

CORPORATE OWNERSHIP & CONTROL

Postal Address:

Postal Box 136
Sumy 40000
Ukraine

Tel: +380-542-610360
e-mail: info@virtusinterpress.org
www.virtusinterpress.org

Journal Corporate Ownership & Control is published four times a year, in September-November, December-February, March-May and June-August, by Publishing House "Virtus Interpress", Gagarina Str. 9, office 311, Sumy, 40000, Ukraine.

Information for subscribers: New orders requests should be addressed to the Editor by e-mail. See the section "Subscription details".

Back issues: Single issues are available from the Editor. Details, including prices, are available upon request.

Advertising: For details, please, contact the Editor of the journal.

Copyright: All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing of the Publisher.

Corporate Ownership & Control

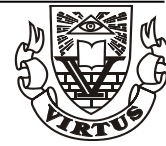
ISSN 1727-9232 (printed version)
1810-0368 (CD version)
1810-3057 (online version)

Virtus Interpress. All rights reserved.

CORPORATE OWNERSHIP & CONTROL

VOLUME 13, ISSUE 4, SUMMER 2016, CONTINUED - 4

CONTENTS



ENTERPRISE CHARACTERISTICS, CAPITAL STRUCTURE AND OPERATIONAL PERFORMANCE: THE CASE OF LISTED ENTERPRISES IN VIETNAM	529
<i>Doan Ngoc Phi Anh</i>	
AUDITORS' VIEW ON ACCEPTABILITY OF CLIENTS' EARNINGS MANAGEMENT PRACTICES	535
<i>Farisha Hamid, Hafiza Aishah Hashim, Zalailah Salleh</i>	
SME OWNERS AND DEBT FINANCING: MAJOR CHALLENGES FOR EMERGING MARKET	542
<i>Jonathan Cameron, Muhammad Hoque</i>	
TECHNOLOGICAL INNOVATIONS PERFORMANCE AND PUBLIC-PRIVATE-PARTNERSHIPS	549
<i>Fanny Saruchera, Maxwell A. Phiri</i>	
GOOD CORPORATE GOVERNANCE AND EARNINGS MANAGEMENT IN INDONESIAN INITIAL PUBLIC OFFERINGS	558
<i>Tatang Ary Gumanti, Ari Sita Nastiti, Ayu Retsi Lestari</i>	
CORPORATE GOVERNANCE IN ISLAMIC BANKS: A COMPARATIVE STUDY OF CONSERVATIVES, MODERATES, AND LIBERAL	566
<i>Sunil Kumar Khandelwal, Khaled Aljifri</i>	
ENVIRONMENTAL MANAGEMENT ACCOUNTING (EMA) IN THE DEVELOPING ECONOMY: A CASE OF THE HOTEL SECTOR	575
<i>Celani John Nyide, Lawrence Mpela Lekhanya</i>	
CORPORATE GOVERNANCE IMPACT ON BANK PERFORMANCE: EVIDENCE FROM EUROPE	583
<i>Salma Belhaj, Cesario Mateus</i>	
REASONS FOR AND IMPLICATIONS OF THE PRESENCE OF INSTITUTIONAL INVESTORS IN THE OWNERSHIP STRUCTURE OF BRAZILIAN COMPANIES	598
<i>Lélis Pedro de Andrade, Aureliano Angel Bressan, Robert Aldo Iquiapaza, Wesley Mendes-Da-Silva</i>	
THE DETERMINANTS OF FIRM VALUE: THE ROLE OF EARNINGS MANAGEMENT AND GOOD CORPORATE GOVERNANC	609
<i>Steph Subanidja, Aiaz Rajasa, Eduardus Suharto, Jalu Dwi Atmanto</i>	
OWNERSHIP STRUCTURE AND FINANCIAL PERFORMANCE OF SMALL FIRMS IN SPAIN	616
<i>Ntounq A. T. Liou, Carlos Ferro Soto, Ben C. Outman</i>	
DETERMINANTS OF PROFITABILITY IN BANKING: AN INTERNATIONAL COMPARATIVE STUDY OF ISLAMIC, CONVENTIONAL AND SOCIALLY RESPONSIBLE BANKS	627
<i>Majed Alharthi</i>	
SMES AND SOCIAL MEDIA OPPORTUNITIES: AN ORGANIZATIONAL OUTLOOK	640
<i>Louise van Scheers</i>	
REVISITING THE CONTRACTUAL EFFECT OF THE COMPANY'S CONSTITUTION IN CORPORATE OPERATIONS	649
<i>Anthony O. Nwafor</i>	
A METHODOLOGICAL CONTRIBUTION TO THE REPRESENTATION OF THE FUNCTION OF LEADERSHIP AND ITS IMPACT ON ORGANIZATIONAL COOPERATION AND COMPANY RESULTS	658
<i>Stefania Zanda</i>	

ENTERPRISE CHARACTERISTICS, CAPITAL STRUCTURE AND OPERATIONAL PERFORMANCE: THE CASE OF LISTED ENTERPRISES IN VIETNAM

Doan Ngoc Phi Anh*

*University of Economics, The University of Danang, 71 Ngu Hanh Son St., Danang, Vietnam

Abstract

This paper examines the relationship between enterprise characteristics, capital structure and operational performance among a sample of 592 companies listed on the Vietnamese stock exchange during the three years 2012-2014. Whilst most previous studies in this area have used multiple regression as the main method of analysis, the paper follows the examples of Titman and Wessels (1988) and Chang *et al.* (2009) and adopts a structural equation modeling (SEM) approach. Specifically, path analysis was employed to analyze simultaneous relationships among the various variables. The results suggest that for listed enterprises in Vietnam, operational performance has a negative effect on both of the measures of capital structure considered, namely long-term debt/total assets ratio (LDR) and short-term debt/total assets ratio (SDR), while the extent of state ownership has a positive effect on LDR and enterprise age has a positive effect on SDR only. The ratio of long-run to total assets affects the two capital structure measures in opposite ways: the effect is positive on LDR and negative on SDR. The evidence was considered to be inconclusive on the question of direction of causality between operational performance and LDR.

Keywords: Capital Structure, Performance, Listed Enterprises, Vietnam

1. INTRODUCTION

During the half-century or so since the introduction of the Modigliani and Miller (1958) theorem, considerable theoretical and empirical research has been conducted into the question of whether a firm's capital structure (leverage) has an impact on its performance, and if so what is the precise nature of this impact. For a small sample of this literature, see Baxter (1967), Jensen and Meckling (1976), Bradley *et al.* (1984), Myers and Majluf (1984), Ross (1988), Stiglitz (1988), Williamson (1988), Harris and Raviv (1991), and Margaritis and Psillaki (2010). The weight of evidence appears to favor the proposition that in a variety of circumstances leverage does affect firm performance.

In recent years research in this area has tended to revolve around a second focal question, namely "what might be the determinants of observed variations in leverage across firms, industries, and economies?". Examples include studies by Meyers and Majluf (1984), Titman and Wessels (1988), Rajan and Zingales (1995), Hall *et al.* (2004), Chang *et al.* (2009), and Margaritis and Psillaki (2010).

A number of authors have extended the above literature, which focused mainly on developed economies, to take account of issues and factors of particular relevance to developing and transition economies. These include Majumdar and Chhibber (1999), Booth *et al.* (2001), Fan *et al.* (2008), Chen *et al.* (2009), de Vries (2010), and others.

Several studies related to this topic have dealt with Vietnam. Of these, San (2002) focused on a

single industry (tourism) in a single locality (Thua Thien Hue Province) whilst Nguyen and Ramachandran (2006) focused on small and medium-sized enterprises (SMEs) only. By contrast, Vu (2003) and Doan (2010) analyzed companies listed on Vietnamese stock market. Although they are far less numerous than unlisted companies (most of the latter are SMEs), listed companies account for a larger share of economic activity while the small business sector produces only about 25% of GDP.

This study represents an effort to update the analysis of Vu (2003) and to complement the coverage of Nguyen and Ramachandran (2006), in that it investigates the determinants of leverage among the companies listed on both the Hanoi and the HCMC stock exchange during the period 2012-2014. In addition, the study also consider an issue which received little attention in the earlier studies, namely the possible effect of leverage on firm performance.

2. RESEARCH QUESTIONS

This study revolves around two main research questions:

1. How do firm characteristics and operational performance affect leverage among listed Vietnamese companies?

There is a sizable international literature regarding the effects on leverage of firm characteristics, such as firm size and/or growth, ownership, asset structure, profitability or

operational performance, business risk, and the likes. In some instances, the evidence accumulated to date is far from conclusive at the international level. It is therefore of interest to investigate the signs and magnitudes of the relevant effects in the Vietnamese context.

It is recognized that firm decisions regarding leverage may differ across categories of debt. Accordingly, the study will distinguish between long-term and short-term debt.

2. Does leverage affect operational performance among listed Vietnamese companies?

It is plausible that a firm's long-term debt level may be largely a result of its strategic or long-range considerations which tend to evolve relatively slowly. If this were to hold in practice, long-term debt would exert at least a contributing influence on the firm's operational performance.

By contrast, it is probably more natural to think of short-term debt as a residual response to, rather than a driver of, operational performance.

3. METHODOLOGY

3.1. Data sources

Data on firm characteristics were obtained from the stockbroker website <http://stoxvn.stox.vn/> for 592 companies listed on the Vietnamese stock exchange over the period 2012-2014. Data were available for the following variables: firm age since establishment to 2014, sale revenue (in billions of Vietnamese dong), before-tax profit, long-term assets, total assets, short-term debt, long-term debt, and ratio of state ownership to equity.

3.2. Data definition and measurement

The main variables are defined and measured as follows.

- Operational performance is measured as: Return on assets (ROA) = Before-tax profit / Total assets

- Long-term assets ratio (LAR) = Long-term assets / Total assets

- Short-term debt ratio (SDR) = Short-term debt / Total assets

- Long-term debt ratio (LDR) = Long-term debt / Total assets

- Firm size is measured as the natural log of total assets

Business risk is proxied by the natural log of the standard deviation of profit over time.

3.3. Methods of analysis

Whilst most previous studies in this area have used multiple regression as the main method of analysis, in this paper we follow the examples of Titman and Wessels (1988) and Chang *et al.* (2009) and adopt a structural equation modeling (SEM) approach. Specifically, path analysis is employed to analyze simultaneous relationships between firm characteristics, operational performance, and debt ratios. In the current context, path analysis offers flexibility and facility in modeling alternative patterns of causation, estimating parameters across a system of simultaneous equations, and selecting models on the basis of overall goodness-of-fit statistics (Hoyle, 1995; Hair *et al.*, 1998; Titman and Wessels, 1988; Chang *et al.*, 2009). The software used is AMOS 20.0, distributed by SPSS.

To test the model fit, a range of goodness-of-fit indices were applied, each of which has been strongly recommended in the recent literature; see for example Schumacker & Lomax (1996), Hu & Bentler (1995, 1999), Byrne (2001), Marsh, Hau & Wen (2004) and Arbuckle (2007). The indices used include:

- the ratio of Chi-square to degrees-of-freedom (*df*),
- Goodness-of-Fit Index (GFI),
- Tucker-Lewis Index (TLI),
- Comparative Fit Index (CFI),
- Root Mean-Square Error of Approximation (RMSEA), and
- PCLOSE.

