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THE PERFORMANCE OF COMPANIES AND THE BOARD'S CHARACTERISTICS FROM THE NEW PERSPECTIVE OF MANIPULATION AVOIDANCE

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Abstract

From the outlook of regional development in the Middle East, a current exploration of the relationship between the corporate governance system and the performance of companies is extremely important and timely, especially after the impact of the latest financial crises, as a means of enhancing and improving the region's business efficiency leading to economic growth of the region. The aim of this paper is to investigate the effect of the board's characteristics in association with the performance of companies in the context of the business environment in the Middle East and specifically by examining the country of Jordan. In addition to examining the board's characteristics, this study also investigates the relationship between the board's characteristics of managerial ownership and the duality or the non-duality of the role of the Chief Executive Officer (CEO) as one of the important mechanisms of corporate governance and a company's performance using both traditional measurements of return on assets (ROA) and return on equity (ROE) and contemporary ones of market share measurement of a company's performance to avoid manipulation. The data for the current study is obtained from one source, namely the secondary data of the annual reports. The sample companies comprise 50 non-financial companies listed on the Amman Stock Exchange (ASE) website for the fiscal year ended in 2013. Multiple regression analysis is used to evaluate the relationship between the variables. The results of the previous studies have revealed that managerial ownership and non-duality in various segments have an inverse association with monitoring costs as mentioned in the agency theory. This finding is consistent with findings of the current study for market share measurement and not consistent, however, with ROA and ROE. The current study presents a unique contribution to the corporate governance area relating to the effect of the board's characteristics in relation to the performance of Jordanian companies. Previous studies examining developed and developing countries have placed an emphasis on financial measurements to measure the financial performance of companies without mentioning the considerable role of manipulation methods in financial statements. The manipulation methods include income smoothing, earnings' management, creative accounting and big bath accounting, which is an earning management strategy that may affect a real picture of a company's performance being given. Thus, the current study provides evidence that supports the notion that this fundamental issue of manipulation methods and avoidance of manipulation has been neglected in prior research in the Middle East as well as in Western countries. Accordingly, this study provides evidence to compare the traditional methods with ones that avoid manipulation.

Keywords: The Board's Characteristics; A Company's Performance; Manipulation; A Company's Size; Industry Type, Jordan

1. INTRODUCTION

The topic of corporate governance has received widespread attention as one of the most important issues in the sphere of governments, within organizations and also in other fields (Shleifer & Vishny, 1997). The corporate governance system addresses an extensive variety of subjects in its association with financial performance (Chaghadari, 2011). However, corporate failures and global scandals in famous corporations such as the cases of Enron, Arthur Andersen, and other scandals, have contributed to the argument regarding whether companies should issue or use new perspectives as new trends to measure a company's performance as important targets to ultimately maximize the wealth of the shareholders (Alabdullah, Yahya & Ramayah, 2014). In adopting a new perspective, this examination also will focus attention on the way in which companies are governed and what measurements are used for a company's performance in association with the structures of corporate governance.

Good corporate governance is focused on the mechanisms, principles and responsibility in the management of a company. Corporate governance and its existence in a company is an effort to reduce problems between the principal and its agent regarding the separation of ownership and control (Chen, Chen & Wei, 2009). The agency theory explains the conflict between shareholders and managers and the arising agency costs between them. The separation between these two parties has been taken into consideration as one of the most important and contentious matters in the literature examining accounting and management practices and procedures.

The board's characteristics, as admitted by the previous studies, are considered as one of the most important corporate governance mechanisms, such as the managerial ownership and CEO duality together with their relationship with the company's performance (Abor & Biekpe, 2007; Chaghadari, 2011). Moreover, the authors of the majority of the previous studies made the decision to investigate two control variables in the multiple regression models regarding the relationship between corporate governance and a company's performance. These two variables are industry type and a company's size (Alabdullah *et al.*, 2014; Ho & Wong, 2001). Brooks (2014) claimed that a company's size is an important control variable to be tested in the model due to a likely significant effect on the dependent variable. Therefore, a company's size and the industry type were introduced as control variables in this study. Furthermore, these control variables have been used by a number of previous studies in the field of study of corporate governance and the performance of companies (Connelly, Limpaphayom & Nagarajan, 2012).

Researchers and scholars of corporate governance have given more attention to the problem of the principal-agent relationship (Fama, 1980; Ross, 1973; Shleifer & Vishny, 1997). The recent financial crises faced by several countries led companies and other interested parties to take an interest in adopting good corporate governance. The challenge of adopting good corporate governance has encouraged a suite of different measures worldwide, such as the Sarbanes-Oxley Act in 2002 which regulates corporate governance as a control system to ensure compliance and best practice corporate governance is adopted (Alabdullah, Yahya, & Ramayah, 2014). To enhance economic growth and development, the Amman Stock Exchange (ASE) in Jordan established a corporate governance code in 2009 (Makhlouf, Laili & Basah, 2014) to intervene in the cases of a lack of good performance and mismanagement in the Jordanian companies to enable these companies to improve their financial performance (Al-Qaisi, 2013; Al-Zawahreh & Cox, 2009).

A best practice of corporate governance is the way in which a company's performance can be improved. This stark reality was realized by several interested parties including stakeholders in order to protect their interests in the best possible way. Thus, the authorities in Jordan identified good corporate governance as a requirement for developing the country to enhance its economic growth. In the past few decades, the previous literature on corporate governance and the discipline of performance of companies has been examined by using different theories. The majority of studies in the literature have confirmed that corporate governance is the control system that significantly impacts upon a company's performance.

Recently, intensive and serious studies in developed countries have investigated the performance of companies. However, little attention has been given to this important topic in the developing countries and Jordan is no exception (Alabdullah *et al.*, 2014). Thus, the present study will analyze the relationship between the board's characteristics (managerial ownership and CEO duality or non-duality) and the performance of companies in Jordan. The current study has utilized three profitability measures to examine a company's performance and that is by way of ROA, ROE and market share. Using data from the ASE website a sample was taken from 50 listed companies, and it was revealed that there is a significant positive relationship between managerial ownership and non-duality, and their respective market share. On the other hand, this study further showed that the company's size and its industry type have no effect on the market share. The study also revealed that managerial ownership and CEO duality have no impact on the ROA. Furthermore, the findings show that industry type has negative impact on the ROA.

Importantly, this study significantly contributes in several ways to the existing literature examining the relationship between corporate governance and financial performance. Firstly, it utilized for the first time market share as a measurement to measure a company's financial performance in its relationship with the board's characteristics (managerial ownership and CEO duality) as a way of preventing the manipulation in all contexts (including the Jordanian one) in its relationship with a company's performance. Accordingly, from both the perspective of developed and developing countries, the current study uniquely contributes to the literature that has investigated corporate governance mechanisms and the performance of companies. Secondly, the findings also revealed that the board's characteristics have some influence on market share.

The present study is structured with Section 1 providing an introduction, followed by Section 2 which outlines the literature review and explains the research hypotheses. Section 3 explains the sample, data and methodology used in the present study. Section 4 sheds light on the results and provides a discussion concerning the regression analysis, while the last section reveals a number of concluding remarks.

2. LITERATURE REVIEW AND RESEARCH HYPOTHESES

The origin of the concept of corporate governance and its design is based on the principles of the agency theory as mentioned by Alabdullah *et al.* (2014). Corporate governance was established to guarantee the agent has responsibility to protect and maximize the interests of stakeholders and other investors. Previous studies have proved that internal and external mechanisms have played a key role to reduce agency problems (Shleifer & Vishny, 1997). The board's characteristics, such as managerial ownership and CEO duality or non-duality, are considered as one of the important internal corporate governance mechanisms that significantly impact upon a company's performance. Empirical evidence reveals that the relationship between the board's characteristics and a company's performance can either be negative (Baert & Vennet, 2009), positive (Abor & Biekpe, 2007), or of no impact (Ehikioya, 2009).

Several previous studies have focused on the association between corporate governance and a company's performance through providing empirical evidence related to the corporate governance mechanisms. Globally, these studies in developed and developing countries, at the international and local levels, have not tested the relationship between a board's characteristics represented by CEO duality or non-duality and managerial ownership, and the financial performance represented by market share, ROA and ROE as measurements of a company's financial performance. However, the only study undertaken (Alabdullah *et al.,* 2014) chose only market share to represent a company's financial performance in its relationship with the board size, independence of the board and CEO duality.

From the findings of the literature review a number of previous studies have indicated that an increasing managerial ownership in a company is an important factor that decreases the agency costs and encourages managers to promote the company's performance (Klein, 1998; Kren & Kerr, 1997; Kumar & Singh, 2013). For example, Klein (1998) found there is a positive relationship between managerial ownership and ROA. Also, Kren and Kerr (1997) demonstrated that there is a positive relationship between managerial ownership and ROA and return on common stock. This is in line with the agency theory as explained by Jensen and Meckling (1976). Therefore, the present study predicts that increasing the level of managerial ownership will increase a company's performance and this then leads to the following three hypotheses being made:

1. *H1*. There is a positive relationship between managerial ownership and market share;
2. *H2*. There is a positive relationship between managerial ownership and ROA; and
3. *H3*. There is a positive relationship between managerial ownership and ROE.

The second independent variable in the present study is whether or not one person serves as the chairman and the CEO of the company and this is known respectively as CEO duality or CEO non-duality. It is one of the essential components of overall quality of the mechanism of corporate governance. As mentioned previously, companies that have one person serving as both the CEO and chairman are said to have CEO duality and this situation leads to a company being more managerially dominated (Ho & Wong, 2001).

Previous studies have revealed that the existence of chairman who is not also the CEO is an important matter to be considered in a company's governance structure. The role of CEO and chairman, as a fundamental monitoring mechanism, is based on the agency theory (Chaghadari, 2011). In examining non-duality, it can weaken the chief executive officer's (CEO's) power and higher board oversight. On the other hand, the existence of duality in leadership might contribute to the lack of accountability and transparency within a company. According to the idea and essence of the agency theory, Fama & Jensen (1983) revealed that companies with non CEO duality perform better than those with no separation of the roles. Several previous studies in the literature (Grove, Patelli, Victoravich & Xu, 2011; Rechner & Dalton, 1991; Yermack, 1996), indicated that when there is non-duality, a company's performance is enhanced. Therefore, it is hypothesized that:

1. *H4:* There is a positive relationship between a company and its market share when the corporate governance is not in the form of CEO duality.
2. *H5:* There is a positive relationship between a company and its ROA, when the corporate governance is not in the form of CEO duality.
3. *H6:* There is a positive relationship between a company and its ROE when the corporate governance is not in the form of CEO duality.

It is worth mentioning that previous studies relied upon measurements such as Tobin's Q, ROA, ROE, and other profitability measurements to measure a company's financial performance in both developed and developing countries, and specifically in Jordan (see Al-Akra & Hutchinson, 2012; Amran & Che-Ahmad, 2009; Grove et al., 2011; Vo & Nguyen, 2014). Nevertheless, such studies did not make mention of the possibility of ways in which manipulation could occur; such as methods of income smoothing behavior that could be used by management and could lead to misleading the results in the financial statements, particularly in relation to net income. Accordingly, the present study adds a new perspective to the literature examining corporate governance mechanisms and the performance of companies. In examining the performance of companies, the current study intends to use the market share as an indicator for measuring financial performance.

Alabdullah *et al.* (2014) indicated that market share is an appropriate measure of a company's performance. This measurement also assists with respect to moving away from practices of income smoothing and other manipulation behaviors which may be used by management as the market share is calculated by dividing the sales revenue of the sector's total sales. Consequently, this measurement will be away from costs; in that it gets largely away from manipulation through the use of income smoothing. Since market share is calculated as the net sale of a company divided by the total sales of the industry, using this measurement will help avoid the issue of manipulation, if any exists. The justification is that the market share indicator deals with sales, where sales processes are either represented by cash or by credit. This means there would be a case of dealing with only two accounts; that is cash and receivables. In more detail, this would establish that such an indicator avoids dealing with expenses. In this case, manipulation is a process exclusively related to expenses rather than sales.

3. SAMPLE AND METHODOLOGY

3.1. Source of Data Collection and Variables Measurement

The present study investigates the relationship between corporate governance represented by the board's characteristics of managerial ownership and CEO duality or non-duality, and a company's performance expressed by market share, ROA and ROE in Jordan's non financial companies and they are companies in the industrial and service sector. For this study the sample of the non-financial listed companies in Jordan comprised a cross-sectional examination by collecting the secondary data from the annual reports for the year 2013. The study chose companies listed on the ASE as it is one of the largest stock exchanges in Asia. Furthermore, Jordan has played a significant role as one of the important emerging economies. Nevertheless, the non-financial companies in Jordan were not immune from the performance related problems, specifically over the last a few years (Al-Qaisi, 2013).

The current study measured the dependent variables of financial performance via the market share, ROA and ROE. The independent variables have been identified as the managerial ownership (MOwner) and whether or not there is CEO duality (CEOduality). In addition, a company's size (Cosize) and its respective industry are the control variables. Table 1 provides a summary of the measurement of the variables.

Table 1. Summary of the Measurement Variables

Number	*Variables*	*Acronym*	*Measurement*
Dependent Variable			
1	Market Share (as a percentage)	Market Share	Market share is net sales divided by the total sales of the industry.
2	Return on Assets (as a percentage)	ROA	Return on assets is measured as the percentage of net income to total assets.
3	Return on Equity (as a percentage)	ROE	Return on equity is measured as a percentage of net income to common equity.
Independent Variables			
4	Managerial Ownership (as a percentage)	MOwner	Managerial ownership is measured as the percentage of total shares held by a company's directors and officers.
5	CEO duality	CEOduality	DEO duality is dummy variable. Whether or not the chairman is also the CEO during the year, where it will take the value of "1" if the CEO is also the chairman of the board, and "0" otherwise.
Control Variables			
6	Company's Size (number)	Cosize	Natural logarithmic of the company's total assets.
7	Industry type (number)	Industry	Dummy variable with "1" assigned if it is an industrial company and "0" if it is a service company.

The models used in the present research for analysis included specific variables, with the specific variables of managerial ownership, CEO duality, size and the industry type also possibly impacting on a company's performance; in other words influencing their market share, ROA and ROE. To examine the relationship between the board's characteristics and a company's performance in developing countries, a cross-sectional study was adopted through collecting the real data from the annual reports for the year 2013. A multiple linear regression analysis was estimated to link a direct relationship between the independent and dependent variables, after controlling for some company-specific characteristics that lie in the company's size and its industry type. The models of this study are defined by the following equations.

$$Marketshare = \alpha + \beta_1 MOwner + B_2 CEOduality + \beta_3 Cosize + \beta_4 industry + \varepsilon \quad (1)$$

$$ROA = \alpha + \beta_1 MOwner + B_2 CEOduality + \beta_3 Cosize + \beta_4 industry + \varepsilon \quad (2)$$

$$ROE = \alpha + \beta_1 MOwner + B_2 CEOduality + \beta_3 Cosize + \beta_4 industry + \varepsilon \quad (3)$$

4. RESULTS AND DISCUSSIONS

4.1. Descriptive Analysis

This section provides the descriptive analysis of the study's dependent and independent variables for the 50 non-financial (industrial and service sector) companies listed at ASE through using descriptive statistics such as mean, standard deviation, minimum and maximum. Table 2 explains the distribution of the variables. Based on the results of the descriptive statistics, the dependent variables of market share, ROA and ROE revealed that the mean market share of Jordanian industrial and service companies is 43.2% with a standard deviation of 0.292. Moreover, a minimum rate of market share in the Jordanian non-financial companies is 5.1% with a level of market share equal to 91 %. The mean ROA of the Jordanian industrial and service companies is 252.9% with a standard deviation of 3.0. Furthermore, the minimum rate of ROA is - 31.1% with the highest maximum level of ROA equal to 88.8%. For ROE the findings show the mean of ROE is 280% with a standard deviation of 3.58. In addition, the minimum rate of ROE in the Jordanian non-financial companies is 0.0 with the highest level equal to 120.7%. In relation to the frequency of CEO duality, as a dummy variable, Table 2 shows that CEO duality in the sample of the non financial companies in Jordan was 38.0% equating to 19 companies, while 62.0% of the companies did not have duality (non duality) and this equated to 31 companies

In Table 2, the results also revealed that the values for the skewness and kurtosis show that the study sample is normally distributed because they are within the accepted range of normality for both kurtosis and skewness. Brooks (2014) shows that the normality of data might be achieved when standard skewness ±1.96 and standard kurtosis is within ±3.

Table 2. Descriptive Analysis

Variables	*Mean*	*Std. Dev*	*Minimum*	*Maximum*	*Skewness*	*Kurtosis*
Market Share	0.432	0.292	0.0510	0.910	0.457	-1.092
ROA	2.52	3.000	-3.110	8.880	0.226	-0.220
ROE	2.80	3.581	0.000	12.07	1.077	-0.004
MOwner	0.448	0.277	0.000	0.840	-0.151	-1.239
CEOduality	0.38	0.490	0.000	1.0	0.510	-1.814

4.2. Correlation Analysis

The correlation between the dependent and independent variables is explained in Table 3. The results reveal that one independent variable and that is CEO duality (CEOduality) has a negative relationship with market share and managerial ownership (Mowner) has a positive relationship with market share, with values (CEOduality -0.500), (MOwner 0.514). Table 3 also shows that managerial ownership has a negative relationship with ROA and positive relationship with CEO duality with the value (MOwner -.0206), (CEOduality 0.130). In addition, the same result was found with ROE with (MOwner -0.135), (CEOduality 0.122). The Table reveals that managerial ownership has a highly positive relationship with market share with a value of 0.514.

Moreover, the level of multicollinearity between the independent variables should be less than 80% as suggested by Yoshikawa & Phan (2003). For this study, the researcher found the data did not have any multicollinearity problems, in that it often requires 80% or more to indicate that the correlations between the independent variables to have multicollinearity problems. Table 3 below reports the correlations of the variables.

Table 3. Correlations between Variables

	MOwner	*CEOduality*	*Market Share*	*ROA*	*ROE*	*Cosize*	*Industry*
MOwner	1.0						
CEOduality	-0.225	1.0					
Market Share	0.514**	-0.500**	1.0				
ROA	-0.206	0.130	-0.151	1.0			
ROE	-0.135	0.122	-0.126	0.508**	1.0		
Cosize	-0.159	-0.069	-0.070	0.177	-0.012	1.0	
Industry	-0.129	0.124	-0.118	-0.313*	-0.246	0.102	1.0

*Level of significance *p < 0.05, **p < 0.01*

4.3. Multiple Linear Regression Analysis

In the present study, linear regression analysis was applied to determine the direction of the relationship between the independent and dependent variables in accordance with a widespread statistical method utilized in several studies and science disciplines (Alabdullah et al., 2014).

4.3.1. Regression Results of Model 1

Based on a company's performance measured by market share, Model 1 is defined by the following equation:

$$Marketshare = \alpha + \beta_1 MOwner + B_2 CEOduality + \beta_3 Cosize + \beta_4 industry + \varepsilon \tag{4}$$

Table 4 below shows the regression results indicating that the R square value is 0.421 for market share. This means that R square value explains 42% of the independent variables (MOwner and CEOduality) on the dependent one of market share.

Table 4. Regression Results for Market share

Model	*Market Share*
R Square	0.421
Sig F Change	0.000

The autocorrelation is also examined through using the Durbin Watson (DW) test. In this respect, the DW of 2.041 is a good value since it is more than 1 and falls between the acceptable range of 1.5–2.5 as argued by Knoke (2003) and it reveals there is no autocorrelation problem in the data.

In Table 5 below, regression analysis was run between all the variables chosen in the present study as represented by the independent variables of CEO duality and managerial ownership, the control variables of the industry type and the company's size, and the dependent variable of the market share. The results show that the managerial ownership has a positive relationship with the market share (MOwner $\beta = 0.417$). The table also shows that CEO duality has a negative relationship with the market share (CEOduality; $\beta = -0.407$) while the others: the company's size (log of total assets) and the type of industry has a negative relationship with the market share (Cosize; $\beta = -0.031$, industry; $\beta = -0.011$).

Table 5. Regression Statistic analysis

Market Share			
Standardized Coefficients			
Variables	*Beta*	*t- value*	*Sig.*
MOwner	0.417**	3.507	0.001
CEOduality	-0.407**	-3.456	0.001
Cosize	-0.031	-0.028	0.793
Industry	-0.011	-0.099	0.922

*Level of significance *p < 0.05, **p < 0.01*

The results of regression analysis reveal that the company's size and the type of industry are insignificant with the market share. For the current study, the testing of hypotheses for model 1 involving the association between every independent variable and the dependent ones is shown in Table 5. There is a highly significant positive impact relationship between the managerial ownership (MOwner) and the market share (β =0.417, T-value = 3.507, P < 0.01). This indicates that a company's financial performance is significantly influenced by the managerial ownership in the non-financial listed companies in Jordan. This result is consistent with the current study's set of objectives. The study has deduced that a significant relationship exists between a company's managerial ownership and its market share. This result is in line with prior studies undertaken both in developed and developing countries (See Abor & Biekpe, 2007; Al-Khouri, 2005; Kren & Kerr, 1997; Kumar & Singh, 2013). Thus, hypothesis H1: there is a positive relationship between managerial ownership and market share, is supported. The findings indicate that the higher the level of managerial ownership in non-financial companies (industrial and service companies) in Jordan, the higher is the level of market share (better performance). This result is in line with agency theory perspective. Therefore, this result matches with the findings in the prior studies demonstrating that managerial ownership improves a company's performance.

With respect to the association between CEO duality and financial performance (market share), testing of the hypotheses of the present study found a negative and significant relationship exists between CEO duality and market share at P < 0.01, T-value = -3.456, β = -0.407. This means that there is a positive and significant relationship between companies which do not have CEO duality and their market share. This is in line with the hypothesis H4: There is a positive relationship between companies which do not have CEO duality and market share. Therefore, hypothesis H4 is supported. This result is consistent with the previous studies in the literature. They recommended the need to separate the position of the chairperson and the CEO to ensure the independence of the board for optimum performance of a company (see Chaghadari, 2011; Rechner & Dalton, 1991; Yermack, 1996).

4.3.2. Regression Results of Model 2

Based on a company's performance as measured by its ROA, for the current study Model 2, as presented previously, can be defined by the following equation:

$$ROA = \alpha + \beta_1 MOwner + B_2 CEOduality + \beta_3 Cosize + \beta_4 industry + \varepsilon \quad (5)$$

Table 6 provides the results of the regression analysis and shows that R square value is 0.211 for the ROA. This means that R square value can explain 21% of the independent variables of CEO duality and managerial ownership on the dependent variable of the ROA.

Table 6. Regression Analysis for the Return on Assets

Model	ROA
R Square	**0.211**
Sig F Change	0.154

The current study also examined the autocorrelation by using the Durbin Watson (DW) test. In this respect, the DW value of 1.180 is an accepted value since it is more than "1" and it reveals there is no autocorrelation problem in the data.

In Table 7, the regression analysis was run between all the variables that have been chosen in the present study represented by the independent variables, control variable, and the dependent variable of ROA. The results show that managerial ownership (MOwner) has a negative relationship with ROA (MOwner β = -0.190). The table shows that the variable of CEO duality has a positive relationship with the market share (CEOduality; β = 0.147). However, the control variable of industry type has a negative relationship with the ROA (industry; β = -0.376) whilst the company's size (log of total assets) has a positive relationship with the ROA (Cosize; β = 0.195).

Table 7. Regression analysis for ROA

ROA			
Standardized Coefficients			
Variables	*Beta*	*t- value*	*Sig.*
MOwner	-0.190	-1.373	0.177
CEOduality	0.147	1.070	0.290
Cosize	0.195	1.441	0.156
Industry	-0.376***	-2.787	0.008

*Level of significance **p < 0.05, ***p < 0.01*

The results of regression analysis shows that the company's size does not have a significant impact on the ROA (β = 0.195, T-value = 1.441, P > 0.1), while the industry type has a significant relationship with the ROA (β=-0.376, T-value = -2.787, P < 0.1). For the current study, the testing of the hypotheses for Model 2 regarding the relationship between every independent variable and the dependent ones is shown in Table 7. There is an insignificant negative impact on the relationship between the managerial ownership (MOwner) and the ROA (β = -1.190, T-value = -1.373, P > 0.1). This indicates that a company's financial performance is not influenced by the managerial ownership of the non-financial listed companies in Jordan. This result is inconsistent with what the current study proposes. Conversely, the study had hypothesized that a significant relationship exists between the managerial ownership and the ROA. Nevertheless, this result is in line with prior studies that were carried out in both developed and developing countries (see Chaghadari, 2011; Grove *et al.*, 2011). They mentioned that there is no relationship between managerial ownership and the ROA. Thus, hypothesis H2: There is a positive relationship between managerial ownership and ROA is not supported.

With respect to the association between CEO duality and financial performance (ROA), testing of the hypotheses of the present study found an insignificant relationship exists between CEO duality and ROA at β =0.147, T-value = 1.070, P > 0.1. This is not in line with H5: There is a positive relationship between a company and its ROA, when the corporate governance is not in the form of CEO duality. Therefore, hypothesis H5 is not supported. However, this result is consistent with previous studies in the literature (Mashayekhi & Bazaz, 2008; Yoshikawa & Phan, 2003).

4.3.3. Regression Results of Model 3

Based on a company's performance measured by the ROE for the current study, Model 3 can be defined by the following equation:

$$ROE = \alpha + \beta_1 MOwner + B_2 CEOduality + \beta_3 Cosize + \beta_4 industry + \varepsilon \qquad (6)$$

However, the current study will not present details regarding this model due to the results of ANOVA testing. The model is insignificant with significance value of 0.285.

5. CONCLUSION

The study's objective was to investigate the relationship between the board's characteristics represented by managerial ownership and CEO duality as important corporate governance mechanisms, and the companies' financial performance using cross-section data of a sample of 50 listed Jordanian non-financial companies from the website of Amman Stock Exchange (ASE). The present study used three types of financial performance measurements: market share; return on assets (ROA) and return of equity (ROE). The current study contributes to the existing body of literature concerning corporate governance and performance of companies from a new perspective to avoid the manipulation of income smoothing, earnings management, creative accounting and big-bath accounting through utilizing the measurement of the dependent variable of market share which is free from manipulation.

After analysis, the present study found the following key issues. There is a positive and significant relationship between managerial ownership and a company's market share. This implies that there is a positive and significant relationship between such a mechanism and financial performance. Furthermore, there is a positive relationship between companies which do not have CEO duality and their market share.

This indicates that the relationship between these mechanisms and financial performance is significant. In addition, the study revealed that there is no relationship between managerial ownership and CEO duality, and return on assets (ROA), as a measurement of financial performance, with the probability of including income smoothing behavior that might be used by the management. Moreover, the current study found that the model of the relationship between the board's characteristics and return on equity (ROE) is insignificant. The current study also revealed that there is no impact of both a company's size and the industry type on its market share. Furthermore, only the industry type has an impact on the ROA.

The contribution of the current study to the literature lies in its investigation of the relationship between the board's characteristics and a company's financial performance represented by a company's market share, ROA and ROE. In so doing, the present study has added to the literature through utilizing useful measurements. Therefore, this study globally contributes to the field of literature examining corporate governance and the performance of companies by investigating the relationship devoid of manipulation between a board's characteristics and company's market share. Crucially, the present study is the first of its kind to introduce this new insight into the relationship between these variables. It therefore has introduced a new level of investigation as an extension to previous studies in this field and to the best of researcher's knowledge no previous study in the literature review has been undertaken in both developed and developing countries to examine the performance of companies and the characteristics of a board from the new perspective of avoiding manipulation.

Finally, for future research in both developing and developed countries, consideration ought to be given to investigate the relationship between the variables of the board's characteristics and financial performance, including market share as a measurement used to avoid manipulation to identify the findings from different levels and from different perspectives of development.

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USING TRIANGULATION TO VIEW INTERNAL AUDIT'S GOVERNANCE FUNCTIONING

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Abstract

Internal audit departments of organisations are regarded as an integral component of the combined assurance model alongside the audit committee, management and the external auditors. The primary users of the work of internal audit are the audit committee, senior management, other levels of management and to some extent, the external auditors. This wide audience served by internal audit reinforces the importance of IAFs' work, which deals with important aspects facing the entity. Internal audit is therefore able to reduce the lack of information availability for the audit committee on matters concerning risk management, internal control and governance. However, a study conducted on audit committee effectiveness, it was found that 40% of audit committees in national government departments in South Africa are not fully effective and are failing to contribute towards improving internal control, risk management, governance and financial reporting practices. Audit committees' effectiveness in contributing to risk management, internal control and governance was measured at 63%, 76% and 62% respectively, in a comprehensive study on audit committees in the South African public sector. This indicates that their oversight in these areas, especially risk management and governance, is not yet effective. These findings are concerning given that audit committees have a legal mandate to assist government departments in these areas. Internal audit functions are key in assisting audit committees in their governance oversight responsibility. The present study reports on the extent to which internal audit in the eight metropolitan municipalities in South Africa assists audit committees in their governance oversight responsibility, focusing on the scope of work of internal audit with reference to its governance mandate. A data transformation triangulation design was followed to describe internal audit's functioning.

Keywords: Internal Audit, Governance, South Africa, Triangulation, Municipalities

1. INTRODUCTION

More than ever before, internal audit departments around the world are faced with the challenge of assisting key stakeholders such as the audit committee and senior management in discharging their responsibilities. Organisations face many risk, governance and control-related challenges and having proper functions in place to assist in managing these challenges is integral to the success of organisations. Internal auditors are entrusted with providing stakeholders with independent objective assurance and consulting expertise on internal control, risk management and governance processes with the overall aim of assisting organisations to achieve their objectives (Sarens, Christopher & Zaman, 2013:308).

Internal audit departments of organisations are regarded as an integral component of the combined assurance model alongside the audit committee, management and the external auditors. The primary users of the work of internal audit are the audit committee, senior management, other levels of management and to some extent, the external auditors (International Federation of Accountants, 2013). This wide audience served by internal audit reinforces the importance of IAFs' work, which deals with important aspects facing the entity.

Internationally, legislation such as the Foreign Corrupt Practices Act and the Sarbanes-Oxley Act contributed to increased responsibility placed on boards and audit committees. This is also evident in South Africa with reference to the King Code of Governance (hereafter King III). Audit committees are tasked with reporting back to the board of directors on the state of internal control (especially as it relates to internal financial control), risk management and governance processes (Ferreira, 2007:3). Internal auditors are greatly involved in these areas of internal control, risk management and governance and are thus in a prime position to serve as 'informants' to audit committees as these cannot be present on a day-to-day basis. Through a sound working relationship, internal audit assists audit committees in achieving their internal control, risk management and governance responsibilities (Goepfert, Soileau & Sumners, 2013:71).

Internal audit is therefore able to reduce the lack of information availability for the audit committee on matters concerning risk management, internal control and governance. However, according to a study conducted by van der Nest (2006:v,232), it was found that 40% of audit committees in national government departments in South Africa are not fully effective and are failing to contribute towards improving internal control, risk management, governance and financial reporting practices. Moreover, van der Nest (2008:182,184) found that audit committees' effectiveness in contributing to risk management, internal control and governance was measured at 63%, 76% and 62% respectively, indicating that their oversight in these areas, especially risk management and governance, is not yet effective. These findings are concerning given that audit committees have a legal mandate to assist government departments in these areas (MFMA, 2003:s166).

South Africa's peak audit institution, the Auditor-General South Africa, has specifically stated that internal audit departments do not adequately evaluate internal control and as a result, they fail to effectively communicate with audit committees on matters such as accounting, risk management and loss control (Auditor-General South Africa, 2011:32; Auditor-General South Africa, 2012:86; Auditor-General South Africa, 2013:31, 35, 75, 103). The Auditor-General South Africa (2012:87) deduced that audit committees are not yet effective in local government to a large extent due to the lack of interaction / information flow from internal audit to executive councils and mayors. It is therefore important that internal audit's work on internal control, risk management and governance be relevant to the extent it assist the users of internal audit services in their oversight responsibility.

The present study reports on the extent to which internal audit in the eight metropolitan municipalities in South Africa assists audit committees in their governance oversight responsibility, focusing on the scope of work of internal audit with reference to its governance mandate. Note that due to the broad nature of internal audit work, it is not possible to cover all areas of internal control, risk management and governance; this study thus reports only on the governance aspect of internal audit functioning and the extent to which IAFs assist audit committees in this regard. Follow up articles will address internal control and risk management.

In the next section, the research methodology is explained, followed by a literature review on internal audit's governance functioning. The results are then discussed and the conclusion is presented.

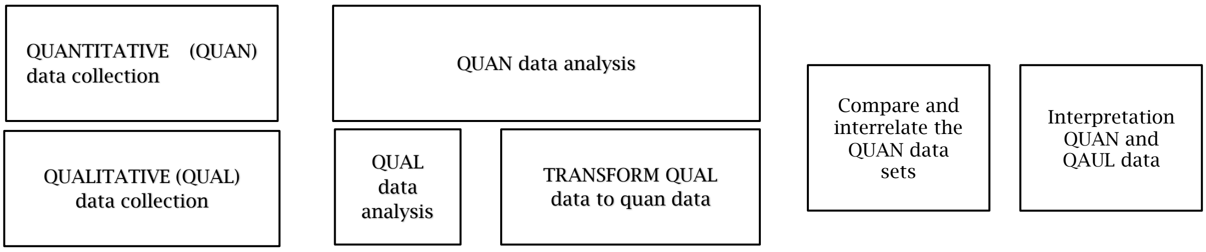
2. RESEARCH DESIGN AND METHODOLOGY

This section contains an overview of the research design, the sampling strategy, questionnaire design, data analysis and presentation as well as methodological considerations such as trustworthiness.

2.1. Overview of the research design

In order to report on the extent to which internal audit's governance mandate assists audit committees in their governance oversight responsibility, a mixed method approach was followed, and specifically, a data transformation triangulation design was adopted. This is shown in Figure 1 below.

Figure 1. Data transformation triangulation design



Source: Creswell, n.d:63

In this regard, after the literature review, a questionnaire was compiled for audit committee members in metropolitan municipalities in South Africa (QUAN data collection and analysis). The annual reports for all eight metropolitan municipalities were also obtained from their respective websites and loaded onto Atlas.ti for qualitative content analysis, which was then used to create frequency counts (QUAL data analysis and TRANSFORMATION to quan data). The data sets from the questionnaires and the annual reports were then used for comparative and validative purposes, which contributed to the rigour of the study and a better understanding of internal audit governance functioning.

2.2. Sampling strategy

In order to conduct the research, eight information-rich (Patton, 1990) municipalities were selected in South Africa. Patton (1990) explains that information-rich participants can provide informative information for other participants not included in the sample. In this regard, certain criteria must be established, or alternatively, existing criteria can be used, which separates the sample from the rest of the population. In order to select information-rich municipalities in South Africa, the following criteria out of the Municipal Structures Act was used. The municipality must be:

a) a conurbation featuring —
   i. areas of high population density;
   ii. an intense movement of people, goods and services;
   iii. extensive development; and
   iv. multiple business districts and industrial areas;
b) a centre of economic activity with a complex and diverse economy;
c) a single area for which integrated development planning is desirable; and
d) have strong interdependent social and economic linkages between its constituent units.

In South Africa, only eight municipalities meet this criteria. These are the eight metropolitan municipalities, as opposed to the smaller local and district municipalities.

2.3. Questionnaire design, data analysis and presentation

The literature review was used to create an online questionnaire based on internal audit's functioning with reference to its governance mandate. This was sent to each audit committee chairperson in metropolitan municipalities in South Africa. For each area, audit committees needed to state the extent to which the specific areas of internal audit assist them (the audit committees) in their governance oversight responsibility. Audit committees had a choice of selecting between 'to a large extent', 'to a lesser extent' and 'not at all'. The data from the questionnaires was captured in IBM SPSS which was used to create frequency tables indicating the responses.

For the analysis of the annual reports, a basic coding frame was developed in order to extract information out of the reports indicating the type of governance work performed by internal audit. This is presented in Table 1 below.

After the annual reports were coded with the code 'governance mandate', Atlas.ti was used to create a qualitative text matrix across the eight metropolitan municipalities to show the areas of governance involvement. Apart from the qualitative matrix, the amount of times reference was made to internal audit's governance mandate was quantified and then triangulated with the audit committee questionnaire responses. This is presented in the tables in section 4.3.

Table 1. Basic coding frame to elicit internal audit's governance mandate in annual reports

Focus areas	*Main categories*	*Code assigned in annual report to collect evidence on the main category*	*Code descriptor and examples*
To collect data on internal audit's governance mandate	• Governance	• Governance mandate	Any statements or segments of text in the annual reports which indicated that internal audit was involved in governance were correspondingly coded using the code 'governance mandate'. For example, "internal audit evaluates the governance framework", was coded in Atlas.ti with 'governance mandate'.

2.4. Methodological norms

In order to ensure the trustworthiness of the study, a full audit trail was kept in Atlas.ti for the analysis of the annual reports. The questionnaire items were subjected to a Cronbach alpha which resulted in an internal consistency score of 0.868.

3. LITERATURE REVIEW OF INTERNAL AUDIT'S GOVERNANCE FUNCTIONING

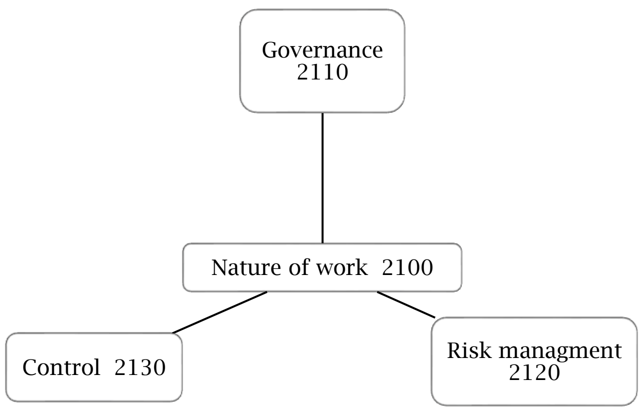
The *Standards* provide a mandatory framework for what the practice of internal auditing should be (IIARF, 2005:41). The core of the work can be found in *Standard* 2100, Nature of Work, which defines the functioning (the purpose for which it is employed) of internal audit.

The core functions of evaluating control, risk management and governance processes can also be found in the definition of internal auditing, which is also mandatory guidance for internal audit practitioners.

These functional areas of internal control, risk management and governance – and the fact that these are regarded as the core work areas of internal audit – have been acknowledged by various authors, showing evidence of internal audit's involvement in these areas (as cited by Ramamoorti & Weidenmier, 2004:315; Burnaby, Hass & Abdolmohammadi; 2006:854; Jones, 2013:10).

Standard 2100 Nature of Work defines the functional areas of internal audit, namely, *Standard* 2110 (governance), 2120 (risk management) and 2130 (control). Figure 2 below shows this relationship.

Figure 2. Internal audit - Nature of Work



Source: IIA, 2012:11-12.

The main *Standard* 2100 (Nature of Work) is broken up into three parts which specifically address the work of the internal auditor in the sub-areas of governance, control and risk management. The *Standards* in Figure 1 provide more detail of what is expected of internal audit with reference to governance, internal control and risk management. This article focuses on the governance aspect of internal audit functioning.

3.1. Governance as a functional area of internal audit – *Standard* 2110

Numerous governance codes introduced worldwide resulted in entities being more accountable for their actions and seeking independent assurance on whether their governance processes are working. Hence, governance aspects became a top priority for internal auditors (Coetzee *et al.*, 2012b:11). Governance codes and legislation such as that introduced by the Treadway Committee, Cadbury Committee, Basel II, Institute of Directors (SA) and the Organisation for Economic Co-operation and Developments' Principles of Governance, all contributed to the increased role of internal audit in governance processes (Coetzee *et al.*, 2012b:7-9).

Mandatory guidance for internal audit on its role in governance can be found in *Standard* 2110. The *Standard* states that for internal audit to accomplish its governance responsibility, it must assess and make recommendations on entities' governance processes (also cited by Abdolmohammadi, 2013:70). This can be achieved by:

- Promoting ethics and values within the organization;
- Assessing the state of the organization's ethical climate and the effectiveness of its strategies, tactics, communications and other processes in achieving the desired level of legal and ethical compliance;
- Providing consulting services to help the organization establish a robust ethics program[me] and improve its effectiveness to the desired performance level;
- Serving as a subject matter expert on ethics-related issues and as a member of the organization's ethics council;
- Acting as a catalyst for change, promoting and recommending enhancements for the organization's governance structure and practices;
- Contributing to effective organizational performance management and accountability;
- Communicating risk and control information to the appropriate areas of the organization; and
- Coordinating the activities of, and communicating information between the board, external and internal auditors and management.

Over and above its governance mandate, internal audit must evaluate the design, implementation and effectiveness of organisations' ethics-related objectives, programmes and activities (Parillo, 2013:33). Lastly, information technology governance and how it supports organisational strategies and objectives must also be assessed by internal audit.

Information technology governance is pivotal for organisations' survival in an ever- changing competitive environment.

3.2. Other guidance on governance

Practice Advisory 2110-1 indicates that the scope of governance is broad and that each entity must apply those principles of good governance which are best suited to its environment. It is therefore important that the Chief Audit Executive (CAE) work with senior executives to determine how governance should be defined for audit purposes. Practice Advisory 2110-2 further states that a relationship exists between risk and control and that during audit planning the CAE must:

- Ensure that the audit addresses those controls in governance processes that are designed to prevent and detect events that could have a negative effect on the entity's strategy, goals and objectives;
- When defining the scope of the governance audit, consider the controls which manage multiple risks across the entity as this could be informative for other audits; and
- Consider relying on results of other audits which assessed controls in governance processes which could be of value for the current audit.

Practice Advisory 2110-3 provides very specific guidance on the assessment of governance processes. It is important for the CAE to include in the audit plan high risk governance processes which were highlighted in the risk assessment and to include any other requests from senior executives regarding governance assessments (IIA, 2012). In cases where governance processes are not matured, the CAE should consider a consulting engagement rather than a formal assessment of governance processes (IIA, 2012). Overall, it is important for internal audit to consider using the results from other engagements in the governance audit as these could provide valuable insights. These results could include findings from other internal or external assurance providers and consideration should be given to any other adverse incidents which could prove useful for the current governance audit. Due to the nature of governance audits, the auditor should consider discussing results with management or even legal counsel before the start of the governance audit and before issuing the results

4. RESULTS

The following sections present the results. First, the analysis of the annual reports is presented, followed by the responses from the questionnaires, after which the two data sets are triangulated.

4.1. Analysis of annual reports

Governance is one of three core functional areas defined in *Standard* 2100 of the *International Standards for the Professional Practice of Internal Auditing*. It follows then, that if internal audit wishes to add value, it must provide governance-related consulting and assurance services to the metropolitan municipality. After the analysis of the annual reports of the municipalities, the following was evident, as it relates to internal audit's governance mandate (shown in Table 2 below.)

Table 2. IAFs' scope of governance work in annual reports

	Metro A	*Metro B*	*Metro C*	*Metro D*	*Metro E*	*Metro F*	*Metro G*	*Metro H*
GOVERNANCE	• Internal audit is involved in corporate governance • Involved in compliance issues related to corporate governance	• Evaluate and improve the effectiveness of governance processes • Communicate governance issues in a report to executive directors and the City Manager • Promoting governance • Technical support to the Municipal Public Accounts Committee to strengthen governance	None	Check the design of governance processes, i.e., are they adequate and operating as developed by management.	• Evaluate and improve the effectiveness of governance processes • Fight aspects of corruption with fully capacitated internal audit department	None	The extent of internal audit functioning with reference to governance is summarised in the annual report as "the Municipality has prioritised good and ethical corporate governance. In this regard, it has a functional Risk Management Unit and a Risk Management Policy; an Internal Audit and Risk Assurance Division, and an Anti-Fraud and Anti-Corruption Strategy in place".	• Investigate reported ethical issues • Prosecute instances of unethical behaviour if detected

Source: ATLAS.ti output, "Governance Mandate", Metro A – Metro H

The perception on the functioning of internal audit when it comes to governance processes is very bleak in annual reports. In order to further understand the extent of IAFs governance disclosures, Atlas.ti was used to create frequency counts per municipality, showing the amount of times reference was made to internal audit's governance mandate. Figure 3 below shows the frequency counts.

Figure 3. References to IAFs governance mandate

	Governance mandate references	*%Total*
Metro A	2	**14.29%**
Metro B	6	**42.86%**
Metro C	0	**0.00%**
Metro D	1	**7.14%**
Metro E	3	**21.43%**
Metro F	0	**0.00%**
Metro G	1	**7.14%**
Metro H	1	**7.14%**

Source: Calculated from Atlas.ti

Figure 3 above shows that compared to other municipalities, Metro B made the greatest reference to IAFs' governance mandate. It is also clear from Figure 3 that inconsistencies exist in the level of disclosure in annual reports and the amount of governance work performed by IAFs.

4.2. Analysis of questionnaire responses

The *Standards* require internal audit to assess and make recommendations on municipalities' governance processes and provide extensive mandatory guidance on what internal audit should do to accomplish its governance responsibility. Fulfilling its responsibility thus enables internal audit to provide the audit committee with assurance on key governance-related matters. Audit committees must be in a position to advise municipal council, the accounting officer and other management on effective governance (MFMA, 2003:s166 (2) (a) (VI)) – the role of internal audit is therefore crucial in assisting audit committees in this regard. A summary of responses is presented in Tables 3 to 10 and related discussions below.

4.2.1. Audit committee views on internal audit's ethics-related functions

The objective of this section is to describe the extent to which audit committees find internal audit's work on ethics-related processes useful in assisting them in their governance oversight responsibility.

Table 3 below summarises the detailed responses of audit committee views on IAFs' ethics-related governance functioning and the extent to which this assists audit committees in their governance oversight responsibility.

Table 3. Audit committee views on IAFs' ethics-related governance functioning

Governance area related to ethics	*Not at all*	*%*	*To a lesser extent*	*%*	*To a large extent*	*%*	*Total responses*
Promotion of ethics and values within the municipalities	-	-	1	12.50%	7	87.50%	8
Assessment of the ethical climate of the municipalities	-	-	2	25.00%	6	75.00%	8
Advisory role on ethics-related issues	-	-	8	100%	-	-	8
Evaluation of the design, implementation and effectiveness of ethics-related objectives and programmes of municipalities	-	-	2	25.00%	6	75.00%	8
Assistance in establishing a robust ethics programme within municipalities	1	12.50%	3	37.50%	4	50%	8

Source: Calculated from IBM SPSS

Most of the audit committees in the municipalities (87.50%) indicated that IAFs' promotion of ethics and values within the municipality added value to the work of the audit committee. In order to contribute to governance processes of the municipality, the *Standards* require internal audit to promote ethics. This ensures that audit committees are better able to act in an advisory capacity in relation to the governance processes of the municipality as they are tasked with providing advice on effective governance (MFMA, 2003:s166).

Most of the audit committees in municipalities (75%) indicated that internal audit's assessment of the ethical climate of the municipality assisted them in their governance oversight responsibility. This could entail internal audit evaluating the prevailing culture at senior managerial level, which could be valuable to audit committees in their oversight capacity.

Internal audit acting in an advisory capacity on ethics-related issues is perceived as assisting audit committees less in their oversight capacity relating to effective governance. All audit committees (100%) shared this opinion. This could be attributed to the fact that internal audit acting in an advisory or consulting capacity is perceived as being less objective and that audit committees prefer a more assurance-based approach from internal audit. This is thus an area where internal audit can spend less resources and focus instead on areas which audit committees perceive as being more useful.

Seventy-five percent of audit committees in the municipalities agreed that internal audit's evaluation of the design, implementation and effectiveness of ethics-related objectives and programmes assisted them in their governance oversight responsibility.

The *Standards* require internal auditors to assist municipalities in establishing a robust ethics programme. However, half of audit committees in municipalities indicated that this did not particularly assist them in their governance oversight responsibility. This could be due to the fact that audit committees are more concerned with establishing whether the ethics-related programmes are working as opposed to internal audit's involvement in instituting such programmes.

4.2.2. Audit committee views on internal audit's governance assessments

The objective of this section is to summarise audit committee views on IAFs' assessments of governance processes and the extent to which these assist audit committees in their governance oversight responsibility. Table 4 below presents the results.

Table 4. Audit committee views on IAFs' governance assessments

Governance assessment area	*Not at all*	*%*	*To a lesser extent*	*%*	*To a large extent*	*%*	*Total responses*
Internal audit's assessment of the legal and compliance processes within the municipality	-	-	4	50.00%	4	50.00%	8
Internal audit communications on risk and control information after assessments	-	-	1	12.50%	7	87.50%	8
Internal audit recommendations after governance assessments	1	12.50%	1	12.50%	6	75.00%	8
Internal audit's risk assessments (identifying high risk governance processes)	-	-	2	25.00%	6	75.00%	8
Internal audit's assessments of weak controls in governance processes	-	-	2	25.00%	6	75.00%	8
Internal audit's assessment of municipality's performance management and accountability	-	-	2	25.00%	6	75.00%	8
Internal audit's assessment of information technology controls in support of governance objectives	-	-	3	37.50%	5	62.50%	8

Source: Calculated from IBM SPSS

According to the MFMA s166, audit committees must provide feedback to municipal council, accounting officers and other management staff on matters relating to compliance with laws and regulations, in particular, compliance with the MFMA, the Division of Revenue Act and any other applicable legislation. It could therefore be expected that considerable reliance would be placed on the assistance provided by internal audit in this regard, and particularly its work in compliance auditing. However, half of audit committees in municipalities indicated that this work area of internal audit did not assist them in their oversight capacity.

Audit committees in metropolitan municipalities find internal audit's communications on risk and control information very useful in assisting them in their governance oversight responsibility (87.50%). This is to be expected, as audit committees are legally responsible to act in an advisory capacity in areas of internal control, risk management and effective governance (MFMA, 2003:s166). Internal audit thus plays a crucial role in this regard to audit committees.

As part of the internal audit report, recommendations must be given. Audit committees in municipalities (75%) find recommendations after a governance audit useful in assisting them in their oversight responsibility. This forms the foundation for audit committees to adhere to their legal mandate with reference to section 166 which states that they must advise municipal council, the accounting officer and other management staff on effective governance within the municipality.

Section 166 of the MFMA states that audit committees must act in an advisory capacity on risk management and effective governance for a specific municipality. Internal audit can assist audit committees in this regard by performing assessments of high risk governance processes. Audit committees in metros (75%) indicated that they did find such assessments useful in assisting them with risk management and governance oversight. Internal audit can thus continue focusing on high risk items which are important for audit committees.

Seventy-five percent of audit committees indicated that internal audit's assessments of weak controls in governance processes assisted them in their governance oversight responsibility. In this regard, IAFs assist audit committees in complying with their legal requirement to provide advice on internal control (MFMA, 2003:s166).

Again, it is clear that internal audit greatly assists audit committees (75%) in their governance oversight as it relates to performance management accountability. Section 166 makes stipulates that audit committees must advise on performance management and the MFMA and MSA make it a legal requirement for internal audit to assess the performance management system of a municipality.

The *Standards* require internal audit to evaluate information technology controls in support of governance objectives. Fewer audit committees in municipalities (62.50%) considered this to be an area where internal audit assisted them in their governance oversight responsibility.

4.2.3. Audit committee views on IAFs' meetings on governance processes

The objective of this section is to summarise audit committee views on IAFs' meetings on governance processes and the extent to which these assist audit committees in their governance oversight responsibility. Table 5 below summarises the results.

Table 5. Audit committee views on IAFs' meetings on governance processes

Internal audit meetings	***Not at all***	***%***	***To a lesser extent***	***%***	***To a large extent***	***%***	***Total responses***
Internal audit meetings with the audit committee in order to define governance processes within the municipality	-	-	2	25.00%	6	75.00%	8
Internal audit meetings with the audit committee in order to define the scope of a governance audit	-	-	3	37.50%	5	62.50%	8
Internal audit meetings with management to discuss audit findings before release to the audit committee	-	-	2	25.00%	6	75.00%	8
Internal audit meetings with the legal department in order to define the scope of a governance audit	2	25.00%	3	37.50%	3	37.50%	8
Internal audit meetings with the legal department to discuss audit findings before release to the audit committee	1	12.50%	3	37.50%	4	50.00%	8

Source: Calculated from IBM SPSS

One of the means of increasing audit committee and internal audit interaction is through regular meetings. The majority of audit committees in municipalities (75%) found it useful to meet with internal audit to define governance processes. In this manner, internal audit can align itself with audit committee expectations when it comes to governance processes, thereby placing itself in a better position to satisfy audit committees in this regard. Audit committees have a legal mandate to report back on the effectiveness of governance processes within the municipality and having regular meetings with internal audit can align audit committee responsibility with legal requirements as internal audit will perform the work and give feedback to the audit committee.

Audit committees find it useful to meet with internal audit. However, it is not always feasible to meet beforehand for every governance audit to define the scope of the audit. This is evident from the findings as smaller amount of audit committee members (62.5%) indicated that they did not meet for the purpose of defining the scope of the governance audit. Once internal audit and the audit committee define their understanding of governance processes, the CAEs are responsible for defining the extent and nature of testing, which could be the reason for the audit committee response.

It is best practice for internal audit to discuss draft internal audit findings with the management concerned for the area under audit. This is important to clarify any issues. Such discussions are of value to audit committees in municipalities (75%) because they use internal audit findings in their decision-making. Knowing that the draft findings were discussed with management places more reliance and credibility on the work.

Half of audit committees indicated that internal audit meetings with the legal department to discuss results before release failed to assist them in their governance oversight responsibility. This could be due to the fact that not many internal audit engagements require results to be discussed with the legal department.

Again, discussion with the legal department to define the scope of governance audits serves little purpose in assisting audit committees (62.50%) in discharging their governance oversight responsibility.

4.2.4. Audit committee views on IAFs' knowledge of other audits

This section discusses whether audit committees finds IAFs' knowledge from other audits useful in defining the scope of governance audits and whether this assists audit committees in their governance oversight responsibility. Table 6 below summarises audit committee views.

Table 6. Audit committee views on IAFs' knowledge of other audits in defining a clear scope for governance audits

Knowledge of other audits	***Not at all***	***%***	***To a lesser extent***	***%***	***To a large extent***	***%***	***Total responses***
Internal audit's knowledge from other audits used to define a clear scope for governance audits	1	12.50%	2	25.00%	5	62.50%	8

Source: Calculated from IBM SPSS

Audit committees (62.50%) find internal audit's knowledge of other audits useful in assisting them with their governance oversight responsibility. This could be due to the fact that internal audit knows which other areas in the entity impact on important governance processes, which in turn, means that governance audits will be geared towards higher risk areas.

4.2.5. Audit committee views on IAFs' attempts to increase the governance maturity of the municipality

This section discusses whether internal audit's work on the governance maturity levels of the municipality assist audit committees in their governance oversight responsibility. Table 7 below summarises audit committee views.

Table 7. Audit committee views on IAFs' governance maturity work

Governance maturity work	***Not at all***	***%***	***To a lesser extent***	***%***	***To a large extent***	***%***	***Total responses***
Internal audit's attempts to increase the governance maturity levels of the municipality	-	-	3	37.50%	5	62.50%	8

Source: Calculated from IBM SPSS

Audit committees (62.50%) are of the opinion that internal audit's attempts to increase governance maturity are an area which greatly assists them in their governance oversight responsibilities. This is due to the fact that the higher the governance maturity levels of the municipality, the more effective the governance controls are deemed to be, which provides assurance to the audit committee about governance processes.

4.2.6. Audit committee views on IAFs' coordination activities

The objective of this section is to determine whether internal audit coordination activities assist the audit committee in their governance oversight responsibility. Table 8 below summarises audit committee views.

Table 8. Audit committee views on coordination activities of internal audit

Internal audit's coordination activities	***Not at all***	***%***	***To a lesser extent***	***%***	***To a large extent***	***%***	***Total responses***
Internal audit's coordination of audit activities between the audit committee, external audit and management	1	12.50%	2	25.00%	5	62.50%	8

Source: Calculated from IBM SPSS

Coordination of audit activities between the audit committee, external audit and management does not necessarily assist audit committees in their governance oversight responsibility. This could be due to the fact that during audit committee meetings, representatives from external audit, internal audit and management are present. In addition, simply because coordination takes place, does not mean that a flow of important governance information has also taken place.

4.2.7. Audit committee views on the IAFs' change agent role

This section determines whether audit committees find internal audit's change agent role in the governance structures of the municipality useful in assisting them in their governance oversight responsibility. Table 9 below summarises audit committee views.

Table 9. Audit committee views on internal audit's change agent role

Change agent role	***Not at all***	***%***	***To a lesser extent***	***%***	***To a large extent***	***%***	***Total responses***
Internal audit's role as change agent in the governance structures of the municipality	1	12.50%	4	50.00%	3	37.50%	8

Source: Calculated from IBM SPSS

Audit committees in municipalities (37.50%) indicated that internal audit's role as change agent in the governance structures of the municipalities did not assist them in their governance oversight responsibility. This could be due to the fact that this role does not influence the governance responsibility of the audit committee or because internal audit would be considered as being less objective by taking on a more managerial role.

4.3. Points of triangulation

For internal audit's governance work areas, the total amount of work as per the annual reports was totalled (total actual work per work area (all municipalities)). This amount for each work area was divided by the theoretical work that should be done by internal audit. During the literature review, the study defined 21 governance areas. This amount was multiplied by eight (all the municipalities) to arrive at the totals (theoretical work per literature review (all municipalities)). The percentage of work done was calculated by dividing the actual work per annual report with the theoretical work. The frequency counts were thus further transformed into quantitative data. Based on annual report data, the perception given is that internal audit only performs 8% of possible governance work. This paints a negative picture for the reader of annual reports and is not a true reflection of the work performed by internal audit. This can be seen in Table 10 below.

Table 10. Governance scope of work done by internal audit in metropolitan municipalities in South Africa based on annual reports

Work area	**Governance**
Total actual governance work (all metros) as per annual reports (from Figure 3)	**14**
Theoretical work per literature review (all metros)	168
% work done	8%

Source: Own calculation

It is clear from Table 10 that the perceived work of internal audit regarding its governance mandate is negligible in annual reports and if this is indeed the true extent of work, audit committees and other management will be uninformed on important governance aspects facing the municipality.

In order to obtain a clearer picture on the above results, the annual report analysis was compared with the audit committee questionnaire responses. The audit committee responses on the areas of governance were totalled for areas where audit committees indicated both “to a large extent” and “to a lesser extent”. The fact that audit committees selected “to a lesser extent” does not mean internal audit did not perform the work, hence its inclusion in the total. Table 11 below shows the results.

Table 11. Triangulated annual reports and audit committee responses

Work areas	**Governance**
Total actual work (all metros) as per audit committee questionnaires	**160**
Theoretical work per literature review (all metros)	168
% work done	95%

Source: Own calculation

From Table 11, it is clear that internal audit’s scope of work done and the extent to which it assists audit committees in their governance oversight is much greater than depicted in annual reports. This could be due to the fact that no legal obligation exists for internal audit to report in annual reports. This therefore provides a golden opportunity for increased internal audit disclosure. Audit committees in metropolitan municipalities indicated that internal audit does 95% of governance work (vs 8% in annual reports). The fact that internal audit does more also stems from the responses of participating CAEs which indicate that IAFs are crucial informants to the audit committee on governance.

5. CONCLUSIONS

Internal audit plays a crucial role in the combined assurance model. This study explored IAFs’ role in governance holistically through content analysis of annual reports and by asking audit committees to indicate the extent to which IAFs assist them in their governance oversight. To further understand IAFs’ governance functioning, the questionnaire data and content analysis were triangulated, showing that in the public eye, IAFs appear to be doing much less than they actually do. There is thus a golden opportunity for the Institute of Internal Auditors to establish global guidelines regarding the disclosure of IAFs’ work in public reports.

The study also indicated the governance areas that key stakeholders such as audit committees find useful in assisting them in their oversight responsibility. This can be used by other IAFs to realign their internal audit plans with the key areas of importance for audit committees and other management.

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ULTIMATE OWNERSHIP STRUCTURE AND CAPITAL STRUCTURE: EVIDENCE FROM CHINESE LISTED COMPANIES

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Abstract

This study investigates the impact of the ultimate corporate ownership structure, particularly the divergence of ultimate controlling shareholder's control rights and cash flow rights, on the capital structure decisions among firms listed in Chinese market where the legal protection for creditors and minority shareholders is weak. I find that firms with a wider divergence between the ultimate controlling shareholder's control rights and cash flow rights have significantly higher leverage level of capital structure. I also identify factors that affect this relation, including state ownership, institutional ownership, the presence of large tradable shareholders and NTS reform. My results suggest that leverage-increasing motivation of ultimate controlling shareholders with the risk of expropriation dominates in Chinese market and raising debt is a tool for them to maintain control over resources and corporate decisions to facilitate their self-dealing expropriation.

Keywords: Ultimate Ownership Structure; Control Rights; Cash Flow Rights; Capital Structure; Expropriation

1. INTRODUCTION

In the recent two decades, research in the area of corporate governance has increasingly shifted in focus from the classic or typical agency conflict between managers and shareholders (Jensen and Meckling, 1976) to the conflict of interest between controlling shareholders and minority shareholders (Shleifer and Vishny, 1997; Morck et al., 2005; Djankov et al., 2008) since the worldwide existence of dominant shareholders and the divergence between the dominant shareholders' control rights and cash flow rights via the prevalent use of pyramid ownership structures, multiple control chains, and dual class shares in many publicly listed firms are documented*. In such firms, the divergence between control rights and cash flow rights may lead to agency conflicts between large controlling shareholders and other investors. The high control rights create the incentives and chances of controlling shareholders to engage in various self-dealing activities† to divert and transfer corporate resources for private benefits while the low cash flow rights expose the controlling shareholders to very limited direct financial costs of such activities (Shleifer and Vishny, 1997; Johnson et al., 2000a). As a result, the divergence between the ultimate controlling shareholder's control rights and cash flow rights is treated as a proxy for the risk of expropriation (e.g., Faccio et al., 2003; Claessens et al., 2002; Paligorova and Xu, 2012).

Previous research on the financial implications of the divergence between control rights and cash flow rights of ultimate controlling shareholders has mainly focused on its effect on corporate valuation and the destructive value of the divergence between control rights and cash flow rights of ultimate controlling shareholders has been widely studied (eg., Claessens et al., 2002; Lemmon and Lins, 2003; Laeven and Levince, 2008; Gompers et al., 2010). In this paper, I focus on another financial implication of the existence of dominant shareholders and the divergence between control rights and cash flow rights of such dominant shareholders. Specifically, I examine the impact of ultimate ownership structure on firms' leverage level of capital structure and identify leverage as one possible tool the ultimate controlling shareholders use to control more recourse to affiliate their expropriating activities.

Capital structure is an essential issue in corporate finance and some of recent research on corporate capital structure has begun to focus on the effect of ultimate corporate ownership structure on firms' capital structure and borrowing behaviors. However, the relationship between the ultimate ownership structure and leverage policy is complex. According to existing corporate governance literature, the divergence of ultimate controlling shareholder's control rights and cash flow rights can

* For example, La Porta et al. (1999) examine the ownership structure of large corporations in 27 wealthy economies and find that the firms are typically controlled by families or the state, especially in countries with poor legal protection of minority shareholders. Claessens et al. (2000) examine the separation of ownership and control for 2,980 corporations in nine East Asian countries including Hong Kong, Indonesia, Japan, South Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand. They find that, in all countries, voting rights frequently exceed cash-flow rights via pyramid structures and cross-holdings and that more than two-thirds of firms are controlled by a single shareholder. Faccio and Lang (2002) analyze the ultimate ownership and control of 5,232 corporations in 13 Western European countries and find 53.99% of European firms have only one controlling owner and a substantial discrepancy between ownership and control in Belgium, Italy, Norway, Sweden, and Switzerland. Masulis et al. (2011) investigate 28,635 firms in 45 countries and find that on average, 19% of listed firms belong to family-controlled business groups, rising to over 40% in some emerging markets.

† Such activities can take many forms, including asset sales or transfers to controlling shareholders or other corporations they control at favorable prices, making inter-corporate loans to the controlling shareholder or its affiliates, and committing assets as collaterals for loans borrowed by the controlling shareholder (Johnson et al., 2000b; Djankov et al., 2008).

both decrease and increase corporate leverage. On the one hand, existing literature suggests that dominant shareholders with the incentives to expropriate other investors prefer to lower leverage level of capital structure because debt constrains their expropriation by imposing fixed obligations and commitments on corporate cash flow (interest and principal payments) and by increasing monitoring from creditors (Jensen and Meckling, 1976; Jensen, 1986; Zwiebel, 1996; Lang et al., 1996; Harvey et al., 2004). However, on the other hand, controlling shareholders with wide divergence of control rights and cash flow rights may prefer debt because raising debt facilitates expropriation of affiliates. Stulz (1988) and Ellul (2008) argue that higher leverage allows the dominant shareholders to control more resources without diluting their control over the corporation and the non-dilution motive is particularly strong in the presence of large divergence between control rights and cash flow rights (Du and Dai, 2005). This study attempts to disentangle these two motivations (leverage-decreasing and leverage-increasing motivations) for the use of leverage among firms with divergence of ultimate controlling shareholders' control rights and cash flow rights in Chinese market. I shed light on the effect of ultimate ownership structure on firms' leverage level of capital structure and on the role of leverage in ultimate controllers' expropriation.

In this paper, I examine the relation between the divergence between the control rights and cash flow rights (control-ownership divergence) of a firm's ultimate controlling shareholder and the firm's leverage level of capital structure using a data set of 9,873 firm-year observations in China during the period from 2003 and 2012. I focus on Chinese market for several reasons. First, the divergence between ultimate controlling shareholder's control rights and cash flow rights exists prevalently among listed firms in China. According to my data, about 46.27 percentage of listed firms in China exhibit access control rights (control rights exceeds cash flow rights) of the ultimate controllers during the sample period. The prevalence of such divergence will provide sufficient observations for my empirical study.

Second, Ellul (2008) and Faccio et al. (2010) show that legal system and its enforcement has fundamental effects on debt contract in a country and the propensity of firms with wide divergence between ultimate controlling shareholder's control rights and cash flow rights to control and expropriate more resources is strengthened in environment with a weak legal system and legal enforcement. The legal system and protection of creditors and minority shareholders in China is poor compared with that in developed countries such as U.S. The leverage-decreasing and leverage-increasing motivations will play different role with such institutional structure. In China, because of weak protection of creditors and minority shareholders, the ultimate owners have more incentives and capabilities to expropriate resources. My results show that, in Chinese market, the leverage-increasing motivation overweighs the leverage-decreasing motivation and leverage increases with the risk of expropriation (the control-ownership divergence of ultimate controlling shareholders), which is consistent with the argument that high risk of expropriation is positively associated with leverage (Faccio et al., 2010).

Third, although the relation between ultimate corporate ownership structures and capital structure has been investigated by some studies in several economies‡, no comprehensive study on the relation between the ultimate ownership structure and capital structure based on Chinese market has been investigated. One study closely relevant to mine is conducted by Liu and Tian (2012). They examine the effect of excess control rights on the leverage decisions made by Chinese non-SOEs before and after the Non-tradable share reform (NTS reform) from 2004 to 2010. They find that firms with excess control rights have more excess leverage and excess leverage in firms with excess control rights decreases after NTS reform. However, their focus is on non-SOEs going through Chinese non-tradable share reform. To the best of my knowledge, my study is the first to investigate the relation between the ultimate ownership structure and leverage level of capital structure comprehensively and identify the mechanisms through which the association can be strengthened or mitigated based on Chinese listed firms.

Fourth, China is not only the world's largest emerging economy but also the largest transitional economy. She is representative of the other emerging markets in that she shares many similarities such as backgrounds in legal enforcement, government quality, and regulatory backdrop. As a result, the findings based on Chinese market can be generalized to other emerging or transitional economy.

My analysis shows that a greater divergence between ultimate controlling shareholders control rights and cash flow rights which is a proxy for risk of expropriation is associated with higher leverage in Chinese listed firms. I apply two definitions of the control-ownership divergence: Control-ownership wedge (Ccwedge) is the difference between the control rights and cash flow rights of the ultimate controller of the firm. Control-ownership ratio (Ccratio) is the ratio of control rights to cash flow rights of the ultimate owner of the firm. The significantly positive effect of ultimate ownership structure on leverage level of capital structure is robust to two different definitions of control-ownership divergence and to different regression methodologies. The results are consistent with the hypothesis that ultimate controlling shareholders with incentives to expropriation prefer raising debt to control more resources (leverage-increasing motivation). And, the results of my study can be supported by the argument that when legal protection for creditors and other investors is weak, controlling shareholders seek to control more resources to expropriate those resources from debtors and minority shareholders because controlling shareholders are able to shift downside

‡ Du and Dai (2005) examine the effects of separation of control rights and cash flow rights on corporate capital structure choice in nine East Asian countries (Hong Kong, Indonesia, Japan, Malaysia, the Philippines, Singapore, South Korea, Taiwan and Thailand) and provide support for the leverage-increasing non-dilution entrenchment effect on corporate leverage of the separation of cash flow rights and control rights. Faccio et al. (2010) study five largest West European economics (France, Germany, Italy, Spain, and the UK) and the same nine East Asian economies and find that the ratio of ownership rights to control right has a significantly negative impact on leverage in economics where creditor protection is weak; but a significantly positive impact in economics where creditor protection is strong. Paligorova and Xu (2012) find negative relationship between leverage and the ratio of ownership to control rights in G7 countries.

risk onto the debt-holders by delaying or repudiating payments without suffering from sufficient punishment or loss (Faccio et al., 2010).

Besides, I also investigate the mechanisms through which the association between the divergence between ultimate owner's control rights and cash flow rights and leverage can be strengthened or mitigated among Chinese listed firms. The idea is that the effect of the control-ownership divergence of ultimate owners on leverage should be weakened in situations where the divergence between control rights and cash flow rights is less likely to result in expropriation and other detrimental activities by the ultimate controlling shareholders. I focus on the following sets of factors that may influence the relation between the control-ownership divergence and leverage level: state ownership, institutional ownership, the presence of large tradable shareholders and NTS reform. I find that the effect of the control-ownership divergence on leverage level of capital structure is larger if it is state-owned enterprise. The effect is diminished for firms with higher institutional ownership. The effect is also weakened for firms with the presence of shareholders holding large amount of tradable shares. The effect of the control-ownership divergence on leverage level of capital structure is reduced after NTS reform. My results suggest that factors that facilitate or constrain self-dealing and tunneling activities (expropriation) affect the relation between the divergence between ultimate control rights and cash flow rights and the leverage level of capital structure.

The aftermentioned analyses focus on the potential problem for interpreting my results, i.e., the issue of endogeneity. Although it is less likely that a firm's leverage can affect the ultimate ownership formation, it is possible that firm-specific characteristics unaccounted or excluded in my model specification affect both the control-ownership divergence and the leverage level of capital structure. The joint determination of ultimate ownership structure and capital structure by unobserved or uncontrolled factors could potentially bias the results.

To address the concern of endogeneity, I employ the instrumental variables approach. I use the industry average measure of control-ownership divergence (Control-ownership wedge, Control-ownership ratio) as instruments for the firm specific control-ownership divergence. Firms' control-ownership divergence is heavily influenced by the divergence of industry peers since firms in the same industry tend to share commonalities in the factors that affect their control-ownership divergence. However, the industry average control-ownership divergence level is less likely to directly influence the capital structure of a particular firm in that industry except through the firm's control-ownership divergence. Hence, the average industry control-ownership divergence should be a reasonable instrumental variable of divergence of a specific firm. In the first stage, I estimate a firm's control-ownership divergence (Control-ownership wedge, Control-ownership ratio) as a function of the instrumental variable as well as all the control variables in the model specification and obtain a predicted level of control-ownership divergence for each firm. In the second stage, I use the predicted control-ownership divergence and then re-estimate Eq. (1). My results indicate that, after controlling for endogeneity, the divergence between the ultimate owner's control rights and cash flow rights still has a significantly positive impact on leverage. I also use each firm's lagged one period control-ownership divergence as instrument for the current firm control-ownership divergence and find similar results.

This study contributes to several strands of existing literature. The first contribution to capital structure literature is to show how the ultimate ownership structure affects the leverage level of capital structure in Chinese listed firms. To my knowledge, this study is the first paper to report evidence on this relation with a large sample size based on Chinese market. Prior studies show that the separation of control rights and cash flow rights enables the ultimate owners to engage in various detrimental activities to expropriate firm value (e.g., Johnson et al., 2000b; Morck et al., 2003; Paligorova and Xu, 2012). My results suggest that the expropriating and controlling incentives caused by the control-ownership divergence plan an important role in determining firm leverage level of capital structure and that, to some extent, capital structure serves as a tool for ultimate owners to expropriate others by putting more resources on the control of the controllers. My findings also contributes to the controlling ownership structure literature (e.g., Claessens et al., 2000; Faccio and Lang, 2002) by showing how the elements or formation of ultimate ownership structure intensify the controllers' moral hazard problems and influence firm financing policies, which are the important channels through which the control-ownership divergence affect firm value. In addition, the paper also provides support to the law and institutional literature (e.g., Ellul, 2008; Boubaker, 2007; Faccio et al., 2010) by showing how law and institutions factors mitigate or enhance the impact of ultimate controlling shareholders' expropriating incentives on capital structure.

The remainder of the paper proceeds as follows. Section 2 develops the hypotheses. I discuss the sample construction process and variable definitions in Section 3. Section 4 presents the methodologies and empirical results of the baseline regressions, instrumental variable estimations and the interaction between ultimate ownership structures and various factors. I conclude the paper in Section 5.

2. DEVELOPMENT OF HYPOTHESES

The wide control-ownership divergence of ultimate owners is a measure of risk of expropriation. These owners have the incentives to expropriate others and engage in self-dealing and tunneling activities rather than create value for the firms because on the one hand they do not bear the full cost of the financial distress of firms or enjoy much of the upside shocks to the firms due to the low cash flow rights and on the other hand high control rights give them the power to control the firms' decisions. In addition, because of the complex shareholding relation chains, the ultimate owners can use fund for their own benefit without being easily detected by outsiders. Although existing literature suggests both leverage-decreasing and leverage-increasing motivations of dominant shareholders with the incentive to expropriate other investors, I hypothesize that leverage-increasing motivation dominates among Chinese listed firms because of the weak legal system. For example, Allen et al. (2005) find that the protection of corporate shareholders and creditors in China is weaker compared to that in the 49 countries studied by La Porta et al. (1998) because of the poor enforcement of law. Bankruptcy laws are often poorly enforced and courts are often very costly for resolving conflicts (Fan et al., 2011). Although China has adopted laws to protect shareholders and creditors, the enforcement of these laws is weak. As found by Boubaker (2007), what really matters is debt laws enforcement rather than the existence of those laws.

The weak legal system such as poor protection of creditors in Chinese market makes the constraints and monitoring effect of debt less concerned to the ultimate owners with high risk of expropriation because they can easily transfer the distress cost to creditors and other shareholders (e.g., refuse interest and principal payments) without suffering legal punishment and makes the non-dilution financing effect more favored by them (e.g., Du and Dai, 2005; Faccio et al., 2010). As a result, ultimate controllers with risk of expropriation (wide control-ownership divergence) tend to increase the firms' leverage level of capital structure to control more resource.

H1. Controlling shareholders with wide control-ownership divergence have the incentives to raise more debt for the purpose of expropriation.

Although since the economic reform in late 1970s, China has been gradually transformed into a market economy and the private sector has developed and expanded rapidly, the state ownership of many companies is still an important institutional feature in Chinese market. Literatures on state ownership show that state ownership enhance firms' access to debt (e.g., Firth et al., 2008; Li et al., 2009) because of the state-owned bank lending environment in China. They argue that state-owned banks in China have the obligations to lend to state-owned enterprises (SOEs) due to political and social objectives. Easier excess to borrowings may lead SOEs with the risk of expropriation to increase leverage.

H2a. The positive relationship between ultimate owners' control-ownership divergence and leverage is more pronounced in state-owned enterprises (SOEs).

Institutional investors play an important role in monitoring corporate governance. Because of their information advantages and special status (large amounts of investment at stake), institutional investors have the incentive and capabilities to monitor the target firms (Shleifer and Vishny, 1997; Grinstein and Michaely, 2005 and Lin et al., 2011). The external monitoring from institutional investors will increase the costs of ultimate controllers engaging in expropriation or self-dealing activities. As a result, the monitoring role of institutional investors will restrain the incentives of controlling shareholders with risk of expropriation to control more resources by raising debt.

H2b. The positive relationship between ultimate owners' control-ownership divergence and leverage is less pronounced in firms with high amount of institutional ownership.

It is more difficult and less likely for the controlling shareholders to engage in expropriation in the presence of large tradable shareholders. Shareholders holding tradable shares value firm performance and have the incentives to restrain controlling shareholders with risk of expropriation from extracting private benefits because share prices and firm performance are closely relevant to their own wealth. So, large tradable shareholders have the incentives and abilities to enhance monitoring and the presence of such shareholders can lower the tunneling incentives of controlling shareholders and in turn, lower their incentives to control extra resource through debt.

H2c. The positive relationship between ultimate owners' control-ownership divergence and leverage is less pronounced in firms with the presence of large tradable shareholders.

NTS reform stared in 2005 is aimed to solve the split share structure and allow the huge non-tradable shares to be traded gradually in the market and finally make all NTS tradable. By the end of 2007, 1,254 firms, representing over 97% of the Chinese A-share market capitalization at the time, had completely reformed (Li et al., 2011). Liu and Tian (2012) find that in China the tunneling by the controlling shareholders reduced after the Non-tradable share reform (NTS reform) because the wealth of the controlling shareholders are tied more closely to the market price and performance of the firms after the NTS reform. So, after the NTS reform, the overall incentives of ultimate controlling shareholders to control more resources by raising debt will be reduced.

H2d. The positive relationship between ultimate owners' control-ownership divergence and leverage is less pronounced after the NTS reform.

3. DATA AND VARIABLES

3.1. Sample construction

All Chinese listed firms have been required by the CSRC (China Securities Regulatory Commission) to list the identities of their ultimate owners as well as the control chains in their annual reports since 2004. I draw the sample of Chinese listed companies on the Shanghai Stock Exchange or the Shenzhen Stock Exchange during 2003-2012. I start the research from 2003 because since then the ultimate owners' data are available for my study. Financial data and the control rights and cash flow rights of ultimate controlling shareholders of each public company are drawn from the China Stock Market and Accounting Research Database (CSMAR). According to the two-digit industry code of CSRC, 13 industries are separately identified. Because financial firms have financial ratios that make them difficult to compare to other firms, firms in financial industry are excluded to make the sample more homogenous. In order to mitigate the influence of outliers, I plan to delete all continuous variables at the 1% and 99% levels each firm-year.

3.2. Variables definitions

The dependent variable is leverage, which is the ratio of total liabilities to total assets. I use data on both control rights and cash flow rights from

CSMAR to measure the control-ownership divergence. CSMAR adopts the calculation methods of La Porta et al. (1999) to obtain control right and cash flow right. Control right is the weakest layer among all shareholding relation chains. Cash flow right is obtained by multiplying the proportion held by each layer of shareholding relation chain. For example, firm A is the biggest shareholder of firm B with 40% ownership and B is the biggest shareholder of firm C with 30% ownership. At the same time, firm A is not controlled by some shareholder. Firm A is the ultimate controller of firm C and it holds 30% (min (40%, 30%)) control right and 12% (40% x 30%) cash flow right of firm C. I construct two variables to measure the divergence between control rights and cash flow rights. Following Lin et al. (2011), Control-ownership wedge (Ccwedge) is the difference between the control rights and cash flow rights of the ultimate controller of the firm. Control-ownership ratio (Ccratio) is the ratio of control rights to cash flow rights of the ultimate owner of the firm.

Besides the ultimate ownership structure, I also control a set of variables to capture various characteristics and factors having been found to influence the choice of capital structure. I control for borrower firm characteristics including firm size, cash, tangibility, profitability, zscore and taxrate. Firm size (Size) is measured as the logarithm of total assets. Large firms have lower probability of default (Rajan and Zingales, 1995), less informational opacity (Bharath et al., 2011) and, therefore, should be more favored by lenders and have higher leverage level. Cash level (Cash) is the ratio of cash and cash equivalents to total assets and measures the firm's resources available on hand. So, high level of cash reduces the incentive to raise debt. Firm tangibility (Fixedratio) is measured as the ratio of net fixed assets to total assets. Tangible assets are viewed as collateralization for debt and issuing debt secured by tangible assets reduces lender's risk (Williamson, 1988; Chen, 2004). So, I predict a positive relationship between a firm's leverage and the tangibility of its assets. I define profitability (ROA) as the ratio of the sum of total profits and financial expenses to total assets. The negative relation between leverage and profit is supported by the Pecking order hypothesis. Retained profit will reduce a firm's reliance on debt finance. I apply Zscore to measure a firm's financial health. Previous studies find that leverage is positively related to the probability of default (Ross, 1977; Harris and Raviv, 1990). In addition, firms facing financial distress may increase debt to pop up their companies. Since high financial health implies low probability of default and financial distress, I predict a negative relationship between leverage and Zscore. As interest on corporate debt is tax deductible, corporate tax create a debt tax shield that should influence the use of debt. Debt financing should be more favorable in situations with higher corporate tax rates. I control for the impact of taxes on leverage by including each firm's effective tax rate (Taxrate). Table 1 provides the detailed definitions for all of the variables used in this study, Table 2 reports summary statistics for the sample. On average, the ultimate owners' control-ownership divergence is prevalent in Chinese listed firms. Table 3 presents the Pearson correlation matrix of the variables used in my analysis. Two measures of control-ownership divergence are positively and significantly correlated with leverage. The univariate analysis in Table 3 shows that the relations between leverage level and control variables are overall consistent with my prediction, except for the negative correlation between leverage and tangibility measure. Table 1 provides detailed definitions of variables.

Table 1. Definitions of variables

Name	***Definition***
Leverage	The ratios of total liabilities to total assets.
Control-ownership wedge (%)(Ccwedge)	The difference between the control rights and cash flow rights of the ultimate controlling shareholder of the firm multiplied by 100.
Control-ownership ratio (Ccratio)	The ratio of control rights to cash flow rights of the ultimate controlling shareholder of the firm.
Size	The logarithm of total assets.
Cash	The ratio of cash and cash equivalents to total assets.
Fixedratio	Fixed assets ratio=the ratio of net fixed assets to total assets.
ROA	The ratio of the sum of total profits and financial expenses to total assets.
Zscore	The degree of a firm's financial health= (3.3×Pretax Income + Sales + 0.25×Retained Earnings + 0.5× (Current Assets-Current liabilities))/Total Assets.
Taxrate	Effective income tax rate, the ratio of income tax expense to total profits.
SOE	A dummy variable that takes the value of 1 for state owned enterprises and zero for non-state owned enterprises.
IO	A dummy variable that takes the value of 1 for firms with institutional ownership no less than 10% and zero otherwise.
HOLD	A dummy variable that takes the value of 1 for firms with the sum of shareholding percentage of top ten negotiable shareholders no less than 10% and zero otherwise.
NTS	A dummy variable that takes the value of 1 for the observations from 2008 onwards and zero otherwise.

Table 2. Descriptive statistics

Variables	*Mean*	*STD*	*25%*	*Median*	*75%*
Leverage$_t$	0.495	0.181	0.367	0.506	0.631
Ccwedge$_t$	5.781	8.040	0	0	11.454
Ccratio$_t$	1.404	0.771	1	1	1.538
Size$_{t-1}$	21.607	1.066	20.848	21.484	22.221
Cash$_{t-1}$	0.201	0.148	0.097	0.162	0.264
Fixedratio$_{t-1}$	0.284	0.182	0.144	0.257	0.405
ROA$_{t-1}$	0.068	0.044	0.037	0.058	0.086
Zscore$_{t-1}$	1.003	0.650	0.596	0.869	1.251
Taxrate$_{t-1}$	0.209	0.145	0.124	0.184	0.278

This table presents the descriptive statistics of the variables in the analysis, including the mean, standard deviation (STD), 25% percentile, median and 75% percentile. The sample includes 9,873 firm-year observations during the period from 2003 to 2012. Leverage$_t$ is leverage level at time t. Detailed definitions of variables are reported in Table 1.

Table 3. Correlation matrices of variables

	Leverage$_t$	*Ccwedge$_t$*	*Ccratio$_t$*	*Size$_{t-1}$*	*Cash$_{t-1}$*	*Fixedratio$_{t-1}$*	*ROA$_{t-1}$*	*Zscore$_{t-1}$*	*Taxrate$_{t-1}$*
Leverage$_t$	1								
Ccwedge$_t$	0.025**	1							
Ccratio$_t$	0.023**	0.699***	1						
Size$_{t-1}$	0.319***	-0.001	-0.054***	1					
Cash$_{t-1}$	-0.231***	0.035***	-0.001	-0.028***	1				
Fixedratio$_{t-1}$	-0.018*	-0.033***	-0.020**	0.072***	-0.366***	1			
ROA$_{t-1}$	-0.280***	0.040***	-0.005	0.081***	0.177***	0.039***	1		
Zscore$_{t-1}$	-0.105***	0.032***	-0.019*	0.047***	0.217***	-0.154***	0.403***	1	
Taxrate$_{t-1}$	0.137***	-0.033***	0.002	-0.001	-0.066***	0.005	-0.113***	-0.005	1

*This table presents Pearson correlations of the variables in the analysis. Leverage$_t$ is leverage level at time t. Detailed definitions of variables are reported in Table 1. Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively.*

4. EMPIRICAL RESULTS

The effect of control-ownership divergence of ultimate controlling shareholders on leverage level in capital structure

In this section, I examine the impact of the divergence between control rights and cash flow rights of ultimate controlling shareholders on leverage level (H1) using multivariate analysis. My empirical model to test H1 follows Du and Dai (2005), Faccio et al. (2010) and Paligorova and Xu (2012):

Leveraget= f (divergence measuret, sizet-1, casht-1, tangibilityt-1, profitabilityt-1, zscoret-1, taxratet-1, industry dummies, firm and time effect) (1)

I use two regression methodologies to estimate eq. (1). First, I use a regression model with fixed-industry effect and with standard errors clustered in the two dimensions of firm and year (proposed by Petersen, 2009) to adjust the standard errors for heteroskedasticity, serial-, and cross-sectional correlation. I also use the fixed firm and year effect regression model for eq. (1) to eliminate the time-invariant firm effect§. The regression results of the two regression models are reported in Table 4 on the following page.

In column (1) of Table 4, when Ccwedge is used as a measure of control-ownership divergence, the estimated coefficient on *Ccwedge* is positive (0.001) and significant (p=0.012). Therefore, firms with wide divergence of control rights and cash flow rights of ultimate owners have higher level of leverage. In terms of the economic significance, when *Ccwedge* increases by one standard deviation (8.040), leverage ratio on average will increase by 0.008. Given that the mean leverage level of the whole sample is 0.495, the effect represents an increase in leverage of 1.62%. In column (2), when replacing the measure of control-ownership divergence by *Ccratio*, the estimated coefficient on Ccratio is positive (0.008) and significant (p=0.075). In terms of the economic significance, when Ccratio increases by one standard deviation (0.771), firms' leverage will increase by 0.006, representing an increase in leverage ratio of 1.25%. The effects of ultimate ownership structure on leverage are economically and statistically significant with both measures of control-ownership divergence.

Columns (3) and (4) show the fixed-effect regression results of eq. (1). The results for the main explanatory variables are generally consistent with that in columns (1) and (2) and support my hypotheses. The coefficient estimates on *Ccwedge* and *Ccratio* are significant with the predicted signs and with relatively larger magnitude. The results for the control variables are overall consistent with the predicted signs except for tangibility.

4.1. Instrumental variables estimation

As the ultimate ownership structure of a firm and the firm's leverage policy can be endogenously determined by firms rather than exogenously given, the above analysis is subject to endogeneity problems. If a firm's ultimate ownership structure

§ Results from the Hausman Test suggest that fixed-effect models is more appropriate in my tests than random effect models.

and leverage are driven by the same underlying forces or common omitted factors simultaneously, my models and analyses may create a spurious relation between control-ownership divergence and leverage. To address the potential endogeneity of ultimate ownership structure and leverage, I use instrumental variables estimation and use the industry average control-ownership divergence for each firm as instrument for the firm's control-ownership divergence. For example, I use the industry average control-ownership wedge as instruments for each firm's control-ownership wedge. Control-ownership wedge at the firm level is influenced by that of its industry peers since firms in the same industry tend to share commonalities in the factors that affect the ultimate ownership structure. However, the industry average control-ownership wedge is less likely to be closely related with the capital structure of a particular firm. Hence, the industry average control-ownership wedge can make a reasonable instrumental variable for the control-ownership wedge of a specific firm. For similar arguments, I also use the lagged one period control-ownership divergence as the second type of instruments for each firm's control-ownership divergence. The firm-level control-ownership divergence is estimated as a function of the instrumental variable as well as all of the control variables and the predicted value of control-ownership divergence is then included in eq. (1) to replace the original control-ownership divergence value. The fixed-effect regressions of eq. (1) are re-estimated in the second stage of the model and the results are shown in Table 5.

Table 4. The effect of the divergence between ultimate owner's control rights and cash flow rights on leverage

	OLS	*OLS*	*FE*	*FE*
	Leverage	*Leverage*	*Leverage*	*Leverage*
Ccwedge	0.001** (0.012)		0.002*** (0.000)	
Ccratio		0.008* (0.075)		0.006*** (0.004)
Size	0.056*** (0.000)	0.057*** (0.000)	0.054*** (0.000)	0.055*** (0.000)
Cash	-0.234*** (0.000)	-0.232*** (0.000)	-0.085*** (0.000)	-0.085*** (0.000)
Fixedratio	-0.041 (0.145)	-0.042 (0.140)	-0.049*** (0.000)	-0.050*** (0.000)
ROA	-0.942*** (0.000)	-0.940*** (0.000)	-0.504*** (0.000)	-0.508*** (0.000)
Zscore	-0.003 (0.667)	-0.003 (0.705)	-0.019*** (0.000)	-0.018*** (0.000)
Taxrate	0.091*** (0.000)	0.090*** (0.000)	0.002 (0.807)	0.002 (0.791)
Intercept	-0.593*** (0.000)	-0.606*** (0.000)	-0.591*** (0.000)	-0.613*** (0.000)
Industry dummy	Yes	Yes	No	No
Firm effect	Yes	Yes	Yes	Yes
Time effect	Yes	Yes	Yes	Yes
Number of observations	9,873	9,873	9,873	9,873
Number of firms	1,802	1,802	1,802	1,802
R^2	0.284	0.284	0.148	0.144

*This table presents the results of eq. (1) with industry effect and with standard errors clustered in firm and year dimensions (proposed by Petersen, 2009) and fixed-effect regression results of eq. (1). The numbers in brackets are the p-values. Detailed definitions of variables are reported in Table 1. Significance at the 10%, 5% and 1% levels is indicated by *, ** and ***, respectively.*

I present results of both first-stage and second-stage of the instrumental variables estimation in Table 5. The coefficients on the instruments are always positive and significant in the first-stage with different measures of control-ownership divergence and with different instruments. The partial R2 of the first-stage range from 0.020 to 0.250 and the partial F-statistic of the first-stage range from 160.467 to 2407.574. The relatively high partial R2 and partial F-statistic is indicative of validation of the selected instruments. The Hausman test (large F-statistics) strongly rejects the exogeneity of ultimate ownership structure and justifies the use of 2SLS rather than OLS. The coefficients on the control-ownership divergence measures are overall consistent with that in Table 4 and provide support for my hypothesis. Although the coefficient is insignificant (p=0.164) at conventional levels when Ccratio is used as main explanatory variables and when lagged one period Ccratio is used as instrument, the sign is consistent with prediction. Therefore, my findings on the effect of the divergence between ultimate owner's control rights and cash flow rights on leverage appear to be robust to the instrumental variables estimation.

4.2. Factors influencing the association between ultimate ownership structure and leverage

In this subsection, I examine the mechanisms through which the association between the divergence between ultimate owner's control rights and cash flow rights and leverage can be strengthened or weakened among Chinese listed firms. The idea is that the effect of the control-ownership divergence of ultimate owners on leverage should be weakened in situations where the divergence between control rights and cash flow rights is less likely to result in expropriation and other detrimental activities by the ultimate controlling shareholders. I focus on the following set of factors that may influence the relation between the control-ownership divergence and leverage level: state ownership, institutional ownership, the presence of large tradable shareholders and NTS reform.

Table 5. The effect of the divergence between ultimate owner's control rights and cash flow rights on leverage (Instrumental variables estimation)

	(1)		*(2)*		*(3)*		*(4)*	
	First-stage	***Second-stage***	***First-stage***	***Second-stage***	***First-stage***	***Second-stage***	***First-stage***	***Second-stage***
Ccwedge		0.013*** (0.000)				0.003*** (0.000)		
Ccratio				0.143*** (0.000)				0.013 (0.164)
Indccwedge	0.614*** (0.000)							
Indccratio			0.651*** (0.000)					
Lagccwedge					0.460*** (0.000)			
Lagccratio							0.139*** (0.000)	
Size	0.594*** (0.000)	0.045*** (0.000)	0.045*** (0.000)	0.050*** (0.000)	0.122 (0.152)	0.048*** (0.000)	0.007 (0.494)	0.049*** (0.000)
Cash	-0.018 (0.967)	-0.082*** (0.000)	-0.062 (0.208)	-0.075*** (0.000)	0.337 (0.391)	-0.079*** (0.000)	0.009 (0.859)	-0.079*** (0.000)
Fixedratio	-0.164 (0.769)	-0.049*** (0.000)	0.051 (0.402)	-0.064*** (0.000)	-0.347 (0.488)	-0.050*** (0.000)	0.061 (0.313)	-0.052*** (0.000)
ROA	-3.809** (0.032)	-0.454*** (0.000)	-0.426** (0.028)	-0.431*** (0.000)	-1.320 (0.392)	-0.499*** (0.000)	-0.316* (0.093)	-0.506*** (0.000)
Zscore	0.558*** (0.002)	-0.028*** (0.000)	0.033* (0.091)	-0.025*** (0.000)	0.103 (0.514)	-0.019*** (0.000)	0.020 (0.534)	-0.018*** (0.000)
Taxrate	0.194 (0.614)	0.000 (0.979)	0.005 (0.899)	0.000 (0.965)	0.199 (0.557)	0.012 (0.163)	0.016 (0.690)	0.012 (0.163)
N	9,586**	9,586	9,586	9,586	8,704	8,704	8,704	8,704
Partial F	213.353		160.467		2407.574		490.094	
Partial R^2	0.026		0.020		0.250		0.064	
Hausman test	F=47.06 (P=0.000)		F=53.35 (P=0.000)		F=112.41 (P=0.000)		F=109.90 (P=0.000)	

*This table presents the results of the first-stage and second-stage regression of the instrumental variables estimations of eq. (1), where industry average control-ownership divergence and lagged one period control-ownership divergence are used as instruments, respectively. Detailed definitions of variables are reported in Table 1. P-values are reported in brackets. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively.*

Table 6. Factors influencing the association between ultimate control-ownership divergence and leverage

	SOE		*IO*		*HOLD*		*NTS*	
	leverage	***leverage***	***leverage***	***leverage***	***leverage***	***leverage***	***leverage***	***leverage***
Ccwedge	0.001*** (0.000)		0.002*** (0.000)		0.002*** (0.000)		0.002*** (0.000)	
Ccwedge x Factor	0.002*** (0.001)		-0.001*** (0.000)		-0.001*** (0.000)		-0.001*** (0.000)	
Ccratio		0.004* (0.065)		0.019*** (0.000)		0.016*** (0.000)		0.016*** (0.000)
Ccratio x Factor		0.032*** (0.000)		-0.021*** (0.000)		-0.019*** (0.000)		-0.023*** (0.000)
Factor	-0.021*** (0.000)	-0.055*** (0.000)	0.014*** (0.000)	0.036*** (0.000)	0.010*** (0.001)	0.029*** (0.000)	0.009*** (0.003)	0.034*** (0.000)
Size	0.052*** (0.000)	0.053*** (0.000)	0.052*** (0.000)	0.053*** (0.000)	0.053*** (0.000)	0.054*** (0.000)	0.053*** (0.000)	0.054*** (0.000)
Cash	-0.084*** (0.000)	-0.085*** (0.000)	-0.085*** (0.000)	-0.085*** (0.000)	-0.084*** (0.000)	-0.084*** (0.000)	-0.085*** (0.000)	-0.085*** (0.000)
Fixedratio	-0.049*** (0.000)	-0.051*** (0.000)	-0.049*** (0.000)	-0.051*** (0.000)	-0.049*** (0.000)	-0.051*** (0.000)	-0.050*** (0.000)	-0.051*** (0.000)
ROA	-0.504*** (0.000)	-0.503*** (0.000)	-0.509*** (0.000)	-0.505*** (0.000)	-0.503*** (0.000)	-0.498*** (0.000)	-0.499*** (0.000)	-0.496*** (0.000)
Zscore	-0.020*** (0.000)	-0.020*** (0.000)	-0.020*** (0.000)	-0.019*** (0.000)	-0.020*** (0.000)	-0.019*** (0.000)	-0.019*** (0.000)	-0.019*** (0.000)
Taxrate	0.002 (0.774)	0.003 (0.731)	0.004 (0.590)	0.005 (0.535)	0.003 (0.671)	0.004 (0.647)	0.004 (0.666)	0.004 (0.617)
Intercept	-0.557*** (0.000)	-0.567*** (0.000)	-0.568*** (0.000)	-0.599*** (0.000)	-0.577*** (0.000)	-0.604*** (0.000)	-0.587*** (0.000)	-0.601*** (0.000)
Firm Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	9,873	9,873	9,873	9,873	9,873	9,873	9,873	9,873
Number of firms	1,802	1,802	1,802	1,802	1,802	1,802	1,802	1,802
R^2	0.151	0.148	0.151	0.150	0.151	0.149	0.152	0.152

** Observations with only one firm in a industry-year are dropped.

*This table presents regression results of eq. (2) to examine the factors influencing the association between ultimate control-ownership divergence and leverage. Factor represents state ownership, institutional ownership, the presence of large tradable shareholders and NTS reform. Detailed definitions of variables are reported in Table 1. P-values are reported in brackets. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively*

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Leveraget= f (divergence measuret, divergence measure x factor, factor, sizet-1, casht-1, tangibilityt-1, profitabilityt-1, zscoret-1, taxratet-1, industry dummies, firm and time effect) (2)

Eq. (2) is used to test H2a, H2b, H2c, and H2d. In eq. (2), divergence measure is *Ccwedge* or *Ccratio* and factor represents state ownership, institutional ownership, the presence of large tradable shareholders and NTS reform. This equation is used to test and compare the association between control-ownership divergence and leverage under different situations defined by the above four factors. The results are shown in Table 6, where:

- SOE is a dummy variable that takes the value of 1 for state owned enterprises and zero for non-state owned enterprises to capture state ownership property.
- IO is a dummy variable that takes the value of 1 for firms with institutional ownership no less than 10% and zero otherwise to capture institutional ownership.
- HELD is a dummy variable that takes the value of 1 for firms with the sum of shareholding percentage of top ten negotiable shareholders no less than 10% and zero otherwise to capture the presence of large tradable shareholders.
- NTS is a dummy variable that takes the value of 1 for the observations from 2008 onwards and zero otherwise to capture the difference before and after the Non-tradable share reform (NTS reform).

The coefficients on the interactions are all significant with predicted signs. So, the research findings indicate that the effect of the control-ownership divergence on leverage level of capital structure is more pronounced if it is state-owned enterprise because SOEs have more access to obtain borrowings. The effect is diminished for firms with higher institutional ownership and is also weakened for firms with the presence of shareholders holding large amount of tradable shares because the presence of large amount of institutional ownership and large tradable shareholders imposes monitoring and constrains over ultimate controllers' behaviors. The effect of the control-ownership divergence on leverage level of capital structure is less pronounced after NTS reform because the overall incentives of ultimate controlling shareholders to control and expropriate resources are reduced after NTS reform.

My results suggest that factors that strengthen or constrain self-dealing and tunneling activities (expropriation) influence the relation between the divergence between ultimate control rights and cash flow rights and the leverage level of capital structure.

5. CONCLUSION

In this paper, I explore how ultimate ownership structures of Chinese listed firms influence their leverage decisions. I find strong evidence that leverage-increasing motivation of ultimate controlling shareholders with the risk of expropriation dominates in Chinese market, where the legal protection for creditors and minority shareholders is weak. The research findings indicate that the positive association between the divergence between the control-rights and cash-flow rights of the largest ultimate owner of a firm and leverage are robust across different regression methodologies and to different estimates of the variables.

In addition, I also identify several factors that have potential influence on the effect of ultimate ownership structure on leverage, including state ownership, institutional ownership, the presence of large tradable shareholders and NTS reform. The empirical results indicate that the effect of the control-ownership divergence on leverage level of capital structure is more pronounced for state-owned firms and is less pronounced for firms with large institutional ownership, with the presence of large tradable shareholders, and after the Non-tradable share reform. So, institutions and mechanisms that facilitate or constrain self-dealing and tunneling activities (expropriation) affect the relation between the divergence between ultimate control rights and cash flow rights and the leverage level of capital structure. These results contribute to our understanding of the motivation and role of raising debt with the presence of ultimate control-ownership divergence in Chinese market, a less developed market compare with western countries.

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AGENCY COST OF TYPE I AND ACCOUNTING NUMBERS IN AUSTRALIA AND INDIA

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Abstract

This paper has as objective to assess the agency cost of type I on the value relevance of accounting numbers (earnings and book value) for all listed firms in the manufacturing, retailing and service industries in Australia and India from 2005 to 2012 using the modified version of the Ohlson' model in Faud and Mohd, (2008) where price is express as a linear function of earnings, book value and various accounting numbers. As predicted, the results show that both earnings and book value are value relevance for the manufacturing, retailing and servicing industry in Australia and India. The presence of the free cash flow agency problem caused the value relevance of earnings and book value to decline in Australia and India. However, the effect is not stable across the difference industries. The results show that in the manufacturing industry, the effect caused by the free cash flow agency problem is relatively higher for Australia and India than in the retail and service industries. As a result, the firms in the manufacturing with free cash flow agency problem have lower earnings (book value) coefficients than those without free cash flow agency problem.

Keywords: Free cash flow, agency cost of Type I, Earnings, Book value, Stock price
JEL Classification: G1, G38, G32

1. INTRODUCTION

Competition in the capital markets have been the core source of driving share prices towards minimum average cost in an activity (Cheng et al., 2005; Kothari and Zimmerman, 1995; Thomas and Zhang, 2002). Thus, the results of these studies suggest that managers must therefore motivate their organizations to increase efficiency so as to enhance the problem of survival. Contrary to capital market disciplinary forces are often weaker in new activities and activities that involve substantial economic rents or quasi. In such scenario, monitoring of firm´s financial statements have become a crucial source of relevant information to investors and financial analyst (Godfrey et al., 2006).

As a matter of fact, stakeholders depend highly on financial report to assess managers´ stewardship responsibilities, investors' decisions and their earnings. In effect, the payout of cash to shareholders creates a major conflict that has received little attention (Jensen, 1986; Myers and Majluf, 1984). This payout to shareholders reduces the resources under manager's control: reducing manager's power and making it more likely that they will incur the monitoring of the capital market when the firm must obtain new capital (Rozeff, 1982; Cheng et al, 2005). And as such, financial project internally avoids this monitoring and the possibility the funds will be unavailable or available only at high explicit prices. This conflict becomes more complex as a firm grows globally (Kothari et al, 2006). Thus, the demand for accounting subculture causes difference in accounting principles between countries which have widen the conflict between shareholders and managers (Godfrey et al., 2006; Hofstede 1980; Gray, 1988).

In the first place, the fundamental objective of a business is to increase real shareholder value, (Jensen, 1986), this means increasing the net present value (NPV) of the future stream of free cash flows. He believed that free cash flow is the cash flow available to the company's suppliers of equity capital after all operating expenses and principal repayment have been paid, and necesIndiary investments into short-term assets and long-term assets have been made. Jensen identifies free cash flow as a major source of agency problems. He argued that shareholder desire free cash flow to be release in the form of dividend while managers believe that could grow their managerial strength by investing it in an alternative venue. That's managers think that investing the pay-outs to shareholder in an alternative venue will causes the firm to grow. Thus, increase in growth will enable manager to gain more control over the resources.

Also, Chung, Firth and Kim, (2005) find out that the agency problem increase when managers earned personal benefits or rewards from activities and projects that are self-gratifying. Gul and Tsui, (1998) argued since the existence of agency problem for firms with high FCF and low growth opportunity is high, auditors may react by judging those firms as having higher probability of misstatements as requiring bigger effort and as such there exist a positive association between FCF agency problem and audit fees. They concluded that most firms with such characteristics using income discretionary accruals to inflate reported earnings.

In Jensen's world, he believes that bad managers use income discretionary accruals method to deflate reported income and invest the excess of cash flow in projects with marginal or negative NPV, while good managers are those who redistribute the excess of cash flow to shareholders as dividend. Chen and Zhiguo, (2012) argued that investment behaviour and enterprise financial pressure are often influence by the presence of excess of free cash flow. They added that free cash flow is responsible for strengthening the tendency of managers engaging in risky behaviour, thus, increase the controllable resources of internal management and enable them to get personal interest for over-investment behaviour. Consequently, companies with sufficient free cash flow and increased desirability of management investing in other business activity will enhance the agency problem.

As in Fuad and Mohd, (2008), this paper assumes that the presence of agency problem is when a firm has high free cash flow and low growth opportunities. Investors will react aversely to firms' market price when there is excess of free cash flow and low growth opportunities. This study examines principally the FCF agency problems and the value relevance of accounting information using a modified version of the Ohlson's, (1995) model assumed in Fuad and Mohd, (2008) where stock price is identified as a linear function of earnings, book value of equity and various accounting numbers under the IFRS. It also checks if there exist any systematic differences among investors decision on share price given the FCF agency problems across manufacturing, retailing and service industries across Australia and India.

This paper is organized as follows. Section II discusses our literature review. Hypothesis development, data collection and empirical model are discussed in section III. In section IV, we present the result of the empirical analysis and in section V we conclude. With respect to the contribution, it attempts to provide new insights to the exiting theory by investigating the value relevance of accounting information in the context of the FCF agency problem.

2. LITERATURE REVIEW

2.1. Value Relevance of Accounting Numbers

Barth, Beaver, and Landman, (2001) argued that value relevance researches are formulated to examine whether particular accounting number reflect information that is used by investors in valuing firms' equity. Especially, financial statements are Indiaid to be value relevance if they are associated with equity prices, values or returns (Faud and Mohd, page 77, 2008).

Under the clean surplus based valuation framework of Ohlson (1995), book value provides an anchor role in valuation by measuring the net assets of the firm that generate future "normal" earnings (also in Penman et al, 2002; Penman, 1996; Easton, Harris and Ohlson, 1992; and Collins, Pincus and Xie, 1999, Lious et al., 2015). Ohlson, (1995) developed a valuation framework wherein book value plays an integral role in valuation. Using the clean surplus relation, Ohlson reformulated the dividend discount model by expressing price as the sum of book value and the present value of expected future abnormal earnings. In this framework, the role for book value is mechanically determined and does not depend upon the stochastic (or informational) properties of accounting data. Rather, book value plays an anchor role in valuation by representing the stock of resources that generates future normal earnings that are expected to persist forever into future.

Some empirical researchers have suggested that book value measures the net realizable of firm´s assets which assumes prominence in the event of firm´s liquidation or when firms are in financial distress (Barth et al., 1997; Berger et al., 1996). Another explanation for the value relevance of book value is that it reflects the liquidation value of a firm especially when a firm is in financial distress (see Barth, Beaver and Landsman, 1997 and Berger, Ofek and Swary, 1996). The origins of this idea comes from the "liquidation option" proposed by Hayn (1995) wherein shareholders are expected to liquidate a firm if the liquidation value of its assets exceeds the value-in-use. Under this framework, book value which reflects the net realizable value of a firm's assets will become value relevant when a firm's liquidation probability is high. Barth, Beaver and Landsman, (1999) provided evidence that is consistent with this claim. Indeed, Burgstahler and Dichev, (2001) argued that book value may be relevant for valuation when the firms' net assets are likely to be adapted to superior alternative use.

Heckel and Livnat, (1992) provided specific shortcomings and limitations that involve earnings approach for investment purposes. They indicated that earnings are subject to managerial discretion such as having some latitude in applying accounting standards to their specific situation. Firms may have different approaches to revenue recognition, expense recognition and the allocation of costs across periods. Some firms estimate the depreciation expense by predicting the useful lives of depreciable assets and their Indialvage values. These estimates can contain errors and furthermore, when firms update their estimates of useful lives of fixed assets the result can be an increase or decrease in earnings (Hackel and Livnat, 1992).

Equally, the findings of Lev's, (1989) study have supported that the earnings relation shows considerable instability over time, meaning that the usefulness of quarterly and annual earnings to investors is very limited. This evidence is also supported by the low correlation between earnings and returns. Lev has showed that earnings have low information content because of the discretion of managers regarding the valuation principles, the accounting measurement, and the manipulation of earnings. Jennings et al., (2001) illustrated that earnings excluding goodwill amortization are more useful as an indicator of share value than earnings including goodwill amortization. Consequently, Moehrle et al., (2001) added that informative earnings excluding goodwill amortization are compared to the traditional measures of earnings before extraordinary items and cash flow from operations. The result of this study suggests that both earnings measures are equally informative, and have more information value than cash flow from operations.

Manzano et al., (2014) employed empirically analysis to investigate whether a change from the Mexico GAAP to the International financial Reporting Standards has an effect on earnings management. Using Sample of non-financial firm listed on the Mexican Stock Exchange (BMV) over 1997 to 2009, affirmed that there was lower earnings management associated with firms that prepared the financial statement according to the new accounting regulations. According these authors, Mexican companies with Big 4 auditors have higher quality of accounting information and thus, the new accounting standard are sufficient and effective in countries with weaker investor protection rights.

On the other hand, a number of reasons have been accounted for the apparent decline in the value relevance of earnings. Possible reasons for this include the arbitrary nature of the accounting techniques used to measure earnings, manipulation of earnings figures by management and the raise of the reliability and relevance of book values (Collins et al., 1997; Francis and Oswald, 2000). Most research in value-relevance of earning and book value has predominantly used data from the GAAP, and no study have provided recently evident under the IFRSs adoption across countries. The use of the mandatory IFRS adoption across countries in this study will provides also an opportunity to investigate the generalizability of past results to another market using difference accounting standards. Using the price model assumed in Ohlson, it is expected that both earnings and book value-relevant as indicated by a positive association with price.

Hypothesis 1 posits that earnings and book values exhibit strong and positive interaction on share prices across Australia and India.

Hypothesis 2 posits that earnings and book values exhibit strong and positive interaction on share prices across manufacturing, retail and service industries.

2.2. FCF Agency Problem and Accounting Numbers

Following Gul, (2001), it is evident that managers with excess of cash flow and low growth opportunities are most likely to engage in risky behaviour pattern in the absent of any disciplinary measure such as paying off debts and redistribution of dividend. Meanwhile, Wu, (2004) reported that even when investments cannot maximise shareholders' wealth, managers are willing to invest as long as in order to gain more prestige being manager in big firms and gain control over resources.

Chen and Zhiguo, (2012) argued that investment behaviour and enterprise financial pressure are often influence by the presence of excess of free cash flow. They added that free cash flow is responsible for strengthening the tendency of managers engaging in risky behaviour, thus, increase the controllable resources of internal management and enable them to get personal interest for over-investment behaviour. Consequently, companies with sufficient free cash flow and increased desirability of management investing in other business activity will enhance the agency problem. Jensen, (1986) added that the tendency of managers of high FCF and low growth opportunity firms to invest in marginal or even negative NPV can enlarge agency problem by creating shareholder's non-wealth-maximizing investment. Non-wealth-maximizing investments eventually could result in lower stock prices and may trigger shareholder actions to remove directors and senior executives. Chung et al., (2005) further claimed that companies with high FCF and low growth opportunity tended to use income-increasing discretionary accruals to increase reported earnings.

In a similar spirit, Gul and Tsui, (1998) found that there exists an association between FCF agency problem and audit fees. That's managers of firms with high free cash flow and low growth opportunities masked non-optimal expenditures by accounting manipulation and auditors responded to the higher probability of accounting misstatements or irregularities by exerting greater audit effort and thus charging higher audit fees. Gul, (2001) concluded that managers of firms with high free cash flow and low growth opportunities are trapped with agency problem in the sense that they tend to invest the excess cash in alternative venue that result to marginal or negative NPV and generally claimed as acting on the behalf of shareholders' interest. Managers' choice to increase reported earnings resulting from FCF agency problem through earnings management may affect the value relevance of accounting information.

In the light of Myers and Majluf, free cash flows will be retained in a form where they are readily accessible; i.e. as cash or short-term financial assets. Management would be willing to store the excess free cash flow in these assets despite their low returns because of their ease of recover ability. From an empirical perspective, both the Jensen and Myers and Majluf approaches suggest a similar behaviour pattern; i.e. managers do not distribute free cash flows but rather invest/hoard them in alternative venues. Given the identical outcome, distinguishing the underlying motivation from the behaviour pattern itself is not always feasible.

Lastly, Teoh et al., (1998a; 1998b) show that firms with income-increasing abnormal accrual in the year of a seasoned equity offer had significant subsequent stock underperformance. This is because prior to public equity offers, some managers inflate reported earnings in an attempt to increase investors' expectations about future performance and subsequently would increase the offer price. As firms with high FCF agency problem have the tendency to camouflage their reported earnings, the market negatively reacts to this information when it is known. Therefore the value relevance of earning and book value may be less for firms with FCF agency problems compared to firms without such problem.

Hypothesis 3 posits that earnings and book values relation with share prices is weaker for firms with free cash flow agency problem across countries such as such as Australia and India.

Hypothesis 4 posits that earnings and book values relation with share prices is weaker for firms with free cash flow agency problem across manufacturing, retail and service industries.

3. METHODOLOGY

3.1. Data

We Sampled all firms in *COMPUSTAT* over the period 2005 to 2012 with sufficient data available to calculate the *COMPUSTAT*-based variables for every firm-year. We identify 2 countries with mandatory IFRS in 2005 such as Australia and India. We eliminate firms in regulated industries (SIC codes between 4400 and 4999) and banks and financial institutions (SIC codes between 6000 and 65000). We took the Sample media of firm's free cash flow for every year and compared it with the firm's price to book ratio. Any firm's free cash flow below the price to book ratio and above the Sample median is characterized of having free cash flow agency problem. This control was necesIndiary in order to check agency problem associate with high free cash flow. Firm with free cash flow agency problem were identified with a dummy variable 1 (have high FCFS but low growth opportunity) and 0 otherwise. Growth opportunity is proxied by the price to book ratio. High PBR indicate that investors expect firm facing high growth opportunity (Faud and Mohd, 2008 and Lious et al., 2015).

Lastly, in order to avoid the misrepresentation of our result through the concept of extraordinary items, we use earnings before extraordinary and exceptional items. It should be noted that the perceived lack of value relevance earnings can be attributed to the concept of extraordinary items; therefore using earnings before extraordinary items is best for this study.

3.2. Models

The study basically uses the theoretical framework applied in Ohlson, (1995) and Feltham and Ohlson, (1995) to develop and test whether accounting numbers reflect information that is used by investors in firms' equity valuation. That is, it tests the relevance of accounting numbers in firms with free cash flow agency problems. It further takes into consideration the importance of the price model as illustrated in Kothari and Zimmerman (1995) where the slope or earnings response coefficients are substantially less biased in the price model than in the return model. This is due to the fact that current earnings reflect both surprise to the market and stale component that the market had anticipated in an earlier period and therefore are relevant to explain current stock price.

Consistent with Francis and Schipper, (1999) results show that the value relevance of the price model has increased while the value relevance of return model have declined from the period 1952-1994. He concluded that the decline for the return model could be due to increases in the volatility of the market returns during the Sample period. In a similar spirit, Lev and Zarowin, (1999) argued even though book values and earning are value relevant for the period 1977-1996, there is a decline in the value relevance for both the price and return models over the examined period. However, Collins et al. (1997) found that the combined book values and earnings are value-relevant whereas the value relevance of book value and earnings had slightly increased over period using the price model for listed firms from 1953-1993.

Thus, the Ohlson model expresses the value of firm's equity as a function of its earnings and book values as follows:

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVSP_{it} + \varepsilon_{it} \quad (1)$$

Where:

P_{it} is stock price of firm *i* at balance sheet date (t);

EPS_{it} is the earnings per share of firm *i* during the year *(t);*

$BVPS_{it}$ is the book value per share of firm *i* at the end of year *(t)* and;

ε_{it} is the error term at time t.

Hypotheses 1 and 2 stated that that earnings and book values exhibit strong and positive relation with share price across manufacturing, retail and service industries in Australia and India, thus value-relevant. These hypotheses will be supported when the coefficients β_1 and β_2 are positive and statistically significant.

We follow the modification of the Ohlson model as illustrated in Faud and Mohd, (2008).

Where an additional variable FCFAP is set as a dummy variable equal to 1 if the free cash flow is above the Sample median for the year and the price to book ratio is below the Sample median for the year, otherwise FCFAP is set equal to 0.

The additional variable in the Ohlson model capture the presence of free cash flow agency problem in firms. That is, we labeled firms as 1 when there is the possibility of having a high free cash flow agency problem (those firms with high free cash flow and low growth opportunities) and 0 otherwise. We used price to book ratio as a proxied for growth opportunity since investors expect firm facing high growth opportunity to have high price to book ratio. Thus, the regression model is shown as follows:

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVSP_{it} + \beta_3 FCFAP_{it} + \beta_4 FCFAP{*}EPS_{it} + \beta_5 FCFAP{*}BVSP_{it} + \beta_6 Manufacturing_{it} + \beta_7 Retailing_{it} + \beta_8 Servicing_{it} + \varepsilon_{it} \quad (2)$$

Where:

P_{it} is stock price of firm *i* at balance sheet date (t);

EPS_{it} is the earnings per share of firm *i* during the year *t;*

$BVPS_{it}$ is the book value per share of firm *i* at the end of year *t* and;

$FCFAP_{it}$ is 1 for firm-year with free cash flow agency problem and 0 otherwise. Firm-year with free cash flow agency problem is identified when the free cash flow is above the Sample media for the year and the price to book value ratio is below the Sample median for the year;

$FCFAP_{it}$*EPS_{it} captures the interaction between free cash flow (***$FCFAP_{it}$***) and book value (***EPS_{it});***

$FCFAP_{it}$*$BVPS_{it}$ captures the interaction between free cash flow (***$FCFAP_{it}$***) and book value (***$BVPS_{it}$);***

$Manufacturing_{it}$ captures industry effect of all listed firms in the manufacturing industry

$Retail_{it}$ captures industry effect of all listed firms in the retailing industry

$Servicing_{it}$ captures industry effect of all listed firms in the servicing industry

ε_{it} is the error term at time t.