The conventional rules of thumb are that a model is considered a good fit if chi-square/*df* is less than 2.5; GFI, TLI, CFI are larger than 0.90; RMSEA is smaller than 0.05; and PCLOSE is larger than 0.05.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

Table 1 presents descriptive statistics for the main variables involved in the analysis. Of particular interest is that the mean SDR was 39.53 per cent, and the mean LDR was 11.63 per cent. Corresponding figures reported by Nguyen and Ramachandran (2006) were 42.0 per cent and 1.9 per cent, respectively. (Note that their data were for SMEs only and related to the period 1998-2001, whilst these figures are for medium-sized to large, listed companies, and relate to the period 2012-2014). On average, the state's share of listed companies in our sample was around 24.6 per cent.

Table 1. Descriptive statistics

Variable	Unit	Mean	Standard deviation	Minimum	Maximum
ROA	%	9.5363	7.20928	.1513	46.4512
Long-term assets ratio (LAR)	%	38.2642	20.9384	.8323	87.6748
Short-term debt ratio (SDR)	%	39.5325	19.2715	.3891	82.1664
Long-term debt ratio (LDR)	%	11.6287	14.5802	.0021	69.7646
State ownership ratio (SOR)	%	24.6319	23.5692	.0000	95.8000
Ln(Total assets)	Nat'l logs	7.6228	6.1789	2.8762	31.5839
Ln (Enterprise age)	Nat'l logs	2.8069	.6963	1.1969	4.2061
Business risk (ln(SD(profit)))	Nat'l logs	3.4632	4.2704	-2.6959	21.6417
Sale growth		1.314469	.5635971	.0652	5.6091

Note: The number of observations is 592 for all the above variables

4.2. Simple correlation

Table 2 reports coefficients of simple correlation between the main variables. From the table it can be seen clearly that both LDR and SDR are negatively related to ROA, and that LDR is positively correlated

with the long-term assets ratio but SDR is negatively correlated with the same variable. There is also a remarkably strong and positive association between business risk (measured as Ln_SD_profit) and enterprise size (measured as Ln_assets).

Table 2. Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ROA (1)	1								
LongAssetRatio (2)	-.090*	1							
SDR (3)	-.295**	-.477**	1						
LDR (4)	-.311**	.548**	-.263**	1					
StateOwnRatio (5)	.070	.167**	-.051	.202**	1				
Ln_assets (6)	-.074	.083*	-.063	.081*	.013	1			
Ln_age (7)	.057	.037	.038	.043	.216**	.031	1		
Ln_SD_profit (8)	.035	.095*	-.116**	.074	-.047	.694**	.023	1	
Sale_growth (9)	.018	-.036	.063	.037	-.136**	-.017	-.203**	.032	1

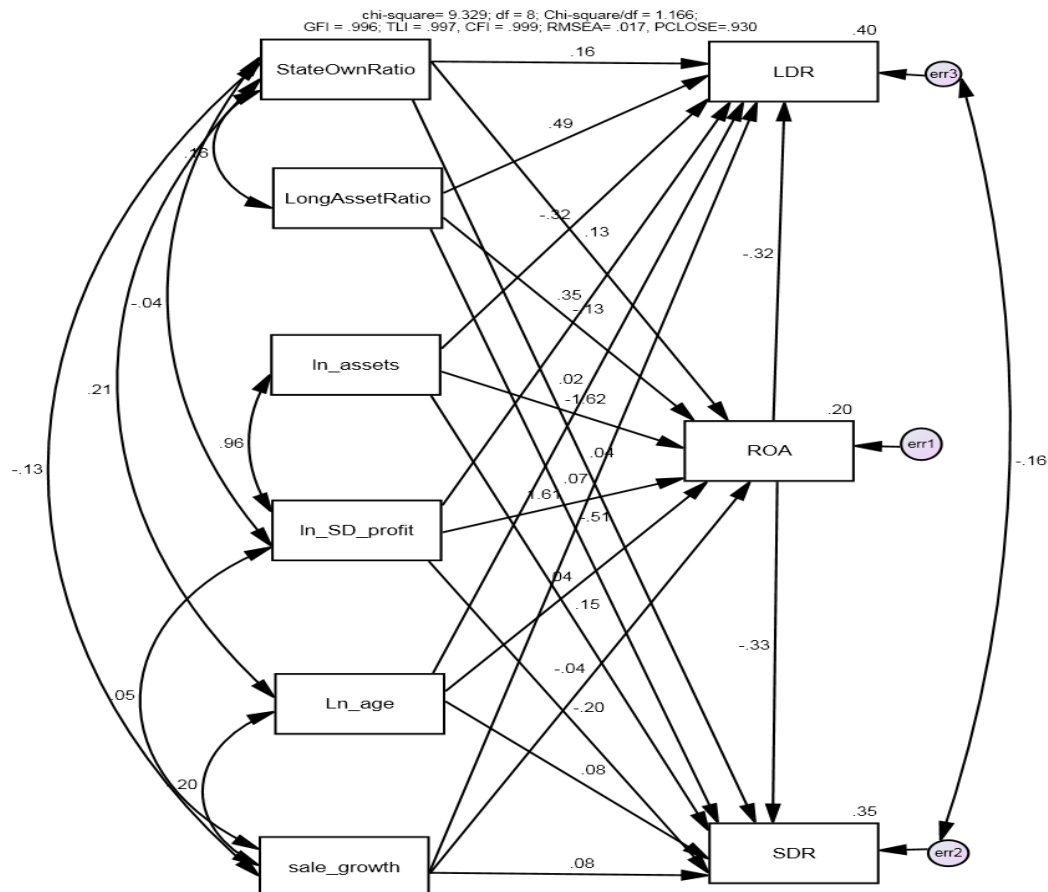
Note: **Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed)

4.3. Model 1

Figure 1 provides a schematic representation of the first model. The six variables on the left hand side of this figure correspond to the main enterprise characteristics for which data are available: state

ownership ratio, long-term assets ratio, firm size, firm age, business risk and firm growth. These are assumed to determine, in turn, LDR, ROA and SDR. In this model, ROA is also assumed to help determine both LDR and SDR.

Figure 1. Relationship between enterprise characteristics, capital structure and performance – Model 1



Fit indices for Model 1 are all satisfactory. However, inspection of the regression weights for this model (see Table 3) reveals that some of the postulated paths are insignificant. For example, the probability of Type I error in accepting the path

from Ln_age to LDR is 46.8 per cent, suggesting that an enterprise's age did not have any impact on its long-term debt ratio. Another clearly insignificant path is the one from Ln_age to ROA (probability of Type I error = 33.7 per cent).

Table 3. Standardized regression weights for Model 1

Explanatory variables	Dependent variables					
	ROA		Long-term Debt Ratio		Short-term Debt Ratio	
	Estimate	p	Estimate	p	Estimate	p
LongAssetRatio	-0.134	***	0.487	***	-0.511	***
StateOwnRatio	0.134	***	0.159	***	0.044	0.213
Ln_assets	-1.620	***	-0.319	0.018	0.150	0.287
Ln_age	0.037	0.337	0.024	0.468	0.083	0.016
Ln_SD_profit	1.615	***	0.351	0.009	-0.204	0.148
Sale_growth	-0.039	0.301	0.070	0.033	0.082	0.017
ROA			-0.317	***	-0.335	***

Note: ***indicates $p < 0.001$

4.4. Deriving alternative models and model selection

By deleting from Model 1 paths which are clearly insignificant we derive Model 2. Table 4 compares the fit indices of these two models (as well as of Model 3, to be discussed below). The indices shown suggest that the loss in explanatory power in going from Model 1 to the more parsimonious Model 2 is relatively minor, compared with the gain in parsimony. Thus, Chi-square / df increase from 1.166 in Model 1 to 1.338 in Model 2. The figures for TLI, RMSEA and PCLOSE also suggest that Model 2 is a similarly fit for the data as Model 1.

As alternatives to Models 1 and 2, we also consider a series of models based on Model 1, but with the direction of the path between ROA and LDR reversed, so that the causality is now assumed to run from LDR to ROA. By eliminating clearly insignificant paths from the resultant model we obtain Model 3; see Figure 2. The overall fit statistics for Model 3 are slightly better than those of Model 2, as can be seen from Table 4. However, the squared multiple correlation (SMC), which is analogous to R^2

in linear regression analysis, for LDR is lower in Model 3 (0.32) than in Model 2 (0.40). This is offset by a rise in the SMC for ROA, which is 0.29 in Model 3 and 0.20 in Model 2. On the evidence available we do not feel there is sufficient justification for favouring either of these two models over the other.

Table 4. Comparative goodness of fit statistics

	Model 1	Model 2	Model 3
Chi-square	9.329	18.730	19.047
Df	8	14	16
Chi-square/df	1.166	1.338	1.190
GFI	0.96	0.993	0.993
TLI	0.997	0.995	0.997
CFI	0.999	0.998	0.999
RMSEA	0.017	0.024	0.018
PCLOSE	0.930	0.955	0.983
SMC for LDR	0.403	0.402	0.321
SMC for SDR	0.352	0.350	0.339
SMC for ROA	0.204	0.199	0.285

Note: SMC - Squared multiple correlation, analogous to R^2 in linear regression analysis

Table 5. Standardized regression weights for Model 2

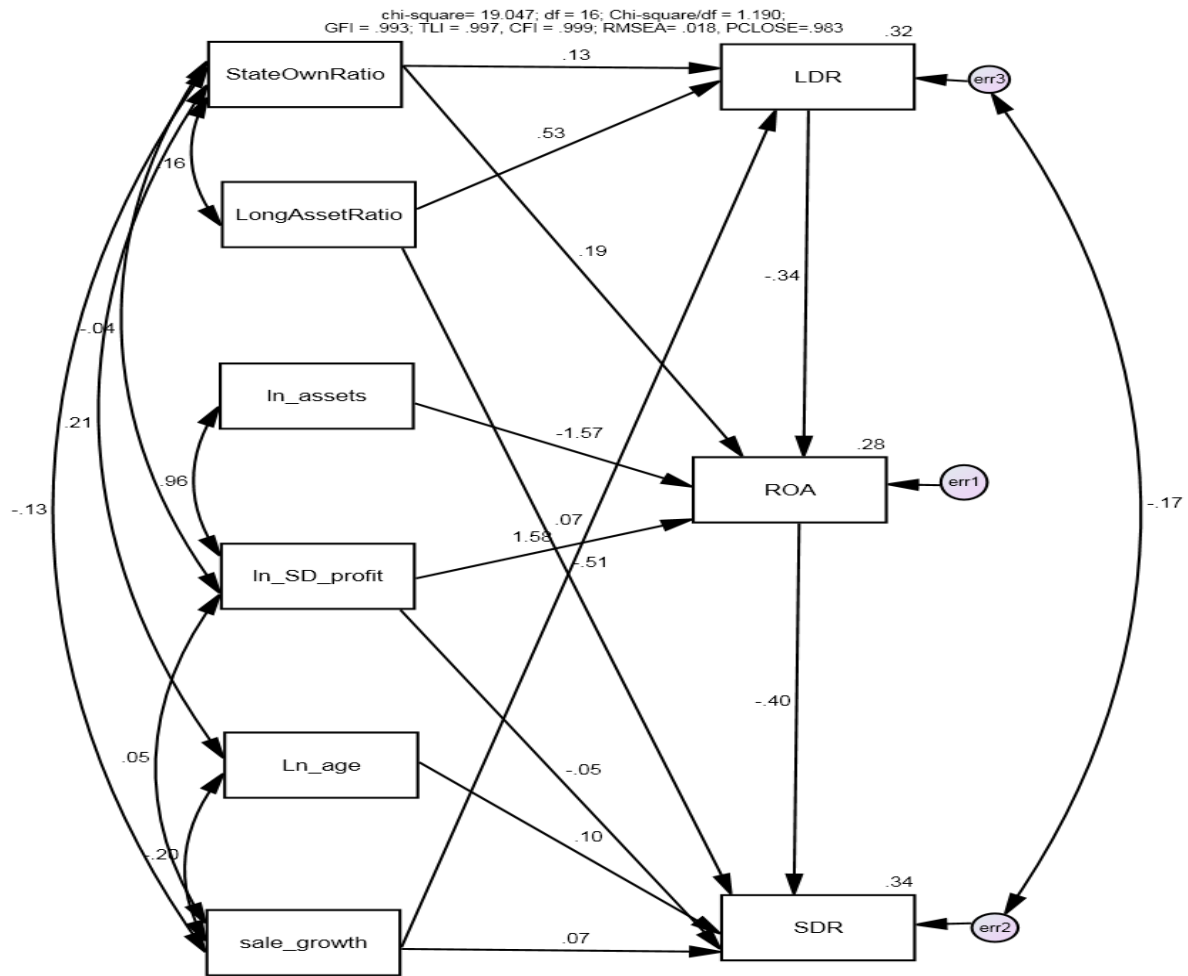
Explanatory variables	Dependent variables					
	ROA		Long-term Debt Ratio		Short-term Debt Ratio	
	Estimate	P	Estimate	p	Estimate	P
LongAssetRatio	-0.133	***	0.487	***	-0.511	***
StateOwnRatio	0.146	***	0.170	***		
Ln_assets	-1.597	***	-0.296	0.026		
Ln_age					0.094	0.005
Ln_SD_profit	1.592	***	0.321	0.016		
Sale_growth			0.068	0.039	0.070	0.039
ROA			-0.313	***	-0.349	***

Note: ***indicates $p < 0.001$

Table 6. Standardized regression weights for Model 3

Explanatory variables	Dependent variables					
	ROA		Long-term Debt Ratio		Short-term Debt Ratio	
	Estimate	p	Estimate	p	Estimate	P
LongAssetRatio			0.527	***	-0.515	***
StateOwnRatio	0.193	***	0.132	***		
Ln_assets	-1.566	***				
Ln_age					0.097	0.004
Ln_SD_profit	1.578	***			-0.055	0.099
Sale_growth			0.074	0.030	0.074	0.031
ROA					-0.395	***
LDR	-0.343	***				

Note: ***indicates $p < 0.001$

Figure 2. Relationship between enterprise characteristics, capital structure and performance – Model 3

4.5. Implications of Models 2 and 3

The main difference between these two models is the assumed direction of the path between ROA and LDR. Model 2 assumes causality runs from ROA (operational performance) to LDR, whilst Model 3 assumes it runs in the opposite direction. Apart from this difference, the two models produce very similar estimates and implications.

Estimates presented in Table 5 for Model 2 and Table 6 for Model 3 are standardized regression weights, and are analogous to the slope coefficients in conventional regression analysis. In the current context, however, they indicate for each standard deviation of change in the explanatory variable, how much (in terms of standard deviation) the dependent variable would change. The estimates suggest that for listed enterprises in Vietnam, operational performance tends to have a negative effect on debt ratios. This is consistent with the findings of Nguyen and Ramachandran (2006) for Vietnam and previous authors for other countries.

The results for both models suggest that the extent of state ownership has a positive effect on LDR. Again, this accords with Nguyen and Ramachandran (2006), who pointed out that state-owned enterprises (SOEs) in Vietnam tend to receive more favourable treatment from state-owned commercial banks which represent the bulk of the banking sector. In both models, sale growth has a

positive effect on both LDR and SDR, while enterprise age has a positive effect on SDR only. The long-term assets ratio affects the two measures of capital structure in opposite ways: positive effect on LDR and negative effect on SDR.

5. CONCLUSIONS

This paper investigates the relationship between enterprise characteristics, capital structure and operational performance among a sample of 592 companies listed on the Vietnamese stock exchange during the three years 2012-2014. The results suggest that operational performance has a negative effect on both of the measures of capital structure considered, namely long-term debt/total assets ratio (LDR) and short-term debt/total assets ratio (SDR) for listed enterprises in Vietnam, while the extent of state ownership has a positive effect on LDR. Enterprise size and business risk have no clear effect on LDR and SDR, while enterprise age has a positive effect on SDR only. The ratio of long-run to total assets affects the two capital structure measures in opposite ways: the effect is positive on LDR and negative on SDR. The evidence was considered to be inconclusive on the question of direction of causality between operational performance and LDR. It will be useful in future research how different economic and institutional factors impact on capital structure as well as enterprise performance.

REFERENCES

1. Arbuckle, J. L. (2007). Amos 16.0 user's guide. SPSS.
2. Baxter, N. D. (1967). Leverage, risk of ruin and the cost of capital. *The Journal of Finance*, 22(3), 395-403.
3. Booth, L., Aivazian, V., Demircuc Kunt, A., & Maksimovic, V. (2001). Capital structures in developing countries. *The Journal of Finance*, 56(1), 87-130.
4. Bradley, M., Jarrell, G. A., & Kim, E. H. (1984). On the existence of an optimal capital structure: Theory and evidence. *The Journal of Finance*, 39(3), 857-878.
5. Byrne, B. M. (2001). *Structural equation modeling with Amos: Basic concepts, applications and programming*. London: Lawrence Erlbaum Associates.
6. Byrne, B. M. (2010). *Structural Equation Modelling With AMOS: Basic Concepts, Applications, and Programming*. New York, NY: Taylor and Francis Group, LLC.
7. Chang, C., Lee, A. C. & Lee, C. F. (2009). Determinants of capital structure choice: A structural equation modeling approach. *The Quarterly Review of Economics and Finance*, 49(2), 197-213.
8. Chen, J. S., Chen, M. C., Liao, W. J. & Chen, T. H. (2009). Influence of capital structure and operational risk on profitability of life insurance industry in Taiwan. *Journal of Modeling in Management*, 4(1), 7-18.
9. de Vries, A. (2010). The effect of firm characteristics and economic factors on capital structures: a South African study. *The Business Review*, 15(1), 205-211.
10. Doan, Ngoc Phi Anh (2010). Determinants of capital structure and financial performance: a path analysis approach. *Journal of Technology and Science*, 5(40), 14-22.
11. Fan, J. P. H., Titman, S., & Twite, G. J. (2008). An international comparison of capital structure and debt maturity choices. Working Paper.
12. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. William Black Prentice Hall.
13. Hall, G. C., Hutchinson, P. J., & Michaelas, N. (2004). Determinants of the capital structures of European SMEs. *Journal of Business Finance & Accounting*, 31(5 6), 711-728.
14. Harris, M., & Raviv, A. (1991). The theory of capital structure. *The Journal of Finance*, 46(1), 297-355.
15. Hoyle, R. H. (1995). *Structural equation modeling: Concepts, issues, and applications*. Sage Publications, Inc.
16. Hu, L. T. & Bentler, P. M. (1995). *Evaluating model fit*. Sage Publications, Inc.
17. Hu, L. T. & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling*, 6, 1-55.
18. Jensen, M. C. & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
19. Majumdar, S. K. & Chhibber, P. (1999). Capital structure and performance: Evidence from a transition economy on an aspect of corporate governance. *Public Choice*, 98(3), 287-305.
20. Margaritis, D., & Psillaki, M. (2010). Capital structure, equity ownership and firm performance. *Journal of Banking & Finance*, 34(3), 621-632.
21. Marsh, H. W., Hau, K. T. & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cut off values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural equation modeling: a multidisciplinary journal*, 11(3), 320-341.
22. Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261-297.
23. Myers, S. & Majluf. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221.
24. Nguyen, T. D. K. & Ramachandran, N. (2006). Capital Structure in Small and Medium-sized Enterprises. *ASEAN Economic Bulletin*, 23(2), 192-211.
25. Rajan, R. G. & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The Journal of Finance*, 50(5), 1421-1460.
26. Ross, S. A. (1988). Comment on the Modigliani-Miller propositions. *The Journal of Economic Perspectives*, 2(4), 127-133.
27. San, N. H. (2002) Determinants of capital structure for tourism companies in Thua Thien Hue Province. Danang: Danang University Press.
28. Schumacker, R. & Lomax, R. (1996). *A Beginner's Guide to Structural Equation Modeling*. Mahwah, NJ: Lawrence Earlbaum Associates: Inc.
29. Stiglitz, J. E. (1988). Why financial structure matters. *The Journal of Economic Perspectives*, 2(4), 121-126.
30. Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *The Journal of Finance*, 43(1), 1-19.
31. Vu, N.N. (2003). Determinants of capital structure for listed firms in the Vietnam stock Exchange Market. Danang University Press, Danang, Vietnam.
32. Williamson, O. E. (1988). Corporate finance and corporate governance. *The Journal of Finance*, 53, 567-591.

AUDITORS' VIEW ON ACCEPTABILITY OF CLIENTS' EARNINGS MANAGEMENT PRACTICES

Farisha Hamid*, Hafiza Aishah Hashim*, Zalailah Salleh*

*School of Maritime Business and Management, Universiti Malaysia Terengganu, Malaysia

Abstract

The purpose of this paper is to assess the views of auditors on earnings management in Malaysia. This study uses a questionnaire designed by Merchant and Rockness (1994), which consists of thirteen (13) short scenarios. Each scenario describes a potentially questionable earnings management activity undertaken by the general manager. The respondents were asked to judge the acceptability of each of the scenarios using a five-point (5) Likert scale. Based on responses, this study finds that acceptability varies with the type of earnings management. The auditors believe that discretionary accrual manipulation is more unethical than real activities manipulation, while the consistency with MFRS and the direction of effect on earnings management do not seem to be an issue to the respondents regarding the acceptability of earnings management.

Keywords: Earnings Management, Auditors, Clients' Practices

Acknowledgment

The study is supported by the Fundamental Research Grant Scheme (FRGS, Vote No.: 59232) provided by Ministry of Higher Education (MOHE) of Malaysia and the authors thank the Ministry for its research support

1. INTRODUCTION

Corporate scandals in business seem to become a common occurrence in the business environment. Some examples in Malaysia include the Transmile Group Bhd1 and Megan Media Bhd for accounting manipulation, such as overstated sales and fabricated transactions (The Edge, 2009). The Transmile Group Bhd overstated their profits of RM75 million and RM158 million for two consecutive years (2005 and 2006, respectively). In regards to Megan Media Bhd, the company was involved in fraudulent trading. In addition, inappropriate accounting treatment was found in the 2005 audited financial statement of Southern Bank Bhd (Krishnan, 2011). However the auditor failed to detect the accounting irregularities and fraud occurred as a result of that error. These cases demonstrate auditors in Malaysia conducted inferior audit that did not reach the expected standards (Krishnan, 2011). Another corporate accounting scandal that shook public confidence in corporate governance and the stock market was the sudden and unexpected collapse of Enron Corporation in the United States. This scandal involved Arthur Anderson regarding a conflict of interest that toppled Enron Corporation and affected the US economy (Li, 2010). This scandal led to questions concerning how the auditors in these kinds of companies functioned in the auditing process and how they were embroiled in the scandals. In the case of Enron, they aggressively managed their earnings by recording fictitious sales transacted with a

special purpose vehicle (SPV), which resulted in increased revenue and profit. In addition, they overstated their reported earnings by omitting the SPV from consolidated financial statements (Wearing, 2012).