In equation 2, β_1 and β_2 coefficients represent the value relevance of earnings and book value in the absence of free cash flow agency problem. The coefficient β_3 shows the presence of free cash flow agency problem. Finally, the coefficients β_4 and β_5 show the impact of the free cash flow agency problem on the value relevance of earnings and book value, respectively. It expected that the coefficients β_4 and β_5 to be negative and statistically significant. Therefore, we can conclude that the presence of free cash flow agency problem causes the value relevance of earnings and book value to decline across firms. The coefficients β_6, β_7 and β_8 represent the industry-specific effect for all listed firms in the manufacturing, retailing and servicing industry.

3.3. Variable Measurement

Free cash flow: According to Chung et al. (2005) and Gul (2001), free cash flow (FCF) can be measure as follows:

$$FCF_{it} = (INC_{it} - TAX_{it} - INTEXP_{it} - PSDIV_{it} - CSDIV_{it})/TA_{it-1} \qquad (3)$$

Where:

FCF is free cash flow

INC is operating income before depreciation;

TAX is total taxes;

INTEXP is interest expense;

PSDIV is preferred stock dividends;

CSDIV is common stock dividends;

TA is total assets at the beginning of the fiscal year.

Growth opportunity: Price to book ratio (PBR) is judged as the best measurement of growth opportunity since it is the difference between market and book value of equity and it reflects the value of the firm's future investment opportunities. Thus, the higher the price-to-book ratio, the greater growth opportunities (Chung et al. 2005; Gul and Tsui, 1998).

$PBR_{it} = PRICE_{it} / BVSP_{it}$

PBR_{it} Price-to-book-ratio of firm *i* during the year *t;*

P_{it} is stock price of firm *i* at balance sheet date (t);

$BVPS_{it}$ is the book value per share of firm *i* at the end of year *t.*

Earnings per share: Earnings before extraordinary items in period t, divided by the total number of share outstanding. Lastly, in order to avoid the misrepresentation of our result through the concept of extraordinary items, we use earnings before extraordinary and exceptional items.

4. EMPIRICAL RESULTS

4.1. Descriptive Statistics

Table 1 shows the descriptive statistics of share price, earnings per share, book value per share, free cash flow and price-to-book ratio for full Sample, free cash flow agency problem firms and other firms across Australia and India from 2005-2012.

The descriptive statistics of the full Sample is reported in Panel A in Table 1 while the FCF agency problem Sample and other firms are reported in Panel B and Panel C, respectively.

In Panel A, the overall mean of price, earnings and book value per share for Australia (India) are 4.206 (1.953), 0.058 (0.718), 2.102 (1.046), respectively. The average of price and book value are higher for Australia compare to those figures in India. However, average of earnings is higher in India than in Australia. The average of earning per share for FCF agency problem firms 0.091 (0.372) is lower than other firms 0.365 (0.450) for Australia (India). However, the average of earning per share for FCF agency firms and other firms are larger in India than in Australia. This indicates that FCF agency firms and other firms are performing better in India than in Australia, even though, across both countries, other firms performed better than FCF agency problem firms. Also, the mean of share price for other firms 5.921 (1.350) is higher than the mean of FCF agency problem firms 1.825 (1.012) for Australia (India).

The mean of the share price for both FCF agency problem firms and other firms are higher in Australia than in India. This suggests that the firms' market value is higher for Australia although the performance in term of the earnings per share is lower and Indian firms' market value are lower even though the performance is higher in term of earnings per share. In Australia and India, the firms' market value is higher for firms without FCF agency problem than FCF agency problem firms. This suggests that firms without FCF agency problem perform better than FCF agency problem firms.

Moreover, the mean of book value 2.954 (1.873) is larger for other firms than FCF agency problem firms 1.034 (0.983) for Australia (India). Consistent with PBR as a proxied for growth opportunity, the price-to-book ratio is higher for other firms 1.684 (1.006) than FCF agency problem firms 0.435 (0.282) for Australia (India).

Table 1. Descriptive Statistics

Panel A: Full Sample for Australia (N=903); India (N=864)

	Mean		Median		Std. Deviation		Maximum		Minimum	
	Australia	India	Australia	India	Australia	India	Australia	India	Australia	India
P	4.206	1.953	2.837	2.061	5.730	2.702	29.435	15.02	0.023	0.015
EPS	0.058	0.718	0.0829	0.473	0.082	0.830	8.940	9.981	-7.45	-2.93
BVPS	2.102	1.046	1.906	1.479	1.893	1.581	15.890	10.30	-9.02	-6.75
FCF	0.097	0.029	0.0485	0.014	0.985	0.046	5.935	3.083	-0.68	-0.89
PBR	1.982	0.935	0.951	0.625	2.674	1.023	26.850	17.05	-8.01	-4.01

Panel B: FCF Agency problem for Australia (N=256); India (N=174)

	Mean		Median		Std. Deviation		Maximum		Minimum	
	Australia	India	Australia	India	Australia	India	Australia	India	Australia	India
P	1.825	1.012	1.046	1.632	0.998	0.469	9.012	3.925	0.011	0.015
EPS	0.091	0.372	0.128	0.481	0.526	0.039	4.885	2.037	-8.48	-3.84
BVPS	1.034	0.983	1.827	2.024	1.375	1.005	5.094	2.565	-5.95	-1.93
FCF	0.086	0.113	0.028	0.081	0.042	0.039	2.045	1.023	0.029	-0.26
PBR	0.435	0.282	1.450	0.049	1.657	1.318	3.928	0.848	-8.01	-0.89

Panel C: Other Sample for Australia (N=647); India (N=690)

	Mean		Median		Std. Deviation		Maximum		Minimum	
	Australia	India	Australia	India	Australia	India	Australia	India	Australia	India
P	5.921	1.350	2.043	1.023	5.892	1.035	29.435	15.02	0.023	0.015
EPS	0.365	0.450	0.048	0.048	0.356	0.091	8.940	9.981	-7.45	-2.93
BVPS	2.954	1.873	1.849	0.850	2.049	1.002	12.675	10.30	-9.02	-6.75
FCF	0.015	0.044	0.007	0.010	0.105	0.005	5.935	3.083	-0.68	-0.89
PBR	1.684	1.006	1.034	0.793	3.019	0.821	26.850	17.05	-8.01	-4.01

Table 1 illustrates the mean, median standard deviation, maximum, and minimum of stock price, earnings before extraordinary and exceptional items per share (EPS), book value per share (BVPS), free cash flow (FCF) and price-to-book ratio (PBR) derived from the COMPUSTAT database for all listed firms in Australia and India from 2005 to 2012. Source: Lious N. A. T.'s PhD thesis, (2015).

4.2. Pearson Correlation

Analysing Table 2, revealed that the correlation between stock price (P), earnings per share (EPS), book value per share (BVPS), and FCF agency problem (FCFAP) were highly significant (p<0.001) for Australia and India. The Pearson correlation coefficients between stock price, earnings, book value and FCF agency problem are relatively higher for Australia than in India. First, among these countries, the correlation coefficient between earnings and stock price is highest for listed firm in Australia (0,680) than in India (0.398), while the correlation coefficients between price and book value is higher in Australia (0.591) than in India (0.373). These correlation coefficients are relatively higher than those found in Faud and Mohd, (2008) in Malaysia. Their results show that the correlation coefficient between stock price and earnings is 0.416 while the coefficient of stock price and book value is 0.433. However, the correlation coefficient between book value and earnings is 0.459 which relatively lower than those in our Sample. This shows differences in the background of the Spanish, India and Malaysia stock exchange market add great contribution to the differences in the strength of the Pearson correlation analysis.

Table 2. Pearson Correlation Matrix

Australia				
Variables	*P*	*EPS*	*BVPS*	*FCFAP*
P	1			
EPS	0.680***	1		
BVPS	0.191***	0.426***	1	
FCFAP	0.753***	0.425***	0.576***	1

India				
Variables	*P*	*EPS*	*BVPS*	*FCFAP*
P	1			
EPS	0.398***	1		
BVPS	0.373***	0.206***	1	
FCFAP	0.234***	0.307***	0.485***	1

*Table 2 illustrates the Pearson correlation coefficients of stock price, earnings before extraordinary and exceptional items per share (EPS), book value per share (BVPS), free cash flow (FCF) and price-to-book ratio (PBR) derived from the COMPUSTAT database for all listed firms in Australia and India from 2005 to 2012. *, **, *** Pearson Correlation is significant at the 0.1, 0.05, 0.001 levels. Source: Lious N. A. T.'s PhD thesis, (2015).*

4.3. Regression results

Table 3 shows that the regression analysis of stock price against earnings and book value are positive and statistically significant at p<0.001 for all listed firms under the manufacturing, retailing and servicing industries in Australia and India from 2005 to 2012. It also provides a separate industry regression analysis as well as a pooled regression analysis. As far as the adjusted R^2 is concerned, in Australia (India), the adjusted R^2s for the separate industry Sample and pooled Sample indicate that earning and book values explain the variation in stock prices about for manufacturing industry 48.3% (49.3%), for retailing industry 45.1% (38.4%), for servicing industry 63.5% (26.2%) and for the pooled industry Sample 67.7% (52.1%). This means that any proportional increase in the value relevance of earnings and book value will result to relatively increase in stock price. Thus, this result supports with hypotheses 1 and 2; and it is consistent with prior studies such as Faud and Mohd, (2008), Collins et al., (1997), Whelan and McNamara, (2004).

Table 4a and 4b show that the regression analysis of FCF agency problem and the value relevance of earnings and book value are positive and statistically significant at p<0.001 for all listed firms under the manufacturing, retailing and servicing industries in Australia and India from 2005 to 2012. It shows repression analysis for both the pooled Sample and the separate industry ample. Consistent with the hypothesis, the results show that the value relevance of earnings and book value decline in the presence of FCF agency problem associated among firms across all industries in Australia and India. Thus, our variables of interest are EPS, BVPS, FCFAP, FCFAP*EPS, and FCFAP*BVPS.

Table 3. Value Relevance of Accounting numbers

$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVSP_{it} + \varepsilon_{it}$					
		Australia			
Sample	Adj. R^2	β_1	β_2	Durbin-Watson	N
Pooled	67.7%	0.641	0.595	2.062	903
		(5.995)***	(3.680)***		
Manufacturing	48.3%	0.430	0.311	2.007	379
		(2.086)***	(1.928)***		
Retailing	45.1%	0.251	0.275	1.983	325
		(2.995)***	(2.680)***		
Servicing	63.5%	0.438	0.175	1.998	199
		(6.419)***	(1.706)***		
		India			
Sample	Adj. R^2	β_1	β_2	Durbin-Watson	N
Pooled	52.1%	1.734	0.826	2.084	864
		(8.762)***	(6.910)***		
Manufacturing	49.3%	0.842	0.692	2.047	491
		(3.035)***	(4.945)***		
Retailing	38.4%	0.352	0.583	1.779	221
		(2.381)***	(2.524)***		
Servicing	26.2%	0.172	0.356	1.852	152
		(1.926)**	(2.184)***		

*Table 3 illustrates the regression analysis of value relevance of earnings per share (EPS) and book value per share (BVPS), derived from the COMPUSTAT database for pooled Sample as well as across the manufacturing, retailing and service industries in Australia and India from 2005 to 2012. *, **, *** is significant at the 0.1, 0.05, 0.001 levels. Source: Lious N. A. T.'s PhD thesis, (2015).*

Table 4a and 4b show that the regression analysis of FCF agency problem and the value relevance of earnings and book value are positive and statistically significant at p<0.001 for all listed firms under the manufacturing, retailing and servicing industries in Australia and India from 2005 to 2012. It shows repression analysis for both the pooled Sample and the separate industry Sample. Consistent with the hypothesis, the results show that the value relevance of earnings and book value decline in the presence of FCF agency problem associated among firms across all industries in Australia and India. Thus, our variables of interest are EPS, BVPS, FCFAP, FCFAP*EPS, and FCFAP*BVPS.

Analysing the pooled Sample revealed that the coefficient β_3 of FCFAP dummy variable is not statistically significant at p<0.001 for all listed firms in Australia (β_3 = 0.732, t = 1.077) and for India (β_3 = -3.294, t = 1.270), respectively. This result indicates that FCF agency problem is not value relevance in its own right for all listed firms in Australia and India. Moreover, in the separated industry Sample, the coefficient β_3 of FCFAP dummy variable is not statistically significant at p<0.001 for all listed firms in Australia (β_3 = 0.411, t = 0.894 for manufacturing industry; β_3 = 0.652, t = 0.329 for retailing industry; β_3 = 0.071, t = 0.699 for servicing industry) and for India (β_3 = -0.815, t = -0.309 for manufacturing industry; β_3 = 0.249, t = 0.465 for retailing industry; β_3 = 0.309, t = 0.311 for servicing industry), respectively. Even though the coefficient of the FCF agency problem is not statistically significant across the difference industries, its interaction with earnings and book value has significant impact on the value relevance of earnings per share and book value per share.

On the other hand, the coefficient β_1 of earnings is positive and statistically significant at p<0.001 for pooled Sample in Australia (β_1 = 2.144, t = 8.960) and for India (β_1 = 1.037, t = 5.573), respectively. This represents market's reaction to earnings in the presence of FCF agency problem. However the market's reaction to earnings in the absence of FCF agency problem is significantly lower. This can be seen from a negative and statistically significant coefficient on the FCFAP*EPS interaction variable in Australia (β_4 = -1.912, t = -3.116) and for India (β_4 = -0.979, t = -14.932), respectively. The presence of the FCF agency problem causes the value relevance of earnings to decline from 2.144 to 0.232 (2.144 – 1.912) for Australia and from 1.037 to 0.058 (1.037 – 0.979). This result is consistent to hypothesis 3.

At the industry level, the coefficient $\boldsymbol{\beta_1}$ of earnings is positive and statistically significant at p<0.001 for all listed firms in Australia (β_1 = 1.837, t = 5.573 for manufacturing industry; β_1 = 1.405, t = 4.268 for retailing industry; β_1 = 1.085, t = 2.473 for servicing industry) and for India (β_1 = 0.939, t = 10.715 for manufacturing industry; β_1 = 0.519, t = 6.162 for retailing industry; β_1 = 0.462, t = 10.671 for servicing industry), respectively. This represents market's reaction to earnings in the presence of FCF agency problem across the manufacturing, retailing, and service industries in Australia and India. However the market's reaction to earnings in the absence of FCF agency problem is significantly lower in the manufacturing industry than in the service and retailing industries.

For instance, this can be seen from a negative and statistically significant coefficient on the FCFAP*EPS interaction variable in Australia (β_4 = -1.478, t = -6.036 for manufacturing industry; β_4 = -1.243, t = -2.234 for retailing industry; β_4 = -1.303, t = -1.962 for servicing industry) and for India (β_4 = -0.549, t = -5.984 for manufacturing industry; β_4 = -0.701, t = -4.593 for retailing industry; β_4 = -0.385, t = -2.311 for servicing industry), respectively. In the manufacturing industry, the presence of the FCF agency problem causes the value relevance of earnings to decline from 1.837 to 0.359 (1.837 – 1478) for Australia and from 0.939 to 0.390 (0.939 – 0.549) for India. The negative impact of FCF agency problem supports free cash flow hypothesis that claims managers of firms with high free cash flow and low growth opportunity tend to engage in investment with negative NPV or non-wealth maximizing investment. As such, they use accounting accrual activity to manage earnings which result to a decline in the value relevance earning and book value, more especially in the manufacturing industry. This result is consistent to hypothesis 4.

Furthermore, the coefficient $\boldsymbol{\beta_2}$ of book value is positive and statistically significant at p<0.001 for pooled Sample in Australia (β_2 = 3.979, t = 14.932) and for India (β_2 = 2.083, t = 25.202), respectively. This represents market's reaction to book value in the presence of FCF agency problem. However the market's reaction to book value in the absence of FCF agency problem is significantly lower. This can be seen from a negative and statistically significant coefficient on the FCFAP*BVPS interaction variable in Australia (β_5 = -2.621, t = -10.404) and for India (β_5 = -0.719, t = -19.219), respectively. The presence of the FCF agency problem causes the value relevance of book value to decline from 3.979 to 1,358 (3.979 – 2.621) for Australia and from 2.083 to 1,364 (2.083 – 0.719). This result is consistent to hypothesis 3. At the industry level, the coefficient $\boldsymbol{\beta_2}$ of book value is positive and statistically significant at p<0.001 for all listed firms in Australia (β_2 = 2.149, t = 9.984 for manufacturing industry; β_2 = 1.015, t = 3.594 for retailing industry; β_2 = 1.582, t = 6.311 for servicing industry) and for India (β_2 = 0.917, t = 5.348 for manufacturing industry; β_2 = 0.659, t = 7.346 for retailing industry; β_2 = 0.254, t = 5.115 for servicing industry), respectively.

Table 4a. FCF Agency Problem and Accounting numbers across Australia

Variables	All industries[1]	Manufacturing[2]	Retailing[2]	Servicing[2]
	Coefficient ***(t-statistic)***	**Coefficient** ***(t-statistic)***	**Coefficient** ***(t-statistic)***	**Coefficient** ***(t-statistic)***
β_0	0.585***	0.378**	0.255***	0.328**
	(4.813)	(2.441)	(3.504)	(2.982)
β_1	2.144***	1.837***	1.405***	1.085**
	(8.960)	(5.573)	(4.268)	(2.473)
β_2	3.979***	2.149***	1.015***	1.582**
	(14.932)	(9.984)	(3.594)	(6.311)
β_3	0.732	0.411	0.652	0.071
	(1.077)	(0.894)	(0.410)	(0.699)
β_4	-1.912***	-1.478**	-1.243**	-1.303***
	(-3.116)	(-6.036)	(-2.234)	(-1.962)
β_5	-2.621***	-1.739***	-1.647***	-1.582***
	(-10.404)	(-5.327)	(-3.402)	(-3.168)
β_6	0.593***			
	(3.472)			
β_7	0.385***			
	(4.104)			
β_8	0.427***			
	(2.997)			
Adj R^2	78.1%	63.2%	45.9%	52.4%
F-Stat	89.245***	49.096**	81.025***	33.791***
Durbin-Watson	1.928	2.041	1.807	1.749
N	903	379	325	199

*Table 4a illustrates the regression analysis of the free cash flow agency problem and the value relevance of earnings per share (EPS) and book value per share (BVPS), derived from the COMPUSTAT database for pooled Sample as well as across the manufacturing, retailing and service industries in Australia from 2005 to 2012. . *, **, *** is significant at the 0.1, 0.05, 0.001 levels. Source: Lious N. A. T.'s PhD thesis, (2015).*

Table 4b. FCF Agency Problem and Accounting numbers across Australia

Variables	*All industries[1]*	*Manufacturing[2]*	*Retailing[2]*	*Servicing[2]*
	Coefficient (t-statistic)	*Coefficient (t-statistic)*	*Coefficient (t-statistic)*	*Coefficient (t-statistic)*
β_0	1.692***	0.828*	0.729	0.514***
	(12.297)	(5.668)	0.989	(2.449)
β_1	1.974***	0.939***	0.519***	0.462***
	(22.633)	(10.715)	(6.162)	(10.671)
β_2	2.083***	0.917***	0.659***	0.254***
	(25.202)	(5.348)	(7.346)	(5.115)
β_3	-3.294	-0.815*	0.249	0.309
	(1.270)	(-0.309)	(0.465)	(0.311)
β_4	-0.979***	-0.549**	-0.701**	-0.385***
	(-14.932)	(-5.984)	(-4.593)	(-2.311)
β_5	-0.719***	-0.846***	-0.177***	-0.546***
	(-19.219)	(-6.841)	(-8.608)	(-3.776)
β_6	0.394***			
	(2.341)			
β_7	0.249***			
	(6.398)			
β_8	0.285***			
	(4.465)			
Adj R^2	52.9%	41.8%	50.2%	29.4%
F-Stat	93.581***	106.045***	62.744***	70.512***
Durbin-Watson	2.026	1.851	1.924	1.708
N	864	491	221	152

*Table 4b illustrates the regression analysis of the free cash flow agency problem and the value relevance of earnings per share (EPS) and book value per share (BVPS), derived from the COMPUSTAT database for pooled Sample as well as across the manufacturing, retailing and service industries in India from 2005 to 2012. . *, **, *** is significant at the 0.1, 0.05, 0.001 levels. Source: Lious N. A. T.'s PhD thesis, (2015).*

This represents market's reaction to book value in the presence of FCF agency problem across the manufacturing, retailing, and service industries in Australia and India. However the market's reaction to book value in the absence of FCF agency problem is significantly lower in the manufacturing industry than in the service and retailing industries. For instance, this can be seen from a negative and statistically significant coefficient on the FCFAP*BVPS interaction variable in Australia (β_5 = -1.739, t = -5.327 for manufacturing industry; β_5 = -1.647, t = -3.402 for retailing industry; β_5 = -1.582, t = -3.168 for servicing industry) and for India (β_4 = -0.846, t = -6.841 for manufacturing industry; β_5 = -0.177, t = -8.608 for retailing industry; β_5 = -0.546, t = -3.776 for servicing industry), respectively. In the manufacturing industry, the presence of the FCF agency problem causes the value relevance of book value to decline from 2.149 to 0.410 (2.149 – 1.739) for Australia and from 0.917 to 0.068 (0.917 – 0.849) for India. This result is consistent to hypothesis 4.

5. CONCLUSIONS AND IMPLICATIONS

Free cash flows have been identified by prior studies as source of causing conflict between managers and shareholders. This is due to the fact that managers of this big corporation with relatively high free cash flow and low growth opportunities have the tendency of engaging in project with marginal or negative NPV. As a result, they employ income increasing discretionary accruals to camouflage the impact of the non-wealth maximizing investments.

Therefore, this paper has as objective to assess the free cash flow agency problem on the value relevance of accounting numbers (earnings and book value) for all listed firms in the manufacturing, retailing and service industries in Australia and India from 2005 to 2012 using the modified version of the Ohlson' model in Faud and Mohd, (2008) where price is express as a linear function of earnings, book value and various accounting numbers. As predicted, the results show that both earnings and book value are value relevance for the manufacturing, retailing and servicing industry in Australia and India. The presence of the free cash flow agency problem caused the value relevance of earnings and book value to decline in Australia and India.

However, the effect is not stable across the difference industries. The found that in the manufacturing industry, the effect caused by the free cash flow agency problem is relatively higher for Australia and India than in the retail and service industries. As a result, the firms in the manufacturing with free cash flow agency problem have lower earnings (book value) coefficients than those without free cash flow agency problem.

Moreover, the results show that the effect free cash flow agency problem on the value relevance on earnings and book value is lesser in the retailing and service industries. One possible reason might be due to the fact that in these industries, there is less use of heavy machinery and other equipment which might limit the use of accrual discretional activity to manipulate accounting figures. Thus, the value relevance of earnings and book value is less influence by the presence of free cash flow agency problem in the retail and service industries compared with the manufacturing industry across Australia and India.

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HOW NARRATIVE REPORTING CHANGED THE BUSINESS WORLD: PROVIDING A NEW MEASUREMENT TOOL

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Abstract

Research on the quality of the narrative portion of the annual report has long been hampered by a lack of tools that permit an objective analysis of qualitative disclosure. This study is the first piece of accounting disclosure quality research which proposes a comprehensive index that uses Key Performance Indicators (KPIs) to enhance understanding of the quality of narrative information disclosure in a very important transitional period of 2002 to 2007. Our results show that after the adoption of IFRS, the level of narrative disclosure compliance with the IASB's Management Commentary Framework (MCF) is medium, ranging from 8% to 75%, averaging 53% and this shows that there is much room for improvement with respect to the financial statements. Thus, despite the continued demand for better comparability in financial reporting practices, in our sample, a large number of firms do not seem to converge toward a single set of standards for both the narrative and financial disclosure. On the other hand, the region forced to comply with mandatory requirements (e.g., the US) will not provide a greater amount of disclosure information in their MCF reporting than the regions that are not required to comply with these disclosure guidelines (e.g., Western Europe and Northern Europe).

Keywords: Management Commentary, Narrative Disclosure, IFRS, Financial Reporting Quality
Jel descriptors: M41, G30, M14

1. INTRODUCTION

In recent decades, the financial reporting model has been a subject of debate. Accounting policymakers and academics have emphasized the importance of financial reporting quality – in particular after corporate scandals such as those involving Enron, WorldCom, Global Crossing and etc (Healy and Palepu, 2001) – in ensuring efficiency and transparency in capital markets. (Donoher et al., 2007; ASB, 2009; Diamond and Verrecchia, 1991; Verrecchia, 2001; CICA, 2009).

The size and variety of these scandals is the main reason for the creation of the International Accounting Standards Boards (IASB), the Sarbanes-Oxley Act (SOX) and the International Financial Reporting Standards (IFRS) of 2002.

Increased transparency and disclosure are significant components of SOX. Explicitly, the Act mandates new disclosure regarding pro-forma reports, internal controls, off-balance-sheet financing and insider-trading activity (SOX, 2002). Unfortunately, SOX is one of the most costly pieces of legislation in the recent history of corporate America and thus provides grist for a developing literature in disclosure research (e.g., Bratton 2003, Cohen et al 2005). Additionally, during this period, European Community Regulation No. 1606/2002 required all European Union listed companies to prepare consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS), beginning from 1 January 2005 (Pagletti, 2009). The IFRS was introduced in the EU to provide comparability and quality improvement in firms' financial statements.

Accounting professionals (ICAEW, 1999; CICA, 2009; IASB, 2010) and researchers (Beattie et al., 2004; Beretta and Bozzolan, 2008; Merkl-Davies and Bruni, 2007) have realized the importance of the narrative portion of financial statements as they improve the amount and quality of information provided to investors, lenders, etc. This is referred to as "Management Discussion & Analysis" (MD&A) in the USA, "Operating and Financial Review" (OFR) or "Guidance on the Strategic Report" in the UK and simply "Management Commentary" (MC) in most other countries. The International Accounting Standard Board (2009, 2010) defines the notion of MC as "the information that accompanies financial statements as a part of an entity's financial reporting. It explains the main trends and factors under lying the development, performance and position of the entity's business during the period covered by the financial statements. It also explains the main trends and factors that are likely to affect the entity's future development, performance and position." The annual report commentary is an important communication tool for directors and management, allowing them to share their views on the company's performance, position and progress during a fiscal period as a complement to information provided in the financial statements (Shi Yun Seah and Tarc, 2006). However, the Management commentary Framework (MCF) is voluntary and leaves firms with plenty of room for discretion of what information they provide and how it is reported (IASB, 2010).

In the last decade, a number of studies have been focused on the narrative sections of corporate disclosure by examining the text (Lehavy et al., 2011). Beattie et al (2004) argue that there are five genres of narrative analyses in annual report texts: subjective analyst ratings, disclosure index studies, thematic content analysis, readability studies, and linguistic studies (Ginesti, 2013). Berger (2011) shows that prior methods have limitations in terms of approaches to measuring disclosure readability and tone and lack agreement in terms of what text is valuable in corporate narrative reports. Therefore, Berger (2011) agrees with Core (2001) in the call for new techniques from other fields of research that liberalize the boundaries of the empirical literature on corporate narrative disclosure.

The main objectives and the novelty of our study were: First, to investigating for a first time a very important transitional period of 2002 to 2007 which appeared to be the Worst Corporate Accounting Scandals of all times as well as the beginning of the most influential accounting and auditing changes of the last century. Essentially this period brought to light the major issues and shortcomings that were actually became part of the narrative information appeared in the financial statements of most companies. For this reason, the Management Commentary Framework (MCF) was considered imperative to be followed by internal auditors, accountants as well as external auditors and investors in order to restore the credibility and to measure reliably the quality of information provided in financial statements.

The second objective and novelty is to use the MCF (IASB, 2010) that includes guidelines in text which encoded (that text) using appropriate Key Performance Indicators (KPIs) from the base of Thomson Reuter (Asset4). This way is proposed for the first time in accounting research and is designed to easily and reliably convert hardly measurable qualitative information into quantitative information with the creation of a new index (the Management Commentary Index-Ma.Co.I.) to measure the quality of narrative portion of Annual reports. Many researchers argue that to create a valuable and reliable tool to measuring the quality of financial statements one should be able to try this tool's effectiveness to periods with actual adverse financial conditions; and thus measurements must provide you the corresponding results.

To evaluate the reliability of Management Commentary Index (Ma.Co.I) we used the Factor Analysis Method. The main goals of Factor Analytical techniques are the following: (1) to reduce the number of variables and (2) to detect structure in the relationships between variables, i.e., to classify variables. Therefore, factor analysis is applied as a data reduction or structure detection method (Thurstone, 1931). The Factor Analysis result shows us whether the management commentary index is of consistent quality throughout the KPIs selected from Asset4 database or not. For those interested in the rigorous evaluation of disclosure practices, the strength of this measure is that it permits assessment of a broader population of firms than that it was previously possible in an attempt to redress a gap in the available toolkit.

This paper is divided into six sections. Section 2 is a concise overview of the literature on narrative reporting quality evaluation. This section also opens the floor for the various measurement tools in the assessment of financial report quality area that are currently used. Section 3 analyses the structure of Management Commentary Index, while section 4 outlines the Validation and Reliability of the proposed Index. Section 5 includes the methodology, while the dataset is implemented, as well as the research structure and the suggested research questions are set. In section 6, the results of the study are presented and discussed at length followed by answers to original research questions while the key findings and implications of this study are recapitulated.

Finally, the section 7 provides concluding remarks.

2. LITERATURE REVIEW

The historical norm requires that a directors' report accompany the accounts presented by the company to the shareholders, while voluntary narratives are usually provided over time (e.g., Chairman's statement). However, this norm has been changing recently, as regulators are increasingly mandating or recommending specific narrative disclosures. An example of such a request is the Management's Discussion and Analysis of Financial Conditions and Results of Operations (MD&A), which was first required in the United States (US) by the SEC in 1968; in the United Kingdom (UK), a similar form of narrative was introduced by the ASB with the publication of guidance on the voluntary supply of the OFR (Operating and Financial Review) in 1993. MD&A and OFR are considered as "Management Commentary" by the IASB.

New regulatory policies were implemented after the Worst Corporate Accounting Scandals of All Time (see table 1).

Table 1. Worst Corporate Accounting Scandals of All Time

Worst Corporate Accounting Scandals of All Time		
Firm Name	***Industry***	***Years***
Enron	Energy and service corporation	December 2001
WorldCom	Telecommunications company	2002
Tyco Scandal	Blue-chip and security systems	2002
HealthSouth	Health care corporation	2003
Freddie Mac	Financial services	2003
American International Group	Insurance services	2005
Lehman Brothers	Financial services	2008
Bernie Madoff	Investment services	2008

These policies introduced revisions to narrative reporting guidance as part of an attempt to enhance corporate reporting models and shed light on corporate operations. Such regulatory changes were implemented by the SEC in 2001, which requested the discussion of critical accounting policies in MD&A. In 2003, the SEC released further guidelines placing emphasis on the identification and discussion of important Key Performance Indicators (KPIs), including indicators of nonfinancial performance, which corporate managers use for decision making purposes and which would provide important material for existing and potential investors (SEC, 2003). Also, in 27 October 2005, Discussion Paper Management Commentary published by IASB.

In the EU in 2003, the Accounts Modernization Directive mandated that all large and medium sized companies publish a Business Review in their Directors' Report (2003/51/EC); in 2004, the Transparency Directive required further alterations to narrative reporting from listed companies (2004/109/EC). Currently, UK listed organizations are required to distribute a directors' "Report with an improved Business Survey" (see FSA, 2004; 2008).

Thus, European Group Regulation No. 1606/2002 required all European Union listed organizations to set up their consolidated financial statements according to the International Financial Reporting Standards (IFRS) beginning 1 January 2005 (Pagletti, 2009). The IFRS was implemented in the EU to ensure comparability and quality improvement in firms' financial statements. Additionally, in 2009, the IASB issued an exposure draft enumerating non-mandatory for management commentary, and in December of 2010, the IASB finished the project and released an IFRS practice proclamation.

Since the adoption of IFRS, the majority of organizations tend to supply more extensive narrative reporting in their annual reports (for instance, see Campbell and Slack, 2008; Orens and Lybaert, 2007; Davison and Skerratt, 2007). Florou et al (2013) noted that the benefits of the adoption of IFRS include "more comparable data, lower transaction costs and greater international investment". In addition, Iatridis (2010) notes that IFRS also assists investors in making "informed financial decisions and predictions of firms' future financial performance and signaling higher quality accounting and transparency". Therefore, the IFRS would tend to decrease "earnings manipulation and improve stock market efficiency", while they would also tend to have a positive impact on stock returns and stock-related financial performance measures. This fundamental change in the quality of corporate reporting will be achieved by using additional narrative information in annual reports, thus paying attention on the management discussion and analysis statement in the annual report.

Deloitte (2006) found that the proportionate volume of narrative reporting represented 52% of an average annual report. Guidance from the United Kingdom (UK) urging organizations to deliver an OFR in 1993 prompted a huge increment in their supply before the obligatory prerequisites outlined in the UK Companies Act 2006. For instance, Deloitte (2006 n533; 2005 n450) found that 76% of UK FTSE 350 listed companies created a formal statement (an OFR) or obviously embraced OFR recommendations in 2006 (68% in 2000). The scarcity of empirical research establishing who uses corporate information and what information they utilize continues to be criticised (see, for instance, IFAC, 2008; Lee et al., 2008; AICPA, 1994; Young, 2006; ICAEW, 2006). Research breaking down user information needs has been suggested particularly in light of narrative reporting (see Campbell and Slack, 2008) and management commentary (see IASB, 2005, 2006, 2009, 2010). This paper attempts to make a contribution about the information that was disclosed in annual reports the period with the Worst Corporate Accounting Scandals of 2002 to 2007 and investigating the use of narrative reporting in this period.

Changes in world economies the previous couple of years have incited companies to re-evaluate the way they define, evaluate and measure corporate performance. Executives and Board members are persistently looking for approaches to upgrade the tools that link corporate strategy to performance, thus enhancing their correspondence with investors and stakeholders in narrative reporting (Babio et al., 2008). Information depicted in financial statements alone may not be adequate for investors and stakeholders to gauge the economic value that an organization has created or its value-creating potential or to predict the sustainability of current performance and cash flows. Providing consistent narrative reports to accompany financial statements is the key for the creation of intelligible and valuable information that is disclosed by a company. Narrative portions are supplemented by financial and non-financial point's material that supports the definition of business strategy and explains the progress that has been made toward stated goals.

2.1. Narrative analyses of annual report texts

For quite some time, studies on organizational communication have concentrated on the impact of organizational performance on the quality and efficiency of organizational communication (Abrahamson and Park, 1994; Abrahamson and

Amir, 1996). Jameson (2000) lauded the virtues of linguistic narrative studies and demonstrated their importance using an analysis of shareholder reports of equity mutual funds. There are five types of narrative analyses of annual report texts (Beattie et al., 2004):

a) Readability studies highlight the clarity of communication using readability indices.

b) Thematic content analysis concentrates on revealing underlying themes while breaking down the entire text.

c) Linguistic studies concentrate on the nuances of language as opposed to a one-dimensional assessment of readability.

d) Disclosure index (partial form of content analysis) considers the presence (or absence) of texts that are defined ex ante.

e) Subjective analyst ratings concentrate on analyst ratings of disclosure information quality and sufficiency.

Narrative analysis studies have focused on either i) the efficiency of disclosure (the first three types of narrative analysis studies) or ii) the breadth and depth of disclosure quality (the remaining two types).

2.2. The efficiency of disclosure

We define efficiency of communication as the relative ease of reading (complexity of the text) or, as it were, "the means by which something is being conveyed". For example, Courtis and Hassan (2002) addressed the contrast in readability of annual reports in various languages (English and Chinese adaptations in Hong Kong and Malay and English in Malaysia) and found that indigenous language renditions were moderately easier to read than their English counterparts.

In the Jones and Shoemaker (1994) review research, there were 32 readability studies (26 of which address annual report narratives). The purpose of the studies is to quantify the cognitive difficulty of the text. This generally involves a readability formula such as the Flesh index. This index is based on a combination of sentence length and word syllable count. Comparing the computed score to the external benchmarks evaluates the degree of difficulty of the text. The annual report narratives are often difficult or very difficult to read. Although this method is as objective and reliable as possible, several problems are associated with the application of readability scores to accounting narratives.

Clatworthy and Jones (2001), in their studies, examine the effect of the thematic content of accounting narratives on the variability of annual report clarity. Moreover, the linguistic formula captures a much richer set of content characteristics and is not connected with readability scores. Sydserff and Weetman (1999) utilized theoretical and applied linguistics to build a text focused technique for scoring narratives. They then showed how investigators can adjust this formula to accounting narratives, particularly the OFR. Moreover, Shi Yun Seah and Tarca (2006) discovered contrasts in weighted and unweighted measures of information disclosed in Management Discussion and Analysis (MD&A) and Operating and Financial Review (OFR) reports among 174 firms in five industry groups in the 2003 financial year.

In addition, thematic and readability formulas have different limitations as per Beattie (2004). The problem with language analysis is that it does not have one type of route for assessing pessimistic or optimistic words. Moreover, two noteworthy disadvantages are apparent when you consider thematic analysis in relation to other qualitative analytic methods. First, it depends more on inadequately directed analyses or inappropriate research questions than on the method itself. Furthermore, the adaptability of the method – which takes into account an extensive variety of scientific choices – implies that there is a wide range of things that can be said regarding the data.

2.3. The depth and breadth disclosure quality

The focus of disclosure quality (when the text supplements other quantitative information and financial material in company annual reports) is "what is being communicated". Beattie, et al. (2004) characterized quality as including two dissociations – 1. the measure of exposure and 2. the spread of disclosure. The measures proposed in their study incorporate "the actual amount of disclosure, relative to the amount expected" and the spread of disclosure “across topics using concentration measures across main topics, sub-topics, and non-empty sub-topics” (Beattie, et al., 2004). Beretta and Bozzolan (2008, 2004) recognize quality as the amount of correspondence. They characterized richness of communication to include the width of disclosure in addition to the profundity of disclosure. They developed a composite index that considers the amount of disclosure and the plethora of its content.

Healy and Palepu (1993) demonstrated that financial reporting in annual reports does not help managers communicate viably with their shareholders. Managers will endeavor to enhance the credibility of their financial reporting by voluntarily providing additional disclosure. Voluntary disclosure lessens agency problems because agents might express the organization's long-term strategy or determine nonfinancial indicators that may help principals to analyze the viability of the strategy (Hossain and Hammami, 2009a). Empirical accounting research on disclosure has concentrated fundamentally on cross-sectional variation in contracting variables to clarify management’s financial reporting decisions (Core, 2001). In addition, as indicated by Gigler and Hemmer (2001), an expanding number of empirical studies began to build hypothetical and theoretical links between the properties of mandatory financial reports and the amount of information that managers provide through voluntary exposure.

According to Srinivasan and Srinivasan (2015), content analysis of voluntary and mandatory disclosure is the prevailing tool of these studies (Swales, 1988; D'Aveni and McMillian, 1990; Tennyson, Ingram and Dugan, 1990; McConnell, Haslem, and Gibson, 1986; Smith and Taffler, 1995; Abrahamson and Amir, 1996; Patelli and Pedrini, 2013; Tsalavoutas, 2011; Smith and Taffler, 2000; Hossain and Hammami, 2009b). The principal strain of firm-based disclosure quality measures depends on Content Analysis (CA) (basically computerized analysis) or the application and the creation of indices. Although Frazier et al. (1984) present a computerized content explanatory-based strategy for assessing narrative accounting disclosure (footnotes), this methodology is not suitable for less formulaic disclosures, for example, the MD&A.

Computerized content analysis and recorded disclosure data are limited in their ability to address the assessment of disclosure quality for the MD&A of smaller firms. This area of research incorporates studies such as those by Botosan (1997) and Hooks and Moon (1993). Hooks and Moon (1993) provide a checklist of disclosures required and/or proposed by the SEC in the mid-1990s. However, this checklist is intended for general evaluation and does not yield a quantitative score that is suitable for further investigation. Moreover, the SEC has recently extended the types of items that are suitable for consideration in the MD&A. The Hooks and Moon (1993) checklist is now out of date.

Analysts' ratings of the information environment are based on a rich data set that consolidates information about the firm, its industry, and prevailing patterns in disclosure; along these lines, these ratings are able to reproduce investor perceptions of disclosure quality in a genuine investing environment (as in Healy et al., 1999; Lang et al., 1996 and 2001; Botosan et al., 2002).

However, limitations are created from the existing base of information about the company, its industry, and patterns of disclosure, which preclude the ability to analyze the actual disclosure. These measures additionally consign the analysts' evaluation procedure to a "black box", which allows little assessment of the role of business reports in defining choices or judgment. Additionally, they are hard to acquire. Existing databases cover a limited range of years, and only the largest firms are evaluated. Thus, this information essentially introduces a data-driven size bias into studies. Moreover, they are not valuable for analyzing firms with recent public offerings, those in trouble, or those in general danger of contracting issues (i.e., small or closely-held firms). Analysts who are keen on investigating disclosure quality issues among smaller, less well-known, distressed, or younger companies are therefore not able to utilize existing archival databases.

According to Kothari et al. (2009), the most accurate method to measure the quality of narrative information is the disclosure index method. This study addresses the limitation of this method by updating the scope of the MC for the prevalent data environment, offering an approved Management Commentary lndex (Ma.Co.I) for transforming qualitative disclosure into a quantitative variable suitable for statistical analysis and allowing more in-depth assessment of the MC. To the best of our knowledge, this is the first accounting disclosure quality research that makes a contribution about the information that was disclosed in annual reports the period with the Worst Corporate Accounting Scandals of 2002 to 2007 and investigating the use of narrative reporting in this period.

This period is very crucial because it provides the appropriate elements to propose a new index in order to evaluate the quality of narrative information; one should first investigate the period with the Worst Corporate Accounting Scandals of all times. This research provides evidence to better understanding the non disclosed information and place more emphasis in the following period. Also we want to investigate is the disclosure quality in moderate disclosure levels to evaluate these scandals.

3. THE STRUCTURE OF MANAGEMENT COMMENTARY INDEX (MA.CO.I)

The Ma.Co.I provides the capacity to assess the disclosure quality of the firm's Management Commentary and to produce a quantitative value for that quality that might then be utilized as a part of further empirical analysis. Our technique is implemented in two stages as depicted below:

3.1. First stage

One study singled out by numerous analysts as the beginning of disclosure scoreboards was performed by Cerf (1961). In this study, a disclosure index was created to quantify the degree of disclosure in the corporate annual reports of 527 US companies. Singhvi and Desai (1971) built a disclosure index consisting of 34 disclosure items, such as Cerf's 31 items and weights, to distinguish attributes connected with disclosure quality and to examine the plausible ramifications and quality of financial analysts' decision-making process for investing. Cooke (1989) refined a disclosure scoreboard comprised of 224 items, which in substantial parts originated from past disclosure indexes.

Despite the fact that disclosure scoreboards demonstrated significant variety in terms of the degree and estimation of disclosed information, these authors share in the enthusiasm for data issued to investors. A sequential audit of the most frequently cited disclosure information demonstrates how current disclosure scoreboards have advanced and how numerous checklists are based on earlier disclosure studies (Rimmel, 2003). Therefore, the measure of revealed information in annual reports is of inevitable significance to disclosure theory, as these types of studies regularly accept that the measure of disclosure is an intermediary for the nature of the disclosure (Beattie et al., 2004). Moreover, numerous studies on disclosure accept that an elevated amount of disclosure reflects the attempt by enterprises to fulfill the data needs of a varying group of stakeholders.

During the last decade, many studies have proposed the use of indexes (Lori Holder-Webb, 2007; Ginesti et. Al., 2013 and Macchioni et al., 2013) however, they mainly focus on a small sample of enterprises from a limited sample of countries within a relatively short time period. Gianluca's, 2013 and Macchioni et al 2013 not only use a short timeframe of one year (ex. 2013 and 2011 respectively) and corporations from a single country but also fail to include in their limitations the effects of the economic crisis on the entities under investigation, a characteristic of great importance. We propose a new checklist called the Management Commentary Index (Ma.Co.I) that was developed for the detailed evaluation of financial reporting quality and was initially presented by the FASB and the IASB in the 2010 publication, "Practice Statement Management Commentary" or "Management Commentary Framework" (IASB, 2010; Lori Holder-Webb, 2007).The amount of narrative information revealed in an annual report is what determines an MC's quality. The Ma.Co.I includes of 37 constituent points that are classified into five categories as follows:

Category 1: The nature of the business
Category 2: Objective and strategy
Category 3: Key resources, risks and relationships
Category 4: Results and prospects
Category 5: Performance measures and indicators

Each category explores a different aspect of a company. Category 1 addresses the nature or structure of a company, i.e., competition issues, regulatory matters, and macro contexts that illustrate the role of the company in the market. For category 2, the strategy plans and goals of a company are included and prioritized. Category 3 comprises the company's key resources as well as the risks involved and relationships with other institutions or entities. Special focus is given to the inter- and intra-associations and the managing of crucial risk parameters. Category 4 emphasizes the company's outcomes and prospects and addresses the financial and non-financial progress of a company. Finally, category 5 provides insights into the historical or diachronic company progress as it is derived from performance measures and other indicators

These five categories are presented in Table 2, with their codes for the points and the number of points used in this research. The points selected after thoroughly consideration of Management Commentary Framework (MCF) of 2010 which proposes specific guidelines that must be disclosed in Annual Report for maximizing the quality of information (see also Appendix 1 for details).

Table 2. Descriptions of Points

Codes of Points	***Description of Points***
Category 1: Nature of the Business	
1	Description of the nature of the business and business segments
2	Discussion of products
3	Discussion of business/board structure
4	Discussion of operating environment
Category 2: Objective and strategies	
5	Discussion on financial objectives/strategies of the business
6	Time frame for achieving financial objective
7	How non-financial objectives monitoring and create or preserve value
8	Significant changes in objectives and strategy
9	A strategy of the vision and value of the business
10	Discussion of how value & objectives relates to strategy
Category 3: Key resources, risks and relationships	
11	Discussion of key financial resources available to the company
12	Discussion of the key non-financial resources available to the company
13	Adequancy of financial and non-financial resources
14	Analysis of capital structure
15	Analysis of financial arrangements
16	Discussion of liquidity and cash flows of the business
17	Plans to address any identified inadequacies or surplus of resources
18	Potential impact of the identified risks and how they are managed
19	Identification of key external and internal risks and opportunities
20	Explanation changes in risk management
21	Discussion of key relationship in place e.g. employees
22	How key relationships are managed and likely impact on business
Category 4: Results and prospects	
23	Explanation of the development and performance of the entity during the year
24	Explanation of the financial position at the end of the year
25	Discussion of significant changes in financial position
26	Variability of quarterly sales over the last three years. AND Net Income growth (three-year annual growth).
27	Extent to which past results are indicative of future progress /results
28	The management of the firm set specific objectives and explain how to achieve them?
29	Analysis of improvements/prospects of the entity AND how implement its targets/strategies about future.
30	Identification of objectives/targets for non-financial measures
Category 5: Performance measures and indicators	
31	Discussion of key financial measures used to measure and assess improvement progress
32	Discussion of key non-financial measures used to measure and assess progress
33	Changes in the quantified measures or indicators reported
34	Identification of key financial and non-financial indicators that it uses to monitor progress
35	Explanation of how each measure, or quantified indicator, reported in MC has been defined and calculated
36	Consistent reporting of performance measures and indicators
37	Discussion of the purpose of each reported measure should be disclosed

3.2. Second stage

In the second stage, we derived the Narrative information that was requested from the Final Management Commentary Framework (MCF) of 2010 using the points in Table 2 above. This required modern methods and tools can overcome the problems (in Literature) of previous methods and deliver accurate and reliable information provided by the annual financial statements of each company. In regard to the Management Commentary Framework, which addresses the changing needs of users, corporate reporting should offer more information with a forward-looking perspective and must emphasize those factors that produce longer-term value, in addition to providing extra-financial measurers and information on the performance of key business procedures. Thus, Key Performance Indicators play a central role. Managers use KPIs more and more to assess their business, but investors and analysts could also take advantage of them to a much greater degree. In principle, Key Performance Indicators are of particular interest because they are assumed to be leading indicators of future financial results (Elzahar et al., 2015).

Parker (2005) found that if used correctly, KPIs can offer solid and concise information that complements the narrative discussion in firm reports. Doni et al. (2011) used the Enhanced Business Reporting Consortium (EBRC) framework, which is structured from a set of Key Performance Indicators based on three business management domains (Demand Management, Support Services and Supply Management) and realized that stakeholders and investors would be better off if they were able to compare and make use of this strategic information in decision making.

Moreover, Tauringana and Mangena (2009) investigated the reporting of Key Performance Indicators using 32 UK media sector firms listed on the London Stock Exchange (LSE) over the period 2004 to 2007. In fact, to the best of our knowledge, the only study focusing on KPIs reporting that is related to this study is, to some extent, the paper by Dorestani and Rezaee (2011). The authors examine the association between the accuracy of analysts' forecasts and non-financial KPIs disclosure for a sample of US companies for the two-year period comprising 2006 and 2007.

Based on these findings, our study used a sample of Key Performance Indicators (KPIs) for a new measurement index (Ma.Co.I) that measures the quality of Annual reports. An important aspect of this research is that it uses 70 KPIs for 37 points, taken by the Management Commentary Framework (MCF) of 2010. This was the case because some points require more than one KPI to cover the information suggested by the MCF. Therefore, the maximum quality score of the index is reached when the annual financial statement includes 70 KPIs. The information on the number of appropriate KPIs is given by the Factor Analysis method. Some points need more than one KPI to cover the appropriate amount of information (for example, refer to Appendix 2, where point 2 uses 3 KPIs). Furthermore, the Appendix 2 proposes the final checklist of Management Commentary Index (Ma.Co.I) with 70 KPIs.

4. VALIDATION AND RELIABILITY OF MANAGEMENT COMMENTARY INDEX

Validity specifies the range within which an instrument measures what it is purported to measure; in this study, validity pertains to whether the Ma.Co.Index efficiently measures the content of the Ma.Co.Index in a manner that is complete and can be replicated. This requires establishing the content and construct validity of the measure, as well as the continuity of results, by applying the measure between evaluators (inter-rater reliability).

4.1. Content Validity

Content validity is the degree to which an apparatus or operationalized variable maps against the pertinent content domain (Trochim 2000). In the case of Ma.Co.I content, the content domain is essentially established by the MCF of 2010, who set the voluntary reporting requirements for all publicly traded firms. The Ma.Co.Index is generated in response to an IASB requirement to provide this information in a well-defined report (Appendix 1).

To the extent that the accountability for determining the reporting guidelines eventually rests with the IASB, the criteria that compose the content domain are definitively established. To the extent that the Ma.Co.Index is drawn directly from that material, the Index possesses content validity.

4.2. Construct Validity and Reliability

Construct validity regulates the degree to which insinuations can be made from the variable arising from the measurement process (Trochim 2000). To establish the construct validity of the Ma.Co.I score, this study follows two measures. The first measure used the main methodology established by Elzahar et al, 2015, pp.13, who develop a measure for the quality of the KPI disclosure. In line with the Financial Reporting Council (2009), disclosing the information suggested by the guidelines should specify the quality of the Key Performance Indicator. Thus, our measurement tool considers the content of the Key Performance Indicators disclosure that should enrich the discussion and analysis.

The disclosure score of the Ma.Co.Index indicates the extent of disclosure compliance with the MCF. Based on this, a dichotomous scoring approach is applied by manually capturing each KPI's disclosure quality. If a required quality dimension is met, it is scored as one; otherwise, it is scored as zero. If a quality dimension is not applicable to a specific KPI, it is scored as 'not applicable' (NA) (e.g., Cooke, 1992). Consequently, the Ma.Co.Index total disclosure score is measured for each firm with the following formula:

$$T = \sum_{i=1}^{m} d_i$$

where:

d_i is the score of each Key Performance Indicator ("1" if the item is mentioned and "0" otherwise), and m is the maximum number of KPIs (70 disclosure items in total) that is expected to be disclosed by firms in compliance with MCF. The value of T depends on the number of KPIs disclosed by the firms. In addition, the quality and quantity score of the Ma.Co.Index for each firm lies between 0 and 100 or 0 and 70.

To derive our second measure of KPIs disclosure quality, we draw on the ASB (2006) guidelines. These guidelines describe the key qualitative characteristics of each KPI (see also Appendix 3) that must be selected to derive the appropriate information for each point.

Elzahar et.al, 2015 argue that if the KPIs disclosures meet these characteristics, the reporting should be of high quality. In addition, to eliminate any doubts about the characteristics of the KPIs in our research, we selected all KPIs from the world expert database on the specific subject, i.e., the Thomson Reuters Corporate Responsibility Indices (TRCRI), which adheres to these characteristics.

4.3. Reliability

A necessary and important step in the development of an index for calculating content is to ensure that multiple individuals are able to use the index with consistent (reliable) results. One method to assess this reliability is statistical comparisons of the inter-rater consistency. To this end, we provide an example of how we calculate the overall quantity and quality of Annual Reports with KPIs items (see also Appendix 4). To increase the reliability of the results, the page and paragraph of the item had to be specified.

Before scoring all of our sample firms, we conduct a pilot study on a randomly selected sample of twenty annual reports to address the validity and reliability of our instrument (cf., Tsalavoutas et al., 2010). We first develop decision rules, and these are used as a reference while coding. Furthermore, each researcher independently codes the annual reports of the pilot study sample to ensure consistency in applying the rules. Additionally, we perform nonparametric tests (Kruskal-Wallis) to compare the quality scores that were coded separately. These indicate that there is no significant difference between the median scores, verifying the reliability of our research instrument (results are available upon request). While following this process we noticed that companies fail to disclose KPIs in the Business Review as well as in other areas of the annual report.

Another way to measure reliability is factor analysis (OECD, 2008). Factor analysis is an important tool that can be used in the development, refinement, and evaluation of tests, scales, and measures in various fields of scientific research including corporate financial distress, portfolio selection, financial analysis, exposure to risk factors and clinical contexts. There are many excellent works on factor analysis, including Geweke (1977), Sargent and Sims (1977), Engle and Watson (1981), Peña and Box (1987), Stock and Watson (1998, 2002a, 2002b, 2004), Quah and Sargent (1993), Forni, Lippi, and Reichlin (2005), Breitung and Kretschmer (2005), Doz, Giannone, and Reichlin (2006), Heaton and Solo (2006), and Williams, et al. (2012). Wherry (1984) explains in detail the interpretation of secondary factors in hierarchical factor analysis as an alternative to traditional oblique rotational strategies. This research approach is based on the multivariate data reduction techniques of principal component analysis and exploratory factor analysis. The methodology reduces the number of dependent (performance) variables by employing principal component analysis to construct a reduced-form performance vector.

Decision variables, whether technological or organizational, are grouped and reduced using exploratory factor analysis. The main goals of factor analytic techniques are the following: (1) reducing the number of variables and (2) detecting the structure in the relationships between variables, i.e., classifying variables. In this study, to examine the reliability of this instrument, factor analysis was applied using principal component analysis for user satisfaction as well as managerial performance and financial performance constructs. We evaluate whether this study is sufficient for this analysis. In all five construct variables, values of KMO are higher than 0.5 (Hinton, et al. 2004), and the results of Bartlett's test of sphericity are significant; thus, we proceed to factor analysis.

Table 3. Tests for Factor Analysis in total sample

	Categories	*Number of Points per category*	*Number of KPIs*	*Variables Reductions %*	*KMO*
PIFRS	1	4	7	80,55	0,622
	2	6	7	72,72	0,779
	3	12	29	93,69	0,876
	4	8	13	83,87	0,933
	5	7	16	89,13	0,942
AIFRS	1	4	7	68,42	0,857
	2	6	7	70,38	0,755
	3	12	29	69,66	0,955
	4	8	13	68,83	0,942
	5	7	16	78,73	0,969

We examine all variables per category in terms of reliability. In this case, reliability analysis was conducted to test the internal consistency of each variable using Cronbach's alpha. According to Hair et al. (2009), the lower limit is generally 0.60. Cronbach's alpha for all cases (e.g., PIFRS and AIFRS) are above 0.894. In addition, the total Variable reduction % for the period PIFRS is 92%, and for the AIFRS, it is 75.67. Therefore, factor analysis is applied as a data reduction or structure detection method (Thurstone, 1931). We grouped related items to reduce the number of variables. The originally identified factors were minimized. Now, we proceed by analysing the core factors in this study.

We continue our analysis with the T-test method, more specifically conducting the Levene tests for differences in the dispersions of the individual samples. The T-test is carried out for each region (the US, Western Europe-WE, North Europe-N.E.) according to the category of the areas concerned and involves the two sets of values, one for the period prior to the adoption of International Accounting Standards (pre-IFRS) and one for the period after the adoption of International Accounting Standards (after-IFRS).

Table 4. Statistical check t for the comparison of averages by region

Regions	*t*	*Areas t statistic significance (Bilateral / 2-tailed)*
US	-12,515	0,000 (***)
WE	-7,712	0,000 (***)
NE	-7,180	0,000 (***)

No statistical significance is found in Table 4 (Sig. = 0.760> 0.05), and thus we conclude that the dispersions do not differ and the results of the T-test for the creation of the Ma.Co.I index are reliable and statistically significant at the 1% significance level.

In summary, after the appropriate analysis and techniques are established, the Ma.Co.Index can be characterized as valid and reliable, as in the case of the new tool in Appendix 2, and thus, we can proceed to the examination of our research methodology and Research Questions.

5. RESEARCH METHODOLOGY

5.1. Sample and Data

Our measurement tool analyses the narrative reporting quality of 524 of the largest companies in Western Europe (WE), Northern Europe (NE) and the United States (US). These regions were chosen for the following reasons:

First, the US and Europe were the Regions that first created the Narrative frameworks MD&A, OFR and Management Commentary (MC), which is the basis for the creation of the Ma.Co.Index. Moreover, we deliberately divided our sample into two parts to make the examination easier and more accurate. The first part includes countries that are required to use Management Commentary (MC) (e.g., the US), and the second part includes European countries where MC is voluntary. Subsequently, EU countries were divided into Western European Countries (Switzerland, France, Germany, the Netherlands, and Belgium) and Northern European Countries; Southern European and Eastern European countries were not included as by definition these countries tend to be poorer, and the companies residing in them rarely achieve the levels of quality of Western companies. Furthermore, these regions and sectors have been selected because capital markets are important financial resources for the companies in each country.

Table 5. Sample's firms' origin and sectors

Country	*REGION*	*Number of firms in the sample*	*Sectors*
AUSTRIA	WE	8	1, 3, 6
BELGIUM	WE	14	1,2,4,5,6
DENMARK	NE	10	1,2,4,5,6
FINLAND	NE	11	1,3,5,6
FRANCE	WE	36	1,2,3,4,5,6
GERMANY	WE	28	1,2,3,4,5,6
IRELAND	NE	6	2,5,6
NETHERLANDS	WE	15	1,2,3,4,5,6
NORWAY	NE	12	2,3,5,6
SWEDEN	NE	25	1,2,3,4,5,6
SWITZERLAND	WE	28	1,3,5,6
UNITED KINGDOM	NE	65	1,2,3,4,5,6
UNITED STATES	USA	266	1,2,3,4,5,6
Total sample	**-**	**524**	-

We did work to have a representative sampling based on stock market significance and geographical and industrial variety (Hossain and Adams, 1995). Our sampling was determined by five criteria from the TRCI database:

A. *Company's position*
B. *Market including financial and commercial performance*
C. *International presence*
D. *Peer groups*
E. *Previous report performance*

It is noteworthy that, occasionally, these criteria contradict or complement one another.