Earnings management practices are a significant ethical issue because they are related to the manipulation of information concerning company performance. Many decisions by stakeholders are made based on a company's financial report. If a decision is made by using incorrect information, the decision is questionable and can cause many problems for both the company and the financial statement users, i.e. investors and shareholders. Hence, the prevention of this practice should be strictly enforced and monitored by the relevant authorities. For that particular purpose, many regulatory requirements were established to reduce irregular and deceptive accounting practices from becoming more pervasive (see e.g. Malaysian Code on Corporate Governance 2012, The UK Corporate Governance Code 2012, German Corporate Governance Code 2012, Corporate Governance Principles and Recommendations 2010, Principles of Corporate Governance 2012, Guidance on Good Practices in Corporate Governance Disclosure 2006, at www.ecgi.org/codes/all_codes.php). However, compliance with the requirement has not been encouraging. Masruki and Azizan (2012) report that firms listed on the Main Board of Bursa Malaysia manage earnings widely after the Asian financial crisis, which also appeared to be dependent on the level of the operating performance of the firms. While their study reported the empirical evidence on earnings management practices among public listed companies in Malaysia,

1 The Star, 19 June 2007, Audit uncovers more irregularities in Transmile.

the authors did not address the extent to which the external auditors find the earnings management practices acceptable. Therefore, there is great need to determine auditors' views on earnings management practices in Malaysia. Their views play a significant role as an external control mechanism in curbing earnings management practices.

As mentioned by Zhou (2012), auditors in the course of an audit are responsible for assessing the risk of material misstatements, whether caused by fraud or error. Under the International Standard of Auditing (ISA) 240, "an auditor conducting an audit in accordance with ISAs is responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error (paras 5, p.7). They need to identify, assess and respond to the risk of material misstatement due to fraud (paras 25-32)." Therefore, in most cases of fraud or exploitation of earnings, auditors are the first group considered delinquent and negligent in their duties. This is because the nature of the auditing function and the purpose of auditing is to protect the reliability of financial reporting. Thus, it is most appropriate for our study to use auditors as respondents to assess the extent to which the earnings management activities are acceptable.

This study is in response to the call by Merchant and Rockness (1994), who elicited information concerning the acceptability of earnings management from the preparers of financial statements. Merchant and Rockness' study suggest the need for further research to explore the acceptability of earnings management practices from different segments, such as external auditors. While there is a growing body of research that examines earnings management in Malaysia, most studies examining this issue used archival data as opposed to measuring perceptions from auditors due to limited response rates using survey questionnaires. Therefore, it is imperative to examine the auditor's acceptability of earnings management practices and perceptions toward them to provide empirical evidence to further inform debates over earnings management practices in Malaysia. The results of the current study fills a gap and will enrich the knowledge of earnings management activities, thus increasing the awareness of regulators and auditors so that they can take necessary action to improve their competency in identifying and addressing earnings management issues. Furthermore, the majority of earnings management is the result of the manipulation of real operating activities, which is relatively less discussed than the accrual management. The current study further contributes insight to this area.

This paper is organised as follows. Section 2 discusses the relevant literature dealing with earnings management practices. Section 3 explains the research method used, followed by the analysis of the results in Section 4. Finally, the discussions and conclusions are considered in Section 5.

2. LITERATURE REVIEW

2.1. Earnings management

A number of studies interpreted the meaning of earnings management differently. Schipper (1989)

depicts earnings management as an action that managers use to manipulate financial reports in order to gain extra profit. Healy and Wahlen (1999) define earnings management as an action of management in applying their self-assessment when communicating the company's financial information. Also related to this is management-led transactions to modify a financial report for the purposes of: 1) giving misleading financial information to stakeholders; or 2) influencing any contractual business that relies on the financial reporting. In a similar vein, according to Prencipe and Bar-Yosef (2011, p.200), earnings management "occurs when managers' discretion is used to alter financial statements with the aim of misleading stakeholders about the company's performance or influencing performance-based contractual outcomes". Additionally, Goel and Thakor (2003) viewed earnings management activities to be a means of customizing an income statement so that the statement does not present the actual performance of income for that period.

2.2. Types of earnings management

Two types of earnings management were discussed by past researchers - discretionary accrual manipulation and real activities manipulation.

2.2.1. Discretionary accrual manipulation

Discretionary accrual manipulation involves modifying accruals to meet the target of window dressing. According to Gunny (2010), accrual management involves the manipulation of information within the range of Generally Accepted Accounting Principles (GAAP)² to hide the actual financial condition. If the manipulation is beyond the range of GAAP, it will be considered to be a violation. Another study by Goel and Thakor (2003) describes earnings management to be artificial and real. They define artificial as being achieved principally by using the reporting flexibility provided by the GAAP. Artificial smoothing has costs that are not visible like those related to the loss of integrity or consumption of the manager's time in such activities. In contrast, real smoothing has costs that are obvious, such as providing promotional discounts or vendor financing to risky customers to push up sales towards the desired target.

According to extant literature, there are many situations in which discretionary accrual manipulation may occur. Teoh, Welch, and Wong (1998a) indicate that accrual manipulation occurs during seasoned equity offerings. They find that discretionary current accruals grow before the offering, peaking in the offering year, and declining thereafter. Such a situation is illustrated in a study by Teoh, Welch, and Wong (1998b). They find that discretionary current accruals, which are under the control of management and are a proxy for earnings management, are high around the IPO compared to those non-issuers. They also mention in their study that by making adjustments using discretionary

² The study refers to the GAAP in the US context because the study was conducted in the US. Our study refers to the Malaysian Financial Reporting Standards (MFRS) that were adopted from the International Financial Reporting Standards (IFRS). All entities are required to comply with the MFRS in the preparation of their Financial Statements.

accrual, the issuers can report unusually high earnings compared to the actual earnings. Ahmad-Zaluki, Campbell, and Goodacre (2011) indicate that over the period 1990-2003, Malaysian initial public offerings (IPOs) used income-increasing earnings management in the IPO years. He, Yang, and Guan (2011) suggest that the income-increasing accounting accruals made at the time of private placements predict the post-issue long-term stock underperformance, implying that the higher the level of earnings management before the issue of private placements, the poorer will be the post-issue stock performance.

A study by McNichols (1998) further suggests that the provision for bad debt also relates to discretionary accrual. Kasznik (1999) also finds that firms that are in danger of falling short of the management earnings forecast use accrual management to manage earnings upward. In addition, Aljifri (2007) observes that dividends have a connection with stock prices. This is because dividends are paid not only to satisfy the expectation of shareholders, but also to attract potential investors who are looking for a higher return on their capital. Therefore, managers will look to smooth earnings to pay dividends as a means to increase the company's share price. Daniel, Denis, and Naveen (2008) find that dividend-paying firms view the expected dividend level to be an important earnings threshold. As a result, these firms might manage earnings to meet the expected dividend levels using discretionary accrual even though it does not affect the firms' capacity to pay dividends.

2.2.2. Real activities manipulation

Although the majority of earnings management results from manipulation of the real operating activities, this area is relatively less discussed compared to accrual management. Real activities manipulation involves operation activities and accrual manipulations that do not affect operation activities. According to Gunny (2010), accrual management can occur after the fiscal year end, which is when the need for earnings management is the most required, while real activities management decisions would usually be made prior to the end of the fiscal year. Chen and Tsai (2010), who employed a survey questionnaire based on Merchant and Rockness (1994) to elicit data from financial managers and auditors, suggest that real activities manipulation (also known as production/distribution manipulation) is the action to alter the production and distribution of information to enhance financial reporting performance in achieving the targeted plan. Real activities manipulation happens when managers alter any transaction regarding the business operation purposely to affect the accounting outcome (Dechow & Skinner, 2000).

Matsuura (2008) suggests that real earnings management consists of real production and investment decisions, such as reducing research and development expenditures that affect selling and administrative expenses. According to Gunny (2010), this real production and investment decision is positively associated with firms minimally meeting the earnings benchmark. She also finds that the firms engaging in real activities management have better performance in subsequent years compared

to firms that do not engage in real activities management. Therefore, she suggests that conducting real activities manipulation is not a selfish action but consistent with the firms' aspiration to achieve current period benefits and perform better in the future. This course of action is called signalling.

Earnings pressure can motivate managers to engage in real activities manipulation. Osma (2008) finds that managers tend to decrease their research and development expenses due to short-term earnings pressure. Furthermore, based on the feedback from the Certified Public Accountants (CPA) in public practice, industry, accounting faculty and accounting students, Elias (2002) finds that the respondents believed that the operating manipulation of earnings is ethical compared to accrual manipulations.

According to Mizik (2010), real activities manipulation may also be called myopic management, which may be done through the alteration of operational practices to reduce the actual economic earnings and to generate favourable market reactions. She further asserts that there are two incentives that lead managers to engage in earnings management: concern for their stock price and to have private information unavailable to the stock market. Additionally, a study by Roychowdhury (2006) suggests that the presence of debtors may lead to real activity manipulation. He believes that firms will try to hide the real situation about the financial condition just to maintain the contract with the debtors. He finds evidence of a positive relationship between the stock of inventories and receivables, and growth opportunities with real activity manipulations. He states that firms reporting positive profits in smaller amounts and smaller positive forecast errors were managing earnings using real activities.

Nevertheless, evidence from Japan suggests that the relationship between real earnings management and accounting earnings management (i.e. discretionary accrual manipulation) is complementary (Matsuura, 2008). He reports that Japanese managers use real earnings management and/or accounting earnings management to smooth earnings. His study shows that in Japan, real earnings management occurs before accounting earnings management. In other words, managers use real and accounting earnings management sequentially to smooth earnings. Cohen and Paul (2010), in examining seasoned equity offerings, observe that firms engaging in real activities manipulation are more severely affected than those firms that practice accrual management. This is because real activities management affected the real consequences of the operational decisions made to manage earnings.

2.3. Earnings management and auditors

As mentioned in the preceding paragraph, there are many situations that can lead managers to engage in earnings manipulation. Past researchers, such as Chi, Lisic, and Pevner (2011), suggest that firms could resort to real earnings management when their opportunities for earnings management are constrained. They find evidence that higher audit quality can prevent firms from applying accrual

earnings management. Bedard, Chtourou, and Croteau (2004) also suggest that an audit team with members who have more audit expertise is more effective in detecting earnings management.

As suggested by Merchant and Rockness (1994), assessment of the acceptability of earnings management is important to improve the understanding about the earnings management issue and the means for improvement of those issues. Their study shows that the acceptability of earnings management was judged to vary with the type, size, timing and purpose of the earnings management actions. Further, they also note that the judgment varies across respondent populations (i.e. general managers, staff managers, operating unit controllers, and internal auditors). The study calls for further research to elicit responses from other groups of respondents, i.e. external auditors, because their judgments about earnings management might relate to the role they play in the financial reporting process. In the audit process, the auditor addresses the risk of misstatements in the financial reports, including aggressive earnings management. Failure to identify the aggressive earnings management will impair the quality of audit performed by the auditors. Therefore, this study poses the following research question:

What is the perception of external auditors regarding earnings management actions relating to the three different attributes of earnings management (i.e. the types, consistency and the direction of the effect on earnings)?

3. RESEARCH METHOD

3.1. Survey instrument

This study adopted a quantitative approach using survey questionnaires. The questionnaire consists of thirteen (13) short scenarios, each of which describes a potentially questionable earnings management activity undertaken by the general manager. The respondents were asked to give their judgment and rating using the following scale:

Table 1. Likert scale

1	2	3	4	5
Ethical practice	Questionable practice	Minor infraction	Serious infraction	Totally unethical

The second section elicited the demographic information – gender, race, age, highest education and professional qualification that were included to obtain basic information about the background of the respondents. This questionnaire was based on the earnings management scenarios questionnaire designed by Merchant and Rockness (1994). Their target group comprised general managers, corporate staff, operating unit controllers and internal auditors. The questionnaire provided an understanding concerning the type of earnings management action, consistency with GAAP, direction of effects, materiality, the period of effect and the purpose in mind for earnings management activities. Merchant and Rockness (1994) find areas of general agreement about some characteristics of the practices. They find that judgement is affected by the type of earnings management (e.g. operating vs. accounting), size (materiality), timing (accounting period-end), and purpose of the action (e.g. increase

bonus). This study adopts the scenarios employed by Merchant and Rockness (1994) because it is still relevant to the current situation and most of the recent studies conducted to explore the earnings management activities also used the same instruments (Elias, 2002; Giacomino and Bellovary, 2006; Chen and Tsai, 2010; Jooste, 2011; Jooste, 2013). This study conducted extensive pilot testing before producing the final version of the questionnaire. Participants in the pilot study included ten academics with auditing and accounting experience and five audit partners. Following discussions with the pilot study respondents, minor changes were made to the content and presentation of the instruments. Particularly, the changes made were to localise the research instruments to the Malaysian setting.

3.2. Data collection

The questionnaires were distributed to auditors from the sampled audit firms through the post in March 2012. In distributing the questionnaires to the respondents, an official letter issued by the researcher was attached. The letter was sent to the audit firms to solicit participation either from audit seniors, audit managers or audit partners. The respondent firms were selected from a list of audit firms on the website of the Malaysian Institute of Accountants (MIA) using a systematic sampling design. In January 2012, the population of the audit firms in Malaysia showed a total number of 1,845 audit firms. Based on the table for determining the sample size by Krejcie and Morgan (1970), the required sample size was 320 audit firms. The audit firms were chosen randomly by selecting the first firm and those at intervals of six thereafter (e.g. 7, 14, 21, 28 and so on). Accordingly, 320 questionnaires were mailed to the chosen firms. The respondents were given one (1) month to complete and return the questionnaire to the researcher. The collected data were analysed using the Statistical Package for the Social Sciences (SPSS) version 17.0.

4. RESULTS

Out of 320 questionnaires distributed, only 101 were returned. Numerous follow ups were conducted including collection by hand of the questionnaires to increase the response rate. After checking all the returned questionnaires, four (4) questionnaires were incomplete, thus making the total number of useable questionnaires 97 and yielding a response rate of 30.30 per cent. Although this response rate appears low, it is normal inasmuch as mailed questionnaires are generally not returned (Salleh and Stewart, 2013).

Table 2 shows that 38 of the respondents (39.2 per cent) are male and 59 (60.8 per cent) are female. The age of respondents ranged from 30 to 51 years old. Forty nine 49 (50.5 per cent) out of 97 respondents are Malays and the rest consisted of Chinese (40.2 per cent), Indian (8.2 per cent) and others (1 per cent). The majority of the respondents only have a first degree for their highest education, which is 72 (74.2 per cent), seven with master's degree, and only one (1) respondent has a PhD. Other respondents did not have a degree but acquired a professional qualification. Hence, the respondents are broadly representative of auditors in Malaysia and appropriate for this research.

Table 2. Result on respondents' demographic

<i>Descriptive items</i>	<i>Frequency</i>	<i>Percent</i>	<i>Valid Per cent</i>	<i>Cumulative Per cent</i>
Gender				
Male	38	39.2	39.2	39.2
Female	59	60.8	60.8	100
Age				
30 or under	49	50.5	50.5	50.5
31-40	36	37.1	37.1	87.6
41-50	8	8.3	8.3	95.9
51 or older	4	4.1	4.1	100
Race				
Malay	49	50.5	50.5	50.5
Chinese	39	40.2	40.2	90.7
Indian	8	8.2	8.2	98.9
Others	1	1.1	1.1	100
Highest education				
First degree	72	74.2	74.2	74.2
Master degree	7	7.2	7.2	81.4
PHD	1	1.1	1.1	82.5
Others	17	17.5	17.5	100
Professional qualification				
Yes	53	54.6	54.6	54.6
No	44	45.4	45.4	100
Work with company				
10 or under	89	92	92	92
11-20	6	6	6	98
21-30	1	1	1	1
31-40	1	1	1	1
Involved in decision making				
Yes	31	32	32	32
No	66	68	68	100

Fifty-three (53) respondents acquired a professional qualification, such as Malaysian Institute of Certified Public Accountants (MICPA), Association of Chartered Certified Accountants (ACCA), Malaysian Institute of Accountants (MIA) and Certified Public Accountant (CPA). Furthermore, the length of time the respondents served in their respective audit firms was generally less than 10

years, with an average of five (5) years. In addition, only 31 respondents were involved in making decisions that touched upon earnings management during their tenure. Based on the demographic information of the respondents, this study considers that the respondents had the appropriate knowledge and experience regarding the issues being examined.

Table 3. Mean acceptability rating for earnings management practices with three contrasting attributes

<i>Attribute</i>	<i>Question</i>	<i>Mean rating</i>	<i>t statistic</i>
Real manipulation activities	1, 2a, 2b, 4a, 4b, 4c	2.6890	-5.695 *
Discretionary accrual manipulation	3, 5a, 5b, 6a, 6b, 7a, 7b	3.1134	
Consistent with MFRS	5b, 6a, 6b	2.9759	-2.543
Inconsistent with MFRS	3, 5a, 7a, 7b	3.2165	
Increases earnings	2a, 2b, 3, 4a, 4b, 4c, 6a, 6b, 7a, 7b	2.8835	-1.821
Decreases earnings	1, 5a, 5b	2.9966	

Note: * = $p < 0.01$

The results show that ethical judgment is affected by the type of earnings management. As shown in Table 3 above, the mean rating is compared for the questions describing real manipulation and accrual manipulation. The results show a highly significant difference; the accrual manipulation is judged as questionable practice ($t = -5.695$; $p < 0.001$). The results are consistent with the findings by Merchant and Rockness (1994), Elias (2002), and Giacomino and Bellovary (2006) that show a highly significant difference between real activities manipulation (operating method) and discretionary accrual manipulation (accounting method). They suggest that discretionary accrual manipulation is judged much more strictly compared to real activities manipulation.

In addition, a further analysis was conducted to examine the auditors view on earnings management practices and its consistencies with Malaysian Financial Reporting Standards (MFRS). The results in Table 3 shows that there is no significant difference ($t = -2.543$; n.s.), which means that the consistency with MFRS is not a major concern but that it should still follow the MFRS. The results are consistent with the findings by Merchant and Rockness (1994) who suggest that the respondents perceive that manipulators do not use GAAP as a defence for their actions.

The tendency to manage earnings by managers is when earnings are extreme in either direction. For example, managers tend to overstate their earnings in the event that they have not been performing well

or to reduce their earnings to make it easier in meeting profit targets in future periods. The result of additional analysis in Table 3 shows that the direction of the effect in earnings is not important, thus suggesting that increasing earnings does not record a significant difference from the decreasing earnings in the short-run ($t=-1.821$; n.s.). The respondents show that the direction of the effect on earnings management, whether increasing or decreasing earnings, does not seem to be considered in making their judgment. While this result is consistent with Merchant and Rockness (1994), the finding contradicts Kasznik (1999) who suggests that firms use accrual management to manage earnings upwards when they are falling short of the management earnings forecast.

5. DISCUSSION AND CONCLUSION

The primary purpose of this study is to assess the acceptability of earnings management based on the views of auditors regarding earnings management activities. This study finds that auditors believe that discretionary accrual manipulation is more unethical than real activities manipulation. Although accrual manipulation is not allowed by MFRS, since there is an excuse where the managers can make judgment and estimation, it is open for accrual manipulation but still has a limit. Therefore, the respondents chose to comply with the rules given by the standard and thereby remaining within the range given by MFRS. This result is consistent with prior research; Merchant & Rockness (1994) find that the accounting method (discretionary method) is considered to be more unethical than the operating method (real activities method). In addition, the respondents believed that real activity manipulation is hard to detect so they chose to keep quiet rather than adjust the manager's attempt to manage earnings. According to Nelson, Elliot, and Tarpley (2002), the reason why auditors do not concern themselves with issues about earnings management is usually because the practice is still compliant with GAAP or because the auditor does not have enough evidence to determine whether the client's position is incorrect or because of other reasons that are usually immaterial. This study is also consistent with the study by Cohen, Dey, and Lys (2008), which finds that the changes from discretionary accrual manipulation to real activities manipulation after SOX is due to real activities manipulation not being subject to the inquiry from the regulators, unlike accrual manipulation.

Additionally, this study also finds that auditors believe that earnings management is tolerable, irrespective of whether or not it complies with MFRS. This finding is alarming because it might indicate that the auditors are not performing their roles in the corporate governance of the firms. As auditors, they should express their views whether the financial statements are fairly presented and consistent with the MFRS. The finding from this study also provides insight into previous Malaysian accounting scandals that indicate auditors inclined to tolerate with earnings management practices. Krishnan (2011) suggests that in the past Malaysian accounting scandals, auditors failed to report accounting irregularities to the regulators and the shareholders of the companies due to inferior audit

that did not reach the expected standards. Merchant & Rockness (1994) also observe that their respondents, which included internal auditors, are also not concerned whether the earnings management practices are consistent with GAAP. This is because there is very little difference in the mean rating between consistent or inconsistent with GAAP. Thus, the perception of the auditors and internal auditors is similar.

The result from this study is useful to regulators and relevant parties since it indicates that auditors still tolerate, rather than prevent, earnings management activities conducted by managers. Therefore, the regulators must become cognizant of it and have checks to ensure the reliability of financial statements and that they are free from exploitation of earnings. As an example, the regulators can restrict real activities manipulation in the financial statement. The current changes in the accounting standards that concern the recognition, measurements and presentation of elements in the financial statements, i.e. financial instruments, are of interest to regulators to improve the reporting quality reported by companies in Malaysia.

Nonetheless, there are limitations in conducting this study. This study only concerns the scenarios in the questionnaire, which are only short scenarios regarding earnings management activities. Many techniques or methods were widely used by managers to manage earnings, whereas this study only addresses a few. This study is also limited to external auditors and hence, the scope of the research only focuses on the perspective of the external auditors. In addition, the auditors employ a risk-based approach and the audit procedures are limited to addressing real earnings management. Thus, auditors are suggested to be cautious in performing audit procedures in curbing earnings management in respect of both real activities manipulation, and discretionary accrual manipulation. Future studies can expand this study through using different groups of respondents, which might provide different results, such as financial managers, general managers, and corporate staff. Therefore, the research in this area should be expanded by adding respondents from the various parties involved directly in the financial reporting process. In addition, future studies may also extend the current study to examine the effect of different ethnic groups, gender or seniority level on the acceptability of earnings management to provide more socially nuanced results in the context of Malaysia.

REFERENCES

1. Ahmad-Zaluki, N.A., Campbell, K., & Goodacre, A. (2011). "Earnings management in Malaysian IPOs: The East Asian crisis, ownership control, and post-IPOs performance". *The International Journal of Accounting*, 11-137.
2. Aljifri, K. (2007). "Measurement and motivation of earnings management: A critical perspective". *Journal of Accounting-Business and Management*, 14, 75-95.
3. Bedard, J., Chtourou, S.M., & Courteau, L. (2004). "The effect of audit committee expertise, independence, and activity on aggressive earnings management". *Auditing: A Journal of Practice and Theory*, 23 (2), 13-35.