5.2. Sample special characteristics

We investigate the period 2002-2007 because it represents an ideal transition period (scandals period and important accounting changed period) to objectively verify the quality and quantity of narrative information offered by the financial statements in the regions (the US and Europe), the reason for which the narrative Frameworks (MC, MD&A and OFR) were first created. This period is considered ideal because it was during this time that the global financial and audit community acknowledged that the financial status of many companies does not reflect the quality and reliability they profess; one of the largest scandals in late 2001 was perpetrated by Enron and other large companies such as WorldCom and Global Crossing. In this study, the research period is interrupted in 2007 due to the reliability of the results; in the middle of 2008, the largest bankruptcy of the post-war decades occurred, the collapse of Lehman brothers, which sparked the greatest economic crisis of the last 100 years.

Additionally, during this period, huge accounting and auditing changes were created and implemented so that the credibility of investors and the entire economy could recover. The most important of these are listed in the following timeline.

Timeline of events affecting the narrative accounting portion:

- In 2002, the International Accounting Standards Board (IASB) was established by certain countries, including the United States, to develop International Financial Reporting Standards (IFRS), a new global accounting standard.

- On July 30 of 2002, the Sarbanes–Oxley Act, also known as the "Public Company Accounting Reform and Investor Protection Act," was created.
- In 2003, The New York Stock Exchange received SEC approval for new corporate governance standards for listed companies, requiring boards to have a majority of independent directors, as well as nomination, compensation and audit committees to consist solely of independent directors.
- In 2005, the European Union (EU) announced that its member states will require IFRS in the preparation of consolidated financial statements of listed companies.
- On 27 October 2005, the Discussion Paper Management Commentary was published by IASB.
- In January 2006, the statement Operating and Financial Review (OFR) was replaced by the FRC's Guidance on the Strategic Report.
- In February 2006, the FASB and the IASB issued a Memorandum of Understanding (MoU). In the MoU, the two Boards reaffirmed their shared objective of developing high-quality, common accounting standards.
- In 2007, the SEC issued a rule that allows foreign issuers to file financial statements with the SEC using IFRS without having to reconcile with U.S. GAAP. Until 2007, foreign companies that filed with the SEC were required to reconcile their financial statements with U.S. GAAP.

Moreover, there is no prior research that analyzes in such depth the information of the management commentary over such a wide time interval (2002-2007) and across such a wide range of companies and countries (e.g., Robb et al, 2001; O' Sullivan and Percy, 2004; Brown and Tarca, 2007; Beattie et. al, 2004; Davis and Tama-Sweet, 2012).

Finally, as previously mentioned, we wanted to examine the quality and quantity of information in the financial situations of this transitional period, avoiding the irregularities of the period before 2002 and after 2007, so that the results of our study are not compromised or misrepresented.

5.3. Research questions

This study submits Research Questions (RQ) after considering the firms of all countries in a single sample consisting of three sub-samples (e.g., firms from NE, WE and the US), where there are clear differences in approach to the MC requirements and their enforcement. In contrast to questions 1 and 2, where the analysis is divided by region to determine whether the Ma.Co.Index – which measures the quantity and quality of narrative information – increased after the adoption of IFRS and whether the mandatory requirements for the narrative portion adopted by the US translate into significantly qualitative financial statements. We divided our analysis into two parts. The analysis per Region and the analysis of Full Sample; the following research questions are considered:

5.4. Per Region

RQ 1: In transition period (2002-2007) the firms provide in average a medium amount (< 55%) of narrative disclosure information?

RQ 2: Is there a substantial difference in disclosure level in the MC reports among Western Europe, Northern Europe and the US regions for the pre-IFRS and post-IFRS periods?

RQ 3: Regions forced to comply with mandatory requirements (e.g., the US) will provide a greater amount of disclosure information in their MC reporting than the Regions that are not obliged to comply with these disclosure guidelines (e.g., Western Europe and Northern Europe).

5.5. Full Sample

RQ 4: Which categories and which KPIs in the Ma.Co.Index are affected (positively or negatively) after the adoption of IFRS?

6. ANALYSIS

6.1. Per Region

The first two research questions are answered by the results in table 5, where a positive difference in the quality of the Ma.Co.Index is identified after the introduction of international accounting standards in all three regions examined. This shows us that the application of IFRS has positive effects on the quality of financial statements, although not at the rate that some would expect. Thus, even today, several modifications are made in order to strike the right balance between the quantity and quality of financial and narrative information regardless of country, size, region, law and language.

The second important element that arises from table 6 below is that the mandatory disclosure of narrative information (MD&A) applied by the US does not provide more qualitative results in the annual financial statements in relation to the voluntary disclosure applied by the EU thus far. Thus, discussions about the problems that exist in the financial statements do not seem to suggest that they result from voluntary disclosure, as some studies suggest. Whether any serious company wants to disclose its details (financial or narrative) in order to provide better and more reliable information to its investors and its shareholders or not does not seem to be affected by it. We simply believe that these companies do not have a specific standard such as the Ma.Co.I that provides the quality of information that they desire. Thus, we propose that our index is very important for both companies and their auditors, as they have a common standard, and as a result neither of them avoids major responsibilities.

Research questions 3 to 6 examine in detail all of the categories and KPIs of the Ma.Co.Index in the full sample.

Table 6. Ma.Co.I values per geographic region

Regions	*A-IFRS*	*P-IFRS*	*Average*	*T-test*
U.S.A.	0,535445757	0,482081828	0,508763793	**0,000 (***)**
Northern Europe (N.E.)	0,527938728	0,481518482	0,504728605	**0,000 (***)**
Western Europe (Δ.E.)	0,530106257	0,475331831	0,502719044	**0,000 (***)**

(***): Statistical significance at 1%

6.2. Full Sample

Research Question 4 examines which categories and which KPIs in the Ma.Co.Index were affected (positively or negatively) after the adoption of IFRS. During the period 2002-2007, we observe that the financial statements of the companies in our survey following the introduction of IFRS are more qualitative as a whole (Table 7); nevertheless, it should be clear that the quality rate is marginally above average, and this shows that there is much room for improvement with respect to the financial statement.

Table 7. Qualitative categorical results in both periods

A%		*B%*		*C%*		*D%*		*E%*		*Full Sample %*	
PIFRS	***AIFRS***	***PIFRS***	***AIFRS***	***PIFRS***	***AIFRS***	***PIFRS***	***AIFRS***	***PIFRS***	***AIFRS***	***PIFRS***	***AIFRS***
0,66	0,68	0,55	0,55	0,57	**0,65**	0,35	0,40	0,25	0,29	0,47	0,51

Specifically, we note that during the period 2002-2004 before the introduction of IFRS, in the total sample of our survey rate, the quality percentage of the financial statements reaches 47%, while during the period 2005-2007 after the introduction of IFRS, there is an increase of 51 %. More specifically, in class A (The nature of the business), 68% is the highest percentage of index quality MA.CO.I; this is logical as in this category, information for the investor is included, for example, the company's activity branch, the markets addressed, its products and its structure in general. Next, class C (Key resources, risks and relationships) is the category with the largest increase in the proportion of published information – 65% – after the implementation of IFRS in relation to the prior period – which was 57%. Increasing quality at this level is very important and encouraging because in this category, information about the Risks, Resources and Relations of the company are described, which was one of the goals of the International Accounting Standards. In classes D (Results and prospects) and E (Performance measures and indicators) there is a significant increase of 5% and 4%, respectively, but here, we see that the information lags significantly in comparison with the other categories because its rates are below 50%. Finally, in category B (Objective and strategy), we observe that the quality of information remains constant for both periods.

7. CONCLUSION

The current research adds new insights related to the quality and the form of narrative reporting in the business sector to the existing literature. Few researches have attempted to analyze the Management Commentary of financial statements as a management information tool; however, the results presented a theoretical basis of assessment that opens the floor for future directions on quality financial disclosures. The narrative information provided is gained considerable attention in current years. Thus, examining quality and core characteristics of disclosure, it could enhance in greater transparency and evident comparability between companies.

The novel of this research is not only one but multiple. First, provides a new index (tool) that can be customized to translate qualitative information provided in the MC into a quantitative measure that can be used in a variety of experimental and other research contexts. The tool permits evaluation of any publicly-traded company, unlike the size-biased and other characteristics (e.g. country and region). Moreover, the tool yields a quantitative score that reflects the percentage of disclosure opportunities (with respect to the MC) that the managers of the firm chose to exercise and thus permits objective comparison between firms. Likewise, the tool may be useful for investors and analysts who wish to track the quality of a given firm's disclosures from year to year, or to develop a benchmark for MC quality for a given industry and evaluate firms against that. Moreover, the tool could also be used in an experiment to assess the degree to which individual characteristics (such as experience, training, education, etc.) affect a person's perception of the quality of an MC.

The efficiency of the proposed tool is that it includes financial and non-financial KPIs, in a way that one can effectively trace back significant narrative information and directly correlate it with relative financial information, either on a yearly or over a three year base fragment. In this way, qualitative as well as quantitative information are implicitly identified, so as to guarantee the success of the selection of KPIs chosen per category.

Second novelty, there is no prior research that analyzes both the depth of information management commentary over such a wide transition period (2002-2007), along with such a wide range of companies, countries and regions.

Third, this research results disclose the credibility of the Ma.Co.Index in both ways, either by statistical methods used or by actual financial events actually took place. Results of the analysis performed, demonstrate the informative dimension of the proposed index, and as such are also displayed in Tables 3 and 4. The collapse of Lehman Brothers, a major financial event that triggered the greatest global economic crisis of recent years is being indirectly revealed taking into account results in Table 6 (% values of Ma.Co.Index per geographical region). The accountability of this information can be identified from table 5, as quality of Ma.Co.Index amounts up to 47% for the pre-IFRS and 53% for after-IFRS period, for both sample regions. The results may indicate an increase for the after-IFRS period, but the published information remains at moderate levels of quality of financial statements, to increase in a way the likelihood of a setting a possible negative event. Using Ma.Co.Index is an emphatic reinforcing monitoring and management tool to be able to identify and practically relate quality of disclosure with possible occurrence of either positive or negative financial events.

Furthermore, the mandatory narrative disclosures which the United States imposed in their firms do not increase the quality of Annual reports; the results show equivalent quality information between voluntary and mandatory principles. Moreover, in categories D and E companies should emphasize more because these categories have the lowest results of disclosure information in the financial statements.

Finally with the proposed framework one can be aware in assessing the degree to which individual characteristics (such as experience, training, education, etc.) may affect a person's perception of the quality of MC information.

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APPENDIX

Appendix 1. IFRS Practice Statement Management Commentary published by the IASB, 2010 pp 12-16

No of Points	*Categories*
Category 1: The nature of the business	
Point 1	(a) the industries in which the entity operates;
	(b) the entity's main markets and competitive position within those markets;
	(c) significant features of the legal, regulatory and macro-economic environments that influence the entity and the markets in which the entity operates;
Point 2, Point 3	(d) the entity's main products, services, business processes and distribution methods;
Point 4	(e) the entity's structure and how it creates value.
Category 2: Objective and strategy	
Point 5 , Point 7	Management should disclose its objectives and strategies in a way that enables users of the financial reports to understand the priorities for action as well as to identify the resources that must be managed to deliver results. For example, information about how management intends to address market trends and the threats and opportunities those market trends represent provides users of the financial reports with insight that may shape their expectations about the entity's future performance.
Point 6	Management should also explain how success will be measured and over what period of time it should be assessed.
Point 8	Management should discuss significant changes in an entity's objectives and strategies from the previous period or periods.
Point 9, Point 10	Discussion of the relationship between objectives, strategy, management actions and executive remuneration is also helpful.
Category 3: Key resources, risks and relationships	
Resources	
Point 11, Point 12	Management commentary should set out the critical financial and non-financial resources available to the entity and how those resources are used in meeting management's stated objectives for the entity. Disclosure about resources depends on the nature of the entity and on the industries in which the entity operates.
Point 13, Point 17	Analysis of the adequacy of the entity's capital structure, financial arrangements (whether or not recognized in the statement of financial position), liquidity and cash flows, and human and intellectual capital resources, as well as plans to address any surplus resources or identified and expected inadequacies, are examples of disclosures that can provide useful information.
Risks	
Point 18	Management should disclose an entity's principal risk exposures and changes in those risks, together with its plans and strategies for bearing or mitigating those risks, as well as disclosure of the effectiveness of its risk management strategies. This disclosure helps users to evaluate the entity's risks as well as its expected outcomes. Management should distinguish the principal risks and uncertainties facing the entity, rather than listing all possible risks and uncertainties.
Point 19	Management should disclose its principal strategic, commercial, operational and financial risks, which are those that may significantly affect the entity's strategies and progress of the entity's value. The description of the principal risks facing the entity should cover both exposures to negative consequences and potential opportunities.
Point 20	Management commentary provides useful information when it discusses the principal risks and uncertainties necessary to understand management's objectives and strategies for the entity. The principal risks and uncertainties can constitute either a significant external or internal risk to the entity.
Relationships	
Point 21	Management should identify the significant relationships that the entity has with stakeholders, how those relationships are likely to affect the performance and value of the entity, and how those relationships are managed.
Point 22	This type of disclosure helps users of the financial reports to understand how an entity's relationships influence the nature of its business and whether an entity's relationships expose the business to substantial risk.
Category 4: Results and prospects	
Results	
Point 23, Point 24	Management commentary should include explanations of the performance and progress of the entity during the period and its position at the end of that period. Those explanations provide users of the financial reports with insight into the main trends and factors affecting the business.
Point 28	In providing those explanations, management should describe the relationship between the entity's results, management's objectives and management's strategies for achieving those objectives.
Point 25, Point 27	In addition, management should provide discussion and analysis of significant changes in financial position, liquidity and performance compared with those of the previous period or periods, as this can help users to understand the extent to which past performance may be indicative of future performance.
Prospects	
Point 30a	Management should provide an analysis of the prospects of the entity, which may include targets for financial and non-financial measures.
Point 29	This information can help users of the financial reports to understand how management intends to implement its strategies for the entity over the long term.
Point 30b	When targets are quantified, management should explain the risks and assumptions necessary for users to assess the likelihood of achieving those targets.
Category 5: performance measures and indicators	
Point 31, Point 32	Performance measures are quantified measurements that reflect the critical success factors of an entity. Indicators can be narrative evidence describing how the business is managed or quantified measures that provide indirect evidence of performance. Management should disclose performance measures and indicators (both financial and non-financial) that are used by management to assess progress against its stated objectives.
Point 33a	Management should explain why the results from performance measures have changed over the period or how the indicators have changed. This disclosure can help users of the financial reports assess the extent to which goals and objectives are being achieved.
Point 34	The performance measures and indicators that are most important to understanding an entity are those that management uses to manage that entity. The performance measures and indicators will usually reflect the industry in which the entity operates.
Point 37	Comparability is enhanced if the performance measures and indicators are accepted and used widely, either within an industry or more generally. Management should explain why the performance measures and indicators used are relevant.
Point 36	Consistent reporting of performance measures and indicators increases the comparability of management commentary over time. However, management should consider whether the performance measures and indicators used in the previous period continue to be relevant.
Point 33b	As strategies and objectives change, management might decide that the performance measures and indicators presented in the previous period's management commentary are no longer relevant. When management changes the performance measures and indicators used, the changes should be identified and explained.
Point 35	If information from the financial statements has been adjusted for inclusion in management commentary, that fact should be disclosed. If financial performance measures that are not required or defined by IFRSs are included within management commentary, those measures should be defined and explained, including an explanation of the relevance of the measure to users. When financial performance measures are derived or drawn from the financial statements, those measures should be reconciled to measures presented in the financial statements that have been prepared in accordance with IFRSs.

Appendix 2. The Management Commentary Index (Ma.Co.I)

Number of Points	Description of Points	Number of KPIs	Description of KPIs
	A. Nature of the Business		
1	Description of the nature of the business AND business segments	1	A detailed description of a company's operations. It may include any or all of the following items: A general comment concerning the company's type of business (1) The size of the company, if relevant (2) Number of offices, stores, restaurants, … (3) Represent the Business line as reported by the company.
2	Discussion of products	2	Does the company have a policy to protect customer health & safety? AND Does the company have a products and services quality policy?
		3	Does the company describe the implementation of its product responsibility policy?
		4	Does the company monitor the impact of its products or services on consumers or the community more generally?
3	Discussion of business/board structure	5	Does the company describe the implementation of its balanced board structure policy?
4	Discussion of operating environment	6	Does the company have a policy for ensuring equal treatment of minority shareholders, facilitating shareholder engagement or limiting the use of anti-takeover devices?
		7	Does the company describe the implementation of its shareholder rights policy?
	B. Objective and strategies		
5	Discussion on financial objectives/strategies of the business	8	Does the company describe the implementation of its integrated strategy through a public commitment from a senior management or board member? AND Does the company describe the implementation of its integrated strategy through the establishment of a CSR committee or team?
6	Time frame for achieving financial objective	9	The maximum time horizon of targets to reach compensation incentives.
7	How non-financial objectives monitoring and create or preserve value	10	Does the company monitor its integrated strategy through belonging to a specific sustainability index or conducting external audits on its reporting?
8	Significant changes in objectives and strategy	11	Does the company set specific objectives to be achieved on resource efficiency? AND Does the company comment on the results of previously set objectives?
		12	Does the company have the necessary internal improvement and information tools to develop attractive and performance-oriented compensation policy?
9	A strategy of the vision and value of the business	13	Does the company have a policy for maintaining an overarching vision and strategy that integrates financial and extra-financial aspects of its business?
10	Discussion of how value & objectives relates to strategy	14	Does the company set specific objectives to be achieved on the integrated strategy?
	C. Key resources, risks and relationships		
11	Discussion of key financial resources available to the company	15	Return on equity (ROE).
		16	The company's credit rating as provided by Fitch (AAA (24 points); AA+ (23 points); AA (22 points); AA- (21 points); A+ (20 points); A (19 points); A- (18 points); BBB+ (17 points); BBB (16 points); BBB- (15 points); BB+ (14 points); BB (13 points); BB- (12 points); B+ (11 points); B (10 points); B- (9 points); CCC+ (8 points); CCC (7 points); CCC- (6 points); CC+ (5 points); CC (4 points); CC- (3 points); C (2 points); D (1 points); DD (1 points); DDD (1 points)).(26)
		17	Net debt to equity.
		18	Long-term debt to equity.
		19	Retained earnings divided by equity.
		20	Dividend payout ratio.
12	Discussion of the key non-financial resources available to the company	21	Does the company describe the implementation of its shareholder loyalty policy through a public commitment from a senior management or board member to avoid the misuse of inside information? AND Does the company describe the implementation of its shareholder loyalty policy by having the processes in place to avoid the misuse of inside information?
		22	Does the company describe the implementation of its board functions policy?
		23	Does the company describe the implementation of its compensation policy?
		24	Does the company describe the implementation of its diversity and opportunity policy?
13	Adequancy of financial and non-financial resources	25	Does the company report about the challenges or opportunities linked to the integration of financial and extra-financial issues?
14	Analysis of capital structure	26	Return on invested capital (ROIC).
		27	Average of the last five years of capital expenditures divided by sales.
15	Analysis of financial arrangements	28	Does the company set specific objectives to be achieved on the use of inside information?(31)στοχοθετηση
16	Discussion of liquidity and cash flows of the business	29	Operating cash flow (or unlevered free cash flow (UFCF)) growth (three-year annual growth).
		30	Current ratio (Total Current Assets /Total Current Liabilities).
17	Plans to address any identified inadequacies or surplus of resources	31	Does the company have a policy for reducing the use of natural resources? AND Does the company have a policy to lessen the environmental impact of its supply chain?
18	Potential impact of the identified risks and how they are managed	32	Does the company claim to apply quality management systems, such as ISO 9000, Six Sigma, Lean Manufacturing, Lean Sigma, TQM or any other similar quality principles?
19	Identification of key external and internal risks and opportunities	33	Does the company reports about take-back procedures and recycling programmes to reduce the potential risks of products entering the environment? OR Does the company report about product features and applications or services that will promote responsible, efficient, cost-effective and environmentally preferable use?

Appendix 2. The Management Commentary Index (Ma.Co.I) - Continued

20	Explanation changes in risk management	34	Does the company report on crisis management systems or reputation disaster recovery plans to reduce or minimize the effects of reputation disasters?
21	Discussion of key relationship in place e.g employees	35	Does the company have a policy for maintaining a loyal and productive employee base?
		36	Does the company describe the implementation of its employee satisfaction policy?
		37	Does the company monitor its reputation or its relations with communities?
		38	Does the company have a competitive employee benefits policy or ensuring good employee relations within its supply chain? AND Does the company have a policy for maintaining long term employment growth and stability?
22	How key relationships are managed and likely impact on business	39	Does the company set specific objectives to be achieved on the employee satisfaction strategy?
		40	Does the company have a policy for maintaining a well-balanced membership of the board?
		41	Does the company have a policy to strive to be a good corporate citizen or endorse the Global Sullivan Principles? AND Does the company have a policy to respect business ethics or has the company signed the UN Global Compact or follow the OECD guidelines?
	D. Results and prospects		
23	Explanation of the development and performance of the entity during the year	42	Does the company report data or studies which generally show improvements in the satisfaction and loyalty of its employees?
		43	Has the company issued a profit warning during the year?
24	Explanation of the financial position at the end of the year	44	Does the company publish a separate CSR/H&S/Sustainability report or publish a section in its annual report on CSR/H&S/Sustainability?
25	Discussion of significant changes in financial position	45	Does the company's extra-financial report take into account of the global activities of the company?
26	Variability of quarterly sales over the last three years. AND Net Income growth (three-year annual growth).	46	Variability of quarterly sales over the last three years.
27	Extent to which past results are indicative of future progress /results	47	Is the management and board members remuneration partly linked to objectives or targets which are more than two years forward looking?
28	The management of the firm set specific objectives and explain how to achieve them?	48	Does the company set specific objectives to be achieved on resource efficiency? AND Does the company comment on the results of previously set objectives?
29	Analysis of improvements/prospects of the entity AND how implement its targets/strategies about future.	49	Is the senior executive's compensation linked to CSR/H&S/Sustainability targets
		50	Does the company have the necessary internal improvement and information tools to develop appropriate shareholder rights principles?
30	Identification of objectives/targets for non-financial measures	51	Does the company set specific objectives to be achieved on emission reduction?
		52	Does the company set specific objectives to be achieved on its products or services quality and responsibility?
		53	Does the company set specific objectives to be achieved on its reputation or its relations with communities?
		54	Does the company set specific objectives to be achieved on employment quality?
	E. Performance measures and indicators		
31	Discussion of key financial measures used to measure and assess improvementprogress	55	Does the company report data or studies which generally show improvements in the satisfaction and loyalty of its customers?
32	Discussion of key non-financial measures used to measure and assess progress	56	Does the company describe the implementation of its community policy through a public commitment from a senior management or board member? AND Does the company describe the implementation of its community policy through the processes in place?
		57	Does the company monitor or measure its performance on employment quality?
33	Changes in the quantified measures or indicators reported	58	Operating income percentage change in the last three years.
		59	Does the company have a golden parachute or other restrictive clauses related to changes of control ?
34	Identification of key financial and non-financial indicators that it uses to monitor progress	60	Does the company monitor the use of inside information through the use of surveys or measurements?
		61	Does the company monitor the customer satisfaction or its reputation and relations with communities through the use of surveys or measurements?
		62	Does the company describe, claim to have or mention the processes it uses to accomplish environmental product innovation?
35	Explanation of how each measure, or quantified indicator, reported in MC has been defined and calculated	63	Does the company monitor the employee satisfaction through the use of surveys or measurements?(23)
		64	Does the company set specific objectives to be achieved on customer satisfaction or fair competition?
		65	Does the company monitor the board functions through the establishment of a corporate governance committee?
		66	Does the company have an external auditor of its CSR/H&S/Sustainability report?
		67	Does the company monitor the shareholder rights through the establishment of a corporate governance committee?
36	Consistent reporting of performance measures and indicators	68	Does the company claim to apply quality management systems, such as ISO 9000, Six Sigma, Lean Manufacturing, Lean Sigma, TQM or any other similar quality principles?
37	Discussion of the purpose of each reported measure should be disclosed	69	Does the company explain how it engages with its stakeholders?
		70	Is the company's CSR report published in accordance with the GRI guidelines?

Appendix 3. Qualitative characteristics for KPIs disclosure (ASB, 2006)

ASB (2006) (Paragraph 76, page 23):
For each KPI disclosed in the OFR:
1) the definition and its calculation method should be explained
2) its purpose should be explained
3) the source of underlying data should be disclosed and, where relevant, assumptions explained
4) quantification or commentary on future targets should be provided
5) where information from the financial statements has been adjusted for inclusion in the OFR, that fact should be highlighted and a reconciliation provided
6) where available, the corresponding amount for the financial year immediately preceding the current year should be disclosed
7) any changes to KPIs should be disclosed and the calculation method used compared to previous financial years, including significant changes in the underlying accounting policies adopted in the financial statements should be identified and explained.
Reflecting on the examples provided by the Reporting Statement (ASB, 2006: pp. 29-38), we capture data related to item four as two different types of information (either quantitative or narrative discussion). This is why eight qualitative characteristics are listed in Table 5.

Appendix 4. Example of measuring quantity and quality of KPIs reporting (Hypothetical firm 3i Group plc)

Year	2002
Firm	3i Group plc
Overall Quantity	40
Overall Quality	0,52

Category 1		
Number of Points	*Number of KPIs*	*Answers*
1	1	1
2	2	1
	3	0
	4	0
3	5	1
4	6	1
	7	0
Quantity of Kpis		4
Quality of KPIs		0,57

Category 2		
Number of Points	*Number of KPIs*	*Answers*
5	8	1
6	9	0
7	10	1
8	11	1
	12	0
9	13	1
10	14	0
Quantity of Kpis		4
Quality of KPIs		0,57

Category 3		
Number of Points	*Number of KPIs*	*Answers*
11	15	1
	16	N/A
	17	1
	18	1
	19	1
	20	1
12	21	1
	22	1
	23	0
	24	0
13	25	0
14	26	N/A
	27	1
15	28	0
16	29	1
	30	N/A
17	31	0
18	32	0
19	33	0
20	34	0
21	35	1
	36	1
	37	0
	38	1
22	39	0
	40	1
	41	1
Quantity of Kpis		14
Quality of KPIs		0,58

Category 4		
Number of Points	*Number of KPIs*	*Answers*
	42	0
23	43	1
24	44	1
25	45	0
26	46	1
27	47	1
28	48	0
29	49	0
	50	0
30	51	0
	52	0
	53	0
	54	0
Quantity of Kpis		4
Quality of KPIs		0,31

Category 5		
Number of Points	*Number of KPIs*	*Answers*
31	55	1
32	56	0
	57	0
33	58	0
	59	0
34	60	0
	61	0
	62	0
35	63	0
	64	0
	65	1
	66	1
	67	0
36	68	0
37	69	1
	70	0
Quantity of Kpis		14
Quality of KPIs		0,58

TALENT MANAGEMENT AND COMPETENCIES: A CROSS COUNTRY STUDY OF MALAYSIAN AND VIETNAM SEMI-PRIVATE UNIVERSITIES

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Abstract

Talent Management has gained attention of researchers and practitioners in developing nations in recent years. There is a shortage of empirical driven research in the South East Asian region and recent reports alerting to a crisis emerging in the higher education sector. Little is known about talent management perceptions and behaviour of Academics in universities in the region. Four constructs were identified and analysed from the literature - talent identification, talent culture, talent competencies and talent development. Questionnaires were distributed to academics from 4 semi-private universities in Malaysia and Vietnam. The findings reveal that talent identification, talent development and talent management culture are the most important contributors to talent management competency for Academics across the samples. The findings also suggest that talent management competency levels for Academics are significantly higher when management have integrated HR systems that identify value, measure team and individual performance, assess and develop, give honest formal feedback and a culture of rewarding high performance. The implications of the study suggest that organizations which embark on a 'one size fits all' Talent management strategy that ignore these job related factors could eventually face further problems such as high staff turnover, poor morale and associated costs. The paper offers a unique talent management model to contribute and enhance academic's intentions of careers in the South East Asian region and market segment.

Keywords: Talent Management Behaviour, Talent Management Perception, Semi-Private Universities, Talent Management Identification, Development, Culture Competency, Exploratory Factor Analysis, Talent Management In Developing Countries.

1. INTRODUCTION

The global environment is under severe challenge facing enormous competition and one of major challenges is employee talent management, which has become a potential powerful source of competitive advantage and sustainability (Ingham et al, 2006). Two studies, one of 40 global companies (Ready and Conger, 2007) another more recently of 37 multi-national firms (Bjorkman, Farndale Morris, Paauwe, Stiles, Trevor and Wright, 2012) found that virtually all of them identified a lack of a sufficient talent pipeline to fill strategic positions within the organization, which considerably constrained their ability to grow and sustain their business.

There is an abundance of academic research on talent management in various regional contexts (Collings and Mellahi 2009; Cooke 2011, 2012; Jones et al. 2012; McDonnell, Collings and Burgess 2012). However, there is a distinct lack of clarity regarding the definition, scope and overall goals of talent management, in tandem with empirically based research (Lewis and Heckman 2006).

An investigation of the number of publications devoted to Talent Management using print media indicators and bibliometrics conducted by Iles, Preece & Chuai, 2010 revealed that in the year 2000 there were 130 articles cited in Emerald databases and 230 in Business Source Premier, compared to the year 2008 (361 in Emerald and 989 in Business Source Premier), more than a threefold increase. Much of the debate on talent management is anecdotal rather than empirically based, and arguments are predominantly based on the selective self-reports of executives, and or individualistic with little or no emphasis on the strategic implications of talent management of organisations (Lewis and Heckman 2006, 142). This study attempts to broaden the empirical literature and is unique in that the locus of attention is on self-reporting of academics' perceptions of the talent management nuances at the coal face in four different organisations in a cross country sample of Malaysia and Vietnam.

1.1. Malaysian context: economy and university sectors

Bernama, the official governmental news agency of Malaysia, recently cited that the country of approximately 26 million populations has over one million Malaysians working overseas, in countries like Singapore and Australia, as well as countries outside the region in the United States and United Kingdom. Brain drain (returning to or investing in another country) appears to have escalated with 140,000 people leaving the country permanently in 2007 compared to 305,000 between March 2008 and

August 2009 (Asia Sentinel 2010; Harvey & Groutsis 2015).

In 1991 as recommended by the Wawasan 2020 (Vision 2020) the then Mahatthir administration made 138 recommendations, its largest was to become a regional education hub for higher education. Since then the private education Act and the Universities and University College Act amendments has seen three foreign universities set up with joint government ownership and control, local partnerships of the nine universities franchising to local private colleges, and overseas joint partnerships with foreign multi-nationals and universities in UK, Africa, China Indonesia and Cambodia (as cited in Mok, 2011). In 2004, 32% of students were enrolled in private higher education institutions in Malaysia. With some 27,000 international students studying in these institutions. 19 UK Universities are offering some 110 twinning programs, 18 Australian universities offering 71 programs. What is unique about Malaysia is that the government applies strong centralised intervention in terms of quality framework for both public and private higher education institutions yet it is embarked on market acceleration of the sector to become a regional hub of transnational proportions.

1.2. Government Linked Companies' Universities (GLCs Universities)

The Ministry of Education's, Malaysia (MOE), primary objective under the National Education Blueprint (2013-2025) released in September, 2013 is to transform the country's education system to be on par with those of developed countries. It has established strategic targets to be achieved by 2020 to increase the number of graduates by 40 per cent of the Malaysian population (Straits Times, 2014). This objective is to be driven by both the public and private universities in Malaysia. In order to achieve this objective, clearly public universities (fully funded by the government), may not be able to single-handedly achieve. Hence, many private universities have been granted the approvals to conduct and produce higher education graduates.

The Malaysian tertiary education provided by private providers (internationally recognised) has a global market share of 3% of total international students. The Malaysian government envisages that by 2015 the education sector would be able to attract 150,000 international students. It has been rationalised by the Malaysian government that with an increasing gross output of M$3.0 billion to M$ $7.00 billion, from 2005 to 2008 from private education sector, this sector is a viable and attractive sector (10th Malaysian Plan, p.130). In driving the objectives towards large scale high quality graduates, initiatives were reviewed and established under the Economic Transformation Programme (ETP) in 2010, which called for more university graduates to manage priority sectors, including tourism, health, biotechnology and education itself. These initiatives increased the global student enrolment for international students in Malaysia to over 90,000 in 2012 and enabled Malaysia as the world's 11th largest exporter of educational services (MOHE, 2012; Borneo Post, July 23, 2012).

The increasing demand for higher education both from the domestic and international students has increased the challenges for the current 20 public universities and 20 private universities (under large Government Linked Companies or GLC universities), and those set up by foreign universities (branch campus)in Malaysia (Malaysian Ministry of Education, 2013). The total student enrolment at both the public and privates universities stands at 290,000 as at 2013/2014 in wide ranging disciplines (MOHE, 2014).

With the increasing student population and the objectives set by the Malaysian government to achieve to become an 'educational hub for excellence in the Asian region' many challenges has since risen. These challenges include space and facilities for the increasing student population, high quality academics and professionals to deliver high standard and internationally accepted qualifications. Needless to say one of the primary challenges is the attraction and retention of qualified and competent academic staff for GLCs. The Ministry's data indicate that in 2008 there were only 1,070 PhD academics and 6,846 master's academics in service which does not suffice the increasing demand. The Malaysian Education Ministry reported that there was an urgent need for competent educators in the education industry (Ministry of Education, Malaysia, website, 2013). Evidence from several prominent researchers in Malaysia also suggest that some universities in Malaysia were losing students because of service quality and a lack of competent academics (Firdaus, 2006; Latif, et al. 2004; Hasan, et al., 2008, Ismail & Abiddin, 2009).

This developing situation of demand for high quality academics in Higher Education has further been compounded with the attrition rate of qualified and competent academics. A study by The National Higher Education Research Institute (USM), Penang in 2004, reported that both the Public and Private Universities had an attrition rate of 12% of PhD academics and 4.1% non-PhD academics. Almost 40% of these highly qualified academics sort employment in business and other non- educational sectors in 2004. The turnover was attributed to attractive compensation packages, career development opportunities, job security (usually on contract appointments with the academic institutions) and workload pressures. In another recent study on the attrition rate of academics, Chong (2014) reported that this trend had not been addressed and has continued at the rate of 30% in the education sector between July 2010 and June 2011. The Malaysian government (Malaysian Ministry of Higher Education (MOHE) in its Strategic MasterPlan 2020 has identified several initiatives to addressed this growing concern for specifically for the Higher Education sector.

One of the critical initiatives for immediate action was the establishment of a National Research Consortium to identify and retain talent research academics besides attracting talent from overseas (Strategic Plan, MOE, 2014). Another government initiative offered attractive incentives to high quality talent to return under the Talent Corp Malaysia program.

The key challenge of the education system is to provide Malaysia with a competent workforce with knowledge and skills. Overall it has been widely reported that the country needs an estimated 2.2 million total workforce by 2010. Presently, only about 12% of the general population pursue tertiary studies locally and a significant portion of those students study abroad (NAPIEI, 2002). By the year 2020, the government hopes that 40 per cent of the Malaysian population will attend tertiary education. Compounding this relatively small number of highly qualified academics discussed above and the quality service delivery, the attrition rate of academics in private universities such as the GLCs has become a significant concern. Competent academics are urgently required with the Malaysian Ministry of Higher Education (MOHE) identifying 3 leading GLC universities spearheaded for specialised and strategic targets set under the Malaysian Economic Master Plan 2020. These GLCs are Universiti Tenaga Malaysia (UNITEN), Universiti Teknologi Petronas (UTP) and Multimedia University of Malaysia (MMU).

Table 1. Summary of TM studies in Malaysia Researchers

	Research work
Zaini A., Siti A.,Kamaruzaman J., (2009)	Succession Planning in Malaysian Institutions of Higher Education
Scullion and Collings,(2010)	Global Talent Management, research on Multimedia University
Gopal, A., (2011)	Internationalization of higher education: Preparing faculty to teach cross-culturally.
Khairunneesam, M.N., (2011)	Work life balance and Intention to leave among Academics in Malaysian Public Higher Education Institutions.
Rosdi I. S., Harris H., (2011),	Human Resource Management practices and organisation commitment in Higher Ed. Malaysia

1.3. Vietnam context: economy and university sectors

Similar to Malaysia, Vietnam is also facing a shortage of PhD qualified academics and quality service delivery, it appears also to be losing academics to better paid private industry positions and secure government positions. However, the central socialist government's response entails various strategies from suspension of poor quality undergraduate and post-graduate programmes to recruiting PhD qualified expats, and sending younger Academics to study high quality PhD's overseas and repatriating them.

Between 1995 and 2005 student enrolments increased 4.43 times (from 297,900 to 1,319,754 students. Teaching staff increased by less than half (22,750 to 47,616 lecturers. A massive overload of teaching contributing to low morale and possibly poor Work Life Management. Coupled with low base salaries and ageing cohorts, where the majority of full & associate professors being over 55 years of age. Most people consider Academics as full-time public servants and not generally free to engage with local firms for research. With a large percentage of Academics working 2nd and 3rd teaching jobs in private institutions to supplement their teaching income (Ca 2006, World Bank Report).

According to MOET 2012 data, Vietnam had 77 universities and 114 colleges, in 2005 93 universities & 137 colleges, growing was 2 national universities, three regional (with 20 members), 76 independent. Amongst these were two semi-private 16 private universities and four semi-private and three private colleges. Research and teaching collaboration is low due to local skills emphasis on teaching and shortage of higher qualified staff with only 51% of Academics with higher degree qualifications (Ca 2006, World Bank Report).

In contrast to Malaysia, Vietnam does not yet offer incentives to foreign educated Vietnamese. (Harvard Report 2008). No Vietnamese institution appears in any of the widely used (if problematic) league tables of leading Asian universities. Vietnamese universities are not producing the educated workforce that Vietnam's economy and society demand. Surveys conducted by government-linked associations have found that as many as 50% of Vietnamese university graduates are unable to find jobs in their area of specialization, evidence that the disconnect between classroom and the needs of the market is large. *Merit-based selection:* Corruption is rife and it is well known that degrees and titles can be purchased. University personnel systems are opaque and promotion is too often based on non-scholastic criteria such as seniority, family and political background, and personal connections. Faculties and the upper levels of administration tend to be dominated by individuals trained in the Soviet Union or Eastern Europe who cannot speak English and, in not a few cases, are hostile to younger, western educated colleagues. *Autonomy:* Vietnamese academic institutions remain subject to a highly centralized system of control. The central government determines how many students, universities may enrol, and (in the case of public universities) how much university instructors are paid. Even decisions as core to the operations of a university as promoting faculty are controlled by the centre. This system denies universities and institutes the incentive to compete or innovate. Remuneration is based on seniority, and official salaries are so low that university instructors must moonlight excessively to support themselves. Research and teaching collaboration is low due to local skills emphasis on teaching and shortage of higher qualified staff with only 51% of Academics with higher degree qualifications. (Harvard's Ash Institute Report on Vietnamese Higher Education: Crisis & response 2008).

Statistics in 2013, from the Ministry of Science and Technology show that Vietnam has 24,300 PhDs and 101,000 master's degree holders - an increase of 7% and 14% respectively over the previous year. However, just 8,520 PhD holders were teaching in universities, while 633 were at junior colleges - an indication that many PhD holders do not opt for higher education jobs. Many prefer posts in government and state-owned enterprises.

A recent announcement by Vietnam's Ministry of Education and Training (MOET) that 207 undergraduate programmes at 71 universities and colleges will be axed in the forthcoming academic year - in part because of under-qualified academics - has shocked the higher education community. online magazine *Motthegioi* - One World.

The Vietnamese higher education sector is volatile, with the government reacting by closing poor quality programmes and intervening to attempt redress talent management shortages. The current central government regulations lay down that bachelor programmes must have at least one lecturer with a PhD degree and three lecturers with masters degrees. Associate bachelor programmes require four lecturers with at least masters. Full-time academic staff should be adequate to cover around 70% of the coursework of the programme. Recently the central government has implemented a slew of measures, including a plan to send thousands g young lecturers to study for PhDs abroad, slashing student enrolment to maintain a reasonable ratio of lecturer-to-student, temporarily halting courses or even shutting institutions that do not match the requirements in terms of facilities and especially faculty. In 2012, MOET revoked the operating licences of 58 doctoral programmes. In 2013, 161 other masters degree courses were also temporarily suspended.

Talent management has been defined and applied in various ways. The generic understanding and views among the interviewed Government Link Companies are; talent management is to build a competent workforce to realize the vision and mission of the company. Employees with talents are those who have the potential to occupy critical positions. Stuart, Kotze and Dunn (2006) defined that talent is not just about having the brainpower, knowledge, experience, skill or the mental and physical characteristics to do something different or a higher order of difficulty and complexity in the future..

"Educational excellence" which is about world class branding, marketable academic programmes, research activities and facilities in attracting and retaining foreign and local students (Isahak, 2007), but how does one compete to be different? Governing bodies, in Malaysia such as the Malaysian Qualification Agency (MQA) provide accreditation to quality programmes that fulfil certain standards. Universities have the responsibility to produce graduates that will meet the requirements of the industries. However, universities are lagging behind in meeting the needs of the industries (Hernaut, 2002).

In this context, talent management refers to the process of developing and integrating new workers, developing and retaining current workers, and attracting highly skilled workers to work for a company and it's beneficial to the organization. Furthermore, by HR explaining to management and employees why talent management is important, how it works and what the benefits are to the organization and participants, talent management strategies are more likely to be seen as a fair process.

Talent management to continue to training and developing high performers for potential new roles, identify their knowledge gaps, and implement initiatives to enhance the competencies among academicians at these GLCs' university. Universiti Tenaga Nasional (Uniten) set up and managed by Tenaga Nasional Berhad (TNB), Universiti Teknologi Petronas (UTP) under PETRONAS and Multimedia University (MMU) under it's parent company which is Telekom Malaysia (TM). These GLCs are rapidly growing in terms of broad discipline delivery and graduate satisfactory completions annually. With this development, the GLCs'academic quality and talent up skilling and retention of academic staff has become paramount.

Talent management actually can provide the job security for academics as it has positive and significant influence on employee attitudinal outcomes and organizational effectiveness e.g. employee work engagement, turnover avoidance, and value addition. The outcomes of poor managerial practices and situational factors associated with working inHigher education institutions could result in academics, employers and consumers alike complaining of poor quality service, high turnover, absenteeism and stress.

2. LITERATURE REVIEW

The current literature on Talent Management (TM) has ambiguities around the definition of the concept, it is also evident that there is a lack of theoretical development in the area (for notable exceptions see Boudreau and Ramstad, 2005; 2007; Cappelli, 2008; Lewis and Heckman, 2006). A significant body of strategic HRM literature has pointed to the potential of human resources as a source of sustainable competitive advantage (Becker and Huselid, 2006; Schuler and Jackson, 1987), and argued that the resources and capabilities that underpin firms' competitive advantage are directly tied to the capabilities of talented individuals who make up the firm's human capital pool (Cheese, Thomas and Craig, 2008; Wright, McMahan, and McWilliams, 1994).

The terms "talent management", talent strategy", "succession management", and "human resource planning" are often used interchangeably. Talent management refers to the process of developing and integrating new workers, developing and retaining current workers, and attracting skilled workers to work for your company. Talent management is concerned with developing strategy; identifying talent gaps; succession planning and recruiting, selecting, educating, motivating and retaining talented employees through a variety of initiatives (Guthridge and Komm & Lawson 2008; Ringo, Schweyer, De Marco, Jones & Lesser 2010).

According to Jantan et al., (2009) talent management can be defined as an outcome to ensure the right person is in the right job; process to ensure leadership continuity in key positions and encourage individual advancement, and decision to manage supply, demand and flow of talent through human capital engine. The talent management process consists of recognizing the key talent areas in organization, identifying the people in the organization who constitute its key talent, and conducting development activities for the talent pool to retain and engage them and has then ready to move into more significant roles.

Baum (2008) said that talent management is an organisational mindset that seeks to assure that the supply of talent is available to align the right people with the right jobs at the right time, based on strategic business objectives.

Talent consist of those individuals who can make a difference to organisational performance, either through their immediate contribution or in the longer term by demonstrating the highest levels of potential (CIPD, 2007) (Davies and Davies, 2010). Talent management is increasingly seen as a critical factor in developing successful organizations and is a strategic priority for businesses (Davies and Davies, 2010).

Talent management is the systematic attraction, identification, development, engagement or retention and deployment of those individuals with high potential who are of particular value to an organisation (CIPD, 2006) (Davies and Davies, 2010). Armstrong and Baron (2007) claimed that Talent management is being viewed as a comprehensive and integrated set of activities to ensure that the organisation attracts, retains, motivates and develops the talented people it need now and in the future). Talent is one of the most critical factors in achieving organizational effectiveness. Therefore it is important for GLCs'to focus on competency of the academic staff as it enhances skill, attitudes and behaviour that an individual or an organization is competent at and the ability to deliver; perform (a set of tasks with relative ease and with a high level of predictability in terms of quality and timeliness) (Spencer, 1993, cited in Tripathi et al., 2010).

Furthermore, capabilities that underpin firms' competitive advantage are directly tied to the capabilities of talented individuals who make up the firm's human capital pool (Cheese, Thomas and Craig, 2008; Wright, McMahan, and McWilliams, 1994). Hence, competency development is imperative and this refers to those activities carried out by the organization and the employee to maintain or enhance the employee's functional, learning and career competencies (Forrire & Sels, 2003).

2.1. Davies's Model

From the perspective of Davies and Davies, (2010), talent management is defined as a systematic and dynamic process of discovering, developing and sustaining talent. What works depends on the context and the way the organisation implements practices.

Davies model is based on three elements of talent practice. These are:

2.2. Talent Identification

Talent identification is the process and activities to define and discover the sources of talent. Attracting people to the organisation is not the same as attracting the right people, who will be enthusiastic, highly capable and loyal to the values, beliefs and mission of the organisation (Davies and Davies, 2010). In talent identification, management of institution will search the talented academician that would best benefit for academy future performance. Organisations are "operating in increasingly dynamic environments", and to be "truly successful they need to stay one step ahead of the game and predict who will be the key drivers of their future success" (Hay Group, 2005) (Cited in Davies and Davies, 2010). So the best organisations are future focused and predict what skills, attitudes and behaviours they will need from their talented individuals (Davies and Davies, 2010). Indeed, talent identification is imperative to identifying key positions which contribute to the organization's sustainable competitive advantage, the development of a talent pool and high performing incumbents to fill these roles, and the development of differentiated human resource architecture to facilitate filling these positions.

2.3. Talent Development

In talent development, learning and skills development is the most important capability for talent-focused organisation. An effective organisation will have a well-established process for the professional learning of all staff, which is effectively connected with other processes such as a performance management (Davies and Davies, 2010). According to Davies and Davies (2010), it is important to consider; what is in place for the development of all staff and where does talent enablement fit in. The variety of learning practices which are integrated with other human resources process, professional learning should be purposeful and link with strategic intents and have an impact (Davies and Davies, 2010).

Talent development involves developing leaders via processes such as coaching, feedback, training, mentoring and challenging employees (Evans, Pucik, and Barsoux, 2002) (Cited in Ibeh and Debrah, 2011). Developed in alignment with the research base on achievement motivation and talent development (Dweck, 2006; Pink, 2009; Colvin, 2008).

Various training and workshops will increase the supply of highly skilled academicians, enhance the knowledge of academicians and equip them with up-to-date skills and upgrade the quality and productivity of academicians. An example of the workshop focused on topics such as "Managing Conflict", "Managing Performance in Your Department", Enriching the Student Experience" and "Recruiting and Retaining Faculty". Furthermore, by providing an external training it is generates professional growth for the academicians. Whilst the academic staff is eligible for one local training and one overseas training per year (Choong, Wong & Lau, 2011).

"A job competency is an underlying characteristic of a person in that it may be a motive, a trait, a skill, an aspect of one's self-image or social role, or a body of knowledge which he or she uses".

Hence training and development is a strategic approach to increase workplace productivity and as incumbent needs to bring to a position in order to perform its tasks and functions with competence.

Efforts will be intensify to raise the number of faculty members with PhD qualifications in order to meet international quality standards and ratings. In addition to do that, various schemes must be made available to assist staff to upgrade their academic qualification by furthering their studies locally or abroad. These essential efforts undoubtedly will create opportunities to improve the quality of academicians. As employees' knowledge, skills and competencies are an important competitive weapon, hence talent needs to be maximized and recognized as one of the discrete source of organizational competitive advantage (Collings & Mellahi, 2009).

2.4. Talent Culture

Talent culture enable talent for future focused activity which enables the planned replacement of key staff. Loyalty, commitment and retention cannot be guaranteed but in the process of developing people to "step up", organisation should consider whether it encourages people not to "stay on board" (Davies and Davies, 2010).

According to Davies and Davies (2010) talented people need to feel valued and their contribution is making a difference as such in term of affirmative is powerful; feeling appreciated, recognised and valued is motivational. Opportunities will help the talented person feel motivated and aligned to the organisation but future opportunities and roles will also need to be available to make this happen (Davies and Davies, 2010).

Cheese et al, (2008) suggest that motivation commitment, trust, empathy and inspiration, ensure that an individual is able to align their own interest with the organisation and assist with the retention of those talented individuals (Cited in Davies and Davies, 2010). In order to become a talent-focused organisation, the institution could focus on factors that determine the organisation culture. Furthermore, it is crucial for the institution to implement relationship building strategies for the academic's career development and opportunities Talented people need to feel valued and that their contribution is making a difference. Affirmation is powerful; feeling appreciated, recognised and valued is motivational. Opportunities will help the talented person feel motivated and aligned to the organization but future opportunities and roles will also need to be available at the right time.

Culture is one of the most precious things a company has; you must work harder on it than anything else (McShane & Von Glinow, 2010). Indeed creating an excellent working culture in the university, the academic's will be motivated. Throughout, job involvement it is the physical, emotional and mental involvement of people in an activity which provide a sound base for decision making, so employees with high level of job involvement strongly identify with and really care about the job they are actually engaged (Robbins & Coulter, 2005:375).

On the other hand, social environment of the organization can significantly affect employee job satisfaction especially co-workers interaction because cooperative co-workers are a modest source of job satisfaction to individual employees. It is evidenced that good and supportive co-workers and interpersonal relationship makes the job easier and enjoyable which in turn increase the level of job satisfaction (Ellickson & Logsdon, 2001).

Furthermore, university leaders need to avail themselves of a wide range of leadership characteristics drawing on dimensions of both transformational and transactional leadership. Past researchers have also suggested that some universities in Malaysia were losing students because their standard of service quality was not up to the expectation of the students (Jain et al., 2004; Firdaus, 2006; Ismail & Abiddin, 2009). It was reported that the level of service quality in the Malaysian universities was between moderate to slightly above the moderate level, Sim & Idrus, 2004; Ismail & Abiddin, 2009). How do Universities attempt to remain competitive and maintain a sustainable growth in this volatile environment in which programmes have been seen to be globally homogeneous in nature, competitive in terms of pricing, and significant in location and branding?

Universities play an important role in economic and social life. In order to fulfil this role successfully they need to attract and retain high quality staff. The university itself need a talent that possess an excel achievement. Academics need to possess strong levels of motivation in enhancing quality of the university. However, most of the university staff were highly exposed to burnout because their direct relationship with large numbers of students, staff and administrators and lack of opportunities for professional development, unclear promotion perspectives, and inadequate resources. This environment stresses academicians and reduces their performances.

In a competitive marketplace, talent management is a primary driver for organizational success and the demand for human capital. Organizations should recognize the core human capital, and be able to invest in it (Delery & Shaw, 2001). Lepak and Snell (2002) indicated that knowledge workers, those "people who use their heads more than their hands to produce value" (Horibe, 1999, p.xi). Hence, it is imperative for the Human Resource Managers, Deans and Head of Departments to retaining and re-inforce positive attitudes of the academic staff as it will lead to enhancement of productivity, creativity, innovation and overall organizational performance

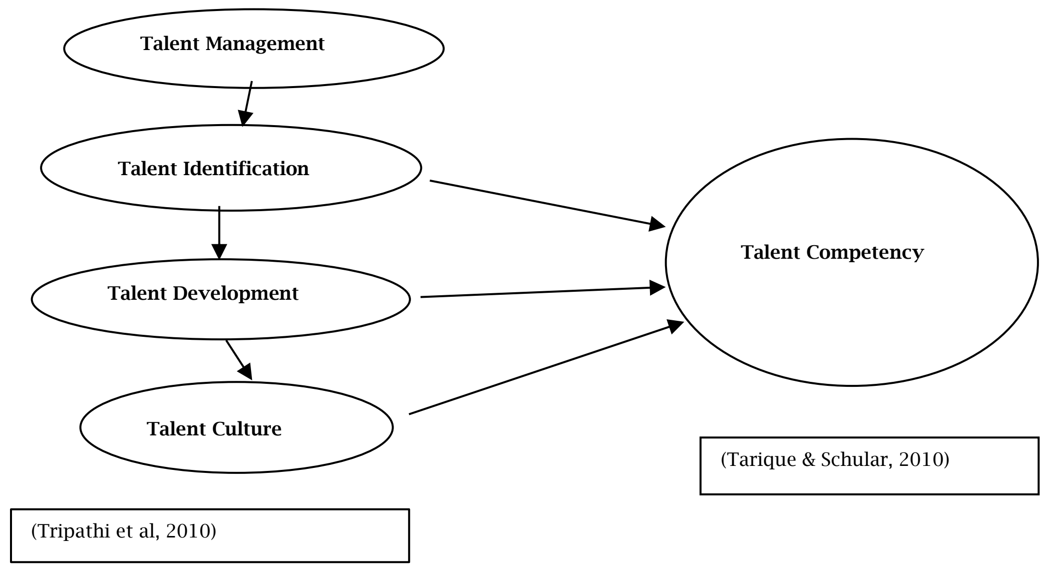
Job satisfaction refers to the individual matching of personal needs to the perceived potential of the occupation for satisfying those needs (Kuhlen, 1963) while Price (2001) defined it in terms of the affective orientation that an employee has towards his or her work (Price, 2001). Job attachment, dedication and willingness are the key factors that provide satisfaction (Sargent & Hannum, 2005). Employees or university teachers may be considered as dissatisfied with their job if they remain absent and friction to the job of teaching and research. Talent management is important, especially in enhancing the organization's performance; this strategy has mapped out competencies relevant which it needs to harness and develop based on talent recruitment and creation. Hence, it would be of benefit to human resource and academics to connecting a wide range of human capital efforts under the single administrative umbrella of "talent management".

Research indicates talent management and competency has significant influence on employee attitudinal outcomes and organizational effectiveness. (de Pablos and Lytras, 2008). Furthermore, according to the Deputy Prime Minister YAB Tan Sri Dato' Haji Muhyiddin Bin Yassin and Minister of Higher Education YB, The Education sector is one of the most important drivers to transform Malaysia into a high-income nation (Economic Transformation Programme: A roadmap for Malaysia, 2010 as cited in Choong & Lau 2011). Finally, having identified the problems of talent management in relation to competencies, the objectives of this research are as follows: Firstly; to identify the relationship between Talent Management and competencies of Academics. Secondly; to identify the relationship between talent development and competencies. Thirdly; to identify the relationship between talent culture and competencies. Empirically based talent management research within university environments has been limited to a few studies. Especially in the Malaysian and Vietnam environment, also using a unit of analysis as the Academic and their perceptions of talent management is clearly lacking in the extant literature. Noting the absence of other more comprehensive models in the literature, the author adapted a version of an existing model in this study in order to predict factors related to talent management competency [Davies & Davies 2010].

3. RESEARCH FRAMEWORK AND HYPOTHESES

Based on the literature review and research problem, the following research framework has been developed. This model focuses on the relationship between talent management and competencies towards academicians. The independent variables are the predictors of talent management towards academics, which consist of talent identification, talent development and talent culture and dependent variables are competency towards academicians.

Figure 1. Research Framework



3.1. Research Problem

The main purpose of this research is to investigate the nature and extent of talent management factors on competency of Academics. The primary research question arising from the research, the literature review is: What are the factors that contribute towards Academics perception of talent management?

The secondary research questions arising from the literature review are:

a) How does talent management affect competencies?
b) How does talent identification affect competencies?
c) How does talent development affect competencies?
d) How does talent culture affect competencies?

Based on the above research questions the following hypotheses have been developed:

H1: There is a positive relationship between talent management and competencies.
H2: There is a positive relationship between talent identification and competencies.
H3: There is a positive relationship between talent development and competencies.
H4: There is a positive relationship between talent culture and competencies.
H5: There is a positive relationship between talent management and competencies across country samples.

3.2. Method

After approaching some five Malaysian universities of different sizes, including private, semi-public, local and international. Four universities agreed to participate in the survey. The questionnaires for this study were distributed using random and snowball sampling techniques. The final sample included respondents from 3 Malaysian universities and one Vietnamese university. Questionnaires were completed and were returned by mail to a specific post office box address in a self-addressed reply paid envelope to ensure anonymity and confidentiality. Of the 210 questionnaires distributed for this study, 166 completed were returned giving a response rate of 79%. Vietnam sample of the 210 questionnaires distributed for this study, 168 completed were returned, giving a response rate of 80%.

Table 2. Profile of the responded organizations

	Malaysia		*Vietnam*	
Category	***N***	***%***	***N***	***%***
Gender				
Male	84	50.6	95	56.5
Female	82	49.4	73	43.5
Age				
20 to 30 years	49	29.5	66	39.3
31-40	56	33.7	73	43.5
41-50	42	25.3	22	13.2
50 +	19	11.5	6	3.5
Years of Service				
<2 years	31	18.7	43	26
2 to 5 years	30	18.1	49	29
5-10 years	48	28.9	33	19.6
10 to 15 years	34	20.5	19	11.1
15 +	23	13.8	24	14.3
Education Level				
Post-2ndry Certificate /Diploma	9	5.4	8	4.8
Bachelor	42	25.3	35	20.8
Master	83	50	121	72.0
PhD/Doctorate	32	19.3	4	2.4
Position				
Tutor	47	28.3	25	14.9
Lecturer	57	34.4	117	69.6
Senior Lecturer	40	24.2	22	13.1
Principal Lecturer	22	13.1	4	2.4
Employment Type				
Full-time	116	69.9	160	95.2
Part time	31	18.7	5	3
Casual	19	11.4	3	1.8
No of employees	**166**	100	**168**	100

Despite the predominantly full-time nature of positions Vietnam (95.2%) Malaysia (69.9%) it is evident there is a low percentage of PhD qualified academics in the sample universities researched, with Vietnam (2.4 %) Malaysia 19.4 %, which is consistent with government and industry profile data reported earlier.

Exploratory factor analysis was utilized to investigate the underlying structure of the relatively large set of variables (24 variables) contained within the study. After a Varimax rotation four factors emerged explaining 68.6 % of the variation. Table 3. Shows, after removing these items and items with low loadings, the four factors were tested for validity using Confirmatory Factor Analysis.

A eigenvalue more than 1.0 was considered as the determinant criterion for each factor in factor analysis. The results of these factor analyses are presented in Table 2 and Table 3, respectively. The results in Table 3 suggest a four-factor solution with a total variance explained 68.6%. The KMO value of RMO was 0.812, which exceeded the recommended value of 0.6. This indicates sampling adequacy. These results suggest these constructs and their dimensions are factorially distinct and all items used to measure a factor/dimension loaded on a single factor. However, in arriving at the final set of items for each factor/dimension, some items were deleted (two items from Talent Identification, three items from Talent Development, one item from Talent Culture and three items from Competency) due to their poor loading with respective factors/dimensions.