4. Chen, M.C., & Tsai, Y.C. (2010). "Earnings Management Types and Motivation: A Study in Taiwan". *Social Behaviour and Personality*, 38 (7), 955-962.
5. Chi, W., Lisic, L.L., & Pevzner, M. (2011). "Is enhanced audit quality associated with greater real earnings management". *Accounting Horizons*, 25 (2), 315-335.
6. Cohen, D.A., & Paul, Z. (2010). "Accrual-based and real earnings management activities around seasoned equity offerings". *Journal of Accounting and Economics*, 50, 2-19.
7. Cohen, D.A., Dey, A., & Lys, T.Z. (2008). "Real and accrual-based earnings management in the pre- and post- sarbanes- oxley periods". *The Accounting Review*, 83 (3), 757-787.
8. Daniel, N.D., Denis, D.J., & Naveen, L. (2008). "Do firms manage earnings to meet dividend threshold". *Journal of Accounting and Economics*, 45, 2-26.
9. Dechow, P.M., & Skinner, D.J. (2000). "Earnings management: Reconciling the view of accounting academics, practitioners and regulators". *Accounting Horizons*, 14 (2), 235-250.
10. Elias, R. Z. (2002). 'Determinants of earnings management ethics among accountants'. *Journal of Business Ethics*, 40, 33-45.
11. Giacomino, D.E., & Bellovary, J.L. (2006). "The ethics of managing short-term earnings: business managers and business students rate earnings management practices - Implications for academia". *Journal of College Teaching and Learning*, 3 (7), 57-70.
12. Goel, A.M., & Thakor, A.V. (2003). "Why do firms smooth earnings". *Journal of Business*, 76 (1), 151-192.
13. Gunny, K.A. (2010). "The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks". *Contemporary Accounting Research*, 27 (3), 855-888.
14. He, D., Yang, D.C., & Guan, L. (2011). "Earnings management and long run stock underperformance of private placement". *Academy of Accounting Studies Journal*, 15 (1), 31-58.
15. Healy, P. M., & Wahlen, J. M. (1999). "A review of the earnings management literature and its implications for standard setting". *Accounting Horizons*, 13, 365-383.
16. Jooste, L. (2011). "A comparison of ethical perceptions of earnings-management practices". *South African Journal of Economic and Management Sciences*, 14 (4), 422-435.
17. Jooste, L. (2013). "Investigating ethical perceptions of short-term earnings management practices". *International Journal of Emerging Markets*, 8 (3), 282-299.
18. Kasznik, R. (1999). "On the association between voluntary disclosure and earnings management". *Journal of Accounting Research*, 37 (1), 57-81.
19. Krejcie, R. V., & Morgan, D.W. (1970). "Determining sample size for research activities". *Educational and Psychological Measurement*, 30, 607-610.
20. Krishnan, L. (2011). "A legal scrutiny on the auditors' role to whistle-blow", *Journal Undang-Undang & Masyarakat*, 15, 149-162.
21. Li, Y. (2010). "The case analysis of the scandal of Enron". *International Journal of Business and Management*, 5 (10), 37-41.
22. Masruki, R., & Azizan, N.A. (2012). "The impact of Asian financial crisis to earnings management and operating performance in Malaysia", *The Social Sciences*, 7, 510-516.
23. Matsuura, S. (2008). "On the relation between real earnings management and accounting earnings management: Income smoothing perspective". *Journal of International Business Research*, 7 Special Issue 3, 63-77.
24. McNichols, M., & Wilson, G P. (1998). "Evidence of earnings management from the provision for bad debts". *Journal of Accounting Research*, 26, 1-31.
25. Merchant, K. A., & Rockness, J. (1994). "The ethics of managing earnings: An empirical investigation". *Journal of Accounting and Public Policy*, 13, 79-94.
26. Mizik, N. (2010). "The theory and practice of myopic management". *Journal of Marketing Research*, 594-611.
27. Nelson, M.W., Elliot, J.A., & Tarpley, R.L. (2002). "Evidence from auditors about managers' and auditors' earnings management decision". *The Accounting Review*, 77, 175-202.
28. Osma, B.G. (2008). "Board independence and real earnings management: The case of R and D expenditure". *Corporate Governance: An International*, 3, 231-260.
29. Prencipe, A., & Bar-Yosef, S. (2011). "Corporate governance and earnings management in family-controlled companies". *Journal of Accounting, Auditing and Finance*, 26, 199-227.
30. Roychowdhury, S. (2006). "Earnings management through real activities manipulation". *Journal of Accounting and Economics*, 42, 335-370.
31. Salleh, Z., & Stewart, J. (2013). "Audit committee involvement in resolving contentious accounting issues: perceptions of chief financial officers, audit committee chairs and external auditors in Malaysia". *International Journal of Accounting, Auditing and Performance Evaluation*, 9 (4), 326-343.
32. Schipper, K. (1989). "Commentary on earnings management". *Accounting Horizons*, 3 (4), 91-102.
33. Teoh, S.H., Welch, I., & Wong, T. (1998a). "Earnings management and the underperformance of seasoned equity offerings". *Journal of Financial Economics*, 50, 63-99.
34. Teoh, S.H., Welch, I., & Wong, T. (1998b). "Earnings management and the long-run market performance of initial public offering", *Journal of Finance*, LIII (6), 1935-1974.
35. The Edge Malaysia (2009). Cover Story: Learning from corporate scandals, 17 August.
36. Wearing, R. (2012). *Cases in corporate governance: Enron*, SAGE Publication Inc.
37. Zhou, Y. (2012). "The role of external auditors in detecting and reporting corporate fraud in public listed companies in China". *International Journal of Business Administration*, 3 (1), 2-15.

SME OWNERS AND DEBT FINANCING: MAJOR CHALLENGES FOR EMERGING MARKET

Jonathan Cameron*, Muhammad Hoque*

*Graduate School of Business and Leadership, University of KwaZulu-Natal, Durban, South Africa

Abstract

The purpose of this qualitative study was to unpack the different aspects of the financial obstacles that small medium entrepreneurs (SMEs) face in South Africa. Data were collected by conducting one on one interview's among four financial specialists from financial institution. The financial specialists reported risk was seen as a contributing factor for loans being declined. Other reasons to decline loan were not having business management skills, lack of financial management, experience in an industry and passion for what they do, poor credit record keeping, and lack of collateral. The opportunities leading from the study suggest that entrepreneurs have the potential to improve their chances of accessing finance by enrolling in entrepreneurial and business management studies, thereby learning to overcome poor financial management, and improve their business management skills.

Keywords: Business Growth, Collateral, Entrepreneurs, Financial Specialist, Management Skills, Receiving Finance

Acknowledgment

The authors wish to thank all the participants who took their time out to take part in the study

1. INTRODUCTION

Small and Medium Enterprises (SME's) play a crucial role in economic development, especially in creating employment and wealth. SME's are key drivers of economic growth however they face challenges in achieving growth through difficulties in raising and obtaining finance (Ruis et al. 2009; Yon and Evans 2011). De la Torre, Peria and Schmukler (2010) add SME's face financing hurdles and therefore need special focus from financing institutions to assist them in gaining adequate finance to grow their firms. SME's are vital for a country's growth and prosperity as they create a large share of new jobs and are a large part of most economies in the world today.

South Africa faces many challenges with economic growth being a major hurdle that needs to be overcome (Abor and Quartey 2010). To achieve sustainable economic growth the South African government needs to create an environment in which business can flourish and create jobs. SME's are a key part of our economy and the success of SME's is vital for the countries success. SME's however face many challenges to survive and grow. There are many obstacles that they have to overcome to be sustainable such as marketing their products and services, managing their business efficiently and maintaining their cash flows to keep their firms operating.

A major challenge for SME's is the struggle to obtain finance to start or grow their businesses (Yon and Evans 2011). This results in a constraint to economic growth in South Africa and other countries around the world. The challenge of accessing finance to grow their businesses places a heavy burden on the shoulders of entrepreneurs. Increasing access to finance is therefore crucial for SME's to allow them to reach their full potential.

1.1. Definition of SME's

There are numerous definitions of SME's. But for this study, the researchers consider the South African definition as defined in Section 1 of the National Small Business Act of 1996 as amended by the National Small Business Amendment Acts of 2003 and 2004 (NSB Act) as:

"... a separate and distinct business entity, including co-operative enterprises and Non-governmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or subsector of the economy..."

Table 1 below summarises the split of firms into SMME's using the number of employees, annual turnover, and Gross Assets, Excluding Fixed Property.

Table 1. Broad definitions of SMME's in the National Small Business Act

<i>Firm size</i>	<i>Number of employees</i>	<i>Annual turnover (SA. Rand)</i>	<i>Gross assets, excluding fixed property</i>
Medium	51 to 200, depending on industry	R25m to R50m depending on industry	R4.5m to R18m depending on industry
Small	21 to 50	R500k to > R25m depending on industry	R500k to > R4.5m depending on industry
Very Small	6 to 20 depending on industry	R150k to >R500k depending on industry	R100k to > R500k depending on industry
Micro	> 5	> R150k	> R100k

Source: Author adapted from Falkena (2015)

1.2. SME support from the banking sector

Globally banks play a key role in offering finance to SME's and banks have developed scoring systems to weed out poor prospects vs profitable prospects from amongst SME's, applying for finance. Banks specifically target SME's because they can be lucrative business for the banks if managed through their filtering systems in which high risk SME's are eliminated for loan approval (OECD 2006).

The four main banks in South Africa namely Nedbank, ABSA, FNB and Standard Bank, have increased their focus on SME's. The Banking Association of South Africa (N.D.) reports that South African banks should continue to assist our country's growth initiatives such as the National Development Plan (NDP) by supporting SME's. The loans they suggest are to be targeted at SME's involved in infrastructure development. The Banking Association also suggests that the South African government in turn should provide banks with guarantees for loans to SME's.

Standard Bank (N.D.) has recognised the importance of funding SME's and their research into SME's helped them understand that traditional SME's are often 'one man' operations in which financial statements are non-existent. Standard Bank created a unique solution for SME's in which collateral was not required, called 'SME Quick Loan.' The working of the loan agreement was, the quicker the loan was paid off the sooner the SME owner would be offered larger loans. In this way Standard Bank has kept their risk low and helped SME owners create a credit history for more traditional loans. According to Mahembe (2011) banks have focused on investing in micro businesses as they envisage that these customers will become profitable once their firms grow. Banks have opened their loan facilities to previously disadvantaged individuals (PDI) as part of their transformation process.

Hussain, Millman and Matlay (2006) point out the importance of the relationship between the owners of SME's with their banks. A positive relationship is key for the day to day financing and functioning of their firms plus it plays an important part for gaining longer term loans. They also mention that financing from banks plays a more important role in their firms as the firms grow. Initially financing for their firms was from owner's personal savings or family and friends. The European Investment Bank (EIB) (N.D.) reports that they have actively increased their support for SME's and continue to improve this going forward. They believe that finance for SME's should be encouraged and they believe in formulating packages for SME's according to the changing needs of the market. They also back SME's through banking guarantees and offer equity financing to SME's.

The World Bank's (N.D.) programme, 'Targeted Support for SME's', (TSME) has specifically been set up to channel funds to SME's via government funding agencies and assist where banking for SME's has been lacking. The World Bank does not traditional focus on SME's however this undertaking is playing an important role in supporting SME's.

1.3. Factors contributing to unsuccessful loan application

Funding institutions often assess SME's loan approval or rejection by considering the personality

of the owner of the SME. Haron et al (2013) mention that a person's personality points to whether they will honour the loan agreement. They additionally point out that financial institutions are striving to build long term relationships with their customers as the market has become very competitive and retaining customers is key for the banks growth and profitability. Abdulsaleh and Worthington (2013) and Irwin and Scott (2010) adds further to support this by pointing out that because the owner of a SME plays a significant role in the company and is the main decision maker the assessment by the financial institution is of the owner is a key factor used when offering or declining a loan to a SME.

SME's credit risk from a banks perspective can vary however banks commonly view SME's risk as higher than large corporations as they do not have the same level of security as their larger counterparts. According to Silburt (2012) credit risk is a view a bank takes of a SME as to whether they will be able to pay back the loan or not. The servicing of the loan is seen by banks as risky for SME's because they often operate in highly competitive environments in which profitability is low. Banks scrutinize the SME's ability to repay the loan by investigating the industry they are in and the prospects of the industry. Assessments are also conducted into the 'willingness' of the SME to repay the loan. This includes payment history from creditors, previous loans and even payment of taxes (World Bank 2014).

Available collateral for many SME's is insufficient for securing loans from banks. This hampers the firm's ability to grow and often SME owners have to pledge their own assets as collateral so that their firms can obtain financing from banks. According to OECD (2014) SME's faced increased pressure to provide additional collateral for loans as the region is undergoing economic hardship and SME's pose a greater risk to lending institutions. Banks took a view that the assets in general used for collateral were overvalued hence the increase in the collateral required. Abdulsaleh and Worthington (2013) reported that SME's with a greater variety of fixed assets are able to obtain financing at lower interest rates and have more chance of having their loans approved as they have greater financial leverage.

1.4. Problem statement

SME's are the engine of growth for the South African economy. Growth of our economy is important because through growth, jobs are created and unemployment is reduced. SME's however face a number of constraints to growth such as a lack of management skills, poor marketing capabilities and access to finance. Financial constraints caused by difficulties in accessing finance are therefore a major cause of limiting SME's growth and hindering South Africa's economic prosperity. SME's unlike larger firms rely heavily on debt finance and are vulnerable to failure as a result of not having sufficient funding. The challenge was therefore to gain an understanding of the challenges SME's went through in trying to access funding for growth. The study therefore explores the challenges faced by SME's in obtaining finance from the supplier's perspective.

2. METHODOLOGY

2.1. Research design

According to Sekaran and Bougie (2013:95,240-241) research design is to create a structure in which data are collected, measured and analysed using the research objectives as a base. Quantitative research uses data in the form of numbers or measurement and qualitative research uses data not in the form of numbers but rather in words (Punch 2013:3). In this study, the qualitative research method was used to explore the financial specialist's personal experiences and views relating to funding SMEs.

2.2. Location and participants of the study

The study was conducted in the Ethekwini Metro which incorporates the city of Durban. The researchers contacted Nedbank, Standard Bank, ABSA, First National Bank (FNB) and Ithala. But only Nedbank, FNB, and Ithala agreed to be interviewed for the study. The participants targeted for the study were senior financial business managers who dealt with SMEs at financial institutions in the Ethekwini Metro. These senior managers were purposefully selected based on their experience in dealing with SME finance. Two interviews were conducted with Nedbank, one with FNB, and one with Ithala – totaling four interviews. The interviews were conducted at their regional offices which were situated in Durban and in Umhlanga (FNB's regional office).

2.3. Data collection

The researcher used semi-structured interviews for the study, as they guided the interview using a specifically designed questionnaire focusing on SME finance issues. Each participant could give their specific views on the questions asked and share their answers freely using their own words. The interviews were conducted individually with the finance specialists at their premises, and lasted around 40 minutes each. The interviews were all recorded for later analysis. After a week of each interview, the researcher had similar interview with each of the participants again to see if the participants did not leave any important information. If there were any new information was provided in the second interview. No new information was provided by all the participants during the second interview. The researcher recorded all the interviews using audio recorder.

2.4. Ethical considerations

An ethical clearance certificate was obtained from the University of KwaZulu-Natal's Ethics Committee. Gate-keeper's letters were obtained from each of the financial institutions before the interviews were conducted. The researcher undertook to ensure that quality and integrity of the research and was given informed consent from each of the study subjects. The researcher respected the confidentiality and anonymity of all study subjects. Participation in the study was voluntary.

2.5. Data analysis

According to Woods (2011:5), the analysis of qualitative data includes the identifying, coding and categorising of themes and patterns in the data. Thematic analysis was used to identify and extract the themes and patterns from the data. The researchers read all the interview transcripts, then re-read them and highlighted similarities and differences. The similarities were given code names and arranged into themes. The transcripts were then imported into NVIVO and each was analysed line by line, and as further themes (Nodes) emerged the text relating to the themes was coded.

3. RESULTS AND DISCUSSION

The objective of the study was to explore the reasons for not approving finance to the SME owners when applying for finance from financing institutions. The following themes emerged from the interviews with the financial specialists from the banking sectors.

3.1. Risky business

SME's often do not receive finance because they are seen as a high risk by financial institutions. Risk for finance institutions has to be managed and is a key factor that is considering when approving or declining loan applications from SME's. The track record of SME's plays a significant role in assessing loan applications. The FNB specialist mentioned, "So I think generally banks have learnt from previous experiences and, and, and experiences and instances where people have failed us. There's a high failure rate in that section. So I...ja...like it's difficult. A lot of SME's I must say, most...the majority of them don't have a good track record."

This negative sentiment does not bode well for SME's and Silburt (2012) highlighted SME credit risk as to whether they will be able to pay back the loan or not. The risk was further heightened in Silburts view as SME's operate in highly competitive environments in which profitability is low. The World Bank (2014) elaborates further the high risk in loaning to SME's as banks have cut lending to SME's and driven SME's to acquire financing from other sources.

3.2. Lack of business management skills

Not having business management skills is another reason highlighted by the financial specialists for not having loans approved. This is a concern for our country as entrepreneurship is vital for growing our economy and creating employment. The FNB specialist mentioned, "They don't have the necessary experience. They have a good idea but they are not schooled in leadership. How to manage people. How to manage a business. What are the components of the financial leg of the business? So all of that. So those are some of the failures."

The issues highlighted of not having the experience, leadership skills and general business management skills is a major reason why business loans are declined. The Ithala specialist mirrored the above concerns using an analogy of a horse and jockey. A great horse with a poor jockey does not win races however an average horse with a great

jockey does. The below comments by the Ithala specialist went as follows. "Because ... look generally it also comes a bit with the management, the responsibility to run that business. Sometimes you might have the best business ever, it is like a jockey and a horse situation. You have got the best horse but if you don't have a good jockey, you are not going to win anything, you know. But if you have got an average horse but the best jockey, that guy knows how to ... how to win a race. He knows how to overcome the challenges, how to pace himself, etcetera. So it is exactly the same thing as a business. The jockey sometimes is more crucial in the viability."

Abor and Quartey (2010) mention the shortage of management skills in SME's is a major factor hindering SME growth. SME's owners often are not qualified to manage their businesses and also struggle to attract qualified managers as large firms are able to pay higher salaries and offer career paths to qualified managers. Jyothi and Kamalanabhan (2010) add that there is a difference in the management skills of SME owners and the management skills they require to manage their firms. Entrepreneurs experience is often lacking. A Turkish study revealed that Turkish women entrepreneurs recognize managerial skill deficiencies and usefulness of prior work experiences significantly impact on their business to be successful (Welsh, Memili, and Kaciak, 2016).

3.3. Experience

Entrepreneurs who don't have experience in the industry that they go into struggle. This was highlighted by the second specialist at Nedbank who commented, "So, you must have your mind right and you must know why you are doing it. You must have going for the right reasons and that is why we always look whenever we do an application we ask for a CV of the potential client to make, to see what experience they have got. Not only in that industry, but also in terms of handling staff..."

And it's for the right reasons. Ja. Also, if I think of a couple of my franchises that have gone belly up. One of the reasons was the client didn't have the right experience, he'd been in an office job and resigned and went into a DIY store and what does he know about DIY, you know, so we backed him, obviously we took security, but he didn't make it because he didn't have that knowledge to run a business."

The Ithala specialist backed this up by saying, "So we ... ideally in a situation, we would like a guy from the industry, who has had experience in the industry that he wants to go into as a business." Olawale (2010) supported this by highlighting that SME's fail due to insufficient management training and work experience.

3.4. Poor financial management

Poor financial management is a reason why SME's fail to obtain finance from financial institutions. The FNB specialist commented, "They don't have the financial acumen... He doesn't have the financial acumen to back him up. Ja. There is...it is difficult." The second specialist at Nedbank supported this by saying, "You have to allow your business, at least a year, turn your profits back into the business before you start drawing an income otherwise, it's going to put too much pressure on the cash flow, and yes, it's

not as glamorous as it seems. It's very, very hard and you've got to be very careful that you don't, once you see cash coming in, that you don't think, okay, I can start spending. No, you must put that away, build up the reserves, and then..." Jyothi and Kamalanabhan (2010) backs this up by highlighting that the lack of financial management often results in difficulties in securing finance and ends up in firms running out of funds to continue operations resulting in the business shutting down.

3.5. Poor credit records

Linked to poor financial management is poor credit record keeping. This also results in difficulties for SME's when applying for finance. The FNB specialist commented, "They either have a, an unhealthy credit record or credit history and now they're...the situation is here." This highlights the importance of managing creditors and ensuring that the firm's credit ratings are kept clean by paying bills and loan repayments on time. Ingilfsson (2011) supports this by adding that lending institutions assess SME's data such as financials, credit history and data about the SME's from credit bureaus. Silburt (2012) also points out that SME's have gaps in financial information due to poor record keeping practices. Poor financial management impacts negatively on the ability of firms to obtain finance and may result in business failure.

3.6. Poor business plan

A poorly written up business plan or one the entrepreneur does not understand hampers the funding process for SME's. Entrepreneurs in South Africa often do not have formal business training and do not have the capability to write up a business plan. They outsource their business plan to accountants or consultants and as a result do not understand the costs of running a business or understand the plan. The first specialist at Nedbank highlighted this by commenting, "I would say business plans not being theirs. So I mean there is a thousand templates out our website SimplyBiz.co.za has one, there, what happens is that people tend to have a generic business plan and generic ideas and it doesn't really talk to the heart of their business so you can't actually connect that when get into entrepreneurs."

The second specialist from FNB added to this by stating, "Let alone other factors that I've mentioned in terms of lack of skills and others, we find that the business proposal does not make sense."

The issue of not having business plans that are understood by entrepreneurs or plans that don't make sense lead to unsustainable businesses as capital depletes and cash flows run dry. Urban and Naidoo (2012) proposed that SME's lack operational skills in the manufacturing sector which is linked to not having comprehensive business plans including an operations plan with financial projections. Barbera and Hasso (2013) suggest that hiring an external accountant benefits the growth and sustainability of SME's. The external accountant fulfils the role of a business consultant bolstering the planning and assisting with compiling a formal business plan. This assists the SME management team in managing their business in a sustainable manner.

3.7. Lack of research

A lack of research and understanding the market, the customers and the competition has the potential to sink an application for finance as finance institutions want to know that SME's will be able to market and sell their products or services. The first specialist at Nedbank said, "As I say, it is a lack of research done. So there's lack of research and understanding of the business, understanding of the operations of the business. There is a lack of understanding the market that is the biggest weakness in most applicants." The second specialist at Sefa supported this by commenting, "The market is already, is not there or the entrepreneur cannot prove to us that there's a market. So the onus is on the entrepreneur to prove to us and justify that there's market for...for the business."