The results revealed that factor loadings of items of all dimensions were above 0.5, the minimum threshold value. This is indicative of convergent validity of measures (Hair, Black, Babin and Anderson 2010). The discriminant validity of the study constructs were tested as suggested by Hulland, Chow and Lam (1996). Thus, Cronbach's alpha values presented in the upper diagonal of table four for each constructs were greater than the constructs' correlation coefficients with other constructs. This is indicative of discriminant validity amongst constructs (Hullandet al 1996).

Additionally, Cronbach's alpha coefficients of each constructs (dimensions) presented in Table 2 and Table 3 were above 0.7, implying reliability of construct measures.

The results reveal that the majority of the constructs are significantly correlated with each other with correlation regressions ranging from 0.47 to 0.59. However, all correlations are less than 0.9, thus suggesting there is no multi-collinearity between these constructs (Tabachnick and Fidell 2012).

3.3. Hypothesis Testing

Two multiple regression analyses were run to test hypotheses. The first was run to test the influence of Talent Management on Competency. The second was conducted to examine the influence of dimensions of Talent Management on Competency. The results in Table 5 reveals that the first model explained 33.1 % variance in Competency. Talent Management (β=.57, $p<0.001$) had significant positive influences on Competency. So, H_1 was accepted. Table 2 also reveal that the dimensions model explained 33.2% variance in Competency. Of these dimensions, Talent Identification (β=.23, $p<0.01$), Talent Development (β=.19, $p<0.05$) and Talent Culture (β=.27, $p<0.01$) had significant positive influence on Competency. So, $H_{2,}$ $H_{3,}$ and $H_{4,}$ were allaccepted.

Table 5 presents the mean, standard deviation and correlations for the constructs used in this study for Malaysia and Vietnam. The results reveal that most of the constructs are significantly correlated with each other with correlation regressions ranging from 0.11 to 0.63. However, all correlations were less than 0.9, thus suggesting absence of multi-collinearity between these constructs in both countries (Tabachnick & Fidell, 2012).

Table 3. Exploratory Factor Analysis for Study Constructs-Measurement Model

Construct	***Statements***	***Factors***			
		1	***2***	***3***	***4***
Talent ID	TalentID1-Is aware of the level at which team members are performing.	.79			
	Talent ID2-Makes use of assessment tools available within the company.	.53			
	Talent ID3- Encourages talented employees to develop their careers.	.51			
	Talent ID4- Addresses performance problems in a timely way – does not let poor performance continue.	Deleted			
	Talent ID5-Rates the performance levels of employees candidly during the performance appraisal process.	Deleted			
	Talent ID6- Adjust managerial decisions and actions to be appropriate for the performance levels of employees.	.54			
Talent Dev	Talent Dev1- Possesses a genuine interest to foster the learning and development of people.		Deleted		
	Talent Dev2- Makes an objective assessment of individuals' development needs.		Deleted		
	Talent Dev3- Coaches staff one-on-one.		Deleted		
	Talent Dev4- Gives honest feedback for developmental purposes.		.55		
	Talent Dev5- Actively create developmental opportunities for subordinates.		.57		
	Talent Dev6- Meets with subordinates for formal career planning sessions.		.65		
Talent Cul	TalentCul1- Nominates employees for various company awards (such as "on-the-spot" and "circle-of-excellence" awards).			Deleted	
	TalentCul2- Rewards employee's for exemplary work in a variety of ways.			.59	
	TalentCul3- Provides verbal or written recognition for individual contribution where appropriate.			.51	
	TalentCul4- Allocates increases fairly, according to individual performance.			.58	
	TalentCul5- Ensures that salaries are market related.			.66	
	TalentCul6- Celebrates exceptional performance of employees.			.58	
Comp	Comp1- Is creative and makes suggestion to improve the job				Deleted
	Comp2- Provide novel solutions to problems.				Deleted
	Comp3- Is able to meet identified standard when performing a job				.51
	Comp4- Uses time & materials to the best advantage of the company				.87
	Comp5- Has the ability to lead people				.62
	Comp6- Is able to motivate others to work for a common goal				.52
	Comp7- Is able to delegate work to peers				.61
	Comp8- Is willing to take ownership and responsibility for the job				Deleted
Eigenvalue		7.1	1.8	1.5	1.3
Percentage of variance explained		31.3	18.6	10.4	8.3
KMO		0.812			
Bartlett's Test of Sphericity		X^2=1608.41,df=190, p<0.001			
Cronbach's alpha		.75	.71	.81	.78

Notes: Talent ID-, Talent Dev-, Talent Cul- , Comp-

Table 4. Mean, Standard Deviation and Correlations for the Study Constructs

Proposed Hypothesis	***Coefficient (β)***	***t-value***	***Conclusion***
Effects of Talent Management on Competency			
Talent Management→Competency	.57	8.99***	H_1-Accepted
R^2 =.332, Adjusted R^2 = .331, F-value = 80.91***			
Effects of the Dimensions of Talent Management on Competency			
Talent ID→Competency	.23	2.82**	H_2-Accepted
Talent Dev→Competency	.19	2.17*	H_3-Accepted
Talent Cul→Competency	.27	3.20**	H_4-Accepted
R^2 =.335, Adjusted R^2 = .332, F-value = 26.959***			

*Notes: *** p < 0.001; ** p < 0.01; ns= not significant*

Table 5. Mean, standard deviation and correlations for constructs Malaysia & Vietnam

	Mean	*SD*	*1*	*2*	*3*	*4*
Malaysia						
1.Talent Id	4.06	.49	.81[a]			
2.Talent Dev	4.08	.61	.57**	.83[a]		
3.Talent Cul	4.06	.55	.54**	.59**	.77[a]	
4.Competencies	4.18	.50	.48**	.37**	.29**	.79[a]
Vietnam						
1.Talent Id	4.13	.54	.81[a]			
2.Talent Dev	4.15	.52	.63**	.80[a]		
3.Talent Cul	4.18	.45	.52**	.58**	.79[a]	
4. Competencies	4.11	.67	.11	.53**	.23*	.81[a]

Notes: ** Correlation is significant at $p<0.01$
* Correlation is significant at $p<0.05$
[a] Diagonal value indicates the square root of AVE of latent construct

Table 6. Results of hypothesis testing- Malaysian Sample

Proposed Hypothesis	*Coefficient (β)*	*t-value*	*Conclusion*
Effects of Talent Management on Competency			
Talent Management→Competency	.57	8.99***	H_1-Accepted
R^2 =.332, Adjusted R^2 = .331, F-value = 80.91***			
Effects of the Dimensions of Talent Management on Competency			
Talent ID→Competency	.23	2.82**	H_2-Accepted
Talent Dev→Competency	.19	2.17*	H_3-Accepted
Talent Cul→Competency	.27	3.20**	H_4-Accepted
R^2 =.335, Adjusted R^2 = .332, F-value = 26.959***			

*Notes: *** p < 0.001; ** p < 0.01; ns= not significant*

Table 7. Results of confirmatory factor analysis, Malaysia & Vietnam

Construct	*Statements*	*FL*		*Other Parameters*	
		Mal	*Viet*	*Mal*	*Viet*
Talent identification	Talent ID2-Makes use of assessment tools available within the company.	.57	.59	AVE (.65), CR (.75), α = .74	AVE (.66) CR (.77) α =(.76)
	Talent ID3	.58	.57		
	Talent ID4 Addresses performance problems in a timely way – does not let poor performance continue.	.58	.66		
	Talent ID5 Talent ID5-Rates the performance levels of employees candidly during the performance appraisal process.	.51	.65		
	Talent ID6	.70	.75		
Talent development	Talent Dev1	.53	.77	AVE (.69), CR (.76), α = (.74)	AVE (.64), CR (.78), α = .76
	Talent Dev2	.55	9		
	Talent Dev4	.53	.52		
	Talent Dev5	.62	.73		
	Talent Dev6	.67	.70		
Talent culture	TalentCul1	.57	.51	AVE (.59), CR (.85), α = (.84)	AVE (.62), CR (.83), α= (.81)
	TalentCul2	.73	.55		
	TalentCul3	.76	.64		
	TalentCul4	.76	.86		
	TalentCul5	.59	.76		
	TalentCul6	.54	.62		
Competencies	Comp1	.53	.54	AVE (.62), CR (.84), α = (.82)	AVE (.65), CR (.85), α= (.84)
	Comp2	.61	.59		
	Comp4	.52	.58		
	Comp5	.53	.59		
	Comp7	.81	.50		
	Comp8	.78	.73		

Notes: Fit indices for Malaysia; $X^2(296)$ =550.56, (p<0.001), CFI =.95, GFI = .95, NFI=.96, TLI= .95, RMSEA = .038, SRMR = 040. Fit indices for Vietnam; $X^2(296)$ =518.43, (p<0.001), CFI =.96, GFI = .97, NFI=.98, TLI= .96, RMSEA = .042, SRMR = 042. Mal-Malaysia, Viet-Vietnam, FL-Factor Loading, AVE=Average variance extracted, - Cronbach's Alpha, CR- Construct reliability, CFI= comparative fit index; GFI=goodness-of-fit index, NFI=normed fit index, TLI= Tucker-Lewis index, RMSEA = root mean square error of approximation; SRMR=standardized root mean residual.

4. FINDINGS AND MODEL RESULTS

4.1. Analysis and results

4.1.1. Measurement Model

Confirmatory Factor Analysis (CFA) was performed to ensure that items used to measure the study constructs were theoretically consistent (Byrne, 2009). Separate CFA analyses were run for each country. In arriving at the final set of items for each construct, some items were deleted (one item each from Talent identification and Talent development and two from Competencies) based on item to total correlations and the standardized residual values (Byrne, 2009). The resulting pool of items was subsequently subjected to confirmatory factor analysis. A completely standardized solution produced by AMOS version 21 using maximum likelihood method shows that all the remaining 22 items loaded highly on their corresponding factors, confirming the uni-dimensionality of the constructs and providing strong empirical evidence of their validity.

The results of the CFA for both countries are presented in Table 7. The fit indices of the CFA tests shown at the bottom of Table 2 suggest an acceptable level of model fit to the sample data. The CFA results reveal that the factor loadings of all constructs were significant (p<0.01) and above 0.5, the minimum threshold value, and the AVE values of all constructs were also above 0.5, both of which are indicative of convergent validity of the measures (Hair & Anderson, 2010) in Malaysia and Vietnam. The discriminant validity of the study constructs were tested as suggested by Fornell and Larcker (1981). Thus, in both countries, the square root of the Average Variance Extracted (AVE) values presented in the upper diagonal for each construct was greater than the constructs' correlation coefficients with other constructs. This is indicative of discriminant validity amongst constructs for both countries (Fornell & Larcker, 1981). In addition, Cronbach's Alpha coefficients of each construct presented were above 0.7, implying reliability of the construct measures for both countries.

4.2. Descriptive statistics and correlation matrix for study constructs

Before testing hypotheses, cross-national measurement invariance was tested. Ensuring measurement invariance is necessary to undertake comparisons of the relationships between latent variables across countries (Steenkamp & Baumgartner, 1998). The test for configural invariance relied on a multigroup confirmatory factor analysis, with the two countries as groups and all constructs freely correlated. The results suggested good model fit (Table 8, M1), which supports configural invariance. The subsequent assessment of the scales for full metric invariance constrained the factor loadings to be the same across the countries (Table 8, M2). Compared with the model of configural invariance, the model of full metric invariance resulted in a significant increase in χ^2, indicating a lack of support for full metric invariance. Therefore, partial metric invariance was tested, where at least one item for each latent construct must be metrically invariant (Steenkamp & Baumgartner, 1998). Therefore, the next analysis step relaxed one equality constraint per latent construct, on the basis of the modification indices and expected parameter changes. The model with relaxed equality constraints (Table 8, M3) resulted in an insignificant χ^2 difference compared with the unconstrained model of configural invariance, in support of partial metric invariance. Therefore, analyses proceed into hypotheses testing.

Table 8. The Results of Measurement invariance

Model	X^2	*df*	X^2/df	*Models compared*	Δx^2	*p-value*	*RMSEA*	*CFI*	*TLI*
M1:Full configural invariance Unconstrained	1101.12	592	1.86	N/A	N/A	N/A	.038	.95	.95
M2:Full metric invariance	1138.83	619	1.84	M2 vs M1	37.7	0.01	.042	.97	.95
M3: Partial metric Invariance	1122.41	608	1.85	M3 vs M1	21.3	0.15	.038	.95	.95

4.3. Hypotheses Testing

Multigroup Structural Equation Modelling was employed to test the hypotheses across the countries. In the first step, the full model was specified separately for Malaysian and Vietnam sample. These models generated acceptable model fit (Malaysia; $X^2(293)$ = 544.98, (p<0.001), CFI = 0.95, GFI = 0.96, NFI = 0.96, TLI = 0.95, RMSEA = 0.034, SRMR = 041; Vietnam $X^2(293)$ =542.05, (p<0.001), CFI = 0.97, GFI = 0.98, NFI = 0.97, TLI= 0.96, RMSEA = 0.043, SRMR = 041). Then, structural invariance was tested to determine whether there were significant differences in the structural model across countries. The Chi-Square difference between the unconstrained structural model and the fully constrained structural model was significant (ΔX^2=71.7, df=25, p<0.001), thus indicating that the structural models was not invariant. Therefore, each hypothetical path was constrained and subsequent Chi-Square difference between unconstrained and constrained structural model for each path was noted. These results are presented in Table 9.

As the results revealed, Talent Id had significant positive influences on Competencies in Malaysia (β=.39, p<0.001) but not in Vietnam (β=.05, p>0.5). So, H_1 is accepted in Malaysia and rejected in Vietnam. The Chi-square difference ($\Delta\chi^2$=27.5, p<0.01) between the unconstrained model and the constrained model for this path is significant, suggesting significant difference between the countries relating to this hypothesis.

Table 9. The results of hypotheses testing across countries

Path relationships	*Malaysia*		*Vietnam*		*Model Comparison*	
	Est	*t-value*	*Est*	*t-value*	ΔX^2	*p*
Talent Id → Competencies	.39	10.5***	.05	1.5^{ns}	27.5	.001
Talent Dev → Competencies	.25	8.82***	.38	9.2***	18.6	.008
Talent Cul → Competencies	.17	5.35**	.15	4.83**	1.6	.657

Notes: :*** $p < 0.001$; ** $p < 0.01$; , ns= not significant.

Also, Talent Dev had significant positive influences on Competencies both in Malaysia ($\beta = 0.25$, $p<0.001$) and in Vietnam ($\beta = 0.38$, $p<0.001$). So, H_2 is accepted in both countries. However, as suggested by Chi-square difference for this path ($\Delta\chi^2 = 18.6$, $p<0.01$), this relationship is stronger in Vietnam than in Malaysia. Finally, Talent Cul had significant positive influences on Competencies both in Malaysia ($\beta = 0.17$, $p<0.01$) and in Vietnam ($\beta = .15$, $p<0.01$). Hence, H_3 is accepted in both countries. As suggested by the Chi-square difference for this path ($\Delta\chi^2 = 1.6$, $p>0.5$), there is no significant difference between the countries relating to this hypothesis.

5. DISCUSSION AND MANAGERIAL IMPLICATIONS

This study investigated the relationship between talent management and competency. There appear to be three sub-components under talent management which are talent identification, talent development and talent culture.

The study found that, Academic's perception of talent identification, talent development and talent management culture relevance are the most important contributors to talent management competency for Academics. The findings also suggest that talent management competency levels for Academics are significantly higher when management have integrated HR systems that identify value, measure team and individual performance, assess and develop careers, give honest formal feedback and a culture of rewarding high performance. Cross country data reveals nuances that talent identification was not a strong factor in determining talent competency however this may be due to the bureaucratic and less transparent nature of recruiting academics in the Vietnam context. This is consistent with the literature as reported by Ca (World Bank Report).

The study concludes that utilizing a more comprehensive model that incorporates the TM whole lifecycle beyond recruitment and selection and using methodology with multi-item measures has unearthed nuances in the data that confirm and extend the extant literature of talent management in higher education. In particular organizations that embark on a 'one size fits all' TM strategy by ignoring these job related factors could eventually face further problems such as high staff turnover, poor morale and associated costs and potential sacrificial client/customer service strategies that will impact on the bottom line and the organization's reputation.

This study extends the work of previous talent management researchers by identifying that using a comprehensive multi-dimensional approach for measuring talent management reveals that Academic's overall perception of positive aspects of talent management competency included intrinsic, extrinsic and social factors. Also that work environment or the context of work has a positive association to talent competency.

Unlike previous studies which have relied on either anecdotal evidence or have approached talent from a variety of measurement approaches with varying units of analysis (from helicopter opinions of senior managers and or consultants) the unique contribution of this study allows future researchers to investigate the proposed model, apply or adapt it and have more comprehensive multi-dimensional empirically based identified factors associated talent management which may be generalised or contested to other similar higher education environments. The limitations of the study include small sample sizes, absence of longitudinal nature and thus the study could be limited to generalizability in other samples. Also mixed methods were not used to triangulate the data. Further research could be undertaken with those limitations in mind.

However according to our research and an extensive literature review, Talent management research and related practices should incorporate a more strategic and holistic approach of investigation to include talent identification, talent development and talent management culture as important contributors to talent management competency. Recently, global talent management case study research has emerged which considers further factors including company branding and company reputation as contributors to talent management competencies (Bjorkman, Farndale Morris, Paauwe, Stiles, Trevor and Wright, 2012).

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TAX COMPLIANCE: AN ADMINISTRATIVE BURDEN FOR SMALL BUSINESS ENTERPRISES (SME'S)

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Abstract

As is the case in many economies, tax laws are sometimes very complicated and difficult for SME's to understand and to implement. Tax laws change every year, impacting on the business, its operations and its profitability. It is also a fact that the more a government overspends, misappropriate funds and overall lack fiscal control, the more they will try and recover these "losses" from the taxpayers - including SME's. The main purpose of the study is to investigate whether small business enterprises are burdened by the administrative processes required in South Africa to comply to with the tax regulations of the country. The South African government has strict policies and procedures in place that all businesses should adhere to. However, the key challenge that many SME's still face is that of red tape and burdensome regulatory processes and procedures. In an attempt to establish the main objective of the study, a quantitative approach research approach was employed and a significant amount of small businesses were surveyed. From the findings it is clear that the respondents of the survey agree that the tax services registration documentation and process should be made easier. The submission of the registration documents, once understood and completed, is not a big problem for the respondents. The cost of registration does not seem to be a major burden to the SME's.

Keywords: Tax Laws, SME, Challenges, Survival

1. INTRODUCTION

Small businesses are considered in many – if not most – countries to be the pillar of the economy. With the variations in the stability of the economy, they are seen to bring about some level of stability into the economy. It is not only important that small businesses contribute to the economy, but also that these small businesses should display continuous growth in order to bring about sustainability and job opportunities thereby taking pressure off the government social structures and away from a dependence on larger businesses. Firm growth is measured in terms of the organisations turnover and by the number of employees it has employed (SBP Business environment specialists, 2014). An entity can be regarded as a Small Business Enterprise (SME) if it meets three criteria: (a) it has a comparatively small share of their market place; (b) it is managed by owners or co-owners, in a personalised way and not through a medium of a formalised management structure, and (c) it is independent in that it is not part of a larger enterprise (NCR, 2011: 22).

According to Davis in Kgosana (2013), if there are seven small businesses started in South Africa, in one year only two will continue to be in existence. This would mean that the remaining five small businesses will fail in the first year of existence. This estimation is particularly concerning when considering the significance and importance of small businesses within the economy. With the high unemployment rate in South Africa, small businesses play a vital role in addressing this issue as job opportunities in larger businesses are relatively low. According to Entrepreneur magazine (2013), 68% of South African workers are employed by organisations that have less than 50 staff members and 43% are employed by organisations that hire less than five staff members.

However, a study conducted by SBP (2014: 7), assigned small businesses to one of four categories based on the change in SME turnover between 2012 and 2013. These categories included shrinking small businesses whose turnovers have declined, stagnant small businesses whose turnover did not change, moderate growth small businesses which showed an increase in turnover of 10% or less and high growth small businesses which saw an increase of more than 10% (SBP, 2014: 7). The slight increase denotes that under harsh economic conditions, there are some small businesses that have managed to survive and continue to grow. According to Forbes (2013), there are approximately 28 million small businesses in the United States of America, and it is estimated that over 50% of the working population of the US is employed by a small business (Forbes, 2013). From these figures, it can be presumed that small businesses do contribute positively to the strength of the US economy and it can be further surmised that in most economies the same positive contribution of SME's are present.

Despite the growth and contribution of SME's to the economy, these organisations face a number of challenges that can and will impact on their ability to succeed. Table 1 identifies some of the barriers of entry and challenges that are faced by SME's and may apply to various sectors.

Table 1. Barriers to entry and challenges faced by SME's

Barriers to entry and challenges faced by SME's
• A lack of management skills
• Finance and obtaining credit
• Access to markets and developing relationships with customers
• Appropriate technology and low production bureaucracy
• Support for the role that they play in economic development
• Lack of capacity to undertake market research, resulting in a lack of understanding of market needs and characteristics
• Red tape and cumbersome regulatory processes and procedures

Adapted from: Bank Seta. (Not Dated)

As can be seen from Table 1, a lack of managerial skills is a challenge that many SME's face. This challenge is not only limited to the knowledge of conducting business but may also include the knowledge of processes and procedures one needs to follow in order to operate a business. Many small business owners may only possess limited tertiary education qualifications which may leave these individuals at a disadvantage. According to Finscope (2010: 21), with regards to the level of education of small business owners in South Africa, 23% of SME owners had accomplished at most primary school level of education and 69% had attained secondary school level or internship training. The study found that only 2.3% of SME owners in South Africa have a university degree (Finscope, 2010: 21). From these figures, it can be seen that SME's are not really equipped with the necessary business skills and knowledge that can be achieved from some sort of tertiary training which can and will have an impact on their success.

Above the general lack and understanding of managerial skills, SME owners are challenged by the complicated regulatory processes and procedures that are prescribed by government (SEDA, 2012). These can range from the process SME's follow in order to register their businesses to the processes they follow in order to comply with the tax laws of the country. According to Smulders and Naidoo (2011: 34), tax compliance requirements and high tax compliance costs can be considered to be an obstacle for small businesses in South Africa. Compliance costs may comprise of subsequent components as identified by (FIAS, 2007: 7):

- The significance of the time spent by business owners/managers or staff members on understanding the tax rules and applying them;
- Record-keeping costs such as costs of compiling the necessary receipts and other records and costs suffered when preparing necessary documents for tax returns;
- The costs incurred by the SME owners for professional assistance from consultants who may provide support with the compilation, completion or submission of tax related documents; and
- Minor expenses for postage, telephone and travel incurred in the process of continuous communication with professional consultants or tax authorities.

Tax systems may vary from one country to another and may impose varying policies as well as procedures upon small businesses. In the U.S for example, the tax payer is subject to both federal as well as state capital gains taxes (Pomerleau, 2015). The strength of the country's economy and the sphere in which it operates may also be a determinant of the responsibilities small businesses have towards tax systems.

As can be seen from the discussion above, a number of challenges are presented to SME's. As SME's play such a vital role in the economy of a country, and the effect of Tax laws have a profound effect on these businesses it was regarded as prudent to evaluate and investigate the effect and impact of tax laws on these businesses. The main purpose of the study is to investigate whether small business enterprises are burdened by the administrative processes required in South Africa to comply to with the tax regulations of the country. According to Smulders and Naidoo (2011: 34), the South African government has recognised the importance of making the tax regulatory environment friendlier for small businesses. However, the effectiveness of their efforts under various economic environments needs to be investigated.

The study at hand will provide the objectives of the study, a literature review providing a detailed analysis of the types of tax procedures that SME's need to abide by. The methodology of the study will then be discussed and thereafter the findings will be presented.

2. OBJECTIVES OF THE STUDY

The primary objective of the study is to investigate whether small business enterprises are burdened by the administrative processes required in South Africa to comply to with the tax regulations of the country. Secondary objectives of the study include the following:

- To explore how SME's experience the tax registration process.
- To determine the perception SME's have of the service provided by SARS.

3. LITERATURE REVIEW

3.1. The role of SARS

The South African Revenue Service plays a vital role in the economy as it facilitates all tax related procedures and processes imposed by legislation. As soon as a business has commenced, it is essential that small business owners familiarise themselves with numerous activities administered by the South African Revenue Services (SARS). These activities include the duties and obligations of the business operator in terms of the various tax laws. SARS is obliged by law to determine and collect the correct amount of tax that is due from taxpayers; including small businesses (SARS, 2013/2014a: 8). The SARS officials are the representatives of the Commissioner and in that capacity are obliged to ensure that the tax laws are administered to appropriately and justly so that no one is favoured (SARS, 2013/2014a: 8).

As can be seen, the tax regulatory services plays, as in any other country, a vital role in the country, and their interaction with taxpayers may be positively or negatively influenced by the compliance of tax regulations. Once the role of SARS has been identified, the next step would be to determine and identify the various taxes applicable to small businesses as well as the processes that small business owners need to follow in order to register for these taxes. These types of taxes are discussed in the following section.

3.2. Types of tax applicable to small businesses

According to SARS (2013/2014b: 2), taxes are levied by the national government of South Africa under the Income tax Act 58 of 1962. These taxes includes (SARS, 2013/2014b: 2):

- Income tax;
- Employees tax which is also known as pay-as-you-earn (paye);
- Provisional tax.

In South Africa, Value-Added Tax (VAT) is levied by the national government under the Value-Added Tax Act 89 of 1991 (SARS, 2013/2014b: 2). According to SBA (Not Dated), in the U.S, the federal government charges four types of taxes such as income tax, self-employment tax, taxes for employers and excise taxes. These types of taxes will now be discussed in the following section.

3.2.1. Income tax

The first tax that is applicable to small business enterprises (SME's) is known as Income tax. According to the Business dictionary (2014), income tax is defined as a yearly charge taxed on both earned income such as wages salaries as well as commission and on unearned income such as dividends, interest and rents. Income tax can be separated into personal income tax and corporation income tax. Personal income tax is levied on incomes of individuals, households, partnerships and sole-proprietorships, whereas corporation income tax is levied on profits of incorporated firms (Business dictionary, 2014). The procedure and processes in which taxpayers need to adhere to when registering for Income tax as described by SARS (2013/2014a: 8) include:

- As soon as a taxpayer starts their business, be it as a sole proprietor or a partnership, the taxpayer or the organization is required to register with SARS in order to obtain an income tax reference number;
- The newly established entity must be registered with the Company Intellectual Property Commission (CIPC) in order to acquire a business reference number. The entity will thereafter be registered as a taxpayer inevitably;
- Depending on turnover of the entity, number of employees to pay salaries to, the entity could also be obliged to register for other taxes such as VAT or PAYE.

As can be seen from the above discussion, there are various processes and procedures that small business owners need to adhere to. It is therefore the responsibility of the small business owners to ensure that the entity is registered for tax. All these processes and procedures require personal time and effort as particular documentation is required. SME owners therefore need to manage their time well in order to complete and submit necessary documentation in order to meet the required tax laws employed in the country.

3.2.2. Employees' tax

The second tax that all businesses, including small businesses, are obligated to register for is Employees' tax, which is commonly known as PAYE (Pay-as-you-earn). Employees' tax is referred to as the total amount of tax that the small business is obligated to deduct from all consistent or periodic cash outflows for remuneration paid or which becomes payable to retained employees (SARS, 2014a). According to SARS (2014a), an employee for Employees' Tax purposes is defined as a natural person who receives remuneration or to whom remuneration accrues.

There are various processes that employers need to follow to ensure that they adhere to the tax laws relating to employees' tax. Small business owners, in their capacity of employers must register for Employees' tax. Registration can be done by completing an EMP 101 form and submitting it to SARS (SARS, 2013/2014a: 11). The employer will then receive a monthly return (EMP 201) that must be completed and submitted together with the payment of employees' tax within seven days of the month after the tax was deducted (SARS, 2013/2013a: 11).

It is the responsibility of the employer to ensure that their employees are registered for employee's tax and also make the necessary payments to the regulatory body within the specified time. Small business owners need to therefore familiarise themselves with all the processes and comply with the tax laws in the country.

3.2.3. Provisional tax

The third tax that directly affects small businesses is referred to as provisional tax. Provisional tax can be paid to SARS twice a year by an individual or an organisation and it is calculated based on taxable income earned by the taxpayer (Sutton, 2013). The amount for provisional tax payable is calculated based on the projected taxable revenue for a particular financial year of assessment (SARS, 2015a). Table 2 provides the method in which the provisional tax is calculated.

Table 2. Provisional tax calculation

Period	*Calculation*
The first period	Half of the total estimated tax for the full year – the employees' tax for six months – any allowable foreign tax credits for six months
The second period	The total estimated tax for the full year – the employees' tax paid for the full year – any allowable foreign tax credits for the full year – the amount paid for the first provisional period

Source: SARS. (2015a)

Small business owners are liable for provisional tax the moment they begin their business. Correctly calculating the provisional tax amount for each period may be a complicated exercise and requires great insight and knowledge of general principles relating to financial statements. Failure to comply with these processes may result in interest owed and a penalty being imposed during the assessments. Therefore, it is the responsibility of the small business owners to equip themselves with the necessary knowledge to complete this process.

3.2.4. Value-Added Tax (VAT)

The fourth tax that can be applicable to small businesses operating in South Africa is referred to as Value-Added Tax. Value-Added Tax, also known as VAT, is an indirect tax that is included in the selling price of every taxable good or service produced by an organisation (Standard Bank, 2012). VAT is a destination-based tax, meaning that it is levied at a standard rate of 14% on most supplies and imports within South Africa (Standard Bank, 2012). However, there is a range of goods and services which are either exempt or subject to tax at the rate of 0%. These goods include basic products necessary for survival such as bread, public transport fares and certain educational services.

Any person, who operates an organisation where the total value of taxable turnover exceeds or is likely to exceed the compulsory VAT registration threshold of R1 million in a 12-month period, is then liable for VAT (Standard Bank, 2012). Therefore, small business owners may be liable for VAT.

Organisations are required to submit VAT returns and make payments of the VAT they are liable for in accordance with the tax period allocated to the organisation (SARS, 2015b). Any late submissions may result in penalties being charged to the organisation (SARS, 2015b). When submitting the necessary application forms for the registration of VAT, a number of supporting documents are needed. It is therefore the responsibility of all businesses to ensure that all documents are correctly completed and submitted.

The discussion above illustrates the registration processes and procedures that small businesses need to follow in order to comply with the tax regulations of South Africa. With limited knowledge, understanding and managerial skills, these processes may be troublesome for those small business owners with no prior exposure or experience with dealing with these processes. As previously mentioned, small businesses thrive depending on the specific country's laws and economic conditions. Other types of taxes that may be applicable to small businesses in other countries are briefly discussed in the next section.

4. TAXES APPLICABLE TO SMALL BUSINESSES IN OTHER COUNTRIES

4.1. Income tax

In the United States, all organisations apart from partnerships are required to file an annual income tax return (IRS, Not Dated (a)). Partnerships file an information return. The type of form that businesses use to file income tax will depend on how the company is organised (IRS, Not Dated (a)). The federal income tax is a pay-as-you-go tax that is paid as income is earned or received during a financial period (IRS, Not Dated (a)). In most cases, an employer will withhold income tax from an employee's remuneration (IRS, Not Dated (a)).

4.2. Estimated tax

The second type of tax applicable to small businesses is referred to as estimated tax. Estimated tax is the method used to pay tax on income that is not subject to withholding (IRS, Not Dated (b)). This is inclusive of income from self-employment, interest, dividends, child maintenance, rent, and gains from the sale of assets, prizes and awards (IRS, Not Dated (b)). Organisations may also be required to pay estimated tax if the amount of income tax being withheld from salary, pension, or other income is not enough (IRS, Not Dated (b)).

4.3. Self-employment tax

The third type of tax that small business owners should be aware of is self-employment tax. This is a tax consisting of social security and Medicare taxes mainly for those who are self-employed (IRS, Not Dated (c)).

4.4. Employment tax

The fourth type of tax to be considered by small businesses is employment tax. As employers, small business owners have employment tax responsibilities that need to be fulfilled. Employment taxes are inclusive of the following (IRS, Not Dated (a)):

- Social security and Medicare taxes
- Federal income tax withholding
- Federal unemployment (FUTA) tax.

In the above discussion, small businesses are obliged to comply with tax laws and are therefore levied various taxes. As mentioned before, different taxes will be imposed on businesses and in order to file for each tax, certain procedures and processes should be followed. It is therefore important that small business owners know and understand these various taxes. The ability of the small business to comply with the tax regulations depends on the expertise regarding tax laws within the SME. The next section will discuss the influence of tax laws on SME's in South Africa.

5. THE INFLUENCE OF TAX LAWS ON SME'S IN SOUTH AFRICA

Abrie and Doussy (2006: 10) conducted a study to investigate the problem areas that manufacturing SMEs have to cope with in administering government taxes. The study found that small businesses are burdened by the issues surrounding tax compliance and these entities lack the human capital to assist with tax compliance issues (Abrie & Doussy, 2006:10). The study further found that SME's spend resources that can otherwise be used to operate the entity; on tax compliance. In some cases, SME owners seek professional assistance with tax compliance. Smulders and Stiglingh (2008: 369) found that tax practitioners charge SME's on average R7 030 per year for assistance with tax compliance. Lack of funding has been identified my many researchers as a key problem that SME's experience therefore this additional cost outsourcing tax compliance can therefore impact the success of the small business. The compliance costs are seen to be regressive in South Africa whereby the smaller businesses are affected the most (Smulders and Stiglingh, 2008: 369).

Brink, Cant, & Ligthelm (2003: 5) emphasise that financial management is a vital area within the micro-environment of SMEs that provides challenges to many SME's. Lack of financial resources is often described as the major hindrance experienced by businesses (Brink, Cant, & Ligthelm, 2003: 5). From the above literature, one can deduce that tax compliance involves a number of administrative processes and financial commitment from the SMEs. The lack of resources and knowledge of the administrative processes can therefore impact SME in a negative manner.

The methodology employed in the study is discussed next

6. METHODOLOGY OF THE STUDY

The primary objective of the study is to investigate whether small business enterprises are burdened by the administrative processes required in South Africa to comply to with the tax regulations of the country. A quantitative approach was utilised in the study as this approach enables the researcher to quantity and scrutinise responses from SME's (Wiid & Diggines, 2013: 8). The quantitative data collection method that was used in the study is that of a self-administered; this was chosen because this data collection tool could provide precise avenues of evaluating information regarding administrative processes experienced by SME's in Gauteng. The data collection tool is considered to be efficient and cost effective (Zikmund & Babin, 2010: 191). The self-administered survey was distributed to SME in Gauteng who registered their businesses at an official state institution for SME's. At the time of data collection, the SMEs were approached at an SME workshop and were asked to complete the survey at their convenience. For the purpose of the study, SME owners, managers and staff who may fulfil administrative tasks of the business were selected.

The questionnaire contained a total of five closed-ended questions of which one was a multiple response questions and three measured on a five-point Likert scale (See Annexure A). There was one open ended question included in the questionnaire. The quantitative data was analysed using IBM SPSS Statistics V22. The data was checked, coded, corrected and descriptive statistics (frequency counts) were used to describe the findings.

The sample population for the study consisted of SME personnel (SME owners, managers or staff) within the Gauteng province. The study focused on SME owners in Gauteng because the province is referred to as the economic and industrial hub of South Africa; contributing more that R1 –trillion to the national economy (SME South Africa, 2015).

The sampling methodology utilised was that of non-probability, convenience sampling. Convenience sample was deemed suitable for the study as the study aimed to explore and investigate whether small business enterprises are burdened by the administrative processes required in South Africa to comply to with the tax regulations of the country. Although the results cannot be generalised to the entire population, findings can contribute to the body of knowledge and illustrate the current state and experiences of small businesses in the province. In addition, convenience sampling enabled the researcher to collect data quickly and easily (Zikmund & Babin, 2010: 424).

In total, 61 completed surveys were completed and used in the analyses process. The number of completed surveys was deemed sufficient and achieved a confidence level of 95%; with an error margin of 10% at 50% response distribution. The 61 useful responses received yielded an error margin of 12.04% (Raosoft, 2016).

The limitations of the study will be discussed in the following section.

6.1. Limitations Of The Study

Given the sample size that was used (n=61), the results only give a general indication of whether small business enterprises are burdened by the administrative processes required in South Africa to comply to with the tax regulations of the country. Therefore, the variables identified cannot be generalised as being representative of all South African SME's further research in this area is therefore recommended.

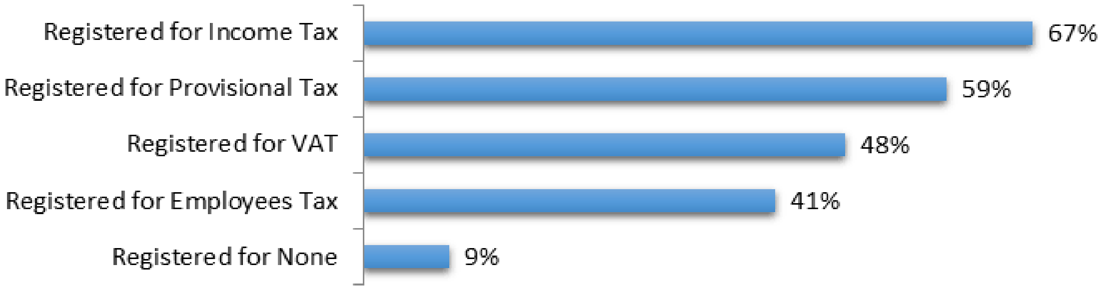
7. RESULTS

The respondent group consisted of owners (79%) managers (19.7%) and staff (1.3%). Most of the respondents were female (58.62%) with more than half who are older than 40 (56.9%).The SME sector that these businesses operated in consisted mainly of construction (20%), business services (10%), manufacturing (10%) and retail (7.1%). A large proportion of the respondents' businesses have existed for less than five years (60.8%) while one quarter of the respondents' businesses have existed for six to ten years (25.7%,). Almost half of the respondents (41.8%) reported that their annual turnover is less than R100000.

7.1. Registration for tax services

Figure 1 provides the percentage respondents who registered for the different types of taxes. Of the 61 responses received, 58 provided information on which SARS services they have registered for.

Figure 1. Percentage of respondents who registered for the different SARS services



As can be seen from Figure 1, the majority (67%) of the business are registered for Income Tax services and Provisional Tax services (59%). Almost half (48%) are registered for VAT and 41% for Employees' Tax. The minority (9%) are not registered for any SARS tax services.

7.2. Descriptive analysis on the experience of small business owners with regards to the tax registration process

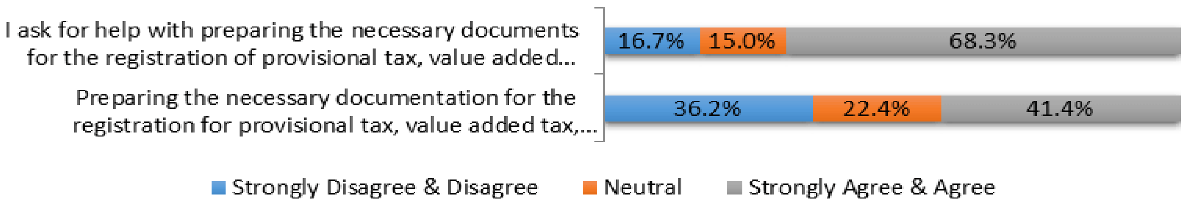
The respondents were asked to indicate the extent to which they agree with a number of statements describing different experiences regarding the tax registration process on a scale of one to five with higher values corresponding to higher levels of agreement. Because of the sample size of this survey, it was necessary to collapse the Likert scale to a three-point scale. This was achieved by combining the two negative perceptions to a single negative view (Strongly disagree/disagree) and the two positive perceptions to a single positive view (agree/strongly agree). The neutral or "don't know" view remained unchanged. Note that a collapse in scale will result in a loss of information.

From the responses the following findings were made:

7.2.1. Completing the registration documents

Most of the respondents (68.3%) strongly agree or agree that they had to ask for help to prepare the registration documentation, while 41.4% of them strongly agree or agree that it was difficult for them to prepare the documentation. The findings are illustrated in Figure 2.

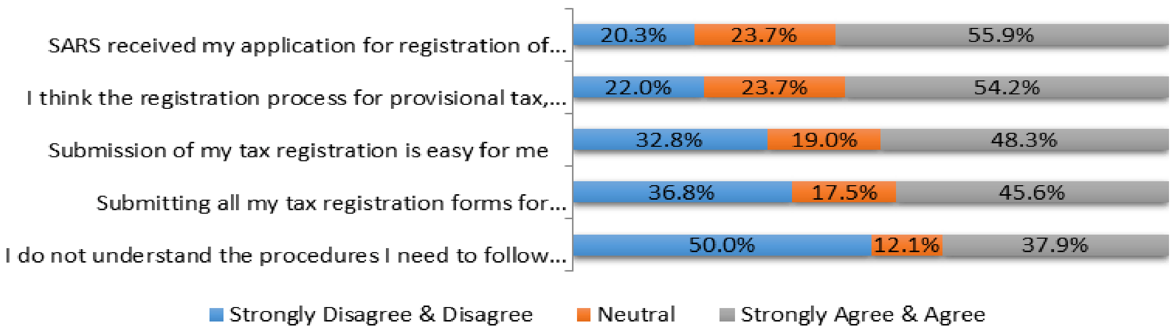
Figure 2. Agreement levels with statements regarding the completion of the registration documentation



7.2.2. The registration process

Most of the respondents (55.9%) strongly agree or agree that SARS received their application for registration of the tax services within an acceptable time frame. Furthermore, most of the respondents (54.2%) strongly agree or agree that the registration process is a very lengthy process. The findings are provided in Figure 3. The submission of the tax registration was easy for almost half (48.3%) of the respondents and less than half (45.6%) of the respondents of them strongly agree or agree that the submission of the registration form went quick. Half of the respondents (50%) strongly disagree or disagree with the statement that they did not understand the procedures to follow for registration for the SARS tax services.

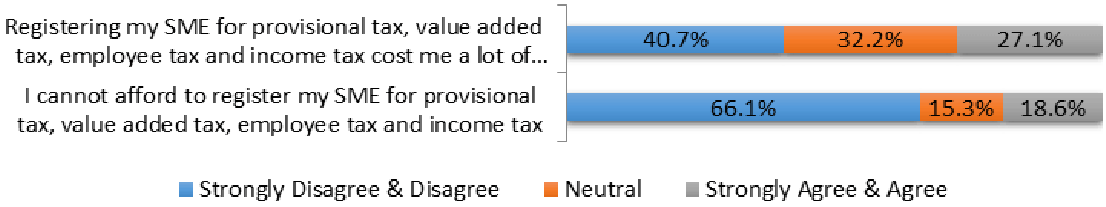
Figure 3. Agreement levels with statements regarding the registration process



7.2.3. Cost implications of the registration process

The majority of the respondents (66.1%) strongly disagree or disagree that they cannot afford to register their SME for the SARS tax services, while 40.7% strongly disagree or disagree that registering their SME for tax services cost a lot of money. The findings are illustrated in Figure 4.

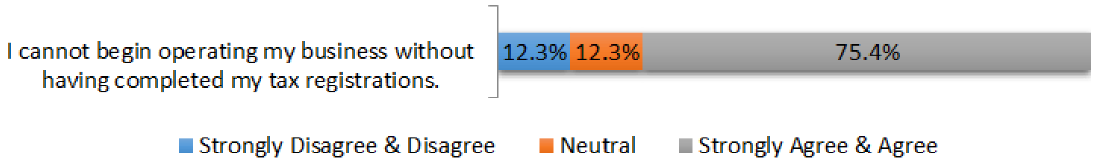
Figure 4. Levels of agreement with statements regarding the cost of registering for SARS tax services



7.2.4. Importance of registering for tax services

The majority of the respondents (75.4%) strongly agree or agree that they cannot begin to operate their business without having completed the tax registration. The findings are provided in Figure 5.

Figure 5. Levels of agreement with the importance of registering for tax services in order to operate the business



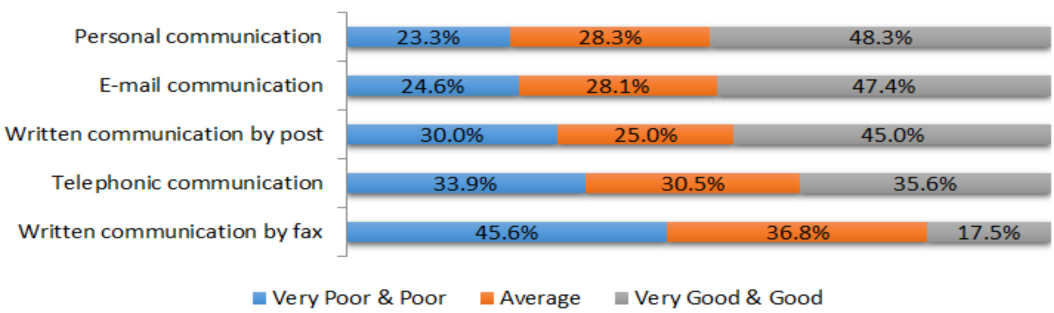
7.3. Descriptive analysis on the perception of small business owners on the service they receive from SARS

The respondents were asked to indicate the extent to which they agree with a number of statements describing their perception of the service they receive from SARS on a scale of one to five with higher values corresponding to higher levels of agreement. Because of the sample size of this survey, it was necessary to collapse the Likert scale to a three-point scale. This was achieved by combining the two negative perceptions to a single negative view (Very poor/poor) and the two positive perceptions to a single positive view (good/very good). The neutral or don't know view remained unchanged. Note that a collapse in scale will result in a loss of information. From the responses the following findings were made:

7.3.1. Communication services from SARS using different communication tools

Telephonic and Fax communication services from SARS was rated the lowest by the respondents with only 17.5% of the respondents perceived the communication by Fax as Very good or good. Written communication by post (45%), email communication (47.4%), and personal communication services (48.3%), was rated as very good or good by more of the respondents (Figure 6).

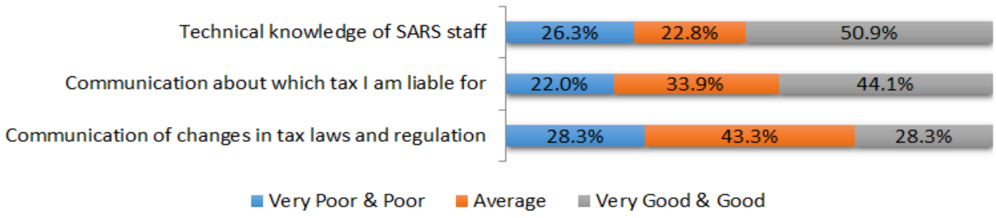
Figure 6. Rating of the different means of communication from SARS



7.3.2. Communication Of Information From SARS

Half of the respondents perceived the technical knowledge of SARS as Very good or good. Communication from SARS on which tax the respondents are liable for was rated Very good or good by only 44.1% of the respondents, while communication from SARS regarding the changes in tax laws and regulation are rate very good or good by only 28.3% of the respondents (Figure 7).

Figure 7. Rating of the communication of information from SARS



7.4. Descriptive analysis on the perception of small business owners on whether the tax laws of South Africa are burdensome

The respondents were asked to indicate the extent to which they agree with a number of statements describing how much they think the tax laws of South Africa impacts the success of their SME. Because of the sample size of this survey it was necessary to collapse the Likert scale to a three-point scale. This was achieved by combining the two negative perceptions to a single negative view (Strongly disagree/disagree) and the two positive perceptions to a single positive view (agree/strongly agree). The neutral or don't know view remained unchanged. Note that a collapse in scale will result in a loss of information. The outcome of the responses can be seen in Figure 8.

The majority of the respondents (58.6%) strongly agree or agree with the statement that tax laws affect the success or failure of small businesses. The top four statements that more than half of the respondents strongly agree or agree with are:

- I think there is a high frequency of submission of tax returns (53.4%)
- It costs me a lot of money to prepare, complete and submit my tax returns (54.2%)
- The registration process for provisional tax, value-added tax, employees' tax and income tax positively affects the success of my SME (55.9%)
- I think there are too many forms to fill and too many procedures to follow in filing my tax returns (56.9%)

More people strongly agree or agree with the following statements than people who strongly disagree and disagree:

- I do not know how to prepare, complete and submit my tax returns (40.7%)
- I think the amount of time spent addressing tax regulations affects the productivity of my business (42.1%)
- I think the tax laws are written in a very complex language (42.1%)
- It takes me long to prepare, complete and submit my tax returns (47.5%)
- The registration process for provisional tax, value-added tax, employees' tax and income tax is complex (49.2%)

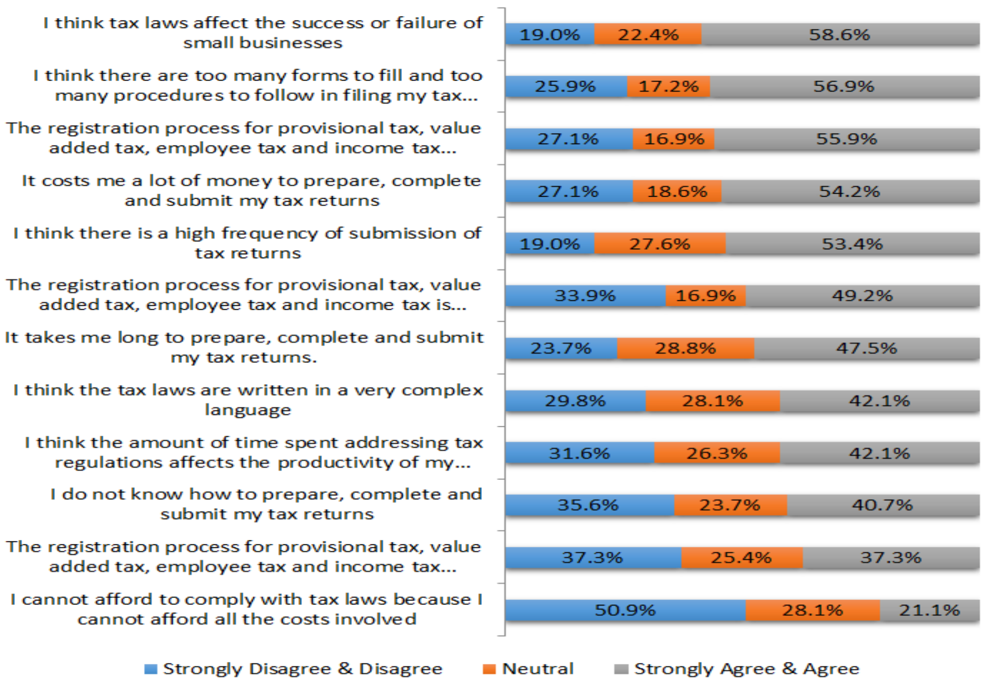
Just as many people strongly agree or agree with the following statement than people who strongly disagree and disagree:

- The registration process for provisional tax, value-added tax, employees' tax and income tax threatens the success of my SME (37.3%).

More than half of the respondents strongly disagree or disagree with the statement:

- I cannot afford to comply with tax laws because I cannot afford all the costs involved

Figure 8. Levels of agreement with the impact of tax laws of South Africa on the success of SME's



8. CONCLUSION

The study at hand discusses the compliance issues that small businesses face regarding tax. As previously mentioned, small businesses play a vital in the economic growth of South Africa however, small businesses struggle to survive as they are faced with various obstacles. The question that one should ask is why should businesses pay tax, what is the importance or significance of tax within the South African context. According to Deloitte (2007), tax is money that South African inhabitants pay to the country. In essence the money that these individuals pay is used for social services such as transport, education, international security, national security, healthcare and welfare (Deloitte, 2007). Despite this significance there seems to be much debate about businesses being taxed. Gauke in Shaxson (2011) argue that corporate taxation involves unfair double tax because corporations are taxed, then tax on their dividends is applied.

The following can be considered as solid for the paying tax (Tax fairness, 2013):

- Taxes provide assistance for education, healthcare and resources such as safe drinking water and infrastructure;
- Taxes provide for a counter-balance by softening extreme disparities in wealth, power and benefits within a country;
- Taxes make the marketplace work in terms of maintenance of regulated business environment in order to protect property rights, enforce fair labour practices and protect consumers;
- Taxes ensure that infrastructures are built and maintained. Such infrastructures include well maintained roads, electrical supply infrastructure as well as healthcare facilities.

In essence, from the words of Oliver Wendell Holmes Junior – taxes are the price we pay for civilisation (Quote investigator, Not Dated).

From the findings it is clear that the respondents of the survey agree that the tax services registration documentation and process should be made easier. The submission of the registration documents, once understood and completed, is not a big problem for the respondents. The cost of registration does not seem to be a major burden to the SME's. As far as services rendered by SARS, the respondents are of the opinion that the Telephonic and Fax communication services from SARS are not very good. Written communication by post, email communication and personal communication services are rated higher. Most of the respondents regard the technical knowledge of SARS as good. Communication from SARS on which tax the respondents are liable for was rated good, while communication from SARS regarding the changes in tax laws and regulation are seen as average by most of the respondents.

The opinion of the majority of the respondents were that the tax laws are a burden to SME's mainly because there is a high frequency of submission of tax returns, it costs a lot of money to prepare, complete and submit the tax returns. The registration processes for tax services are too cumbersome and complex, there are too many forms to fill and too many procedures to follow in filing the tax returns and they do not know how to prepare, complete and submit it. Other reasons for regarding tax laws as a burden is that the amount of time spent addressing tax regulations affects the productivity of the business. The tax laws are written in a very complex language.

In order to make the tax laws less of a burden to SME's the following recommendations can be made after studying the feedback from the respondents: Lower the frequency of submission of tax returns since it costs a lot of money to prepare, complete and submit the tax returns. Simplify the registration process for tax services and the procedures for submitting tax returns and making it easier to understand the procedures and processes. The tax laws should be explained in easier understandable terms. SARS should communicate the changes in tax laws and regulations better and in a more understandable language to make it easier for business owners to stay up to date with the tax laws.

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APPENDIX

Appendix A. Data Collection Instrument

Resp. no.

The influence of South African tax laws on the success of Small Business Enterprises (SME's) survey -

QUESTION 1

Please indicate which of the following have you registered your SME with the South African Revenue Services (SARS)? Tick ALL that is applicable.

Provisional tax	
Value Added Tax (VAT)	
Employee tax	
Income tax	
None	

QUESTION 2

Please read each statement carefully and then indicate the extent to which you agree or disagree that the statement describes **how you experience the tax registration process of your business**

	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
I think the registration process for provisional tax, value added tax, employee tax and income tax is very lengthily.	1	2	3	4	5	6	7
I cannot begin operating my business without having completed my tax registrations.	1	2	3	4	5	6	7
I do not understand the procedures I need to follow to register for provisional tax, value added tax, employee tax and income tax	1	2	3	4	5	6	7
Preparing the necessary documentation for the registration for provisional tax, value added tax, employee tax and income tax is difficult	1	2	3	4	5	6	7
I ask for help with preparing the necessary documents for the registration of provisional tax, value added tax, employee tax and income tax.	1	2	3	4	5	6	7
Submission of my tax registration is easy for me	1	2	3	4	5	6	7
Submitting all my tax registration forms for provisional tax, value added tax, employee tax and income tax is quick	1	2	3	4	5	6	7
SARS received my application for registration of provisional tax, value added tax, employee tax and income tax within an acceptable time frame	1	2	3	4	5	6	7
Registering my SME for provisional tax, value added tax, employee tax and income tax cost me a lot of money	1	2	3	4	5	6	7
I cannot afford to register my SME for provisional tax, value added tax, employee tax and income tax	1	2	3	4	5	6	7

QUESTION 3

Please read each statement carefully and then indicate the extent to which you agree or disagree that the statement describes **your perception of the service you receive from SARS.**

	Very poor	Poor	Average	Good	Very good
Personal communication	1	2	3	4	5
Written communication by post	1	2	3	4	5
Written communication by fax	1	2	3	4	5
Telephonic communication	1	2	3	4	5
E-mail communication	1	2	3	4	5
Technical knowledge of SARS staff	1	2	3	4	5
Communication of changes in tax laws and regulation	1	2	3	4	5
Communication about which tax I am liable for	1	2	3	4	5

QUESTION 4

Please read each statement carefully and then indicate the extent to which you agree or disagree that the statement describes **how you think the tax laws of South Africa impacts the success of your Small Business Enterprise (SME).**

	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
The registration process for provisional tax, value added tax, employee tax and income tax is complex.	1	2	3	4	5	6	7
The registration process for provisional tax, value added tax, employee tax and income tax threatens the success of my SME.	1	2	3	4	5	6	7
The registration process for provisional tax, value added tax, employee tax and income tax positively affects the success of my SME	1	2	3	4	5	6	7
It takes me long to prepare, complete and submit my tax returns.	1	2	3	4	5	6	7
I do not know how to prepare, complete and submit my tax returns	1	2	3	4	5	6	7
It costs me a lot of money to prepare, complete and submit my tax returns	1	2	3	4	5	6	7
I think there are too many forms to fill and too many procedures to follow in filing my tax returns	1	2	3	4	5	6	7
I think there is a high frequency of submission of tax returns	1	2	3	4	5	6	7
I think the tax laws are written in a very complex language	1	2	3	4	5	6	7
I think the amount of time spent addressing tax regulations affects the productivity of my business	1	2	3	4	5	6	7
I cannot afford to comply with tax laws because I cannot afford all the costs involved	1	2	3	4	5	6	7
I think tax laws affect the success or failure of small businesses	1	2	3	4	5	6	7

QUESTION 5

Please indicate if you think that the tax laws are a burden to your small business

Yes	1
No	2

Why?
....
....
....
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....

EXPORTING FAMILY FIRMS IN SPAIN: THE ROLE OF WOMEN

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Abstract

In this study we have focused on the export activity of family firms, to see if women in governance positions have a positive effect on it. In order to clarify these effects, we have divided such positions in three different roles: ownership, boards of directors and the executive management. Data were collected from System for Analysis of Iberian Balances database (SABI) and the Spanish High Council of Chamber (SHCC) website to build a sample of Small and Medium Sized Spanish firms with some exporting activity between years 2000 and 2011. Our results suggest that female executive managers are less risk-averse and more growth-oriented than female owners and directors. Also, family firms show a worse export activity behaviour related to the number of countries and to the exported volumes than family firms. Since family SMEs play an vital role in both, the national and international economies, this study draws attention to the importance of the presence of women in government bodies in search of other markets, as internationalization is a key strategic decision for them.

Keywords: Gender, SME's Corporate Governance, Exporting Activity

1. INTRODUCTION

Family firm is the predominant form of private business in industrial capitalism, they account for more than two-thirds of all companies around the world. Nevertheless, despite their importance to the economy, there are still many aspects to be studied, especially when associated with gender.

Society is becoming aware of the importance of the incorporation of women to management positions. This is well reflected in the proposed European Directive to improve the gender balance on boards, adopted by the European Commission in late 2012[6]. However, much remains to be done in order to achieve a real parity.

In general, women have more difficulties than men in developing managerial careers. In most countries women are still responsible of family tasks making impossible for them to reach to management positions. Besides, so few women reach governance responsibilities that there is a lack of female leadership models that encourage other women to follow. It is necessary to increase the visibility of female role models.

The quotas imposed by the countries have not achieved the expected results. It is desirable that both, firms and women, are willing to solve this situation. To do so, literature has tried to demonstrate the benefits of having women taking decisions. In general, they are both ethical and economical (Walt and Ingley, 2003).

Women managers provide organizations with added knowledge and flexibility as well as cultural insight, understanding, and sensitivity critical to serve the needs of new markets segments (Cox, 1994).They also exhibit different leadership styles compared to men (Eagly *et al.*, 2003).

Following these arguments Hambrick, Cho and Chen (1996) suggest that more diverse teams benefit from the different perspectives and skills provided by individuals with different backgrounds and experiences. Other researchers suggest that heterogeneity in management teams is especially important when making complex strategic decisions, like internationalization (Boome *et al.*, 2004; Carpenter and Fredrickson, 2001; Naranjo and Hartmann, 2007).

With this study we want to focus in a strategic aspect for SMEs and especially for Family SMEs, like export activity. Internationalization is a key strategic and risk taking decision (Lazarra-Kintana *et al.* 2007). It is also strategic the design of corporate governance structures because is directly related to the competitive advantages that the firm needs to exploit.

Joining these ideas, the aim of our study is to examine the relationship between women in managerial positions and firm's exporting activity.

To analyze this issue we have selected a sample of Spanish firms with some exporting activity between years 2000 and 2011.

Spain is an interesting case study with regard to the characteristics of Exporting Family SMEs for several reasons. First, in Spain nearly 98% of the firms are SMEs, so it is important to consider their corporate governance performance. Second, many of these small companies have had to deal with the crisis seeking for foreign markets to survive and to be more competitive. Finally, Spain has Good Governance Codes in force only for listed

[6] Proposal for a Directive of the European Parliament and of the Council on improving the gender balance among directors of companies listed on stock exchanges and related measures. http://data.consilium.europa.eu/doc/document/ST-16300-2014-INIT/en/pdf

companies, so we understand that there must be studies to encourage policy-makers to regulate good governance for SMEs (Barroso et al., 2011). In fact, the ICA (Institute of Directors-Administrators) has elaborated a Good Governance Code7 of SMEs based on the existing regulation for listed companies.

Data were collected from two databases: i) financial, governance and accounting information was obtained from System for Analysis of Iberian Balances database (SABI)[8] while export variables were extracted from the ii) Spanish High Council of Chamber web page[9] for twelve consecutive years, during the period 2000 to 2011.

The information of exporting activity available at the Spanish High Council of Chamber comprises only 297 firms as it is no mandatory to provide this information. Once we get the exporting firms, we had to cross information with SABI in order to obtain financial and corporate Governance information. This has result in a complete original database created ad-hoc for this study.

The period covered is 2000-2011; however, the number of years available for each company depends upon the company's history; therefore, the data source is unbalanced and comprises 266 companies for a total of 3,039 observations, after having deleted firm/year cases with missing values. It is important to say that the firms may be non-exporters for several years.

Available data includes:

- Company identification, name, industry sector (Global Industry Classification Standard (GICS);
- Fundamental financial data.
- Corporate Governance Information.
- Economic data, mainly exporting information, namely: number of countries to which the firms exports, four levels of exporting volume.

We have observed an uneven regional distribution. Exporting family firms of the simple are predominant in Catalonia, Madrid, Andalusia and Valencia.

The companies have been classified in family and non-family businesses. There is no concise, measurable and widely accepted definition of family business. Nevertheless, literature agrees that what makes a family business is to consider the family involvement in ownership and management. In this study we consider that a company is a family firm when a family has the voting control (more than 50% of shares) and the majority of ownership (Calabrò and Mussolino, 2013).

2. FAMILY FIRMS

The importance of family businesses to the global economy is undeniable. They account for more than two-thirds of all companies around the world and 50%–80% of employment in most countries.

According to the Spanish Family Business Institute, family businesses account for 85% of the Spanish business sector, 70% of national GDP and 70% of employment in the private sector. The majority of family businesses are Small and Median Enterprises (SMEs) but this is because in general, the majority of firms are SMEs (98% in the case of Spain).

Family businesses are different than non-family businesses in terms of values, goals and strategic behavior and the reason is none other than family is involved. This is mainly due to the fact that these two types of companies differ basically on who holds the decision-making power. Family-controlled firms will cause major family influence on the objectives and strategies of the organization.

Many empirical studies have examined whether there are significant differences in economic, financial and social outcomes among family and non-family companies. The main conclusions of these studies indicate that the average return of family businesses is higher, they also observe in the financial structure of family firms a debt aversion and higher operating results. (Pindado et al., 2011)

In general, family firms are smaller than non-family firms (Chu, 2009). Small companies can maintain a better connection between family and business, it is likely that the potential benefits of family businesses are better reflected in these firms. Maintaining control and risk aversion are other characteristics of family firms that influence the capital structure and funding decision and, as a consequence, determines the size of the company.

The sample we have selected for this study shows these characteristics:

Family firms are numerous

Family businesses account for 60% of the total cases. The median and mode statistics are set to 1 (the most probable value and leaving the same probability on both sides). This means that most of the observations are family businesses.

Family firms are smaller

In our sample, we observe that family firms are more numerous between small firms.

Figure 3 shows the distribution of exporting companies by size and family character. The European Commission recommendation of May 6th, 2003, establishes the following taxonomy for classifying companies by size (see table 1). However, no statistically significant differences were found in the size of companies according to the statistical F test comparison of means. We have measured the size of the company through the variable sales volume.

[7] Principles of Good Corporate Governance for Unlisted Companies (2005)
[8] SABI database is compiled by Bureau van Dijk Electronic Publishing: http://www.bvdinfo.com/Products/Company-Information/National/SABI.aspx.
[9] http://www.camaras.org/publicado/en/ .

Figure 1. Regional Allotacion of Firms

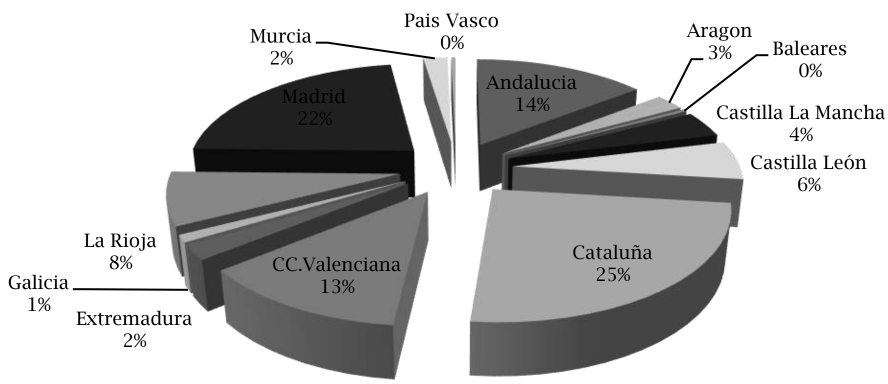


Figure 2. Percentege of Family Firms

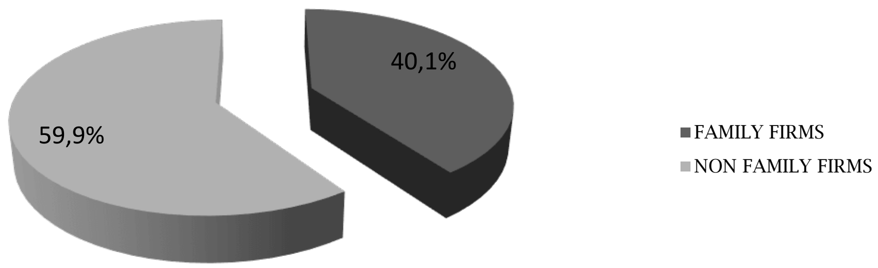
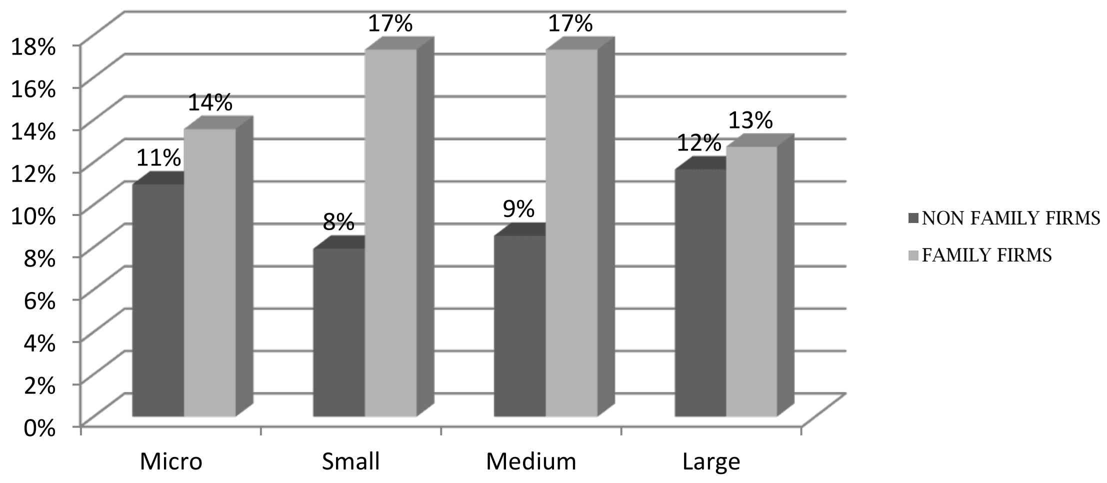


Table 1. Firms by size classification

Firm Size	*Employees*		*Sales (Million EUR)*		*Assets (Million EUR)*
Micro	< 10	&	≤ 2	or	≤ 2
Small	< 50	&	≤ 10	or	≤ 10
Medium	< 250	&	≤ 50	or	≤ 43

Source: Commission Recommendation of 6th May 2003 concerning the definition of micro, small and medium-sized enterprises

Figure 3. Family Firms by Size



Family Businesses have higher return

As we can observe from figures 4 and 5, family businesses show higher returns than non-family businesses. Both, Return on Assets (ROA) and Return on Equity (ROE) have been analyzed.

Family businesses are more liquid

Using the variable logarithm of liquidity, we note that family businesses have significantly higher liquidity ratios; its explanatory power is low: 0.5%.

Figure 4. Family Firms and ROA

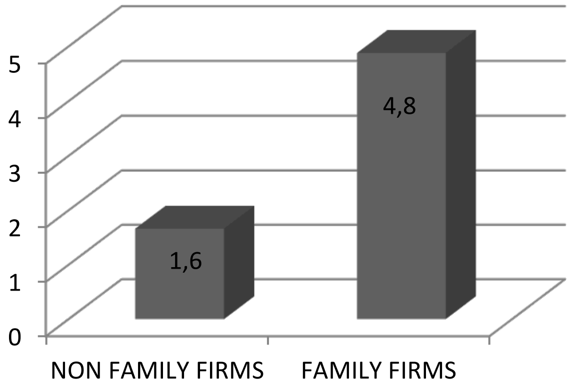


Figure 5. Family Firms and ROE

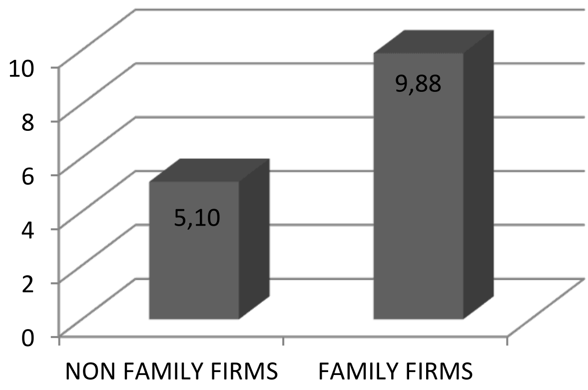


Figure 6. Family Firms and Liquidity

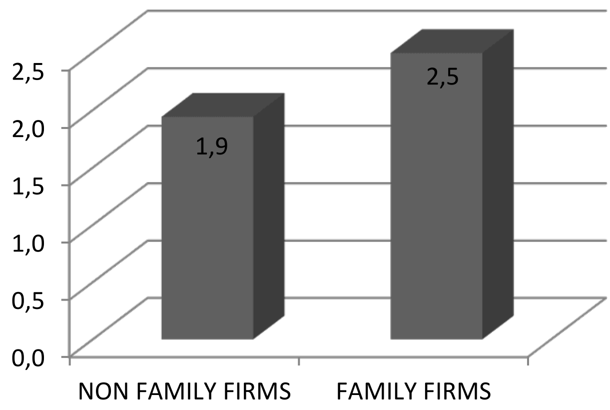
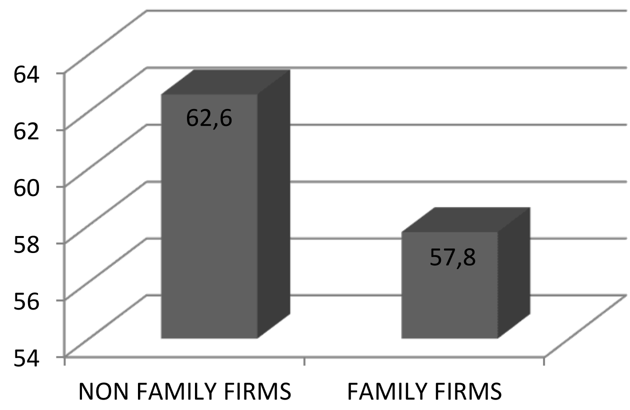


Figure 7. Family Firms and Leverage



Family businesses have less debt

Family businesses have a lower average level of debt, measured with the ratio debt to total assets. This difference, around 8%, is also statistically significant, as shown by the level of the F statistic, and its explanatory power is 0.9% according to the coefficient eta squared.

3. CORPORATE GOVERNANCE AND FAMILY FIRMS

Corporate Governance describes how companies ought to be run, directed and controlled. Research on Corporate Governance comes from "The modern corporation and private property" (Berle and Means, 1932). These authors describe the agency problem in firms where a separation of ownership and control is present. From this article different theories based on the role played by the board of directors have been developed.

The Stewardship theory (Davis *et al.*, 1997), in contrast with the agency theory, defines situations in which the managers and employers motives are aligned with the objectives of the organizations. Managers sincerely want to pursue the interest of the shareholders (Arrègle *et al.*, 2007). This theory is particularly strong in family SMEs, (Sciascia *et al.*, 2012)

Nevertheless, for an SME, the corporate governance concerns the respective roles of the shareholders as owners and the executive managers (Abor and Adjasi, 2007).

SMEs have normally a simple governance structure. In most cases, the property, the board and senior management is the same person and the separation of management and control is not so clear (Schulze *et.* al, 2001, 2003; Mustakallio, *et* al, 2002; Nordquist and Melin, 2002; Cowling, 2003; Brunninge *et* al, 2007). When this occur the executive managers assume the monitoring role instead of the board (Díaz-García and Jiménez-Moreno, 2010). The executives become more relevant and have more power because the lack of the board of directors.

As we previously commented, family businesses are usually SMEs, so they have their typical governance structure. Nevertheless some authors point out that family firms have a theoretically distinct form of governance largely due to the alignment of management, ownership, and control (Schulze et al. 2001). Historically, a family is related to its business for a long duration; furthermore each family has its own culture and set of values which are internalized by the family members.

Each individual family firm has a particular governance system of its own (Melin and Nordqvist, 2002), but basically it includes: (1) the owner(s) which is the family member(s) (the number of owners depend on the generation the firm is at), (2) the board of directors, (3) the Chief Executive Officer (CEO) and the Top Management Team (TMT).

Research on family business governance has evolved over time, from an almost exclusive focus on the role of the board of directors in the family firm, to a different approach emphasizing the governance system as a whole.

Until recently, relatively little research has been conducted on gender in businesses in general and on women's participation in family business in particular (Cappuyns, 2007). The growing interest in gender equality in all spheres of society and the increasing number of women in managerial positions has made researchers aware of the importance of developing studies in the field.

3.1. Women in governance positions

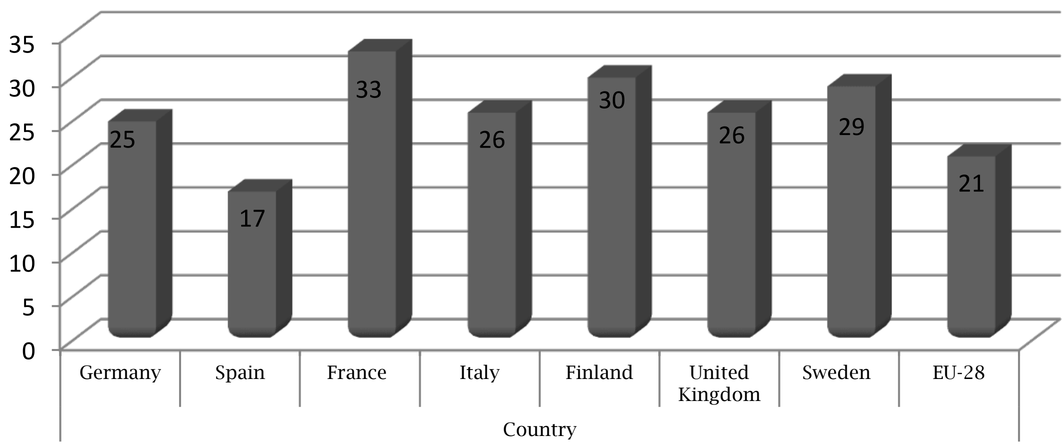
In Spain, 45.5% of labour force is made of women, but this percentage declines when it comes to reach managerial positions. This situation has created a growing interest in gender equality in all spheres of society.

This social demand is well reflected in the proposed European directive to improve the gender balance on boards, adopted by the European Commission in late 2012. In addition, many European countries have established minimum quotas for female representation on boards in publicly traded companies.

With regard to the boards in Spain, there are three key recent regulations: The *Gender Equality Act, 2007*, that aimed to reach a 40 % of women on boards of listed companies by 2015, but the latest data placed that percentage at 16.9 %; the *Law 31/2014*, in force since December 24th, 2014, amends The Companies Act (Ley de Sociedades de Capital) with the aim of strengthening the policy on Corporate Governance. Finally, the *New Good Governance Code (2015*), on Principle 10: *"…Director selection policy should seek a balance of knowledge, experience and gender in the board's membership*"; and in its Recommendation 14: *"…The director selection policy should pursue the goal of having at least 30% of total board places occupied by women directors before the year 2020* ".

Nevertheless, the voluntary character of the quotas, unlike mandatory established in other European countries such as France or Italy, have been insufficient so far in Spain: the relative weight of women on boards of companies in the IBEX 35 has averaged 17% last year, according to the European Commission. This percentage rises to 21% for the euro zone countries (EU-28). Despite the effort to help women reach managerial positions, Spain is among the European countries with the lowest female representation on the boards (see figure 8).

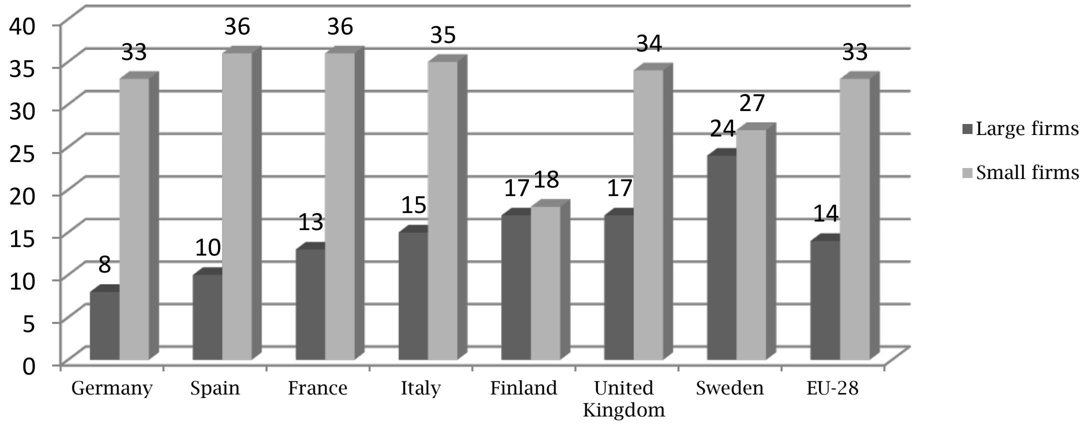
Figure 8. Women on Boards of Listed Firms by Country, %



Source: European Commission April 2015

If we look at the Small and Medium Enterprises, SMEs hereafter, the presence of women in governance positions is greater. We can observe from figure 9 that, in the case of Spain, women lead on average 36% of business, surpassing in this case the European average of 33%.

Figure 9. % Executive Women by Country



Source: European Commission April 2015

While women remain consistently underrepresented in the upper management echelons of major companies, there is one sector where they're leading in far greater-than-average numbers: family businesses. A new report by business consultancy EY and Georgia's Kennesaw State University found that, globally, family-owned and family-controlled businesses have higher percentages of women in the c-suite, as well as in top management positions and on the board, than other types of companies.

Family businesses offer women opportunities that other businesses do not. For example, Salganicoff (1990) reported better positions, higher income, more flexibility in work schedules and more job security for women who work in family businesses than for women who work in non-family businesses. Other important issue is that several studies pointed out that woman in managerial positions encourage other women to reach leadership positions. The more women in governance positions the greater the likelihood that women assume more leadership roles.

Analyzing our sample of Spanish Exporting Family Businesses we observe the following results concerning their corporate governance in general and women participation in governance positions. In order to facilitate the analysis we present the results by roles: Ownership, Board of Directors and Executives.

Ownership

The ownership concentration ranges between 0 and 100%, and takes an average of 61.77%. This variable measures the concentration shareholding or voting power in the hands of the main shareholder. However, the value that is the most repeated is 100%, i.e., all power in the hands of one person. Ownership concentration is typical of family SMEs.

Women presence as shareholder in Spanish exporting SMEs is low. Women appear as owners in 38 % of cases analyzed. But when we analyze the percentage of shares in her hands this number declines. Thus, the female shareholding average reaches only 13.83% of the capital of these companies, distributed unevenly between non-family and family businesses. Woman as owner is scarce, but occurs mainly in the family business. The average female participation in non-family businesses only reaches 6.65%, while the average family that reaches 18.25% of the capital (see figure 10

Figure 10. Family Firms and % Female Ownership

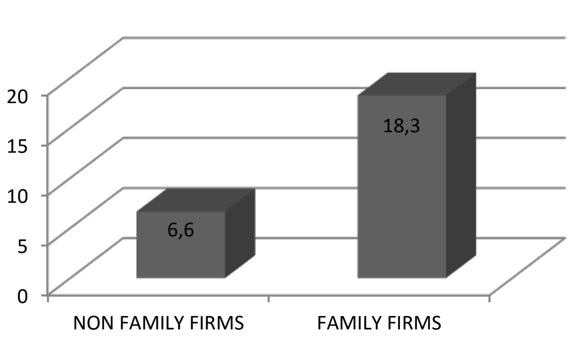
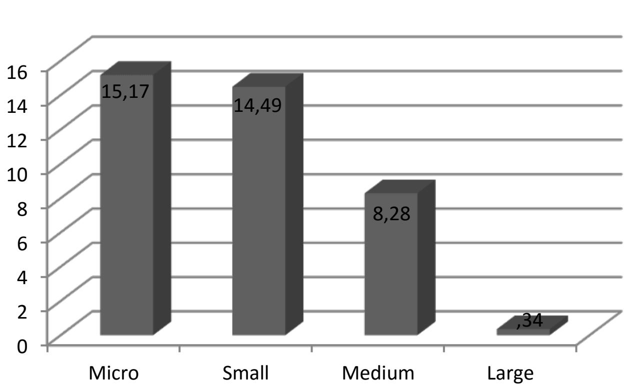


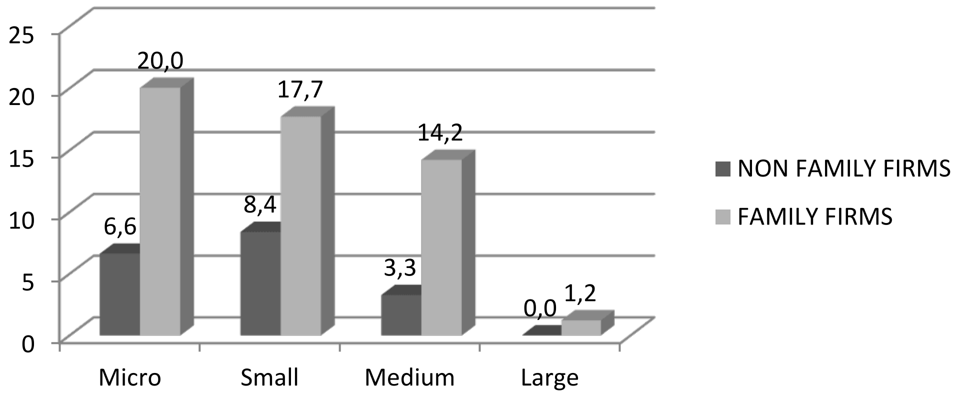
Figure 11. Female Owhership by Firm Size



We have also observed in our sample that women-owned businesses exist primarily in small to medium size (see figure 11). Diverse tests allow us to make this assertion. (Pearson correlation, the statistical significance of the ANOVA F table and the simple graphical analysis).

In conclusion, women owners in Spanish exporting SMEs are few in general, nevertheless we observe a higher representation in micro to median family businesses (see figure 12).

Figure 12. Female Ownership by Firm Size and Family Ownership

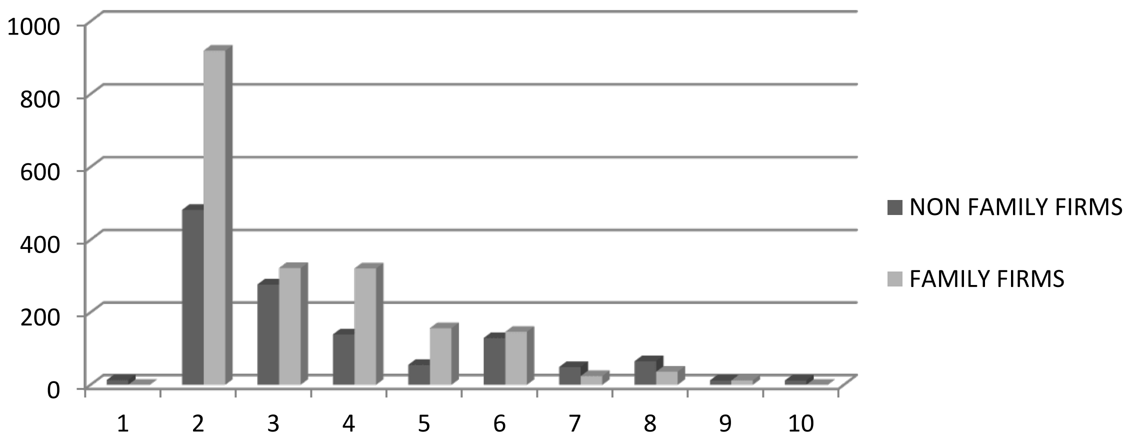


Boards of directors

Board size in our sample ranges from 0 to 12 member, however the prominent situation is that of a sole director (44.5% of observed cases).

In family firms, the average size of the board is slightly lower than in non-family firms, we have observed that this difference has statistical significance. Moreover, family businesses have a higher percentage of sole administrators than non-family businesses. This situation is reflected in the fact that in family businesses 81.29% of cases have a board of directors with a maximum of three members. In non-family businesses this percentage reaches 73.88% of the observations (see figure 13)

Fiigure 13. Board Size by Family Ownership (number of firms**)**



After analyzing the female presence on the boards of the companies in our sample we obtain the following results:

There is little female participation in the board of directors. The presence of women on boards is very low; we have observed that their representation on average is only 16.27% of the total membership. However, the most probable value is 0, i.e., that there is no woman on the board. This number is similar to the overall numbers of female participation in the board of the firms of Ibex-35.

Considering the size of the company, we observe that it is more likely to have women on the boards of microenterprises. The larger the firm is the less female presence on the board of directors. The average female participation in micro firms (19%) exceeds 580% that of large businesses, which is only 3% (see figure 14).

Figure 14. Female Board Members by Firm Size, %

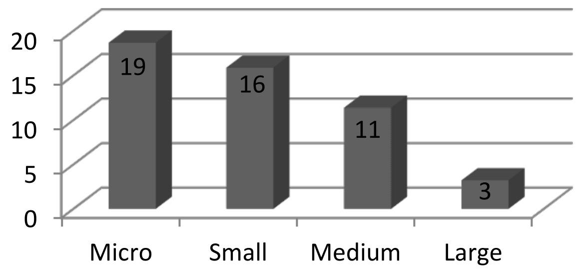
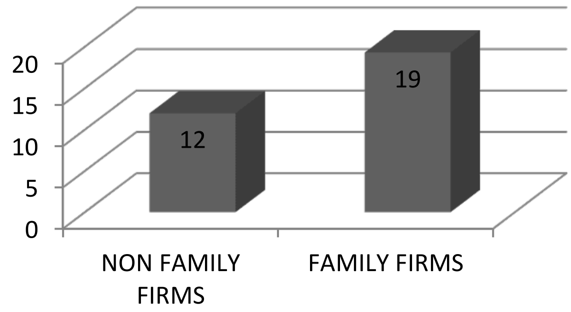


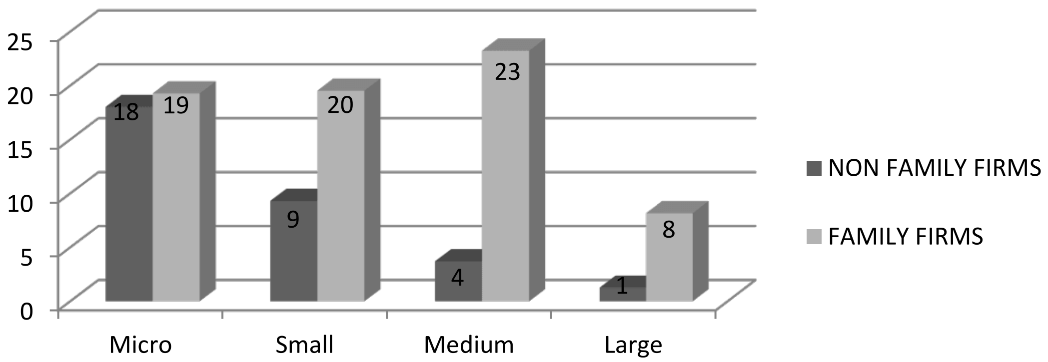
Figure 15. Female Board Members by Family Ownership, %



We observe more women on board of directors of family businesses. There is clear evidence of a significant higher propensity of the family business to have female representation on the boards, as shown in figure 15.

These differences prevail for any level of firm size, as shown in figure 16, being more pronounced in cases related to medium and large companies (companies whose sales exceed 10 million euros). In medium-sized firms, the female representation average on the boards of family companies almost multiplied by 6 that of non-family businesses. This number reaches 8 when we consider the large companies (those with more than 50 million sales).

Figure 16. Female Board Members by Firm Size and Family Ownership, %



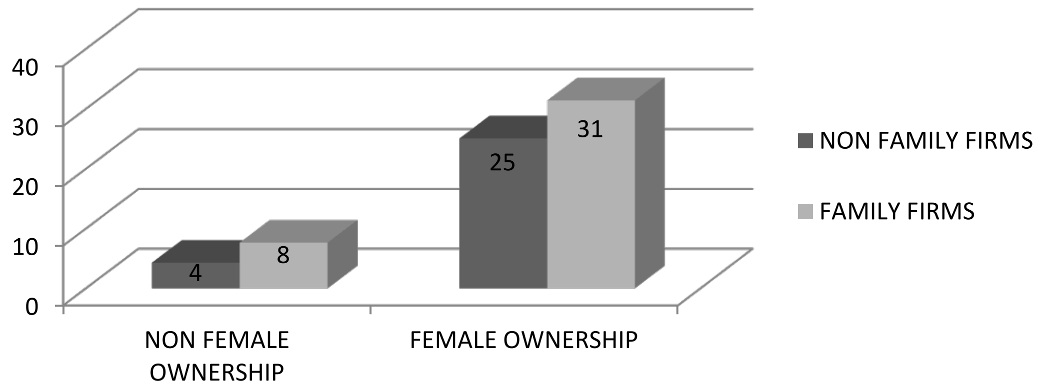
Considering the whole sample, female participation average on the board shows large differences between family vs non-family firms. Female participation average on boards of family firms is 19.28%, five times the amount of non-family businesses (11.96%). These differences are statistically significant by the F parameter, presenting an explanatory capacity of 19.5% according to eta squared.

As mentioned above, when women occupy managerial positions it encourages other women to follow their steps. Because of this, we find it interesting to analyze the female presence on the board of director in firms with female owners. Results are shown in figure 17.

We observe that there are more women in board of directors in firms with female owners. This situation is even more evident in family businesses. However, our analysis does not consider the level of coincidence or independence of these women, so there is a possibility they might be the same person.

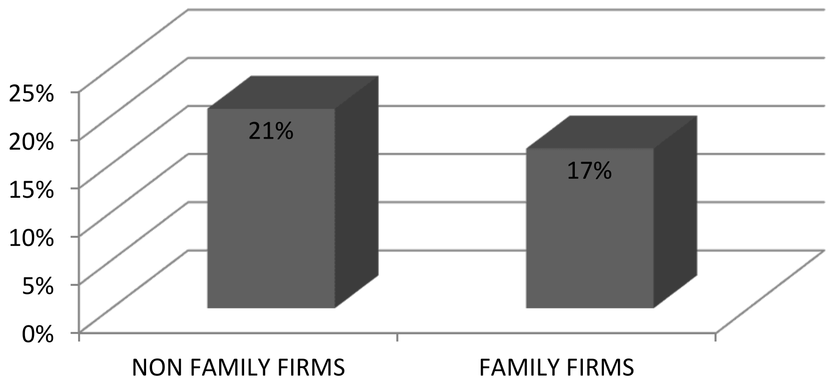
In order to clarify this issue we have created a variable to measure if women on the board are the same of those in the property. We have named it independent women and represent the number of women of the board that are not also in the property.

Figure 17. Female Board Members by Family and Female Ownership, %



Family businesses have fewer independent women. This result is consistent with the idea of coincidence between property and board of directors observed for family businesses in general. We have shown that this situation it is also true in our sample for women in governance positions (see figure 18).

Figure 18. Independent Female Board Members



Executive women

As was the case with the property and the boards of directors there are few executive women.Female participation in the top management teams of the Spanish exporting companies is low. There are executive women at 16% of the cases analyzed, but the median value is 0, what means that the more widespread is that there are no women at all.

We have also observed for our sample that there are more than double executive women in family firms (see figure 19).

Figure 19. Average Female Executive Managers by Family Ownership

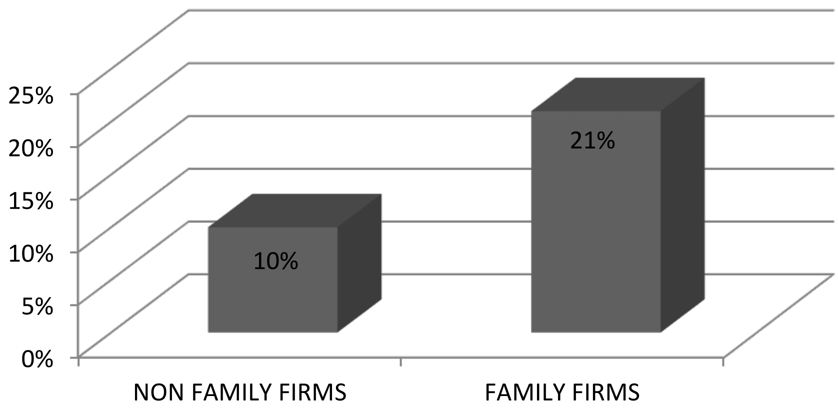
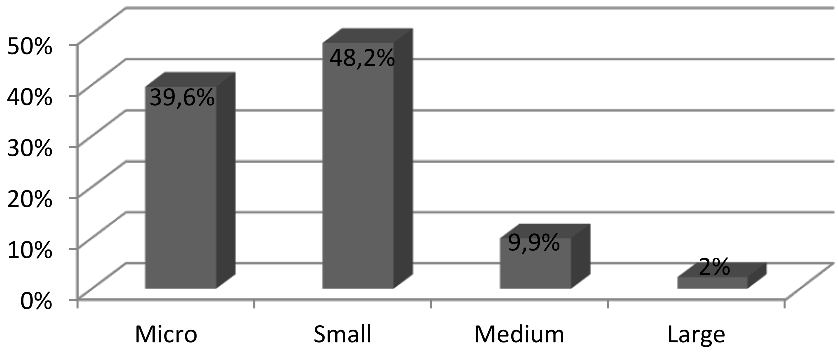


Figure 20. Executive Women by Firm Size, %



Firm size is another variable related to the presence of executive women; small business with sales EUR 2 to 10 million are those with the higher proportion of female executive managers. This percentage falls abruptly for medium to big firms with sales over EUR 10 million; the differences are statistically significant. With these results we can say that smaller companies hire more female executive managers than the medium-large firms. This conclusion is coincident with that obtained for board of directors and property.

When analyzing companies with female presence as shareholders we observe that there are more executive women. Companies with female presence in the shareholding structure have more than twice female executives than firms lacking female shareholders. These differences are statistically significant by the F parameter, presenting an explanatory capacity of 6.1% according to eta squared (see figure 21).

When we consider family businesses we obtain the following conclusions:

1- Family firms have more executive women than non-family firms.
2- When there are women in the ownership structure of family firms, the percentages of executive women are higher (see figure 22).

Figure 21. Female Executive Managers, %

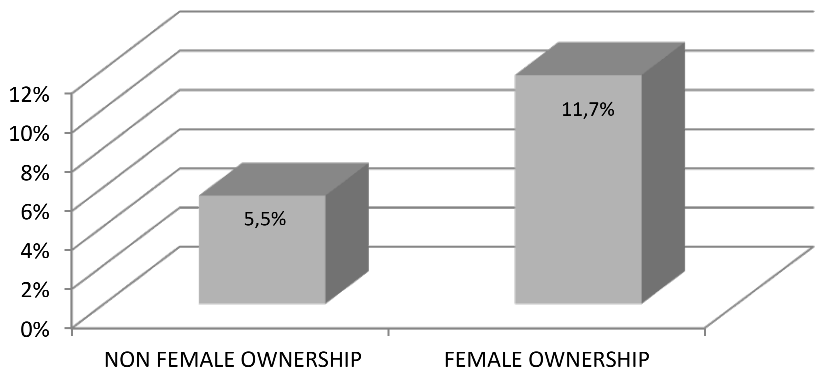
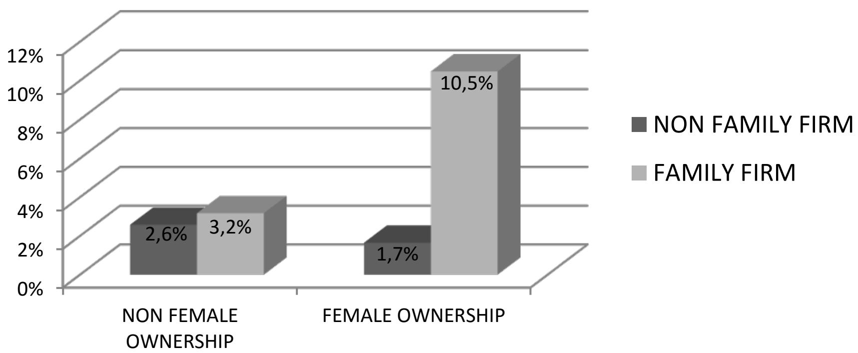


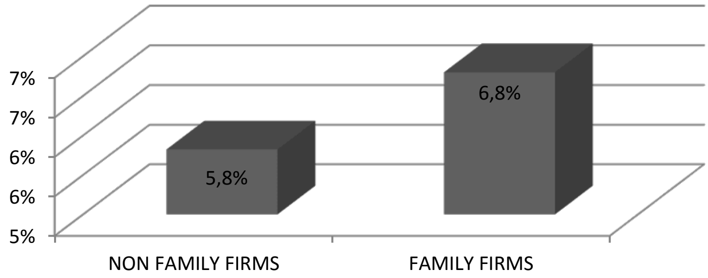
Figure 22. Female Executive Management by Female and Family Ownership, %



As we can see in figure 22, family businesses with women as shareholders have the greater number of executive women (10.47%) It is not unusual that in family firms there is a coincidence between ownership and control roles this situation also applies when it comes about women.

Nevertheless, in our sample, independent executive female managers (executive women that are not shareholders) are also predominant when considering family business. That emphasizes the fact that family firms hires more executive women, and that these women do not only depend on family ties (see figure 23).

Figure 23. Independent Female Executive Managers by Family Ownership, %



4. INTERNATIONALIZATION OF FAMILY FIRMS

Internationalization is one of the main challenges that family businesses must address in order to survive in an increasingly global and complex environment. In Spain 66% of family businesses have presence in foreign markets[10].

There are many arguments related to the need for family SMEs to internationalize. The increased competition not only on a domestic level but also on an international level has made family SMEs think about the possibility of openings into foreign markets as a way of growth (Claver *et al.* 2007). Exporting in particular is seen as an experimental tool to test international markets and a way to revitalize family SMEs through increasing productive capacity and improvements of their financial position (Claver *et al.* 2007). Moreover, it gives new employment opportunities and it is positive for the next generations (Ward 1987; Zahra 2003). Finally, export activities can positively contribute to the achievement of family SME competitive advantage (Claver *et al.*2007). However, family SMEs internationalize their business after consolidating their position in domestic markets (Fernández and Nieto 2005, 2006; Graves and Thomas 2006, 2008; Segaro 2010) and they approach international markets usually through export activities.

Family- controlled firms' access to resources may be limited (Gomez-Mejia *et al.*, 2010; Schulze *et al.*, 2001; Sciascia *et al.*, 2012), resulting in a lower inclination to internationalize (Merino *et al.* 2014; Sciacia *et al.* 2012).

Family businesses are risk averse. Precisely because of the fact that the family involved decide to go more slowly, its decision-making process is more conservative. They may be a little reluctant to export, since everything unknown to them involves risk to which they are adverse in order to protect his family. They are less growth-oriented, precisely because of risk aversion. The reality is that they prefer to have a fairly stable domestic position and stay alive or just maintain the level of profitability without trying to increase, rather than risk.

They have difficulties in obtaining the necessary resources: its capital is limited not only by having to finance the needs of the family but also the business. Its objectives are different as well as their values and needs which can lead to conflicts within the family and especially among the successors. This lack of resources severely limits the growth of small and medium-sized family businesses, together with the cultural and political problems.

Our sample confirms this particular character of family firms related to export variables. We use three different dependent variables:

i. *International Dispersion Level* (IDL). Consistent with prior research (George, *et al.,* 2005; Zahra, 2003), international scope is captured by a metric variable that comprises the portfolio of countries at which the company exports. This variable is measured by the number of countries to which a firm exports its products or services, and is expected to capture the magnitude of export in internationalized small firms. (Arregle, *et al.* 2012).

ii. *Propensity to Export* (PEX). This dichotomous variable indicates whether the firm is a non-exporter or an exporter. Firm's propensity to export is a well-established measure of a firm's export performance (Bonaccorsi, 1992; Calof, 1994; Wakelin, 1998).

iii. *Exported Volume of Sales* (in euros) (EXPVOL). This is an ordinal categorical variable with four thresholds from 0 to 3. Because of a lack of other objective classification, the companies are classified every year into one of four possible groups depending on the exported sales. The description of these groups is on table 2.

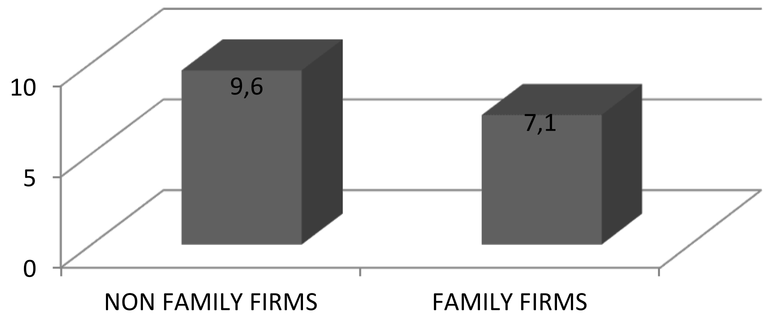
Table 2. Exported Volume of Sales (EUR)

Assigned value	*Threshold*
0	<50,000
1	50,000< x <100,000
2	100,000< x <1,000,000
3	X >1,000,000

[10] European barometer of family business. Fourth edition 2015

After analyzing the exporting variables in the family businesses of our sample we have obtained the following results: countries on average. These averages are statistically different from each other.

Figure 24. Average Number of Countries to Export by Family Ownership



Family firms export to a lower number of countries (IDL)

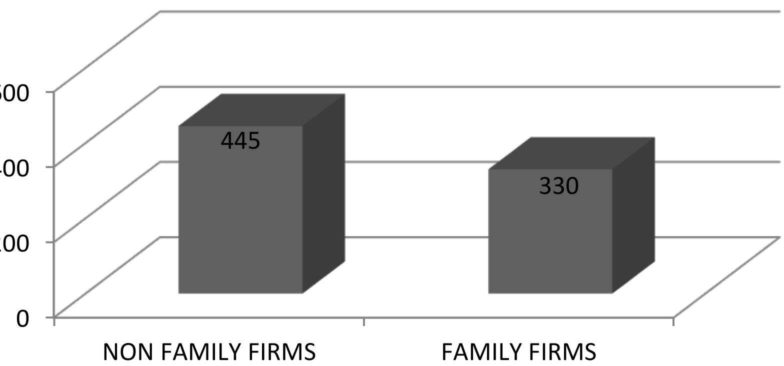
There is evidence that family firms export, on average, to a lower number of countries than non-family firms. As we can appreciate from figure 24 family firms have on average 7.13 exporting countries, while non-family firms export to 9.59

Family firms present a lower Propensity to Export (PEX)

The propensity to export (PEX) is lower (and statistically significant) in family businesses, although the family nature of the company only accounts for 3.8% of the decision to export.

Family firms have lower Exported Volume (EXPVOL)

Figure 25. Average Export Volume by Family Ownership (EUR thousand



A statistically significant lower average export volume is observed for family firms (see figure 25). This time the family character of the company explains only 1.2% of that variable.

From this analysis we can conclude that family businesses show a more conservative exporting character than non-family firms. We have observed that prudential character for all variables analyzed (IDL, PEX, EXPVOL). These findings are consistent with existing literature.

5. WOMEN AND INTERNATIONALIZATION IN FAMILY FIRMS

Literature has proven that women, in general are more risk adverse tan men (Chaganti, 1986; Brown and Segal, 1989; Collerett and Aubry, 1990; Olsen and Currie, 1992; Scherr *et al.*, 1993). Studies based on internationalization and export activities have also confirmed this character (Welch *et al.* 2008; Orser *et.al* 2010).

Researchers have shown that women owners have more difficulties to internationalize than men. (Orser *et al.*, 2010; Welch *et al.,* 2008; Pernía *et al.*, 2012). They are less willing to take risks and are less growth oriented (Chaganti, 1986; Sexton and Bowman-Upton, 1990). Nevertheless, this particular character of women applied to the role of women as executive in SMEs remains basically unexplored.

This risk aversion show by women, together with the prudential behavior of family businesses lead us to think that the combination of both should become in a negative relationship with export activity. Nevertheless, some studies suggest that more diverse teams benefit from the different perspectives and skills provided by individuals with different backgrounds and experiences.

Heterogeneity in management teams is especially important when making complex strategic decisions, like internationalization (Boone *et al.*, 2004; Carpenter and Fredrickson, 2001).

With this state of the matter we want to examine whether the negative relationship between women in management and export activity is maintained for all governance roles.

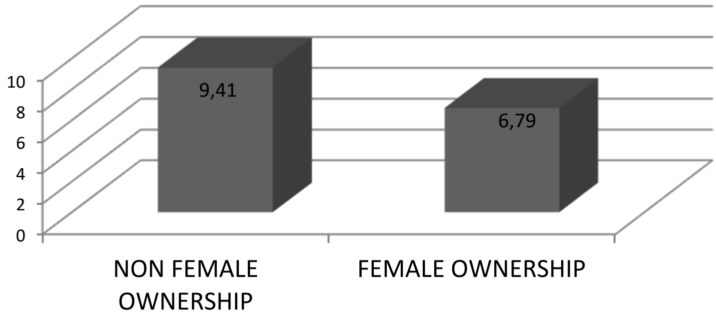
What can we expect from a woman as an owner as a board member or as an executive manager related to the export activity? Is there any difference depending on the role women have on government positions?

As we have done throughout the chapter we present the results by distinguishing the different roles of women in governance. The export variables are those presented in the previous section.

5.1. Female owners and export variables

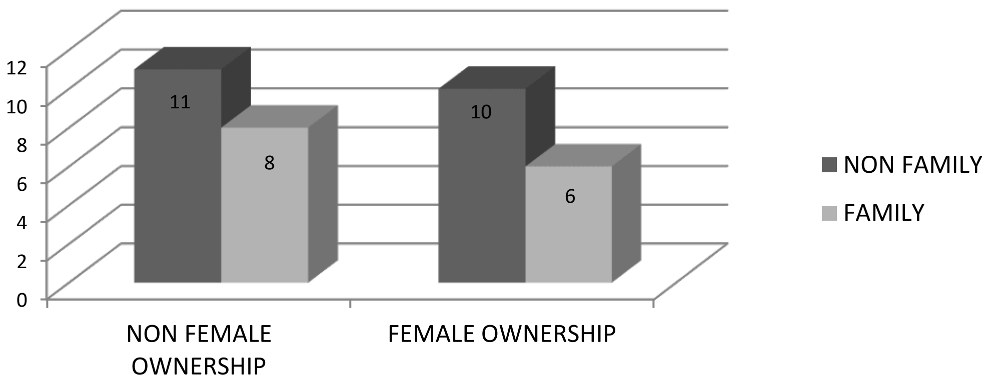
The ANOVA test determines that there are significant differences between women-owned businesses (on average the company exports to 6.79 countries) and those firms with no female owners (company export on average to 9.41countries). This means that companies with women shareholders export to fewer countries than companies with only men in their ownership structure (see figure 26).

Figure 26. Average Internatioal Dispersion Level by Female Ownership



Now taking into consideration the family nature of the business, the averages are lower in all cases. The interaction between families businesses with female participation in ownership has resulted in fewer countries to export on average (see figure 27).

Figure 27. Average International Dispersion Level by Female and Family Ownership

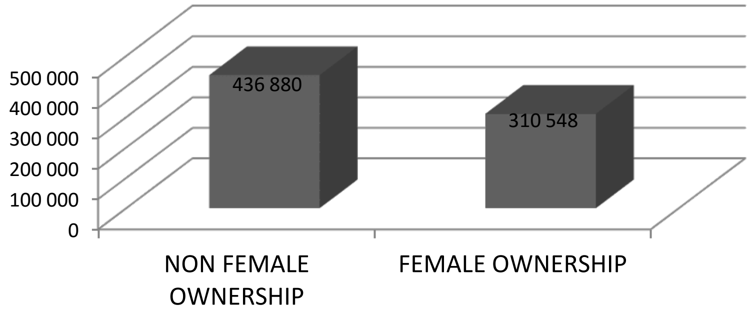


In conclusion, family businesses with women in the shareholding export to fewer countries. This result is consistent with the existing literature.

We continue the analysis with the Propensity to Export. In this case we also expect that family businesses with women among its shareholders were less likely to export than those whose property is in the hands of men. However, no significant differences were found for this test so we cannot say that companies with female owners present less likely to export than those that do have them.

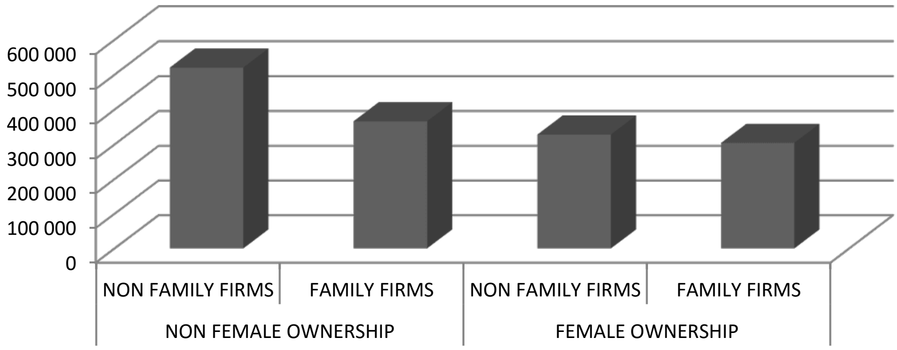
Analyzing the exported volumes, we found (through the U Mann Whitney) that there are differences in terms of export volume based on the presence of women in the shareholding companies. Companies with women in ownership export lower volumes than those with only men as owners. Figure 28 shows these results.

Figure 28. Average Exported Volume by Female Ownership (EUR)



Considering together the characteristics of female and family ownership, we observe that the lowest exported volumes are those belonging to family firms with women in the ownership, while non-family firms owned exclusively by men exhibit the highest volumes. These differences are statistically significant (see figure 29).

Figure 29. Average Exported Volume by Family and Female Ownership

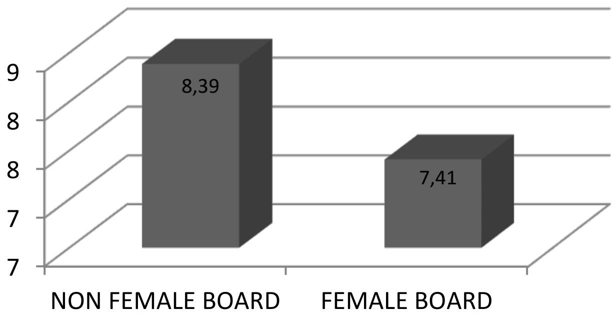


In brief, female ownership is related to fewer countries to export, and lower exported volumes, but we cannot confirm a lower propensity to export. Joining gender in ownership with family state of the company, we observe that family firms with women inside the ownership export to a lower number of countries, do not present significant differences with respect to the propensity to export, and sell lower exported volumes when comparing to their counterparts.

5.2. Women on boardrooms and export variables

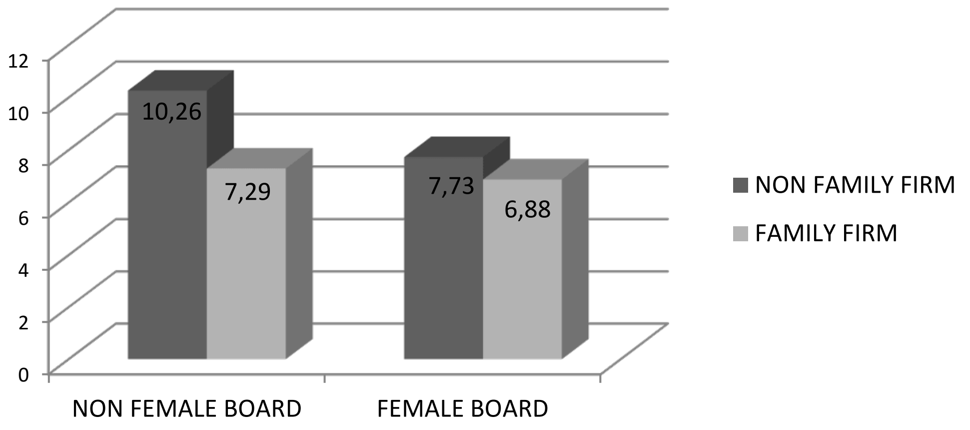
As we expected, female board is negatively related to international dispersion level; it is, firms without women on their boardrooms export to a higher number of countries. The difference is 13,18% higher on average.

Figure 30. International Dispresion Level by Female Board



Considering the family statement of the company together with the presence of women on the boards, the conclusion is that the averages are lower. Family owned business with women on their boardrooms export to a lower number of countries on average (see figure 31). This result is consistent with those obtained with female ownership and they are also statistically significant.

Figure 31. International Dispersion Level by Family Ownership and Female Board Presence

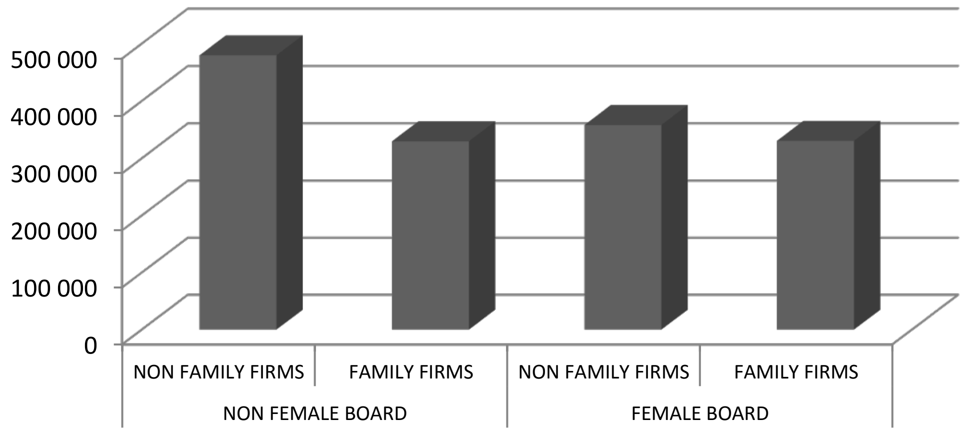


Nevertheless, we do not find any evidence about an association between the existence of women in the boardrooms and the propensity to export. It seems that female directors think twice about starting commercial relationships with many countries, but do not show more risk aversion than male directors to decide to export. The significance of the Mann-Whitney test does not suggest that there are differences between the two groups.

Analyzing the exported volumes, we do not find significant differences depending on the presence of women on the boards; therefore, we must consider that exported volumes do not depend on adding women to the boards of directors.

Considering finally these two features together (women on boards and family ownership) we find evidence about a riskier behavior of non-family owned firms, but it is not possible to conclude anything about including women on boards, as the results are non-significant.

Figure 32. Exported Volume by Family Ownership and Female Board Presence



Summarizing, the presence of women on boards of directors of family businesses is associated with a lower number of countries to which to export, but we do not find significant results with the propensity to export or with lower exported volumes.

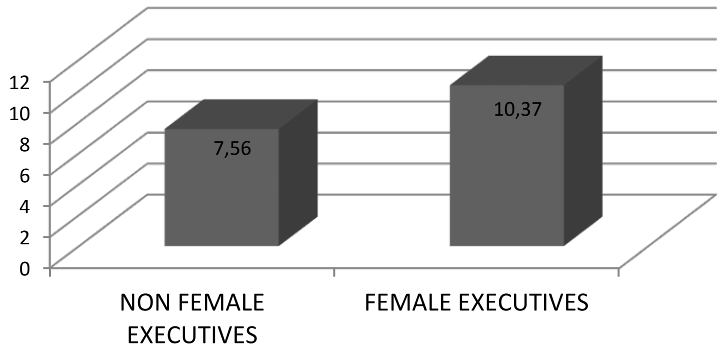
5.3. Female executive managers and export variables

As we have already mentioned, there is a growing body of literature that point out the distinctive character of executive women. TMT research suggests that gender play an important role in both strategies, the firm pursues and the day-to-day management of the organization (Dwyer *et al.*, 2003). According to Cox (1994) women managers provide organizations with added knowledge and flexibility as well as cultural insight, understanding, and sensitivity critical to serve the needs of new markets segments. They also exhibit different leadership styles compared to men (Eagly *et al.*, 2003).

Given these ideas we expect that women in the executive role may exert a positive influence on export behavior. The analysis of export variables related to the executive role of women in our sample seems to confirm our idea.

Female executive managers show the opposite effect on the international dispersion level than female board members and female shareholders. On average, firms that include women on their management teams export to almost three more countries than those compounded only by men. The differences are statistically significant (see figure 33)

Figure 33. Average International Dispersion Level and Female Executive Managers



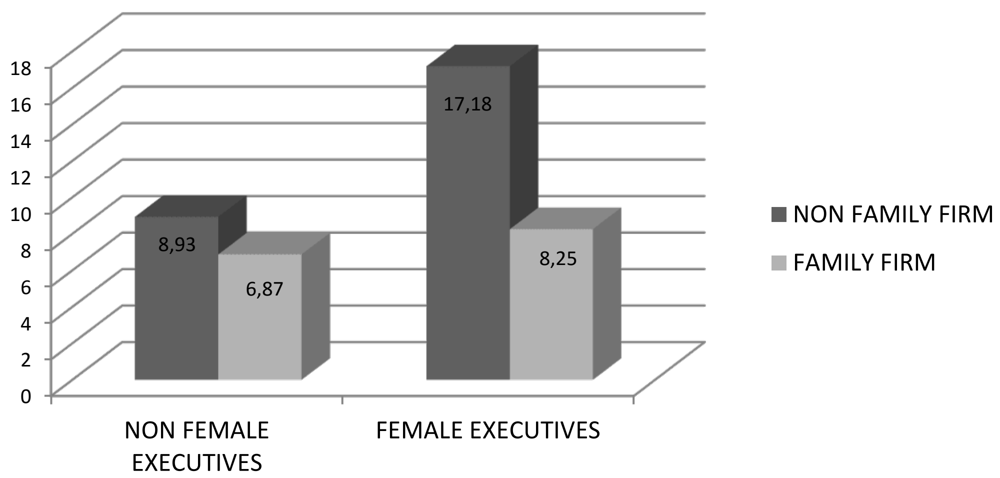
Considering now the family ownership of the company and the presence of executive women, there are several aspects to consider. To begin with, the spread of the international dispersion level is higher when there are executive women, and this holds under both situations: family and non-family firms.

Second, and as we mentioned before, family firms export to a lower number of countries, but those that include female on their management teams export to more countries.

Finally, the best results (in terms of international dispersion level) belong to non-family companies with executive women on their management teams. Moreover, including a female executive manager in a non-family firm doubles the number of countries to which it exports. Non-family firms with executive women show the most risk behavior when opening new markets abroad (see figure 34)

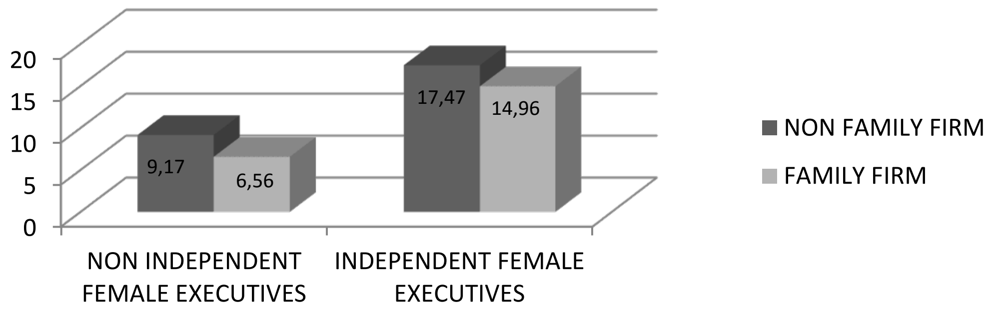
These results, statistically significant, are absolutely opposite than those related to female ownership and board membership, where women exhibit the most prudential behavior. Therefore we can assert that female executive managers make a true difference compared to the rest of the roles of corporate governance presented in this study.

Figure 34. International Dispersion Level by Family Ownership and Female Executive Presence



There are also relevant and significant results related to independent female executives, mainly for family owned firms. The average number of countries to which the companies export is always higher for companies with independent executive women; also, in family business this mean almost holds fifteen countries, and this is a big difference considering that family owned firms with female executive manager export to eight countries on average. This means that firms that export to higher number of countries are those with executive women that are not owners (see figure 35).

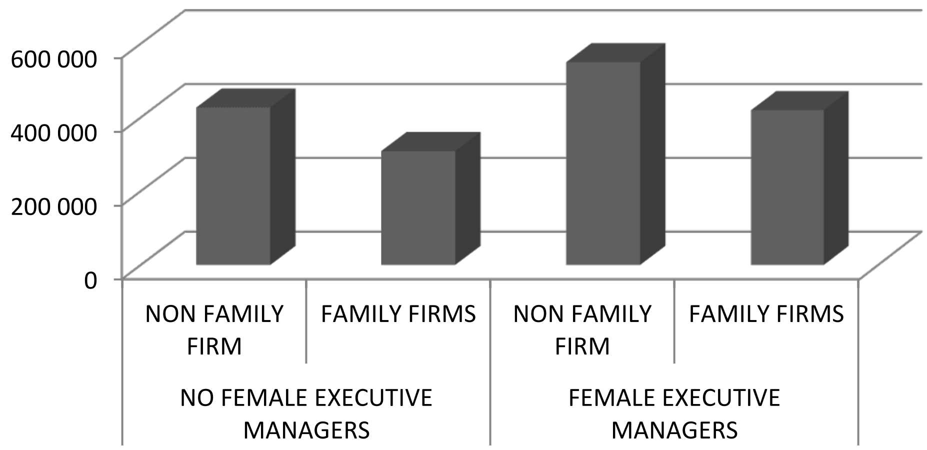
Figure 35. International Dispersion Level by Independent Female Executive Presence



Again, with respect to the propensity to export, we do not find significant differences depending on the presence of executive women. Thus, we do not find evidence of a higher risk aversion of women (in any role) related to this variable at all.

In contrast, analyzing the exported volumes, we do find significant differences depending on the presence of executive women. With these results we can conclude that firms with female executive managers export higher volumes than firms without women on the executive management teams (see figure 36).

Figure 36. Exported Volumes by Family Ownership and Female Exetuvie Manager Presence



The highest average value belongs to non-family firms with female members on their management teams.

6. CONCLUSION

Despite accounting for more than 50% of population, women remain invisible in business matters. Numbers leave no doubt of it. It is true than women have been gradually entering the labor force, however very few occupy management positions. Society is aware of this situation and nowadays governments are making efforts to help women reach top positions in companies. Recent laws have been enacted all over the world to try to solve this situation, but we still have a long way to go in this matter.

According to European Commission, Spain is even behind its European neighbors in this area. The analysis of our sample also confirms this trend. Women appear as owners in 38% of cases analyzed, but the average percentage of shares in their hands only reaches 13.83%. This implies that most of the businesses are owned by men and when we find women in the shareholding it is quite common that they do not have control of the company. In relation to the boards of directors the situation is not much better. On average, female represent 16.27% of total membership on the boards of the companies in our sample. For the executives managers the numbers are even worse, only in 16% on the analyzed cases we find women in executive positions. All this numbers improve slightly by segmenting the sample by family businesses.

But the progressive incorporation of women to leadership positions is not just a matter of social justice. Several studies have found evidence of multiple benefits women can bring to a company. Women not only better manage their resources but also bring a leadership style to the company that improves team work. There is also an increasing number of reports that maintain that gender diversity in executive teams is connected to company earnings.

In this study we have focused on the export activity of family firms, to see if women in governance positions have a positive effect on it. We have divided women presence into three different roles: owner of the company, member of the board and executive manager. Our results are very interesting.

Traditionally, women have been told to be very conservative and risk averse when taking decisions related to export activities. In our sample we can confirm this character, but only for women as owners and as board members. When we analyze the executive manager role the results are the opposite. Firms with female executive managers export higher volumes (in million EUR) and to a higher number of countries than firms with no women as executive. Non-family firms show better export activity behavior related to the number of countries and to the exported volumes than family firms.

In SMEs is very common to have the same person as owner and as executive. To control this situation we have created a variable indicating whether the owner and the executive is the same. The independent executive women are those women that are part of the executive team but are not owners of the firm.

The export activity results for the independent executive women are even better. The average number of countries the companies export to is always higher for companies with independent executive women; also, in family business.

For the variable propensity to export we have not found any relation with the presence of women in corporate governance of the firm.

Our results confirm that executives have a distinctive character, less risk averse and more growth oriented than women in ownership and in board of directors.

We consider that this study has some implications:

Since family SMEs play an important role in both the national and international economies, this study draws attention to the importance of the presence of women in government bodies in search of other markets (increasingly competitive) for the expansion of these companies. Internationalization is a key strategic decision for family firms.

As we mentioned, the Spanish government has issued a series of laws (Law on Gender Equality 2007, Law 31/2014 and the New Code of Corporate Governance, 2015) regarding the corporate governance of listed companies, but nothing has been regulated for SMEs. Perhaps these features encourage policymakers to regulate some guidelines for SMEs stating the need to include women in government bodies, as they are able to increase the value of the company and compete with other companies in search of new markets.

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OWNERSHIP STRUCTURE AND ENVIRONMENTAL DISCLOSURE IN MENA EMERGING COUNTRIES

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Abstract

This study examines the association of ownership structure with the environmental disclosure of listed companies in the Middle Eastern and North African (MENA) emerging markets. A self-constructed environmental disclosure score based on the framework of the Global Reporting Initiative (GRI) was used. Investigating a sample of 347 annual reports, we calculate the score for listed companies pertaining to 10 MENA countries. Our results revealed that the majority of companies in our study provide a separate section for environmental issues on their annual reports. In addition, multivariate analysis shows that there is a negative association between family ownership and environmental disclosures. However, the presence of the government ownership is likely to improve corporate environmental reporting practice. This paper is of value in that it enlarges the scope of previous studies on environmental disclosure through its inclusion of other regions of the world.

Keywords: Environmental Disclosure; MENA Countries; Family-Ownership; Government Ownership

1. INTRODUCTION

The past two decades have witnessed an increasing global concern for the environment. This concern emerges mainly from the threat caused by the harmful effects and environmental problems resulting from the impact of economic growth.

As a result of the consideration given to the social responsibility and compliance with laws and regulations, various steps have been taken toward the protection of the environment from pollution and the conservation of natural resources.

In this regard, the role of environmental accounting and reporting has emerged as a result of a concern for the relationship between the organization and the natural environment. Companies are paying more attention to corporate environmental responsibility and environmental disclosures. Managers are confronted with environmental issues in their decisions, not only to take into account ethics and social values that should be promoted by companies, but also to ensure sustainable economic success.

Studies on corporate environmental reporting have proliferated and a growing body of studies has investigated factors that impact the extent of firm's environmental disclosure in developed countries (e.g. Coween et al., 1987; Patten 1992 in the United States; Huse et al., 1997, and Cormier and Magnan, 2004 in Europe). More recently, the literature has given growing attention to exploring environmental disclosure in Asian emerging markets over the last few years (Wong et al., 2001; Xiao et al., 2005 in Hong Kong; Haniffa and Cooke, 2005 in Malaysia; Zengal et al., 2010 in China). However, a few studies have focused on corporate environmental disclosure in Arab countries (Al-Bastiki 1997 in Bahrain; Abu-Baker 2000 in Jordan; Naser et al., 2006 in Qatar; Rizk et al., 2008 in Egypt).

The literature is relatively silent regarding corporate environmental reporting in Middle Eastern and North African (henceforth MENA) emerging markets. Moreover, in this context, we observe a large number of firms operating in polluting sectors, such as petrochemical, energy, mining, etc. These companies have an important role in national economies but can also have significant environmental impacts.

MENA countries are taking major steps in enhancing the private sector's role in the economy, developing foreign business and economic liberation. However, unlike developed countries where ownership is widely spread among different shareholders, ownership is highly concentrated in the MENA companies. The concentration of ownership is characterized by the presence of "Family and Government Ownership" as specific features in the MENA emerging markets. Accordingly, this study examines whether ownership structure is associated with the environmental disclosure practices and influence the environmental reporting decision.

This paper is of value in that it enlarges the scope of previous studies through its inclusion of other regions of the world. It contributes to the environmental accounting literature by bringing insights from the MENA region, where little is known about its environmental accounting features, despite, the fact that, this region forms an important part of the current and future global economy. Moreover, while previous studies test for company characteristics such as company size, leverage and profitability, we try in our research, to investigate specific variables to the MENA region, namely family ownership and state ownership. Finally, this study helps to explain MENA corporate behavior in terms of environmental disclosure and has significant practical implications for a number of decision makers especially regulators in the MENA region.

Using a sample of 143 listed companies from MENA emerging market countries. Our results indicate that environmental disclosure levels in annual reports are quite low. The environmental disclosures were found to be general statements indicating company support for environmental protection. In addition, multivariate analysis shows that family ownership presents a significant negative association with the environmental disclosure levels. However, the presence of government ownership improves corporate environmental reporting practice.

The remainder of this paper is organized as follows: Section 2 presents prior literature and develops the hypotheses for the study. The research design is described in Section 3. In Section 4, we present the results and discussion. Section 5 concludes this paper.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Corporate social responsibility reporting, of which environmental reporting is a part, is not a new disclosure practice. In addition, environmental reporting within corporate annual reports has attracted increased interest since the early 1990s. Unlike other aspects of corporate social responsibility, environmental reporting is a relatively recent feature of corporate financial reporting. A considerable body of literature from a wide range of theoretical backgrounds concluded that environmental disclosure is an important disclosure practice employed by companies (Gray *et al.*, 2001) and is influenced by a variety of explanatory factors. Prior research has been primarily concerned with the extent and nature of corporate environmental reporting within annual reports and its trend over time, as well as the effect of certain corporate characteristics on the environmentally information practices. However, the environmental disclosure of firms is significantly influenced by the cultural environment in which they operate (Gray, 1988; Radebaugh and Gray, 1997). The cultural environment in MENA region do not encourage voluntary disclosure of environmental information. Middle Eastern societies are characterized by a large hierarchical authority, collectivism and low future orientation (Hofstede,1984; Beard and Al-Rai, 1999; Kabasakal and Bodur, 2002). These factors may suggest that people in these countries are relatively more conservative and, based on statutory audits, have less professional judgment in relation to their counterparts in developed countries, indicating a lower level of voluntary disclosure (eg. Hadded et al., 2009, Gray et al., 1995; Zarsekei, 1996; Askary, 2006). Moreover, the disclosure orientation of firms in these countries is also greatly influenced by the form of their ownership (Ahmed, 2007; Lakhal et al., 2011).

Privatization in the MENA region has been progressing more slowly than other developing countries in Latin America and Asia. This might be due to the fact that privatization in Asia is a relatively old phenomenon compared to the MENA region where privatization on a large scale is relatively recent. Hence, the progress of privatization to date is not yet considered by investors as a credible signal of government commitment, especially in institutionally weaker environments, such as the MENA region. (Ben Naceur et al., 2009).

More specifically, ownership in MENA companies is strongly concentrated with a significant proportion held by the state and families (Omran, 2007). Also family-controlled firms and state-owned enterprises both play a crucial role in MENA economies. Kuwait, Egypt and Qatar show the highest institutional investor participation in the region, which is estimated to be closer to 30% (Koldertsova, 2012). This figure is still remarkable when compared with developed and even some emerging markets (e.g. China).

Using a sample of more than 300 representatives MENA firms (Oman, Egypt, Jordan and Tunisia), Omran (2008) demonstrated that Egypt remains the country with the largest presence of government ownership at 34 %. On the other hand, Jordan and Oman emerge as the countries with the highest private ownership. These countries have more than 80 % of firm ownership in the hands of private institutions and individuals. Tunisia comes is as the country with the largest foreign participation in firm ownership at 18 % – surely facilitated by the free trade agreement with the EU – and also appears to be the one with the least participation by local individuals. The low foreign ownership in MENA emerging markets is attributable to the existing investment restrictions in some markets despite the privatization process over the past decade. For example, Tadawul, the biggest market in the region, has the highest investment restrictions: non-GCC nationals can currently invest through swaps only. In the UAE, foreign investment is limited to 49 % of equity and in Qatar to 25% (Koldertsova, 2012).

Indeed, Al-Moatez and Lakhel (2008), investigate a sample of 48 Saudi companies including manufacturing firms with a percentage of 47.9 %, followed by the service industry with 25 %. Descriptive statistics show that the Saudi firms are mostly held by families (the mean percentage of family ownership in Saudi Arabia is 22.2 %) and the government (state ownership is present on average at about 10 %).

Finally, family-owned companies are the dominant characteristic of the MENA capital markets. A single family may be among the top five shareholders and have controlling stakes in a number of companies, whether directly or indirectly (Ben Othman and Zéghal, 2010).

Agency theory (Jensen and Meckling, 1976; Watts, 1977) suggests that where there is a separation of ownership and control of a firm, the potential for agency costs arises because of conflicts of interest between contracting parties. Fama and Jensen (1983) propose that where share ownership is widely held, the potential for conflicts between principal and agent is greater than in more closely held companies. As a result, information disclosure is likely to be greater in widely held firms.

Empirical results of the relationship between ownership concentration and corporate disclosure are mixed. Using a sample of Malaysian listed companies, Hossain et al., (1994) found a negative relationship, whereas Haniffa and Cooke (2002) noted a positive relationship.

Family-owned companies prevail on the MENA capital markets and the predominance of family members or close relatives suggests an important role in the executive position within the company (Miteva, 2007). These stakeholders can use their power by requesting information directly from company management.

Therefore, the hypothesis is as follows:

H1: There is a negative association between family ownership and environmental disclosure.

Furthermore, government ownership is a main feature in the MENA region. The government is expected to show that it acts for the benefit of society. A company with high government ownership is expected to observe environmental protection principals in order to be seen as a good example for other companies totally owned by the private sector. Naser et al., (2006) reported a positive but insignificant association between the extent of environmental disclosure and government ownership in Qatar.

Accordingly, we hypothesize:

H2: Firms with government ownership are more likely to disclose environmental information.

3. METHODOLOGY

3.1. Data and Sample Selection

We collected listed companies from the MENA region that operate in polluting sectors. These companies were selected because they are more sensitive towards environmental issues and they normally invest much more in environment protection than those from other industries (Salomone et al., 2001; Moneva et al., 2000; Gamble et al.,1995; Barth et al., 1994). KPMG (2002) found that sectors showing the most activity in environmental reporting were those in high risk areas such as chemicals, pharmaceuticals and automotive. Based on prior research. The polluting sectors selected in this study are: pharmaceutical (Adams et al., 2000), energy (Tilt, 2001; Anderson et al., 1998; Barth et al., 1994), chemical (Adams et al., 2000; Anderson et al., 1998; Barth et al., 1994), mining (Anderson et al., 1998), transportation (Bartoloméo, 2000; Barth et al., 1994), and food (Barth et al., 1994).

Disclosure literature has found that annual reports are considered to be the most important means for the company to disseminate information to the public (Hines, 1982). Therefore, the companies' annual reports are examined in this study to decide whether environmental information is disclosed by the company. These reports were collected through both the web sites of financial markets in the MENA region and the web sites of these companies over the 2010-2012 periods.

Additionally, following Doidge et al., (2007), we eliminate Lebanon, for which only three companies operating in the selected polluting sectors are listed. This left us with a final sample of 143 companies (347observations) from ten emerging markets and six sectors.

3.2. Environmental Disclosure Measurement: SCORE

Researchers have extensively used disclosure indices to evaluate, compare and explain differences in the amount of information disclosed in corporate annual reports. Among them, Banghoj et al (2008) and Hossain et al (2006) who examine the economic consequences of corporate voluntary disclosure.

Similar to prior studies, content analysis is used to measure a firm's environmental disclosure across different countries in the annual reports. For example, Gray et al 1995b; Wallace and Naser, 1995; Naser, 1998; and Abu Baker and Naser, 2000, defined such a method as a technique employed to measure objectively, systematically, and qualitatively the content of communication. Krippendorff (2004) believes that content analysis ensures replicability and appropriate inference about data in its contexts.

Although companies tend to make public disclosure in the annual reports and other channels of distribution such as advertising and promotional leaflets, in developing countries, the annual report is viewed as the main channel of disclosure. Drawing from the majority of studies used to assess corporate environmental disclosure practices (e.g Ernst and Ernst, 1978; Beresford and Cowen, 1979; Krippendorff, 1980; Guthrie, 1983;Guthrie and Mathews, 1985; Guthrie and Parker, 1989, 1990; Zeghal and Ahmed,1990; Roberts, 1992; Kirkman and Hope, 1992; Gray, Kouhy, and Lavers,1995a, 1995b ; Abu Baker and Naser, 2000), this study utilised the annual report as a principal focus of the firm's reporting and thus defined the bounds of the analysis. Marston and Shrives (1991) argue that the annual report is the "main disclosure vehicle," and it is the most comprehensive financial report available to the public.

A further requirement from a content analyst is the selection and development of categories into which content units can be classified. Categorical distinctions cluster units "by their membership in a class or category – by their having something in common". In the present study, the categories and items were drawn from the Environmental Indicators developed within the framework of the Global Reporting Initiative (GRI) (the last version entitled "G3.1"). The GRI's mission is to 'develop and disseminate globally applicable Sustainability Reporting Guidelines. The voluntary nature of the Guidelines means that organisations have flexibility in deciding what non-financial information to disclose. The Guidelines are designed to be suitable for reporting organisations with varying degrees of complexity. Acceptance of the GRI as a guide for sustainability reporting is now quite widespread. This list is used by many researchers as Plumlee et al (2009); Moroney et al (2009) and Rupley et al (2011). Through comparison of the items in the GRI, as well as from the investigation of annual reports of the sample, a list of items was developed, which is closer to the context of emerging MENA markets (see Appendix A). The GRI seeks to elevate sustainability reporting to the same level of rigour, comparability, credibility and verifiability expected of financial reporting (GRI, 2002:1).

Some previous studies measured corporate environmental disclosure on the dichotomous basis of disclosure/non-disclosure (Lynn, 1992). This method, however, fails to indicate the degree or extent of the reporting entity's involvement in corporate environmental responsibility reporting. According to Cormier et al (2005), the approach to scoring items is as follows:

- A score of (0) is awarded if an item is not disclosed.
- A score of (1) is awarded if an item is generally described.
- A score of (2) is awarded if an item is described in detail (not quantitative)
- A score of (3) is awarded if an item is described quantitatively (numerical)

The score for each company j is calculated as follows:

$$SCORE_{jt} = \frac{\sum_{i=1}^{N} X_{ij}}{N}$$

Where, N is the total number of items expected to be disclosed for firm *i*.

The following steps were adopted in this study, as suggested by Gray et al. (1995) and adopted by Abu Baker and Naser (2000):

1. Annual reports were read carefully, individually and relevant data were collected manually.
2. Each annual report was allocated a scoring sheet and the resulting data on the scoring sheets was entered into a database. The sheets were retained for further query and replication.
3. The accumulated data was then transferred to the relevant computer program for further data analysis.

3.3. Ownership structure variable

In the annual reports of MENA companies, there is information about the proportion of shares owned by dominant shareholders. The ownership variable in this study was calculated initially by adding together the proportions of equity owned by family members for family ownership and the firm's equity owned by state for government ownership.

3.4. Regression model

A linear multiple regression analysis was used to test the association between the dependent variable of environmental disclosure and the independent variable of ownership structure. In addition, a number of control variables are included in the model. These control variables have been commonly used in prior disclosure research studies (Cooke, 1991; Hossain et al., 1995; Zarzeski, 1996; etc.).

$$SCORE= \alpha_0 + \alpha_1 FAM\text{-}OWN_i+\alpha_2 GOV\text{-}OWN_i+\alpha_3 SIZE_i+\alpha_4 LEV_i+ \alpha_5 PROF_i+e_i \quad \text{Model (1)}$$

$$SCORE=\alpha_0+\alpha_1 FAM\text{-}OWN_i+\alpha_2 GOV\text{-}OWN_i+\alpha_3 SIZE_i+\alpha_4 LEV_i+\alpha_5 PROF_i+COUNTRY\ \ DUMMIES +e_i \quad \text{Model (2)}$$

$$SCORE=\alpha_0+\alpha_1 FAM\text{-}OWN_i+\alpha_2 GOV\text{-}OWN_i+\alpha_3 SIZE_i+\alpha_4 LEV_i+\alpha_5 PROF_i+INDUSTRY\ DUMMIES +e_i \quad \text{Model (3)}$$

Where,

SCORE: the environmental disclosure rating of firm i.

FAM-OWN: family ownership of firm I, measured by the percentage of capital held by family.

GOV-OWN: government ownership of firm i, measured by the percentage of capital held by the state.

SIZE: size of firm i, measured by the "log total assets".

LEV_i: leverage of firm i, measured by "debt to assets ratio".

PROF: profitability of firm i. we use the ROA as a measure of the profitability.

4. RESULTS

4.1. Descriptive Statistics

Table 1. Distribution of Environmental Disclosure Score for MENA Emerging Markets

Country	***N***	***Mean***	***St .dev***	***Min***	***Max***
Bahrain	8	0.026	0.063	0	0.182
Egypt	23	0.166	0.173	0	0.451
Jordan	33	0.146	0.106	0	0.363
Kuwait	26	0.051	0.061	0	0.161
Morocco	17	0.138	0.176	0	0.647
Oman	43	0.032	0.048	0	0.193
Qatar	15	0.130	0.106	0	0.258
SaudiArabia	103	0.132	0.163	0	0.700
Tunisia	21	0.043	0.060	0	0.240
UAE	58	0.172	0.173	0	0.758

Table 1 exhibits scores of environmental disclosure above 0.15 for Egypt, Morocco, the UAE, Qatar, Jordan and Saudi Arabia, whereas, scores below 0.1 are obtained in Bahrain, Tunisia, Kuwait and Oman. This analysis indicates also that environmental information provided in annual reports is relatively low for all countries investigated. This result may be explained by the fact that environmental disclosure in these countries is still done as voluntary communication. Moreover, Middle Eastern societies are characterized by a large hierarchical authority, collectivism and low future orientation (Hofstede,1984; Beard and Al-Rai, 1999; Kabasakal and Bodur, 2002). These factors may suggest that people in these countries are relatively more secretive, conservative and, based on statutory audits, have less professional judgment in relation to their counterparts in developed countries, indicating a lower level of voluntary disclosure (eg. Hadded et al., 2009, Gray et al., 1995; Zarsekei, 1996; Askary, 2006). These findings are in line with results obtained in previous studies and suggest that developed countries provide more environmental information than developing countries (Yossof et al., 2005).

4.2. Multivariate analysis

Before we run the multiple regressions based on panel data, we perform several specification tests in order to ensure that the regression specification fits the data. We address the tests for Multi-collinearity, the heteroscedasticity and the serial correlation of error terms.

In our study, all VIF factors are less than 5 indicating that there is no serious problem of collinearity (mean 1.07). The next step is to examine the potential heteroscedasticity problem using the *hettest* stata command after conducting an OLS regression analysis. This command provides the Breusch-Pagan/ Cook-Weisberg test under the null hypothesis that the variance of residuals is homogenous. The Breusch-Pagan heteroscedasticity test is significant for our model indicating the presence of a heteroscedasticity problem.

The contemporaneous and the serial correlation among panel data is another issue that we should deal with. According to Baltagi (2005), contemporaneous correlation is a problem in macro panels with long time series (over 20-30 years). This is not much of a problem in micro panels (a few years and a large number of cases) like the present study.

To sum off, in order to correct for heteroscedasticity, we use the appropriate statistical treatment by estimating models using the method of Generalized Least Squares (GLS).GLS technique has the advantage of the correction for heteroscedasticity and serial correlations and produces efficient and consistent parameter estimates.

Table 2. Regression of environmental score on test and control variables based on the sample of MENA companies

Dependent variable : SCORE			
Independent variables	***Panel A: Model 1***	***Panel B: Model 2***	***Panel C: Model 2***
	Coefficient estimate (p-value)	***Coefficient estimate (p-value)***	***Coefficient estimate (p-value)***
INTERCEPT	-0.197 (0.000)***	-0.064 (0.109)	-0.093 (0.000)***
FAM-OWN	-0.039 (0.047)**	-0.043 (0.011)**	-0.094 (0.000)***
GOV-OWN	0.060 (0.000)***	0.064 (0.000)***	0.039 (0.042)**
SIZE	0.035 (0.000)***	0.016 (0.000)***	0.023 (0.000)***
LEV	-0.008 (0.000)***	0.028 (0.027)**	0.011 (0.245)
PROF	0.001 (0.837)	0.001 (0.576)	0.000 (0.195)
UAE		0.062 (0.000)***	
Qatar		0.050 (0.022)**	
kuwait		-0.059 (0.000)***	
Bahrain		-0.067 (0.000)***	
Oman		-0.055 (0.000)***	
Tunisia		-0.045 (0.000)***	
Egypt		0.051 (0.092)*	
Morocco		0.058 (0.020)***	
Jordan		0.052 (0.000)***	
Energy			0.037 (0.000)***
Pharmaceutical			-0.046 (0.000)***
Mining			0.008 (0.194)
Transportation			-0.011 (0.502)
Food			-0.063 (0.000)***
N	143	143	143
Chi 2	228.83	437.20	450.34
Prob> Chi 2	(0.000)***	(0.000)***	(0.000)***

Notes: *SCORE: environmental disclosure rating of firm i; FAM-OWN family ownership; GOV-OWN: government ownership; SIZE: firm size = log total assets; LEV: leverage = debt to assets ratio; PROF: profitability = ROA. N is the number of MENA companies. In model 2, the Arabia Saudi was considered as a country reference due to the large number of Saudi companies. In Model 3, the chemical industry was considered as a sector reference due to the large number of chemical firms.*

****,**,* Indicate two-tailed statistical significance at 1%, 5% and 10% levels.*

Table 2 presents regression results of the three regression models (Panels A, B and C) we tested over the sample of MENA companies.

The three regression models are globally significant. The Chi 2 test statistic is significant at a level of 1% for Model 1, Model 2 and Model 3.

Consistent with our predictions, Panels A, B and C exhibit a substantial influence of the family ownership on the environmental disclosure for MENA emerging market companies. The family ownership variable shows a negative and significant coefficient. This indicates that while concentrated ownership in general reduces disclosure, that effect is particularly pronounced when the firm is family-controlled. Gray's (1988) argues that where a firm's shares are held by family-controlled firms, there is a preference for confidentiality and restriction of disclosure of information only to those who are closely involved with its management and financing. Thus, the findings of this study support our first hypothesis that there is a negative association between family ownership and environmental disclosures.

In addition, as shown in table 2, the coefficients for government ownership were positive and highly significant ($p<0.001$ for Model 1 and Model 2). These results are consistent with Hypothesis 2 indicating that the presence of the state is likely to improve corporate environmental reporting practice. This result can be explained by the fact that government acts more for the protection of environment and the benefit of society, in order to be seen as a good example for other companies totally owned by the private sector.

Moreover, consistent with the prior researches, the coefficient of the variable size is positive and statistically significant at a level of 1 %, which indicate that company size affects positively and substantially the level of environmental disclosure for the MENA emerging markets. However, we find no substantial influence between environmental reporting and profitability.

Consistent with descriptive statistics, Panel B outlines that companies from Egypt, Jordan, Morocco and UAE have higher environmental scores than those from Saudi Arabia. Furthermore, Panel C indicates that environmental scores are lower in MENA companies from pharmaceutical and food industries than chemical companies. This finding can be explained by the fact that, these companies are less sensitive towards environmental issues and they normally communicate less environmental information than those from other industries.

5. CONCLUSIONS

The objective of this study is to examine the association between environmental disclosures and ownership structure of MENA companies. In this regard, we test the impact of "State ownership" and "Family ownership" on corporate environmental disclosure practices. We collected 147 annual reports of companies operating in polluting sectors from seven MENA countries over the 2010-2012 period (347 observations).

Through the application of a self-constructed environmental disclosure score based on the framework of the Global Reporting Initiative (GRI) to their annual reports, we calculated the score for each MENA company. The results revealed that the majority of companies in our study provides a separate section for environmental issues on their annual reports. However, disclosure is found to be general statements indicating company support for environmental protection and the environmental scores are quite low. This result may be explained, as we have already mentioned, by the fact that environmental disclosure in these countries is still performed through voluntary communication.

In addition, the results of this study environmental reporting behavior by MENA listed companies provide support for the agency theory-based hypothesis that there is a positive association between wider ownership and the extend of voluntary disclosure. The empirical findings also highlight the importance of the contextual characteristics of the MENA region. The prevalence of family-ownership is likely to be associated with lower levels of corporate disclosure.

This article is subject to the following limitations. First, regarding internal validity, the list of items on environmental activities used to compute the environmental disclosure index might not be exhaustive. Furthermore, the sample in this study was taken from polluting sectors. Consequently, the results may have limited external validity beyond the industry settings of the study.

Despite these limitations, this study is potentially useful for reformers, policy makers and regulators in less developed countries allowing market regulators to better understand disclosures in their countries.

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APPENDIX

Appendix A. Environmental Disclosure items List

Aspect: Materials
- Consumption of raw materials
- Recycling

Aspect: Energy
- Direct energy consumption by primary energysource.
- Indirect energy consumption by primary source.
-Energy saved due to conservation and efficiencyimprovements.
- Initiatives to provide energy-efficient orrenewable energy-based products and service
- Initiatives to reduce energy consumption

Aspect: Water
- Consumption of water (total water consumption)
- Water sources significantly affected by withdrawal of water.
- Total volume of water recycled and reused

Aspect: Biodiversity
- Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity
- Description of significant impacts of activities, products, and services on biodiversity
- Habitats protected or restored.
- Strategies, current actions, and future plans for managing impacts on biodiversity and environment.
- Number of IUCN Red List species in areas affected by operations,

Aspect: Emissions, Effluents, and Waste
- Total direct and indirect greenhouse gasemissions
- Other relevant indirect greenhouse gasemissions by weight.
- Initiatives to reduce greenhouse gas emissions
- Emissions of ozone-depleting substances by weight.
- NOx, SOx, and other significant air emissions
- Reduction of water, air and desert discharges
- Reduction of total weight of waste
- Total number and volume of significant spills.
- Secure management of waste
- Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.

Aspect: Products and Services
- Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.
- Percentage of products sold and their packaging materials that are reclaimed by category.

Aspect: Compliance
- Monetary value of significant for noncompliance with environmental laws and regulations.

Aspect: Transport
- Reduction environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.

Aspect: Overall
- Total environmental protection expenditures and investments by type.
- Develop structures with respect to the environment
- Pollution control due to the company's business
- Compliance of the company with the standards for pollution.

A MODEL FOR THE EVALUATION TRENDS PERFORMANCE IN SMALL AND MEDIUM ENTERPRISES

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Abstract

The purpose is to propose a model thanks to which the management, the owners and the stakeholders could assess the evolution in time of small and medium-sized enterprises' state of health, in terms of different criteria during the considered three year period. For this purpose, our framework is represented by a model developed in the previous publication (Giacosa and Mazzoleni, forthcoming), which distinguishes small and medium-sized enterprises into several typologies, in terms of above-mentioned criteria. The originality of the research is consistent to the current context in which the companies operate, which is changing in an intensive way because of the world financial crisis. In particular, the company manifests the need to understand its situation and be encouraged to adopt a series of measures to improve its situation. Concluding, the companies could commit themselves to undertake a path toward virtuous positions, after determining the current starting condition.

Keywords: Company's Performance; Evaluation Performance; Growth; Profitability; Financial Debt's Repayment; Stakeholders; Small-Medium Enterprises

1. INTRODUCTION

A company is an open system (Culasso, 1999; Ferrero, 1987; Ferraris, 2014; Giacosa, 2011; Gigler and Hemmer, 2001) harmonized in its market context of business activities. Therefore, the company cannot operate by itself, but it interacts with its context through several relationships (Dahnke and Clatterbuck, 1990; Giacosa, 2012a).

During the management and owners' decision making process, a series of relations can be contextualized within a sort of puzzle in the economic context, involving several companies (Culasso, 2009 and 2012; Favotto, 2001; Farneti, 2007) and stakeholders (Airoldi et al., 1994; Freeman, 1984; Freeman et al., 2007; Hitt and Harrison, 2001; Meigs et al., 2001).

In this context of strong relationship with its environment, the company changes its behaviour: from instrument aimed at fulfilling private interest (*shareholder view*), it becomes an entity thanks to which stakeholders could satisfy their interests (*stakeholders view*) (Dell'Atti, 2003; Lai, 2004). In order to mitigate typical conflicts between the company and its stakeholders, the company has to produce a compulsory and voluntary disclosure under the sign of transparency, with the purpose of involving stakeholders in the company's project and permitting them to evaluate the business. Consequently, the process communication allows them to reach a positive or negative consensus on the company's activity, which impacts on the availability of stakeholders when granting new resources to the company (Shannon and Weaver, 1971; Reilly and Di Angelo, 1990; Giacosa, 2012a). Literature has stressed on how the stakeholders represent a key role into the company's business (Carayannis et al., 2015; Carayannis and Rakhmatullin, 2014; Del Giudice and Maggioni, 2014; Hansen, Mors and Lovas, 2005), and their decision making process impacts on the company's opportunities (Del Giudice et al., 2013; Del Giudice and Straub, 2011).

The additional data collection on several types of knowledge about the company's state of health is critical to favour the decision making process of the management, owners and stakeholders; consequently, improving disclosures on company's situation permits to improve business process (Del Giudice, Della Peruta and Carayannis, 2010 and 2011; Del Giudice, Della Peruta and Maggioni, 2013; Maggioni and Del Giudice, 2006; Nicotra, Romano and Del Giudice, 2014) and to satisfy the relationships between the company and its stakeholders (Dias and Bresciani, 2006; Giacosa, 2012b; Rolland, 2004).

The above company's state of health could be observed from different point of view. A combination between economic and financial aspects and the growth ones allows an articulated reasoning aimed at understanding the conditions of the company. This company's situation could be analyzed thanks to a set of indicators, which focuses on the evolution of the company performance (Arcari, 2004; Campedelli, 1998; Ferrero et al., 2006; Teodori, 2008).

The research is placed in this context of observation. The purpose of the research is to propose a model thanks to which the management, the owners and the stakeholders could assess the evolution in time of small and medium-sized enterprises' state of health, in terms of different criteria (growth, profitability, and their attitude in financial debt's repayment) during the considered three year period.

For this purpose, our framework is represented by a model developed in a previous publication (Giacosa and Mazzoleni, 2016), which distinguishes small and medium-sized enterprises into several typologies - in terms of above-mentioned criteria (growth, profitability, and their attitude in financial debt's repayment) - in the context of an informative matrix.

In addition, this research could be considered as a development of Giacosa, Mazzoleni and Rossi (forthcoming), in which the aim of the research was the identification of the appropriate financing methods for small and medium-sized companies, by comparing Italian and German companies. To reach this purpose, the paper stated some indicators for identifying the appropriate financing methods for small and medium-sized companies, in terms of company's growth, profitability, and capacity of financial debt's repayment. The current research used the some indicators to reach a different purpose.

There can be identified the internal and external parties interested in the presented model. Under the inner profile, the management and owners are identified, as they must consider the company's condition to put in place corrective measures in a timely manner. The proposed model suggests some information for evaluating the company's situation and verifying its evolution over time and, subsequently, stimulating a series of corrective actions to improve abovementioned situation. With reference to stakeholders, there are placed those which are connected with the company by various relationships, as they need to know in advance the possible occurrence of a crisis; among these, several categories of stakeholders, current or potential, need to know well before the conditions of the company: for instance the funders, the company's suppliers and employees, as they are involved in the company's results.

The originality of the research is consistent to the current context in which the companies operate, which is changing in an intensive way because of the world financial crisis. In particular, the research is linked to the need of a company to understand its situation and, at the same time, be encouraged to adopt a series of measures to improve the situation in terms of growth, profitability and financial capacity of debt repayment. Concluding, the companies could commit themselves to undertake a path toward virtuous positions in terms of economic and financial situation and company's growth, after determining the current starting condition.

The research is structured as follows. The second paragraph is focused on the analysis of the literature, with particular reference to the identification of the company's financial and economic situation. The research method is outlined in the third section. The description of the results is conducted in the fourth paragraph, which is followed by discussion of the results. Finally, the conclusions and implications of the study are set out, along with the limitations of the research.

2. LITERATURE

The company's state of health could be observed from different point of view. Economic and financial aspects and the growth ones could be combined, allowing an articulated reasoning aimed at understanding the conditions of the company, over a period of both short and medium-long term. In particular, researchers focused on a range of variables that influence the degree of company's situation, in both financial and economic terms (Baginski and Hassel, 2004; Giunta, 2007; Rossi, 2014b; Value, 2001) and company's growth ones (Canals, 2001; Hart and Mellons, 1970; Giacosa, 2012; Goold, 1999; Grandinetti and Nassimbeni, 2007; Potito, 2013).

Focusing on financial and economic analysis, the literature attributes to the financial analysis a significant role (Bernstein and Wild, 1998; Fiori, 2003; Foster, 1986; Giroux, 2003; Giunta, 2007; Helfert, 1997; Ingram et al., 2002; Meigs et al., 2001; Rossi, 2014a; Van Horne, 1972; Weston and Brigham, 1978). Indeed, a set of indicators focusing on the evolution of the company performance (Arcari, 2004; Campedelli, 1998; Ferrero et al., 2006; Teodori, 2008) allows to evaluate the company's conditions thanks to several typologies of comparison (in relation to several companies belonging to the same sector, and/or considering the trend of the indicators in time for each company). In addition, these indicators permit to provide a unitary system of information deriving from the financial statements (Andrei, 2003; Ferrero et al., 2006), thanks to the fact that they are interdependent.

The financial analysis favours a clear and convincing check-up to diagnose the business situation, placing the company in a positive or negative phase. In particular, an analysis of the current situation and future prospects of the company and an understanding of the key business issues, as well as the reason of them, encourage decision-making process of the property and/or the management, improving the company's survival conditions in a long term (Higgins, 2007; Ingram et al., 2002; Mazzoleni, 2012).

The analysis of the company's condition must include a number of interdependent factors (Ferrero et al., 2006; Giacosa, 2015). To this end, despite a number of limitations suggested by the literature (Brealey and Myers, 1988; Froli et al., 1994; Giunta, 2007; Ingram et al., 2002; Invernizzi, 1990; Lombardi Stocchetti, 2013), the financial analysis was focused in deep.

Thanks to its signalling attitude (Bernstein and Wild, 1998; Brunetti, 1995; Campedelli, 1998; Foster, 1998; Fridson, 1995; Giunta, 1992; Giacosa and Mazzoleni, 2012; Ingram et al., 2002; Helfert, 1997; Higgins, 2007; Teodori, 2000), it aims to evaluate the economic and financial company's situation (Flowers, 2003; Facchinetti, 2002; Ferrero et al., 2003), within a comparison between companies or a time comparison (Bergamin Barbato, 1974; Castellano, 2008; Ferrero and Dezzani, 1979; Teodori, 2002; Terzani, 1978).

For this purpose, the financial analysis provides a series of synthetic elements (Baginski and Hassel, 2004; Bastia, 1996; Caramiello, 1993; Catuogno, 2012; Coda, et al., 1974; Fiori, 2003; Foster, 1986; Giroux, 2003; Meigs et al., 2001; Mella, 1998; Mella and Navaroni, 2012; Horrigan, 1968), consisting of economic and financial indicators (Invernizzi, 1990; Paolucci, 2013; Prince, 2011; Quagli, 2013; Sostero, 2014; Torcivia, 2010; Value, 2001; Van Horne, 1972; Weston and Brigham, 1978).

As the company system is unique in its entirety, also the indicators produced by the financial analysis create an unitary system of information, because they are influenced by a series of interdependent conditions (Andrei, 1996). The information resulting reflects the operating conditions in terms of productive, commercial and managerial attitude of the company, summarizing the trend of the results achieved (Antonelli, 2001; Arcari, 2004) in both current and prospective terms, in order to permit stakeholders (Branciari, 2003; Brusa, 2000; Giunta, 1992; Paganelli, 1986; Provasoli, 1974) an assessment of the company's current and potential situation (Amaduzzi, 1978). By interpreting a set of indicators mentioned above, the recipient of the information deriving from the financial analysis can mature a judgment on production efficiency, commercial potential, financial autonomy, and innovative capacity (Bresciani, 2010; Bresciani, Vrontis, and Thrassou, 2014; Bresciani and Ferraris, 2012; Ferraris, 2014; Ferraris and Grieco, 2015; Ferraris and Santoro, 2014; Marchi, 2010).

As part of the profitability analysis, the literature has examined a number of indicators, related to the core business and the profitability of shareholders (Bastia, 1996; Bresciani, Vrontis and Thrassou, 2015; Ferrero et al., 2003; Giacosa, 2011; Mazzola, 2002; Rea, 2008). In addition, assessing the company's ability to repay debts with operating activities was a very important issue. It allows to analyze the company's attitude in ability to financial debt repayment through cash generated from operating activities, which is calculated by linking the financial debts with Ebitda. Ebitda represents important component of cash flows from operating activities: indeed, the turnover creates receivables which, after cash collection, provides the entrance of sources deriving from the company's operating activity, which are useful in financial debt's repayment.

Focusing on the company's growth, it refers to the process which, within a certain time frame, affects an increase of a size of the observation subject (Canals, 2001; Hart and Melons, 1970; Giacosa, 2012; Goold, 1999). The aim of the growth in a small and medium-sized enterprise can be imposed both internally, meaning to be stimulated by the ownership or management and externally, that is linked to opportunities deriving from outside (Molinterni, 2000). Regardless of the source of its origin factors, the stimulus of growth is physiological in every company, even those small and medium-sized, as it constitutes an element of a typical human activity challenge in the economic field (Bresciani, Vrontis and Thrassou, 2012; Conca, 2010; Donaldson, 1994).

The growth can be measured in quantitative terms (through the turnover, production value, added value, number of employees, capital invested, market share, etc.). It can also be observed in its qualitative aspects; indeed, the growth affects the creation of new skills and the improvement of those already owned (Grandinetti and Nassimbeni, 2007), being extremely connected to a multiplicity of factors related to human resources operating in the company, with particular reference to their quality and attitudes.

The growth in the SMEs is an essential ingredient for the company's survival in the long term, characterized by the strategic choices during its life cycle (Gardi, 1990). However, business growth is not a necessary condition for the company to operate in a sustainable manner: considering the small companies working on niche markets, which can show a certain degree of competitiveness while maintaining their size.

By analyzing the previous literature, it emerged the absence of a model which permits to evaluate the evolution in time of small and medium-sized companies' state of health, in terms of a combination of different criteria (such as growth, profitability, and their attitude in financial debt's repayment) during a considered period. In addition, this model could encourage the companies to adopt a series of measures to improve their situation, undertaking a path toward virtuous positions in terms of economic and financial situation and company's growth after determining the current starting condition.

3. METHODOLOGY

3.1. The sample

We said that our framework is represented by a model developed in a previous publication (Giacosa and Mazzoleni, 2016), which distinguishes small and medium-sized enterprises into several typologies - in terms of above-mentioned criteria (growth, profitability, and their attitude in financial debt's repayment) - in the context of an informative matrix. In the present research, we used the same sample of the framework, texting it for other purposes.

In addition, this research could be considered as a development of Giacosa, Mazzoleni and Rossi (2016), in which the above framework has been applied on the same sample. The aim of the research was the identification of the appropriate financing methods for small and medium-sized companies, by comparing Italian and German companies. To reach this purpose, the paper stated some indicators for identifying the appropriate financing methods for small and medium-sized companies, in terms of company's growth, profitability, and capacity of financial debt's repayment.

The current research used the same above-mentioned indicators (Giacosa and Mazzoleni, 2016; Giacosa, Mazzoleni and Rossi, 2016) to reach a different purpose.

On the basis of the Aida-Bureau van Dijk database on over one million Italian companies, the companies have been classified to the proper business sector, adopting the ATECO classification of the National Institute of Statistics (Istat).

At the beginning, a population of 758.153 Italian companies has been considered.

The next step was to create a sample and therefore the following criteria have been applied:

- the companies have deposited the financial statements from 2011, 2012 and 2013, while the financial statement from 2013 was the last one deposited at the moment of valuation. This three-year period was considered as the minimum necessary to carry out the research on the analyzed companies;

- companies' financial statements were not prepared in accordance with IAS (International Accounting Standards) in order to ensure the comparability of analysed data;
- the companies' activities within individual ATECO's economic activities were considered as relevant. The companies that belong to its residual activity have been excluded from the sample;
- their production value of 2013 was between 5 and 250 million euro (using the production value instead of sales it was possible to extend the research about working on order companies);
- in the Aida-Bureau van Dijk database were available the details about the company's accounting group "total debt"(the companies without detailed financial debt were excluded from the sample).

As the manufacture sector consists of 23 different economic activities, it has been divided in the following sectors: food, automotive, pharmaceutical, rubber-plastic, machinery, metal-mechanic, petrochemical, textile and other manufacturing.

At the end, the final sample consists of 41.344 Italian companies (Table 1).

Table 1. The sample

Sector	***No of companies***
Agriculture	743
Food	2,189
Accommodation and catering	522
Cultural Activities	190
Financial Activities	176
Professional activities	1,539
Automotive	510
Trade	12,891
Building	2,762
Pharmaceutical	214
Rubber - plastic	1,839
ICT	950
Real estate	716
Machinery	3,921
Other manufacturing	2,763
Metal-mechanic	3,220
Petrol-Chemical	998
Business services	892
Textile	2,077
Transportation and storage	2,232
Total for geography area	**41,344**

Source: Own elaboration

3.2. The method

The aim of the research is to assess the evolution in time in terms of the economic and financial situation of small and medium-sized enterprises, during three years considered. As we said in the introductions section, our framework is represented by a model developed in a previous publication (Giacosa and Mazzoleni, 2016), which distinguishes small and medium-sized enterprises into several typologies - in terms of above-mentioned criteria (growth, profitability, and their attitude in financial debt's repayment) - in the context of an informative matrix.

In addition, this research could be considered as a development of Giacosa, Mazzoleni and Rossi (2016), in which the aim of the research was the identification of the appropriate financing methods for small and medium-sized companies, by comparing Italian and German companies. To reach this purpose, the paper stated some indicators for identifying the appropriate financing methods for small and medium-sized companies, in terms of company's growth, profitability, and capacity of financial debt's repayment. The current research used the some indicators to reach a different purpose.

The following research question has been formulated, in order to achieve the aim of the paper:

RQ: What is the evolution in time of small and medium-sized enterprises in terms of growth, profitability and ability to repay the financial debt, during the three-years period?

The research methodology was articulated as follows:

a) short illustration of the framework, whose informative matrix permits to identify different types of financing instruments considering different criteria (growth, profitability, and capacity of financial debt's repayment);

b) application of the above-mentioned informative matrix to the sample;

c) analysis of the evolution in time in terms of different criteria (growth, profitability, and capacity of financial debt's repayment), during three-year period considered.

All the aspects of the observation are deepened and presented below.

A) Illustration of the used informative matrix

The framework of our research is represented by a model developed in the previous publication (Giacosa and Mazzoleni, 2016). The model mentioned-above illustrates several typologies of small and medium-sized enterprises in terms of different criteria (growth, profitability, and capacity of financial debt's repayment) and permits to conduct analysis on the following topics, considering a them in a system way (Coda, 1990; Ferrero et al., 2006; Teodori, 2000).

Firstly, we used the CAGR indicator to measure an average annual growth, because of its ability of neutralizing the effects of a wide volatility of the rates of growth. The CAGR is calculated on individual years and makes arithmetic average less meaningful.

Secondly, we considered a series of expressive indicators of profitability and ability to repay financial debt, with the purpose to identify the post helpful ones. Then, it was necessary to calculate the correlation of these indicators with the company's economic and financial situation (the data of both, the companies under normal operating conditions and bankrupt ones have been compared).

In order to identify the parameters necessary to evaluate economic and financial situation of the company, the following criteria have been defined:

- high correlation between the financial condition of the company and proper indicator;
- correlation between the indicators identified before.

Table 2 contains the results obtained.

Table 2. Correlation between the company's economic-financial situation, and indicators of profitability and ability of repaying financial debt

Company's condition	EBITDA/ Production Value	EBITDA/ Sales	Return on Investment	EBIT/Total Assets	Return on Equity	Total Liabilities/ Equity	Net Financial Position/EBITDA	Financial Debts/ EBITDA	Financial Debts/ Equity	Financial Debts/ Sales	Financial Debts/ Production Value	
1	-0.3245	-0.2966	-0.4587	-0.4498	-0.4765	-0.0521	-0.0631	-0.0874	-0.0319	0.2238	0.253	Company's condition
	1	0.9605	0.6066	0.6161	0.3794	-0.1252	-0.0025	-0.0094	-0.0679	-0.054	-0.1021	EBITDA/ Production Value
		1	0.5751	0.5849	0.3599	-0.1212	0.0117	0.0065	-0.0674	-0.0169	-0.0506	EBITDA/ Sales
			1	0.9845	0.6624	-0.0933	-0.077	-0.0643	-0.084	-0.3134	-0.3362	Return on Investment
				1	0.6467	-0.0877	-0.0762	-0.0672	-0.0784	-0.3135	-0.336	EBIT/Total Assets
					1	0.0411	-0.0466	-0.031	-0.0133	-0.237	-0.2616	Return on Equity
						1	0.1697	0.1704	0.7411	0.0466	0.0355	Total Liabilities/ Shareholder Funds
							1	0.9094	0.4485	0.4826	0.4746	Net Financial Position/EBITDA
								1	0.4323	0.452	0.4434	Financial Debt/ EBITDA
									1	0.3732	0.3643	Financial Debt/ Shareholder Funds
										1	0.9745	Financial Debt/ Value
											1	Financial Debt/ Production Sales

Source: Own elaboration

The yellow cells presented in the table above illustrate the correlation between the situation of the company and the proper indicator. The green one indicates the correlation between two chosen indicators, instead.

As a result of conducted analysis, the highlighted indicators (meaning EBITDA/Production Value and Financial Debts/EBITDA) are characterized by a relevant correlation between the company's condition and between the indicators themselves (respectively -0.3245 and -0.0874) by a lower correlation between the two indicators identified (-0.0094). Finally, the following indicators have been used:

a) to measure the company's growth – indicator CAGR (Compound Annual Growth Rate) has been used, calculated in the following way:

$$CAGR = \sqrt{\frac{PV_m}{PV_n}} - 1$$

Where,

PV_n, PV_m = Company's production value in years "n" and "m", assuming that m>n.

b) to measure the company's profitability – indicator EBITDA to production value has been used calculated as follows:

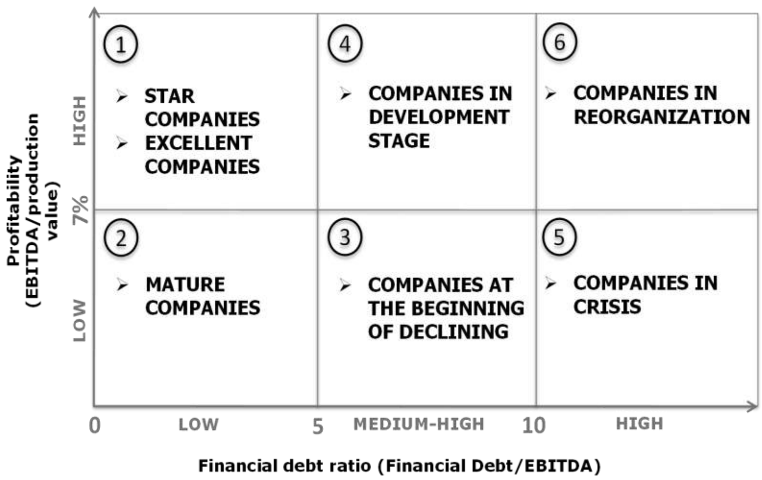
Profitability in the year "n"= Ebitda (n)/Production value (n)

c) to measure the capacity to repay the financial debt – indicator Financial Debt to EBITDA has been used, as it contains an information about the period necessary to repay the debt using the sources deriving from the core business activity. The formula used to calculate it is presented below.

Ability to repay the financial debt in the year n = Financial Debts (n)/Ebitda (n)

Our model is created by 6 quadrants and it is illustrated on the Figure 1.

Figure 1. The informative matrix



Source: Own elaboration

Below is presented the characteristic of six quadrants mentioned above:

- 1[st] quadrant – star companies, where average annual growth is higher than 5%, average profitability greater than 7% and average financial debt less than 5;
- 1[st] quadrant – excellent companies, where average annual growth is lower than 5%, average

profitability greater than 7% and average financial debt lower than 5;

- 2nd quadrant – mature companies, where average profitability is below 7% and average financial debt is below 5;
- 3rd quadrant – companies at the beginning of declining, where average profitability is below 7% and average financial debt is between 5 and 10;
- 4th quadrant – companies in development stage, where average profitability is greater than 7% and average financial debt is between 5 and 10;
- 5th quadrant – companies in crisis, where average profitability is below 7% and average financial debt is greater than 10;
- 6th quadrant – companies in reorganization, where average profitability is above 7% and average financial debt is higher than 10.

A horizontal axis of our informative matrix represents the financial debt ratio, the vertical – profitability. Within each quadrant appears graphically a bubble illustrating the growth. To identify the position of the bubble in the situation, when the companies' average growth is negative, we assumed it is equal to 0.20%

B) Application of the informative matrix to the sample of Italian companies

The Italian companies were classified in the informative matrix. The classification took place in two different moments.

Regarding to the first moment, the following method was adopted;

- calculation of the indicators previously illustrated (Ebitda/Production value and Financial Debts/Ebitda) with reference to year 2011;
- collocation of the sample's companies in one of the matrix quadrants. The classification took place by comparison the indicators' values for each company with the values delineating by the matrix quadrants.
- Regarding to the second moment, the following method was adopted:
- calculation of the indicators previously illustrated (Ebitda/Production value and Financial Debts/Ebitda) with reference to year 2013.
- collocation of the sample's companies in one of the matrix quadrants. The classification took place by comparison the indicators' values for each company with the values delineating by the matrix quadrants.

The calculation of CAGR was made, in both cases with reference to the years 2011 and 2013.

C) Evolution of the companies' position in the informative matrix in a three-year period

The aim of the examination of the companies' location in the informative matrix in the years 2011 and 2013 was to identify the evolution and involution processes followed by the same companies during the three-year period considered.

In particular, 2011 has been considered as the initial year of the survey and the 2013 as the conclusive year. Additionally, it was observed that if in the year 2013 the company has changed the quadrant to which has belonged in 2011, or if has remained in the same quadrant, it maintained the same levels of profitability and financial indebtedness that has recorded during the year 2011. For example, if the company A in 2011 has belonged to the second quadrant (with profitability less than 7% and financial indebtedness less than 5) and in 2013 has belonged to the first quadrant (with profitability more than 7% and financial indebtedness less than 5), this means, that during the three-year period 2011-2013, it has recorded an evolution process by improving its profitability and maintaining the same financial indebtedness ratio.

This analysis on the companies' movement in the informative matrix was carried out for each quadrant, as it is described below.

4. FINDINGS

Once the analysed companies have been placed in the informative matrix, the evolution of their position in the same matrix during the three year period 2011-2013 was examined (Table 3). The findings are presented below and detailed for each quadrant.

Table 3. Collocation in the years 2011 and 2013

Categories of companies in the informative matrix	*2011*		*2013*	
	No.	%	No.	%
Star and Excellent Companies (1st quadrant)	12,300	30%	12,043	29%
Mature companies (2nd quadrant)	11,596	28%	11,720	28%
Companies at the beginning of decline (3rd quadrant)	5,973	14%	5,829	14%
Companies in development (4st quadrant)	2,148	5%	1,973	5%
Companies in crisis (5st quadrant)	5,288	13%	4,961	12%
Companies in reorganization (6st quadrant)	900	2%	800	2%
Negative Ebitda	3,139	8%	4,018	10%
Total	**41,344**	100%	**41.344**	100%

Source: Own elaboration.

Compared to 2011, in the year 2013 the percentage of the companies of the first and the fifth quadrant is declined, but there is observed an increase of the number of the companies that are not represented in the informative matrix due to a negative Ebitda in 2013.In the other quadrants there were no changes.

In order to understand the dynamic of the companies' movement within the quadrants of our informative matrix, for each quadrant the analysis has been conducted.

The first quadrant is analysed below (Table 4).

Table 4. Analysis of the first quadrant

Collocation of the companies in 2011	*Collocation of the companies in 2013*	%
Star and Excellent Companies	Star and Excellent Companies	71.50%
	Mature companies	16.40%
	Companies at the beginning of decline	4.04%
	Companies in development	2.87%
	Companies in crisis	2.19%
	Companies in reorganization	0.30%
	Negative Ebitda	2.70%

Source: Own elaboration.

The 71.50% of companies that in 2011 were placed in the first quadrant, in 2013 has maintained the same collocation and in this way the same levels of profitability and financial indebtedness. The remaining 28.50% instead, has moved towards other quadrants. In particular:

- most of these companies (16.40%), in 2013 was placed in the second quadrant, underlying in this way a worsening of profitability (to level below 7%) and maintaining a financial indebtedness ratio lower than 5;
- a further 4.04% of the companies that in 2011 was placed in the first quadrant, has instead moved towards the third quadrant, getting worse both in terms of profitability and in terms of financial solidity (profitability has fallen to level between 0 and 7%, while the financial indebtedness has risen to level between 5 and 10);
- there are 269 companies (2.19), whose situation has deteriorated, and which in 2013 have been relocated in the fifth quadrant, recorded in this way a sharp deterioration in financial indebtedness to values higher than 10, with a drop in profitability to values between 0 and 7%;
- the 2.71% in 2013 has recorded an Ebitda below zero;
- the remaining 3.17% is lastly located in the remaining quadrants, in particular the 2.87% in the fourth and the 0,30% in the sixth quadrant.
- The second quadrant is analysed below (Table 5)

Table 5. Analysis of the second quadrant

Collocation of the companies in 2011	*Collocation of the companies in 2013*	%
Mature companies	Star and Excellent Companies	13.26%
	Mature companies	62.95%
	Companies at the beginning of decline	11.40%
	Companies in development	0.28%
	Companies in crisis	4.73%
	Companies in reorganization	0.04%
	Negative Ebitda	7.34%

Source: Own elaboration

The 62.95% of the 11,596 companies that in 2011 was placed in the second quadrant, in 2013 has maintained the same levels of profitability and financial indebtedness, and therefore were always placed in the second quadrant. In addition, it emerged that:

- the 37.05%from 2011 to 2013 has changed its collocation in the informative matrix;
- a big part of the 37.05% of the companies that have changed their place (1,536 companies, meaning 13.26% of the total number of 11,596 companies) have recorded an increase of their profitability above the level of 7%, maintaining a financial debt ratio below 5, and they have moved in this way to the first quadrant;
- remaining 11.40% of the companies has recorded the deterioration of its situation, and in 2013 has been classified and placed in the informative matrix as the companies at the beginning of decline, keeping the low level of profitability (below 7%) and worsening a financial debt ratio to the level between 5 and 10;
- the 7.34% of the companies has recorded a deterioration of its profitability, reaching in 2013 negative values;
- there are 549 companies (4.73%) that in 2013 have significantly worsened their financial debt ratio, recording the values above 10 and maintaining profitability below 7%;
- a remaining 0.32% of the companies has been finally moved to the fourth and the sixth quadrant.

The third quadrant is analysed below (Table 6).

Table 6. Analysis of the third quadrant

Collocation of the companies in 2011	*Collocation of the companies in 2013*	%
Companies at the beginning of decline	Star and Excellent Companies	9.44%
	Mature companies	21.41%
	Companies at the beginning of decline	38.67%
	Companies in development	4.27%
	Companies in crisis	18.63%
	Companies in reorganization	0.25%
	Negative Ebitda	7.33%

Source: Own elaboration

5,973 companies that in 2011 were placed in the third quadrant are among those who have been moved the most. From the analysis emerges as follows:

- only 826 (38.67%) of them have not changed their difficult situation from 2011, meaning that they have kept a low profitability (below 7%) and medium-high financial debt ratio (between 5 and 10);
- a big part of the analyzed companies (21.41%) that has recorded a change, in 2013 has been placed in the second quadrant, what means that situation of these companies has improved a little bit: they have maintained low level of profitability but they have improved a financial debt ratio (to a level below 5);
- a significant part of 5,973 companies (18.63%) has recorded deterioration of its already difficult situation, placing itself in the fifth quadrant; in particular, they have deteriorated again their ability to repay financial debt to the values above 10, keeping in the same time low profitability;
- the 9.44% of the companies that in 2011 has been placed in the third quadrant, has changed place and in 2013 has been located in the first one, meaning that those companies were able to improve in both terms of profitability (values above 7%) and in terms of financial debt ratio (values below 5);
- the 7.33% of the companies that in 2011 has recorded the financial debt ratio between 5 and 10 and profitability below 7%, in 2013 has worsened again their profitability, recording a negative Ebitda;
- the remaining 4.52% of the 5,973 companies analyzed, in 2013 has been relocated in the fourth (4.27%) and in the sixth quadrant (0.25%).
- The fourth quadrant is analysed below (Table 7).

Table 7. Analysis of the fourth quadrant

Collocation of the companies in 2011	*Collocation of the companies in 2013*	%
Companies in development	Star and Excellent Companies	26.03%
	Mature companies	2.56%
	Companies at the beginning of decline	11.03%
	Companies in development	38.45%
	Companies in crisis	10.99%
	Companies in reorganization	5.96%
	Negative Ebitda	4.98%

Source: Own elaboration

From the analysis it emerged as follows:

- 2,148 companies that in 2011 have been placed in the fourth quadrant are these one, who have changed the most. Only 38.45% of them in 2013 present the same levels in terms of both profitability and in terms of financial debt ratio;
- the 61.55% of the 2,148 companies that in 2013 present different collocation, a big part (26.03%) has been relocated into the first quadrant, improving in terms of indebtedness, what means decrease the values below 5 and keeping the same profitability levels (above 7%);
- the 11.03% of the companies analyzed has worsened their situation, and has been placed in the third quadrant with lower profitability (below 7%) and maintaining a financial debt ratio on the level between 5 and 10;
- in 2013, 236 companies (meaning 10.99%) have been placed in the fifth quadrant, recording deterioration in both terms of profitability (values between 0 and 7%) and in terms of ability to repay financial debt (values greater than 10);
- further 5.96% of the companies, in 2013 has recorded worse indebtedness (values greater than 10) but has kept high profitability (values greater than 7%), placing itself in the sixth quadrant;
- the remaining 162 companies (7.54%) in 2013 have been placed in the second quadrant (2.56%) and have recorded a negative Ebitda (4.98%).

The fifth quadrant is analyzed below (Table 8).

Table 8. Analysis of the fifth quadrant

Collocation of the companies in 2011	*Collocation of the companies in 2013*	%
Companies in crisis	Star and Excellent Companies	5.05%
	Mature companies	9.15%
	Companies at the beginning of decline	22.02%
	Companies in development	5.07%
	Companies in crisis	40.97%
	Companies in reorganization	2.63%
	Negative Ebitda	15.11%

Source: Own elaboration

5,288 companies that in 2011 have been placed in the fifth quadrant, valuated as worse one because of high profitability (values between 0 and 7%) and high financial debt ratio (values greater than 10), in 2013 were able – in the most cases – to change their place in the informative matrix. Only 40.97% of them in 2013 has presented the same levels of profitability and of financial debt ratio. In particular, from the analysis it emerged that:

- a significant part of the companies (22.02%), which in 2013 has changed their position in the informative matrix and has been placed in the third quadrant, improving a little bit financial debt ratio to level between 5 and 10, maintaining however the profitability below 7%
- a big part of 5,288 companies analyzed (meaning 15.11%) in 2013, in comparison to 2011, has worsened their profitability and recorded a negative Ebitda;
- in 2013 the 9.15% of the companies was able to improve their indebtedness (below 5) maintaining in the same time a low profitability (below 7%) and has been placed in the second quadrant;

- it is very important to highlight that 267 of 5,288 Italian companies analyzed (5.05%) were able to move within 3 years from the fifth quadrant, evaluated as the worst one, to the first and the best one, thanks to increased profitability to values greater than 7% and decreased financial debt below 5;
- the remaining 7.70% of the companies, in 2013 has been relocated in the fourth quadrant (5.07%) and in the sixth quadrant (2.63%).

The sixth quadrant is analyzed below (Table 9).

Table 9. Analysis of the sixth quadrant

Collocation of the companies in 2011	*Collocation of the companies in 2013*	%
Companies in reorganization	Star and Excellent Companies	7.44%
	Mature companies	0.89%
	Companies at the beginning of decline	1.56%
	Companies in development	18.22%
	Companies in crisis	17.11%
	Companies in reorganization	46.56%
	Negative Ebitda	8.22%

Source: Own elaboration

The 46.56% of 900 companies that in 2011 were placed in the sixth quadrant, in 2013 has kept the same level of profitability (above 7%) and of financial debt (values greater than 10). In particular, it emerged that:

- 481 companies that in 2013 have changed their position in the informative matrix (53.44%) in the most cases (18.22%) have been placed in the fourth quadrant, recording better indebtedness (values between 5 and 10) and keeping high profitability (values greater than 7%);
- the 25.33% of 900 companies analyzed has deteriorated their situation: the 8.22% has registered in 2013 a negative Ebitda and the 17.11% has kept the same high financial debt ratio and reduced its profitability, and as a consequence has been placed in the fifth quadrant;
- in the three-year period of analysis, 67 companies (7.44%) have been relocated instead in the first quadrant instead, what means that they were able to keep high profitability (values above 7%) and to improve their ability to repay the financial debt, decreasing it to values below 5;
- the remaining 2.44% of 900 companies analyzed, in 2013 has been placed in the third (1.56%) and in the second quadrant (0.89).

5. DISCUSSION

Observing the results, it emerged that the quadrant characterized by the best stability is the first one (Star and Excellent Companies), while those the less stable are the third (Companies at the beginning of decline) and the fourth one (Companies in development).

The dynamic of the second quadrant (Mature Companies) leads to the following conclusions. In the situation when the company with a low profitability and a low financial debt tends to improve its profitability, it therefore has a possibility to be placed in the quadrant which is represented by a Star and Excellent Companies. On the other hand, decrease of profitability means a deterioration of the financial debt/Ebitda ratio and, in this way, the replacement to the quadrants characterized by medium-high indebtedness is high. There were observed a limited cases where the companies that were moving in the fourth (Companies in development) and the sixth quadrant (Companies in crisis), have been characterized by high profitability and medium-high or high financial debt level.

The behavior of the companies classified in the third quadrant (Companies in crisis) is different than the one assumed for the companies in the second quadrant (Mature companies). The movement from the quadrant, in which they were placed at the beginning is assigned above all because of decrease or increase of financial debt. Indeed, significant part of the companies are placed in the quadrant 2 and 5, characterized by low profitability and financial debt respectively low or high.

The behavior of the companies classified in the fourth quadrant (Companies in development) provokes the following discussion. A company classified as the company in development has a real possibility to improve its solidity: in the case when a company continues to guarantee a high profitability, it can be located as a Star or Excellent Company (the first quadrant); on the other hand, probable increase of its financial debt ratio leads to placement in the third quadrant (Company in decline) or in the fifth quadrant (Companies in crisis).

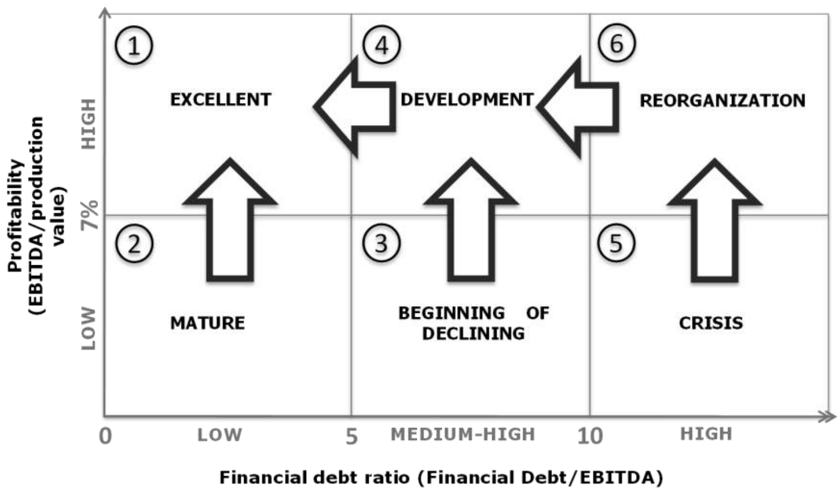
The behavior of the companies classified in the fifth quadrant (Companies in crisis) leads to the following discussion. The relevant part of the companies are relocated into quadrants with a low profitability and an ability of financial debt's repayment lower in comparison to the respective quadrant, indicating reduction of the indebtedness level.

The behavior of the companies placed in the sixth quadrant (Companies in reorganization) leads to the following conclusions. A company in reorganization has a possibility to migrate to the fourth quadrant (Companies in development), under condition that will keep a high profitability; alternatively if the company's profitability will decrease, it will be placed in the fifth quadrant (Companies in crisis).

After discussing the paths followed by Italian companies within our informative matrix, and according to *RQ*, it emerged the evolution in time of *small and medium-sized enterprises in terms of growth, profitability and ability to repay the financial debt, during the three-years period.*

Consequently, a "virtuous" path is introduced, which should be followed by the companies placed in a different quadrants in order to improve their economic and financial situation (Figure 2).

Figure 2. Evolution paths in the informative matrix



Source: Own elaboration

In particular, it would be advisable to wait, as the Mature companies (the second quadrant) and those in development (the fourth quadrant) would improve respectively their profitability and indebtedness, placing itself between Excellent Companies (the first quadrant).

It is also advisable to wait, as the companies at the beginning of decline (the third quadrant) and in crisis (the fifth quadrant) would improve in a short-time period their profitability, collocating itself as the companies in development /fourth quadrant) and companies in reorganization (the sixth quadrant).

The table presented below shows the results of the analysis conducted on the Italian companies (Table 10).

Table 10. Trend of profitability and indebtedness 2011 – 2013

Relevant indicator	*Trend*	*%*
Profitability	Improvement	17%
	Stability	73%
	Deterioration	10%
Indebtedness	Improvement	15%
	Stability	72%
	Deterioration	13%

Source: Own elaboration

The 73% of the Italian companies analyzed in the three-year period considered is not a subject of any increase/ decrease of profitability that would allow to classify them in another quadrant. The 17% of the companies recorded increase of profitability and the remaining 10% showed its decrease.

The 72% of the sample of the companies operating in Italy, during the three-year period considered has not recorded any variation of the values in terms of financial debt, what would permit to place them in 2013 in a different quadrant. The 15% instead has recorded an improvement of indebtedness, while 13% has noticed its deterioration.

This virtual path permits the creation of information for management, owners and stakeholders, which represent a key role into the company's business (Nicotra, Romano and Del Giudice, 2014; Hansen, Mors and Lovas, 2005), and their decision making process impacts on the company's opportunities. In particular, the proposed model could contribute to setting up a Knowledge management strategies in the identification of those decisions who can help and those who can hinder the implementation of the company business (Del Giudice et al., 2013).

The model creates several types of knowledge about the company's state of health, favouring the management and owners in a conscious decision making process (Culasso, 2009 and 2012; Giacosa, 2012b). In addition, the model creates such information useful for stakeholders, allowing them to reach a positive or negative consensus on the company's activity, which impacts on their availability when granting new resources to the company (Giacosa, 2012a; Reilly and Di Angelo, 1990; Rolland, 2004; Shannon and Weaver, 1971).

6. CONCLUSIONS, IMPLICATIONS AND LIMITATIONS

The use of the framework has allowed to analyze the evolution of the company's situation in time, in terms of different criteria (growth, profitability, and capacity of financial debt repayment), during the three years considered.

In three-year period, it was observed a decrease of the companies classified as Star and Excellent Companies (the first quadrant) and the Companies in Crisis (the fifth quadrant), while the companies that have no representation in the information matrix (negative EBITDA) have increased instead. On the contrary, the companies placed in the other quadrants (Mature companies of the 2nd quadrant; companies at the beginning of decline of the 3rd quadrant, companies in development of the 4th quadrant) have not recorded any changes..

Therefore, the following final considerations should be stated.

The position of Star and Excellent Companies (characterized by solid conditions in terms of growth, profitability and capacity of financial debt's repayment) inserted in the first quadrant, tend to be unchanged (in 71.50% of cases). Only the 16.40% of them becomes a mature company.

The mature companies (placed in the second quadrant) tend to maintain their position (in 62.95% of cases). Only the 13.25% becomes a star or excellent company, and the 11.40% becomes a company at the beginning of decline.

Companies less stable but not in crisis (classified in the third and the fourth quadrant) are characterized by greater movement within the informative matrix, in other words, by a greater change of their situation. Indeed, it is considered that the third and the fourth quadrant represent an intermediate situation of the companies in the short term period.

In particular, only 38.67% of the companies at the beginning of decline (the third quadrant) remains like that. On the contrary, the 21.41% becomes a mature company (the second quadrant); the 18.63% becomes a company in crisis (the fifth quadrant). Only 9.43% of them improves their situation and becomes a Star and Excellent company.

With reference to the companies in development (the fourth quadrant), only 38.45% remains classified like that. In contrast, 26.02% improves its position by becoming a Star and Excellent Company (the first quadrant), the 11.3% becomes a company at the beginning of decline (the third quadrant) and 10.99% goes into crisis (the fifth quadrant).

The allocation of the company in one of the two quadrants (the 3rd and the 4th quadrant) should be for a company an incentive for adopting a series of measures to reduce debt or increase the profitability of its business. Then, depending on the timing of intervention and effectiveness of the measures undertaken, the company would be able to improve its situation (migrating towards the quadrants considered as the best one, meaning the first and the second quadrant) or towards quadrants typical for the companies in crisis (the fifth quadrant) and in reorganization (the sixth quadrant).

The fifth quadrant defines the companies in crisis. The trend shows that a big part of the companies in crisis remains within the fifth quadrant (40.97%) and the situation of an important part of the companies deteriorates again, resulting as a company with a negative EBITDA (15.11%). Only 22.2% of the companies goes into decline, and 5.5% improves its position becoming star and excellent companies.

The evolution of the companies placed in the sixth quadrant (companies in reorganization) shows, that the reorganization policies adopted by the company are not always effective. Indeed, 17% of them, after two years, are classified as the companies in crisis, because of worsening the profitability, while situation of the 22.8% has deteriorated as they have obtained a negative EBITDA. The 46.56% keeps the status of a company in reorganization and only the 18,22% becomes a company in development. A modest 7,44% becomes a star and excellent company.

Overall, during the period 2011-2013, it increased the number of companies, whose core business has not generated resources necessary to repay the debt.

The research is characterized by theoretical and practical implications. Theoretical implications are linked to the contribution to the scientific debate for a series of reasons:

- the research provides a model of virtuous paths that companies must follow to improve their economic and financial situation;
- therefore, the model permits to evaluate the company's situation and verifies its evolution over time, stimulating a series of corrective actions to improve abovementioned situation;
- in this way it is possible to prevent the crisis situation, which is so common nowadays. Indeed, the theme of phenomenon of the crisis has become extremely topical due to the current environment in which the companies operate (Bresciani and Oliveira, 2007), characterized by an increasing number of companies in crisis. In addition, the speed of changing the status from the decline to the crisis has led the experts to think of about the phenomenon of crisis in deepened way;
- in addition, the crisis is often characterized by a certain gravity, which can compromise on the survival of the company; as the last, the decision-making process on actions to be undertaken in a crisis situation must take place in the conditions of urgency;
- concluding, the companies could commit themselves to undertake a path toward virtuous positions, in terms of economic and financial situation. To this end, the research illustrates the most probable paths undertaken by the companies that has once determined its current condition. In addition, the research provides to the individual company a useful tool to understand the appearance of the situations which require corrective actions (the third quadrant) and reorganization (the fifth quadrant).
- Practical implications are referred to the companies (in particular the management and the owners) and to the stakeholders:
- the created model can support management and/or owners both in making an early diagnosis of the business situation before the crisis will be fully manifested, and in the establishment of timely actions appropriate to real business conditions in order to facilitate the improvement of the company's condition;
- with reference to stakeholders, the model permits them to know in advance the conditions of the company: for instance the funders, the company's suppliers and employees, as they are involved in the company's results. These information help them in a conscious decision making process according the evaluation of the company. In particular, the proposed model allows them to reach a positive or negative consensus on the company's business, which impacts on the availability of stakeholders when granting new resources to the company;
- for both the management and/or owners, on

one side, and the stakeholders, on the other, the presented research permits to analyses evolution of the company's situation in time, in terms of different criteria (growth, profitability, and capacity of financial debt's repayment). Therefore, the company can understand its position and, at the same time, be encouraged to adopt a series of measures to improve its situation in terms of growth, profitability and capacity of financial debt's repayment.

During conducting the present research some limitations were assumed, however they do not have significant impact on the conclusions:

- in order to assess the company's economic and financial condition, three following indicators were used (growth, profitability and ability of repaying financial debt, because they are significantly correlated with the company's performance. To represent the peculiarities and certain characteristics for the companies analysed, a system of indicators can be used.
- the model does not take into consideration the qualitative variables (for example, the brand's originality, investment projects, market share), but is based only on the quantitative ones;
- the company's ability to migrate toward different quadrants of the matrix is assessed by considering the company's position in the single year and not by its allocation based on the average values over the three years: in this way the evolution of company's growth is not assessed. In other words, to evaluate changes in terms of growth, it would be necessary to determine the allocation of the company in the matrix quadrants on the basis of average values for the period 2011-2013 and after re-determine the placement of the same companies in the next three years, for example 2012-2014. In this way, it is possible to observe not only the change over time in profitability and debt, but also in the average growth.

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THE RESOURCE PROVISION CAPABILITY OF INDEPENDENT DIRECTORS IN FAMILY-CONTROLLED, PUBLICLY-LISTED COMPANIES IN MALAYSIA

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Abstract

To develop a comprehensive measurement index that captures a wide range of independent director characteristics that collectively reflect their overall resource provision capability in the context of Malaysian publicly-listed companies. A detailed content analysis of independent director-related disclosures in the annual reports of 217 family-controlled companies listed on the Malaysian stock exchange (Bursa Malaysia). Ten distinctive types of 'resource' that independent directors bring to their respective companies were identified. These resources (e.g. government contracts, networks, loans, expertise, etc.) are then utilized to develop a resource provision capability index. The resultant index provides a fair indication of independent directors' contribution to enhancing/sustaining their respective companies' performance. The developed comprehensive resource provision capability index can be used to explore as well identify the specific nature of independent director contribution to their respective firms. This study makes a contribution to the governance literature by elaborating on independent directors' resource provision role that has been generally ignored in "Western" studies. More specifically, not only we are proposing that independent directors' role transcends the classic, Western-inspired monitoring role, we provide evidence of other specific means by which they can contribute to their respective firms and offer a framework to capture all such capability in a concurrent manner.

Keywords: Family-controlled Companies, Corporate Governance, Resource Provision Capability, Independent Directors

1. INTRODUCTION

Corporate governance is becoming increasingly prominent in the past few decades. This is largely due to the widely accepted view that numerous corporate scandals as well as financial crises (e.g. the 1997 Asian financial crisis, 2008 global credit crunch, etc.) are partly caused by serious lapses in governance. These adverse incidences have greatly shaken investor confidence in the global capital markets (Abdul Rahman and Ali, 2006; Che Haat, Abdul Rahman, and Mahenthiran, 2008; Erkens, Hung, and Matos, 2012). As a consequence, sustained corporate governance was triggered across many capital markets worldwide.

One of the primary reform measures instituted by capital market regulators worldwide is the inclusion of independent, non-executive directors onto companies' board of directors so that no group or individual can dominate board decision making (Abdul Rahman and Ali, 2006; Abdullah, 2004). This is because, unlike executive directors, independent directors are less likely to be influenced or controlled by top management. Hence, these directors are seen to be effective monitors of top executives thus providing better protection for shareholders (Dunn and Sainty, 2009; Roy, 2011).

Despite the seemingly persuasive arguments favoring the inclusion of independent directors onto the boards of publicly-listed companies, empirical findings on the effects of board independency on company performance in developing countries is, at best, inconclusive. For instance, while Ibrahim and Samad (2011) showed that independent directors have a positive effect on company performance while Amran and Ahmad (2009) documented a negative relationship. On the other hand, Haniffa and Hudaib (2006) and Che Haat *et al.* (2008) could not find any significant relationship between board independence and performance of publicly-listed companies. A bleaker assessment of such empirical findings is that they are mixed or even downright contradictory.

This study contends that the incoherent findings of previous studies and the continual uncovering of new scandals implicating publicly-listed companies worldwide may be partially caused by the dominance of the agency perspective in academia (Daily, Dalton, and Albert, 2003) and also its subsequent impact on proposed regulatory reform measures (i.e. governance mechanisms built upon Western principles and philosophies). Specifically, the often-trumpeted monitoring role by independent directors may be unsuitable, perhaps even misguided (Arsalidou and Wang, 1999), given that the corporate and institutions environments in East Asian economies such as Malaysia is very different from that of Western countries where such governance mechanisms seem to work fairly well.

Consistent with this, despite the existence of a comprehensive code on corporate governance in Malaysia that relies on independent director monitoring as a core mechanism (Thillainathan, 1999; Tam and Tan, 2007); high-profile scandals and persistent fraudulent practices within Malaysian publicly-listed companies still continue to dominate news headlines on a worryingly frequent basis. Prominent recent examples include Axis Incorporation (providing false report to Bursa Malaysia), Transmile (accounting fraud), SCAN Associates (misappropriation of funds), OilCorp (inadequate transparency and disclosures), Technology Resources Industries (accounting fraud), Megan Media (fictitious transactions), Padiberas (insider trading), Tat Sang (accounting fraud), OCI (missing or destroyed accounting books and records), etc.

From a wider perspective, of late, many governance scholars and also regulators have highlighted the fact that the one-size-fits-all approach to corporate governance is ineffective as the governance mechanisms within each capital market is embedded within its distinctive social, institutional, political and cultural context. Taking this notion of the distinctiveness of capital markets a step further, many academics are now acknowledging that corporate governance is highly path-dependent and simply importing principles/mechanisms from one country to another may likely fail to achieve the intended outcomes (Aguilera and Jackson, 2003, 2010; Pahlevan Sharif, Yeoh, and Khong, 2015; Bota-Avrama, 2013; Fligstein and Choo, 2005; Matoussi and Jardak, 2012).

Similarly, the primary role of independent directors can only be truly understood when an in-depth understanding of the corresponding corporate, political and institutional environments as well as its evolution is developed (Bammens, Voordeckers, and Gils, 2011; Ekanayake, 2004; Essen, Oosterhout, and Carney, 2012; Pahlevan Sharif and Yeoh, 2014). In this regard, this paper has opted to focus specifically on the Malaysian capital market.

In terms of underlying theory, this study adopts the resource dependence perspective in order to develop new insights into the roles played by this select group of individuals (i.e. independent directors). This is because a resource-based view is deemed more suitable in taking into account the influences of contextual and institutional environment on the actual workings of adopted governance mechanisms in a particular country (Cuevas-Rodríguez, Gomez-Mejia, and Wiseman, 2012; Hillman, Withers, and Collins, 2009; Pahlevan Sharif and Yeoh, 2014). The crux of our argument is that independent directors, notwithstanding or beyond their intended monitoring role, contribute to the overall success of their respective firms in other ways. In effect, our study intends to explore independent directors' resource provision role that has been generally ignored in "Western" studies (Hillman and Dalziel, 2003). The aim is to develop a comprehensive measurement index that captures a wide range of independent directors' characteristics that collectively reflect their overall resource provision capability in the Malaysian context.

The rest of the paper is structured as follows. The next section outlines the various institutions and cultural norms that fundamentally influence the supposed and also actual role(s) played by independent directors within the Malaysian corporate governance system, particularly within family-controlled companies. This is followed by an elaboration of Malaysia's political evolution, apparatus and system in terms of how they too greatly affected the aforementioned role of independent directors. The final section of the literature review expands on the resource dependence perspective that acts as the alternative lens by which we make sense of the said role (i.e. that of resource provision capability). Then, this study moves on to outline the methodology adopted and this is followed by corresponding empirical findings, discussion and conclusions.

2. LITERATURE REVIEW

2.1. Institutions and Cultural Norms

Recent empirical research have shown that corporate governance practices in a particular country/capital market reflects that jurisdiction's prevailing institutional norms and also embedded in society's cultural underpinnings (Li and Harrison, 2008). This stream of literature suggests that the traditional "one-size-fits-all" approach to enhancing governance standards is not appropriate (Jogulu, 2010). Therefore, in order to set the paper in the appropriate context, this study will elaborate on a particular political, historical and institutional environment (i.e. Malaysia) where a distinctive set of corporate governance mechanisms are in place.

As the Malaysian capital market has been chosen to provide the institutional context for this paper, this section begins with the contention that Malaysian political and corporate history and culture have a remarkable effect on governance practices and directors' behavior in Malaysian publicly-listed companies (Hashim, 2012). In this regard, past empirical studies have shown that Malaysians are characterized by a high collectivist tendency and as well as considerably high power distance (Hofstede, 1997; Kennedy, 2002; Manan, 1999). In addition, there is much cultural emphasis on (i) status inequality, (ii) the use of titles, (iii) adherence to pre-set protocols and (v) the importance of maintaining connections/ relationships through both compromise and consensus (Jogulu, 2010; Kennedy, 2002).

The aforementioned high power distance culture leads to autocratic leadership where leaders are considered as 'wise elders' who are the unchallenged decision makers (Hofstede and Hofstede, 2005; Jogulu and Ferkins, 2012). On the other hand, the strong collectivist inclination of Malaysians results in the avoidance of conflicts, direct debates, aggressive mannerisms and displays of anger (Jogulu, 2010; Kennedy, 2002; Lo, Ramayah, Min, and Songan, 2010; Tajaddini and Mujtaba, 2009). The main objective of communication is to develop and maintain good relationships and trust rather than information exchange per so (Kennedy, 2002; Tajaddini and Mujtaba, 2009). Interestingly, these characteristics are in direct contrast to countries like the US and the UK.

Considering the cultural tendencies exhibited by Malaysians within a corporate setting, independent directors who are tasked to question and challenge managerial decisions (as envisioned by established CG codes/guidelines that are based on Western governance values and principles) may actually be disinclined to do so in reality. This is because frequent questioning of the CEO or chair, even if independent directors are being given the freedom to do so, is actually against Malaysian cultural norms. Similarly, agency theory predictions may prove to be misguided or even downright unrealistic. Put simply, independent directors may not undertake their monitoring role effectively.

The various conflicts between cultural norms and governance requirements arguably manifest themselves most significantly in family-controlled publicly-listed companies based in non-Western developing economies such as Malaysia. This is because such organizations are often viewed as an expanded "family unit" with the organization head as the parent and employees as children. Subordinates appreciate the leaders' authority and interpret it as a form of protection which is a reward to their commitment familial harmony and loyalty (Jogulu, 2010; Kennedy, 2002). Hence, in practice, independent directors may allow family leaders/top management to have largely unrestrained decision-making powers.

Even though family-controlled companies are compelled to ensure that a certain minimum number/percentage of independent directors must be present in their respective company boards because it is a requirement stipulated within the Malaysian Code on CG, this study argues that the presence of this select group of individuals actually serves the purposes of these families rather well. This is because most of these families' wealth is tied to such entities and thus they strive to ensure that decision-making powers (Tsui-Auch, 2004; Young, Ahlstrom, Bruton, and Chan, 2001), top management posts as well as broad oversight (Essen *et al.*, 2012) largely remain in the hands of family members. Even so, this closely-knit network limits the ability of such companies to secure certain valuable external resources. In this regard, the use of independent directors is deemed to be a relatively low-risk means to expand the closely-knit core network of family members/owners with the wider corporate environment while, at the same time, preserving the overall degree of control exerted by the family owners. Basically, this paper posits that independent directors are chosen on a basis that is altogether distinct from the ability to monitor executive actions, that of the securing/provision of specific resources that these companies lack or prizes.

In summary, one of the key roles played by independent directors in family-controlled Malaysian publicly-listed companies is in providing access to resources, contacts and contracts that the company needs for enhancing and also sustaining financial performance (Haniffa and Hudaib, 2006; Hillman and Dalziel, 2003; Hillman *et al.*, 2009; Ibrahim and Samad, 2011; Pfeffer and Salancik, 1978). The importance of resource provision role and accessing to scarce resources becomes more critical in countries with very high involvement of the government in the business sector such as Malaysia.

2.2. Political Environment

Apart from the institutions and cultural norms covered in the earlier section of the paper, the role played by independent directors is also a direct consequence of Malaysia's distinct political evolution, apparatus and system. In essence, in the past few decades, Malaysian politics have become so intertwined with the corporate and business sectors that the very boundaries of these spheres of activity have become blurred. Within this enmeshed system of politics and business, the role of independent directors has also evolved.

First, in order to gain an in-depth appreciation of the various factors leading to the blurring of boundaries between politics and business in Malaysia, this paper sets the appropriate context by charting the political evolution of the country from its pre-independence era. The Malaysian population is made up of three major ethnic groups including Malays, Chinese, and Indians who represent 60%, 23%, and 7% of the population respectively (Demographic Statistics Division, 2011).

Historically, largely due to the 'divide and conquer' strategy by British colonialism, while Malays were restricted to the villages being fishermen, farmers, and civil servants, the Chinese mostly involved in mining, industry, and business in urban areas, and the Indians were employed in plantation estates (Crouch, 1996; Verma, 2002; Yeoh, 2010). The agreement between major ethnic groups, in the negotiations leading to Malaysia's independence in 1957, is that key posts in the civil services were conferred to the Malays and citizenship was granted to ethnic Chinese and Indians (Rahman and Salim, 2010). Non-Malays accepted Malay political paramountcy and Malays agreed not to hinder Chinese business and economic interests (Crouch, 1996; Heng, 1997; Verma, 2002).

Over the years, the Chinese who were the more business oriented and entrepreneurial group dominated and controlled the extensive part of the economy and business in Malaysia (Gomez and Jomo, 1999). This increasingly significant economic inequity between the Malays and the Chinese triggered racial riots in 1969 (Jayasankaran and Hiebert, 1997; Searle, 1999).

To alleviate this critical situation and correct economic imbalance, the New Economic Policy (NEP) was launched by the government in 1971. In effect, Malay bumiputera (i.e. "sons of the soil") are given preferential treatment in terms of the granting of licenses, jobs, government contracts, admission to public universities, etc. (Balasubramaniam, 2007). The implementation of the NEP led to significant discrimination in favor of bumiputeras against non-bumiputeras. Although NEP was successful in involving Bumiputera into business and commercial activities, it failed to build an independent bumiputera entrepreneurial class. Most Malay businesspeople remained highly dependent on their political and bureaucratic links in order to access to the government resources and obtain special privileges. On the other hand, ethnic Chinese businessmen were forced to make partnership with the bumiputera to access these resources - in practice many of them became clients/proxies of Malay patron politicians (Crouch, 1996; Verma, 2002).

Over the course of the next few decades since the implementation of the NEP, the involvement of the United Malays National Organization (UMNO), the largest and dominant political party in Malaysia, in business extended to such an extent that few political parties anywhere in the world is more entrenched in a country's economic activities (Searle, 1999). It basically resulted in a complex blurring of political party, state and business interests in the Malaysian corporate sector (Kahn and Loh Kok Wah, 1992). Once again, within such a political and business environment where patronage and access within close-knit elite circles are rife, to expect independent directors to perform a largely arms-length monitoring role within publicly-listed companies in Malaysia seems counter-intuitive at best. Alternatively, those individuals or companies associated with the government can benefit from the state economic sponsorship and access to valuable and vital resources that are in the control of the government.

In summary, for family-controlled publicly-listed companies in Malaysia to (i) satisfy the local stock market's (i.e. Bursa Malaysia) Listing Requirements as well as the Malaysian Code on Corporate Governance on the recommended proportions of independent directors, and (ii) gain access to valuable external resources such as government contracts, networks, projects, licenses, loans, specialized skills and expertise, etc.; independent directors are appointed largely based on such provision capabilities (Pahlevan Sharif, Yeoh, and Khong, 2014). This perspective is highly compatible with the supposed trends arising from the earlier examination institutional and cultural norms. Most importantly, this paper posits that this country-specific context in understanding the actual role(s) of independent directors is highly complementary with the focus and also predictions of the resource dependence perspective. The following section, therefore, elaborates on the resource dependence perspective.

2.3. Resource Dependence Perspective

Resource dependence perspective suggests that companies act to reduce environmental dependency and uncertainty by controlling the sources of such dependencies (Bryant and Davis, 2012; Hillman *et al.*, 2009; Pfeffer and Salancik, 1978; Ulrich and Barney, 1984). One of the channels by which organizational uncertainty is reduced is through strategic development of social interactions, networks and linkages. Put simply, when companies face uncertainty, they develop their linkages with elements within their surrounding external environment to access to needed resources which stabilize consequences and interdependent relationships as well as reduce their environmental dependency (Pfeffer, 1972a; Pfeffer and Salancik, 1978).

In relation to the arguments above, the board of directors is often regarded as the most flexible and easiest form of inter-organization linkage that companies use to interact with the environmental elements through network development and stabilizing coordination (Hillman, Shropshire, and Cannella, 2007). In fact, it views primary characteristics of the board of directors as "rational organizational responses to the conditions of the external environment" (Pfeffer, 1972a). More specifically, all appointments to the board are assumed to be made based on the kinds of distinctive resources that their respective companies lack and/or values. In this sense, board directors are seen to be resource providers and important links to external networks (Hillman, Cannella, and Paetzold, 2000; Hillman and Dalziel, 2003; Hillman *et al.*, 2009; Marlin and Geiger, 2012; Pahlevan Sharif and Yeoh, 2014; Peng, 2004; Zahra and Pearce, 1989).

The use of social coordination as a primary means of managing interdependence with sources of uncertainty also stems from certain impracticalities and/or complications potentially arising from alternative mechanisms. For example, attempts at controlling dependencies through mergers and acquisitions such as (i) merging with the government, (ii) taking over large companies and (iii) acquiring banks, is not always possible. Hence, appointing certain individuals on the board of directors, especially as independent and/or non-executive director(s) seems to be a viable, low-risk and easily implementable measure. More importantly, publicly-listed companies, by appointing representatives from dependency sources (e.g. government, banks and financial institutions, competitors, large market players, and other important stakeholders) on their respective boards, naturally facilitate access to required resources (Daily and Schwenk, 1996; Hambrick and D'Aveni, 1992).

As mentioned earlier, the utilization of independent directors for the said purposes are especially appealing for family-controlled, publicly-listed companies as these appointed individuals do not dilute their control over the companies, does not intrude the day-to-day operations of the company and a relatively easy means to acquire valuable skills, expertise and resources (i.e. access to key external relationships, securing of contracts, etc.). This is because independent directors are assumed to have significant networks that extend beyond inside directors' closely-knit circles and this is crucial in accessing new resources, networks, connections and channels.

The resource dependence perspective places more emphasis on independent directors' collective resource provision capability (i.e. the types of distinctive resources that they can secure) rather than the number of independent directors appointed per se (Boyd, 1990; Marlin and Geiger, 2012; Pahlevan Sharif and Yeoh, 2014; Peng, 2004; Pfeffer, 1972a). In essence, resources are defined as "anything that could be thought of as a strength or weakness of a given firm" (Wernerfelt, 1984, p. 172).

Considering the various arguments above, this study posits that an exploration of disclosures relating to independent directors made within the annual reports of family-controlled, publicly-listed companies in Malaysia is essential. Such an exercise would allow us to identify actual natures and also types of distinctive resources (i.e. expertise, experience, networks, links, etc.) that they are providing to these companies. On the other hand, this would also give a good indication of the kinds of resources that companies endeavor to acquire through the appointment of these outside directors.

The research methodology is detailed in the following section.

3. RESEARCH METHOD

In order to identify the various types/categories of resources provided by independent directors of family-controlled, publicly-listed companies in Malaysia, a comprehensive review of disclosures relating to them (i.e. director biographies) in the annual reports of selected companies was conducted using content analysis. The annual reports chosen are published throughout 2008. A total of 699 independent directors from 217 randomly-selected family-controlled publicly-listed companies on Malaysian stock exchange, Bursa Malaysia with family ownership concentration greater than 20% make up the main sample. These samples are big enough to represent the population at 95%

confidence level (Krejcie and Morgan, 1970). Table 1 shows sample properties across sectors as well as average of total assets, equity and income of all companies in each family ownership group. As it is shown, most of the samples are from industrial production (38.71%) followed by trade and service (20.28%), and consumer (17.05%).

The average board size for sampled companies is 7.6 directors and the average number of independent directors on their boards is 3.2. A list of distinctive resources provided by independent directors was identified from all disclosures that relate specifically to them. In addition, where possible, each identified theme was linked back to established corporate governance literature in order to better understand their importance when interpreted from the resource dependence perspective. Each resource is assumed to form a component of a particular director's overall resource provision capability. Indeed, by using content analysis, this research identifies independent directors' resource provision capability indicators disclosed in their biographies published in companies' annual reports. Thus, these indicators form a resource provision capability disclosure index which reflects resources that independent directors can provide to their companies.

4. RESULTS AND DISCUSSION

From the detailed content analysis of independent directors' profiles in the sampled annual reports, this study has identified ten (10) distinctive resources that this select group of individuals brings to the publicly-listed companies that they serve. Table 2 shows a summary of the ten resource provision capabilities of independent directors of samples.

Resource Type 1: Level of Education

The detailed content analysis uncovered formal education as a key type of resource provided by independent directors. This is consistent with established governance literature where independent directors with higher education level have higher prestige and more powerful friends and they can connect the company to external "stars" and "boundary spanners" (Finkelstein, 1992). Put simply, prestige power facilitates the absorption of uncertainty from the institutional environment and helps directors manage uncertainties informationally and symbolically (Finkelstein, 1992). In addition, prestige of directors lends legitimacy to their company (D'Aveni, 1990) and to the extent that a company's legitimacy increases, the uncertainty from the environment reduces (Selznick, 1957). Their academic knowledge, expertise and skills also enable them to provide appropriate advice to the board on strategy planning and implementation.

Resource Type 2: Business and Law Education

Besides overall formal education, this study found that companies regard education that is specific to areas within business and law as a highly prized commodity. It is expected that directors with formal education in business and law provide advice and consultation on company operation issues and critically analysing business strategies and plans (Dimov and Shepherd, 2005). Providing advice and counsel to the board is seen as one of the most important independent directors' activities that fall under their resource provision function (Baysinger and Butler, 1985; Hillman, Nicholson, and Shropshire, 2008; Pfeffer and Salancik, 1978). Moreover, companies by appointing independent directors with education in business and law by offering legitimacy to the company facilitate attracting other resource providers such as investors, suppliers, bankers, etc. (Withers, Hillman, and Cannella, 2012).

Resource Type 3: Tenure (Relevant Experience)

The third primary resource that is a common characteristic of independent directors across all sampled companies is directors' tenure. This is because, according to the extant literature, board members' capability to serve on the board is influenced by their knowledge which is a result of their working experience (Kamardin and Haron, 2011). Independent directors with higher tenure have more knowledge about the operation and strategies of the company as well as its needed resources. Hence, the reason for the importance of tenure is that independent board members' tenure is considered as a proxy for their task knowledge, experience, information diversity, power, and task interest which play a critical role in their decision making procedure and affects the company performance (Hambrick and Fukutomi, 1991). In addition, due to the collectivism culture of Malaysians, independent directors with higher tenure have more commitment to the company. Indeed, by increasing independent directors' tenure, they feel more obligations to the company and use their networks and channels in a more merciful manner.

Resource Type 4: Titles

The fourth type of prized resource is formal/conferred titles with all the accompanying benefits that can be derived from these. Indeed, the perception of power and prestige stemming from the acquisition and/or use of official/conferred titles by independent directors serves to lend companies that they are linked to with an aura of legitimacy (D'Aveni, 1990; Finkelstein, 1992). Thus, it is expected that boards with independent directors with higher titles have higher prestige and this is intensified by high power distance culture in Malaysia. It is because Malaysians put value in seniority and titles (Hofstede, 1980). Indeed, independent directors' titles and reputation influence the perception of institutional environment members consists of the government, banks, financial institutions, and other key stakeholders which a company depends on their resources and support. This enhances company's legitimacy which leads to facilitating the company's access to certain needed resources. Moreover, those with higher titles presumably have extensive network linkages and access to key relational resources – i.e. access to powerful friends, contacts, contracts and social networks (Finkelstein, 1992; Jogulu, 2010; Kennedy, 2002).

Table 1. Sample properties across sectors

	Sector												
Family direct and indirect ownership (F.O.)	*Construction*	*Consumer*	*Industrial production*	*IPC*	*Plantation*	*Properties*	*Technology*	*Trade/Service*	*Average board size*	*Average No. of independent directors*	*Average total assets ('000)*	*Average total equity ('000)*	*Average income ('000)*
20% < F.O. < 30%	2	5	17	--	--	5	6	16	7.2	3.2	334,769.3	89,715.2	14,588
	3.92%	9.80%	33.33%	--	--	9.80%	11.76%	31.37%					
30% < F.O. < 40%	4	13	25	1	5	2	2	11	7.7	3.2	1,421,528	211,474	23,187
	6.35%	20.63%	39.68%	1.59%	7.94%	3.17%	3.17%	17.46%					
40% < F.O. < 50%	1	8	14	1	3	5	--	4	7.6	3.1	195,232.3	103,976	14,170
	2.78%	22.22%	38.89%	2.78%	8.33%	13.89%	--	11.11%					
50% < F.O. < 60%	1	7	17	1	1	7	1	10	7.8	3	379,776.5	148,060	13,410
	2.22%	15.56%	37.78%	2.22%	2.22%	15.56%	2.22%	22.22%					
60% < F.O. < 70%	--	3	7		1	3	--	1	8.1	3.7	453,752.1	115,218	13,961
	--	20.00%	46.67%	--	6.67%	20.00%	--	6.67%					
70% < F.O.	--	1	4	--	--	--	--	2	7.3	3.9	119,547.1	64,238.6	3,792.5
	--	14.29%	57.14%	--	--	--	--	28.57%					
All samples	8	37	84	3	10	22	9	44	7.6	3.2	648,288.4	143,655	16,475
	3.69%	17.05%	38.71%	1.38%	4.61%	10.14%	4.15%	20.28%					

Table 2. A summary of resource provision capabilities of independent directors of samples

			Number (and % in each group) of companies disclosed the identified resource type									
Family direct and indirect ownership (F.O.)	*Number of companies (%o of all selected companies)*	*Mean (SD) of % of family-controlled companies;*	*Education level*	*Business and law education*	*Lawyers*	*Accountants*	*Tenure*	*Bankers*	*Government servants and politicians*	*Interlocking directorships*	*Titles*	*Community leaders*
20% < F.O. < 30%	51(23.50%)	25.33%(3.03)	44	45	49	38	46	14	13	13	45	30
			86.27%	88.24%	96.08%	74.51%	90.20%	27.45%	25.49%	25.49%	88.24%	58.82%
30% < F.O. < 40%	63(29.03%)	34.36%(3.11)	54	64	66	43	64	27	20	20	54	38
			80.60%	95.52%	98.51%	64.18%	95.52%	40.30%	29.85%	29.85%	80.60%	56.72%
40% < F.O. < 50%	36(16.59%)	45.40%(2.86)	24	28	31	19	32	13	9	9	27	16
			75.00%	87.50%	96.88%	59.38%	100.00%	40.63%	28.13%	28.13%	84.38%	50.00%
50% < F.O. < 60%	45(20.74%)	54.17%(3.07)	36	42	45	31	43	15	8	9	39	30
			80.00%	93.33%	100.00%	68.89%	95.56%	33.33%	17.78%	20.00%	86.67%	66.67%
60% < F.O. < 70%	15(6.91%)	63.73%(3.32)	12	14	15	12	15	9	4	4	11	9
			80.00%	93.33%	100.00%	80.00%	100.00%	60.00%	26.67%	26.67%	73.33%	60.00%
70% < F.O.	7(3.23%)	74.95%(4.59)	4	7	7	7	7	2	1	1	7	6
			57.14%	100.00%	100.00%	100.00%	100.00%	28.57%	14.29%	14.29%	100.00%	85.71%

Government servants and politicians: reporting independent directors' connections with the government and/or ruling political parties. Interlocking directorships: reporting independent directors' current and former positions in other large companies. Title: disclosing independent directors' titles (e.g. royalty family, federal titles, state titles). Bankers: reporting independent directors' connections to the bankers or insurance representatives. Lawyers: independent directors who are lawyers. Accountants: accountants as independent directors on the board. Tenure: the year that independent directors joined the company.

Resource Type 5: Interlocking Directorships

An interlocking directorship occurs "when one person affiliated with one organization sits on the board of directors of another organization" (Mizruchi, 1996, p. 271). From the empirical scrutiny of sampled annual reports, this is yet another important resource that most companies look for in their independent directors. Companies, by appointing representatives from important external players to the board, facilitate access to external resources, develop inter-organization commitment, and establish legitimacy. Independent directors with many interlocking directorships can perform an important function in bringing knowledge about competition and industry and also they can help in strategy development and decision making (Peng, Au, and Wang, 2001). Moreover, they have network and connections in other companies that provide channels to them to provide required resources to the company (Hillman *et al.*, 2000) which enhance companies' profitability (Burt, 1983; Mizruchi, 1996; Pennings, 1980). This is because interlocking directorship, through developing friendships and information exchange, can be seen as a means to "co-opt" sources of environmental uncertainty, stabilize coordination and reduce inter-organizational interdependence (Boyd, 1990; Mizruchi and Stearns, 1988; Pfeffer, 1972b; Pfeffer and Salancik, 1978).

Furthermore, appointing independent directors with interlocking directorships with ties to other large companies can bring prestige and reputation is interpreted as a positive signal by other important market stakeholders and institutional environment such as the government, banks, investor, suppliers, buyers, etc. This facilitates company's access to distinctive resources that other stakeholders can provide (Mizruchi, 1996; Peng *et al.*, 2001).

Resource Type 6: Government Servants and Politicians

This research findings show that independent directors who are currently/formerly government servants and/or politicians are regarded as highly valuable to sampled companies. More specifically, the prized resource provided by these individuals is in facilitating access to government contracts, soft loans, preferential treatment and regulatory protection, etc. This finding is consistent with the earlier contention that the very high involvement of the Malaysian government as well as political parties in business has created a "nexus of business, politics and the state" (McVey, 1992, p. 9). Consequently, rent seeking corporate activities became an integral part of the corporate landscape and the boundaries between politics, state, and business in Malaysian political economy have become more and more blurred (Gomez and Jomo, 1999; Johnson and Mitton, 2003; Searle, 1999; White, 2004).

In line with the findings above, the extant literature in the resource dependence tradition has also highlighted the importance of linkages with the government and also strong political ties especially for companies operating in developing economies (Hillman, 2005; Pfeffer and Salancik, 1978; Li, Poppo, and Zhou , 2008). Within the context of the Malaysian political economy, the having close relationship with the government and the ruling political parties is a means by which companies manage their respective external dependencies (Essen et al., 2012; Li and Harrison, 2008; Pahlevan Sharif and Yeoh, 2014; Yoshihara, 1988). More generally, this resource type is typically valued in most developing countries around the world as companies often reap significant benefits arising from close relationships with government leaders, officials, and/or influential politicians. While governments often provide some forms of protection to their local companies from foreign competition, the resource dependence perspective focuses more on these parties being key sources for acquiring exclusive licenses, capital, major projects, and/or subsidies (Gomez and Jomo, 1999) Guo, Xu and Jacobs, 2012).

Resource Type 7: Bankers

The analysis of annual report disclosures also found that independent directors who are bankers and/or possess banking-related experience/expertise are regarded as an important resource to the sampled companies, presumably to facilitate access to scarce capital. When the general economic conditions are favorable and when capital is plentiful and cheap, independent directors with a banking background could provide valuable input (i.e. advice and counsel) in (i) assessing the financial viability and feasibility of potential projects, and (ii) the use of various financial instruments/options that are available to these companies. Furthermore, in times of economic uncertainty or crises when there is stiff competition for limited capital and/or when the company is not performing well, then banks and financial institutions will be in a relatively stronger bargaining position with respect to these companies. In response, these companies would presumably appoint bankers onto the board to reduce uncertainties in raising financial capital (Mizruchi and Stearns, 1988). Indeed, Pfeffer (1972a) showed that as larger companies have higher need for financial capital, they increase their board size by appointing representatives from financial institutions.

Resource Type 8: Lawyers

The next significant finding is that legal expertise is regarded as a valuable independent director trait. Lawyers are an important source of advice on legal rights and regulations and improved companies' prestige and legitimacy in the institutional environment (Hillman et al., 2000; Mahon and Murray, 1981; Withers et al., 2012). More specifically, lawyers are important to help companies to understand their legal rights and duties as well as guidance to comply with existing/new regulations (Mahon and Murray, 1981). With their extensive experiences of dealing with government as counterparty in administrative or legal proceedings, they offer this sort of distinctive political acumen to the board (Agrawal and Knoeber, 2001). As large companies often attempt to lobby the government to establish policies and regulations that are favorable to their respective businesses, independent directors with strong legal backgrounds play a critical role in companies that are operating in the wider business and political institutional environment (Agrawal and Knoeber, 2001).

Resource Type 9: Accountants (financial experts)

The content analysis exercises uncovered yet another type of valuable resource, that of specific expertise in accounting and finance, which presumably enhances the effectiveness of independent directors in carrying out their board advisory role. While financial experts and accountants are an important source of advice on financial communication strategy for CEOs and top management team, their presence on the board would also facilitate access to new equity and debt financing by reassuring potential investors and/or creditors (Francis, Hasan, and Qiang, 2012; Hillman *et al.*, 2000; Jeanjean and Stolowy, 2009; Kirkpatrick, 2009).

Resource Type 10: Community Leaders (Academic, Clergy, Social, NGOs, etc.)

The final type of valuable resource that independent directors bring to their respective companies is benefits, links and also legitimacy derived from them being community leaders (i.e. academic, clergy, social, etc.). Companies by appointing independent directors with social connections endeavor to endear themselves to these powerful groups in the community and provide communication with other stakeholders beyond suppliers and competitors. These independent directors, by providing non-business perspectives on company's proposed actions and strategies, keep the company away from threats and implementing misguided strategies which may conflict with the interests of community groups and movements (Hillman *et al.*, 2000). Indeed, community leaders are appointed on the company's board to represent the interests of local community, workers, consumer interests, etc. (Baysinger and Zardkoohi, 1986).

From the resource dependence perspective, community leadership is a means to reduce certain environmental uncertainties, especially those that originate from certain sections of society and/or pressure groups. Thus, companies try to manage their external dependency by developing links, relationships, and networks with these environmental components through their independent directors. In addition, the presence of independent directors who are community leaders on the board increases the boards' overall prestige and lends added legitimacy to their respective companies from the standpoint of external key stakeholder groups (Baysinger and Zardkoohi, 1986; D'Aveni, 1990; Finkelstein, 1992; Hillman *et al.*, 2000; Selznick, 1957). Moreover, it is plausible that these prestigious independent directors have powerful friends and rich social networks that would improve companies' access to external resources.

5. CONCLUSION

In conclusion, we provide some evidence which suggest that, even though publicly-listed companies in developing countries such as Malaysia appoint independent directors onto their respective boards as this is a requirement of corporate governance codes/guidelines and stock market listing regulations; the actual choice of who they select is largely based around these directors' resource provision capabilities (Pahlevan Sharif and Yeoh, 2014; Pahlevan Sharif *et al.*, 2014). Furthermore, we contend that such a tendency is exhibited more strongly in family-controlled families as they typically have a relatively small, closely-knit network (Claessens, Djankov, and Lang, 2000) and also depend on a smaller pool of resources (i.e. those that reside within the family). Hence, independent directors are prized not because of their supposed monitoring role but because of their ability to facilitate access to valuable external resources such as government contracts, networks, projects, licenses, loans, specialized skills and expertise, etc. In fact, this resource dependence perspective is especially applicable in economies where there is strong relationship-based business culture and extensive political involvement in business (Gomez and Jomo, 1999; Searle, 1999; Verma, 2002). This sort of institutional environment differentiates countries such as Malaysia from Western countries and is seen to go against agency perspective assumptions (Essen *et al.*, 2012; Mohd Ghazali, 2010). Once again, in family-controlled companies, independent directors are chosen on a basis that of the securing/provision of specific resources that these companies lack or prizes.

Another conclusion reached is that the existing literature lacks a comprehensive resource provision capability index which addresses all possible aspects of directors' capability in providing different resources even though these can be extracted from directors' biographies published in these companies' annual reports. From the detailed content analysis of independent directors' biographies in the sampled annual reports of family-controlled publicly-listed companies, ten distinctive resource provision capability indicators were identified. These disclosed indicators reflect certain resources that independent directors can provide to their company and are categorized into (i) education, (ii) business and law education, (iii) tenure, (iv) titles (iv) interlocking directorships, (v) government servants and politicians, (vi) bankers, (vii) lawyers, (viii) accountants, and (ix) community leaders.

The main limitation of this study is stems from using only the disclosed information in companies' annual reports rather than a more comprehensive search for information relating to independent directors from all publicly available sources. Nevertheless, we argue that our approach is sufficiently robust as most investors tend rely on annual reports or company-generated information (e.g. on the companies' websites) for details relating to their respective directors. More importantly, the index developed by this study can be used in future quantitative research as a construct to explore the overall resource provision capability of independent directors in order to examine its impact on companies' performance and success.

Moreover, future studies can be conducted to identify the preferences of family-controlled companies in terms of their independent directors' resource provision capability. Furthermore, qualitative research through interviewing directors and managers is worthwhile to gather an in-depth understanding of companies' attitude towards independent directors' roles in developing countries and more specifically scrutinize appointment criteria of independent directors in family-controlled companies.

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"CORPORATE ACCOUNTABILITY: MAJOR ACTORS, INNOVATIVE INSTRUMENTS AND PERFORMANCE" Paris, November 24, 2016

Concept of the workshop: During past two decades the world has witnessed the growing importance and visibility of a range of initiatives led by businesses, social organizations and governments that was aimed at pressuring companies to behave in more socially responsible and accountable ways. This is a new development for many parts of the business world. Previously, the state was assumed to lead standard setting and behavioral norms for businesses in relation to most categories of stakeholders. When community organizations and interest groups wanted to change business behavior, they focused on changing the law. From the 1990s the focus changed, reflected in the emergence of new alliances and regimes of influence over business norms, linking together consumers, communities, workers and producers. Nowadays the issue of sustainability and accountability of business entities received a complex form and is continuingly changing. It is important to trace these changes, follow regulatory developments, business practice to identify stable fundamentals in corporate accountability and management practices and distinguish emerging trends that are going to occupy practitioners, regulators and academics minds in nearest future.

General information:

Date: November 24, 2016
Venue: ISTEC, Paris
Organizers: ISTEC Paris, Virtus Interpress, Virtus Global Center for Corporate Governance
Chairs - Remi Jardat, Professor, Director of Research, ISTEC, France - Alexander Kostyuk, Professor, Ukrainian Academy of Banking, Ukraine, Director at Virtus Global Center for Corporate Governance

Key Topics

- corporate social responsibility
- corporate sustainability
- corporate environmental performance
- the role of shareholders, board of directors and management of the company
- the role of stakeholders
- methods to evaluate corporate accountability
- corporate accountability in financial and non-financial companies
- impact of corporate accountability on the public wealth
- etc

Call for Papers Paper submission deadline: September 1, 2016
Notification of authors of accepted papers: October 1, 2016

When submitting papers the authors should declare whether they would like to have their papers considered for publication in Special Issues of "Corporate Ownership and Control", "Journal of Governance and Regulation".

These papers will be subject to a separate reviewing process.
Papers should be submitted to Professor Alexander Kostyuk at alex_kostyuk@virtusinterpress.org and a copy to paris_2017conf@virtusinterpress.org

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