The points from the specialists highlighted that entrepreneurs need to do research and understand the market and operations (management) of their business. Thomas et al (2014) suggest that business plans and research is not going to guarantee success, as often these are made up of 'good guesses.' They propose that SME's rather use a business model canvas as a framework and work out the details as they progress. This is contrary to what the specialists said and could be viewed as an entrepreneurial approach which differs from the standard business plan approach used by financial institutions and accountants.

3.8. Not viable

Entrepreneurs have many ideas, however when tested the ideas may not be viable or don't make business sense. A business idea that is not viable, obviously will not be funded. The specialist from Ithala highlighted this by commenting, "The biggest reason is by lack of viability and affordability or sustainability. I mean if you get what I am saying, and that viability is always crucial, so those are the things that generally lead to us making a ... declining an application. Mostly it plays with the viability." The second specialist from Sefa supported this by saying, "The main reason as I'm saying, the most of the businesses which come to us, we find that they are not viable. So when we look at the business proposal, there's nothing that shows that the business will be sustainable."

The importance of a business being viable was highlighted by the specialists. Viability from an operations point of view firstly, in that the business should be able to fund operations, pay back the loan and market a product or service successfully to generate cash flows to fund the operations and make a profit. The business should also be viable from a management point of view, does the entrepreneur have the skills and experience to manage the business. Resnik (2013) shows that leaders in SME's are key to the success of their firms. A leader or entrepreneur with leadership skills should have the ability to lead a firm and grow the firm.

3.9. Lack of collateral

A lack of collateral is a key reason for SME's failing to be granted finance. This was highlighted by the

first specialist from Nedbank who commented, "Collateral is always going to be one and then I think a lot of factors around understanding the market and the competitors in that so if they start to do a swat analyses they tend to be very strong around what their skills are, what they bring to the table."

Collateral reduces the risk of the financial institutions as SME's often do not flourish but fail and are unable to pay back their debt financing. SME's do not always have assets that they are able to offer as collateral which hampers their funding drives. This is unfortunate as there are government agencies such as Khula that offer financial institutions backing for SME loans in situations where entrepreneurs don't have sufficient collateral. Steijvers et al (2010) add the personal wealth of SME owners plays an important role in whether or not SME's are able to obtain finance from banks. The owners often have to use their own assets as collateral as their firms do not have sufficient assets to secure loans. This places an additional burden on SME owners as they may lose their business and their personal assets should the business fail. According to Abdulsaleh and Worthington (2013) SME's with fewer tangible assets found it was more difficult to obtain finance. Researchers also concluded that combining with other variables such as sector and technology, business size is an important condition for firm to survive. There must be a relationship between incubators and other factors to ensure firm survival (Mas-Verdú, Ribeiro-Soriano, and Roig-Tierno, 2015).

3.10. Lack of passion

Entrepreneurs who lack passion for what they do may add a hurdle to receiving finance as has been highlighted by the second specialist at Nedbank who commented, "Possibly because as I say we back the jockey, so if it's somebody that's being, say for instance, being say a doctor's wife, for instance, that has been at home all her life, but now he's buying her a fish and chip shop. She doesn't really know much about fish and chips, she doesn't really know much about, about running a business, so for us it's so important that people go into this thing with a passion. They must have passion for what they doing and not just that they are there to make money. It is, it's not easy, hey. I always say, I admire the person that can go into business for themselves. You've got to have nerves of steel and you've got to have passion and you've got to have the willingness to work not just 09:00 to 05:00, but 7 days a week."

The specialist highlighted entrepreneurs need to have a passion for what they are doing. Entrepreneurs need to want to be involved in their business and to put in the hours needed to make their business successful.

Passion does not substitute experience however as a lack of business management experience can result in entrepreneurs not being able to cope with the finer details of managing a business. An entrepreneur may not manage stock levels or cash flow resulting in the business failing. Cardon et al (2013) suggests that passion is at the heart of entrepreneurship and the will to succeed. A lack of passion and experience may therefore result in a loan application being declined because financial institutions 'back the jockey'.

4. CONCLUSION

The results show that there are legitimate reasons why financial institutions decline loan applications. Risk was seen as a contributing factor for loans being declined. Not having business management skills is another reason highlighted by the financial specialists for not having loans approved. The lack of financial management often results in difficulties in securing finance and ends up in firms running out of funds to continue operations resulting in the business shutting down. Experience in an industry and passion for what they do was also highlighted as a benefit for an entrepreneur as financial institutions look for experience and passion when assessing loan applications and experienced entrepreneurs stand a greater chance as 'the jockey' to have loan applications approved. Poor financial management came up strongly as a reason to decline loan applications. Linked to poor financial management is poor credit record keeping. This also results in difficulties for SME's when applying for finance. Banks often view SME's as poorly managed and find their applications for loans have gaps in financial information due to poor record keeping practices. Poor business plans were also highlighted as a concern by the financial institutions when entrepreneurs applied for finance. Further to this a lack of collateral is a key reason for SME's failing to be granted finance.

5. RECOMMENDATIONS

The research has highlighted a number of practical ideas that have the potential to overcome the difficulties that SME's face when sourcing debt financing. The followings are recommended:

- Entrepreneur's education was found to be lacking in both literacy and numeracy. Our department of education should focus in increasing the standard of basic education focusing on these two key aspects.
- Training courses for entrepreneurs who lack business management skills would assist in educating SME owners and help entrepreneurs become more successful. These training courses could be run at higher education institutions and entrepreneurs could be encouraged by financial institutions to be enrolled in the courses as a requirement for applying for a business loan.
- Mentoring of entrepreneurs who lack skills for managing and growing their businesses would be useful as mentors would be able to teach entrepreneurs practical ways of doing business and train them in the finer details of financial management, marketing and sales, operations and supply chain management, which are key aspects of business management.
- Government led schemes for backing SME's who lack collateral such as Khula could be expanded to include backing for 100% of loans for entrepreneurs who are willing to first go through training courses as mentioned in b) above. This would encourage entrepreneurs to go on training courses and overcome the hurdle of not having collateral.
- The recommendations for future studies are as follows: Factors in the macro environment could be explored in how they benefit or constrain SME

growth. It would be interesting to investigate the level of success for SME's in relation to the level of education that the entrepreneurs have. Competitive advantage of SME's compared to larger firms could be investigated in relation to SME's decision making timespan.

REFERENCES

1. Abdulsaleh AM, Worthington AC. 2013. Small and medium-sized enterprises financing. *International Journal of Business and Management*, 8(14):36-54.
2. Abor J, Quartey P. 2010. Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39:218-228.
3. Barbera F, Hasso T. 2013. Do we need to use an accountant? The sales growth and survival benefits to family SMEs. *Family Business Review*, 26(3):271-292.
4. Cardon MS, Gregoire DA, Stevens CE, Patel PC. 2013. Measuring entrepreneurial passion: Conceptual foundations and scale validation. *Journal of Business Venturing*, 28(3):373-396.
5. De la Torre A, Peria MSM, Schmukler SL. 2010. Bank involvement with SMEs: Beyond relationship lending. *Journal of Banking and Finance*, 34(9):2280-2293.
6. European Investment Bank. 2014. Supporting access to finance for SME's and midcaps - EIB INFO 4 - 2014.
7. Haron H, Said SB, Jayaraman K, Ismail M. 2013. Factors Influencing Small Medium Enterprises (SME's) in Obtaining Loan. *International Journal of Business and Social Science*, 4(15):185.
8. Hussain J, Millman C, Matlay H. 2006. SME financing in the UK and in China: a comparative perspective. *Journal of Small Business and Enterprise Development*, 13(4):584-599.
9. Ingolfsson G. 2011. Financing constraints and internationalization of Danish SMEs. An analysis of financing constraints and its implication on internationalization aspiration of Danish SMEs. Master's thesis, M.Sc. International Business Economics, Aalborg University.
10. Irwin D, Scott JM. 2010. Barriers faced by SMEs in raising bank finance. *International Journal of Entrepreneurial Behaviour and Research*, 16(3):245-259.
11. Jyothi P, Kamalanabhan TJ. 2010. A study on the critical success and failure factors affecting the development of small business. *International Council for Small Business: World Conference Proceedings*. pp. 1-25.
12. Mahembe E. 2011. Literature review on small and medium enterprises' access to credit and support in South Africa. Prepared for National Credit Regulator. Underhill Corporate Solutions, pp. 44-45.
13. Mas-Verdú F, Ribeiro-Soriano D, Roig-Tierno N. 2015. Firm survival: The role of incubators and business characteristics. *Journal of Business Research*, 68(4):793-796.
14. OECD. 2014. Financing SMEs and entrepreneurs. An OECD scoreboard, Paris, OECD Publishing, pp.37-39.
15. OECD. 2006. Financing SMEs and Entrepreneurs. OECD Policy Brief.
16. Olawale F, Garwe D. 2010. Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. *African Journal of Business Management*, 4(5):729-738.

17. Resnik DA. 2013. The role of reflection in leader identity formation in small-and medium-sized enterprises (SME). Doctoral dissertation, Capella University.
18. Ruis A, Stel AV, Tsamis A, Verhoeven W, Whittle M. 2009. Cyclicalities of SME finance: Literature survey, data analysis and econometric analysis. EIM Business and Policy Research, Brussels, European Communities, pp. 5.
19. Sekaran U, Bougie R. 2013. Research methods for business, 6th ed., Wiley Publication, pp. 240-241.
20. Silburt A. 2012. Financing obstacles for SMEs in China. International Finance, Yangzhou University, pp. 4.
21. Steijvers T, Voordeckers W, Vanhoof K. 2010. Collateral, relationship lending and family firms. Small Business Economics, 34(3):243-259.
22. The World Bank. 2014. Facilitating SME financing through improved Credit Reporting. Report of the International Committee on Credit Reporting, chaired by the World Bank. P 14-17.
23. Thomas DF, Gudmundson D, Turner K, Suhr D. 2014. Business Plan Competitions and Their Impact on New Ventures' Business Models. Journal of Strategic Innovation and Sustainability, 10(1):35.
24. Urban B, Naidoo R. 2012. Business sustainability: empirical evidence on operational skills in SMEs in South Africa. Journal of Small Business and Enterprise Development, 19(1):146-163.
25. Welsh DHB, Memili E, Kaciak E. 2016. An empirical analysis of the impact of family moral support on Turkish women entrepreneurs. Journal of Innovation & Knowledge, 1:3-12.
26. Woods M. 2011. Interviewing for research and analysing qualitative data: An overview. Massey University.
27. Yon R, Evans D. 2011. The role of small and medium enterprises in frontier capital markets. Network Science Center at West Point, pp. 7.

TECHNOLOGICAL INNOVATIONS PERFORMANCE AND PUBLIC-PRIVATE- PARTNERSHIPS

Fanny Saruchera*, Maxwell A. Phiri*

*University of KwaZulu-Natal, South Africa

Abstract

The research institutes' dilemma in successfully bringing their breakthrough technological innovations to the market has remained major concern in most developing economies. Zimbabwe is no exception. The theory of Public-Private-Partnerships (PPPs) and their increasing applicability in especially the provision of public facilities and services has commanded some research interest worldwide. However, not much attempts have been made to unlock the value in the PPP's capability in enhancing commercialization of technological innovations, worst still from a developing economy's perspective. This paper explores the role of PPPs in ensuring successful Research and Development, and Commercialization (R & D-C) of research outcomes. Guided by a systematic literature review on key success factors of PPPs, cases of two forms of PPPs (a Build-Own-Operate-Transfer (BOOT) PPP, and a concession contract) were studied and their operations were monitored and evaluated, in comparison to institutes not engaged in any partnership – to supplement data obtained through key informant interviews. The study established that research institutes engaged in PPPs had relatively fewer commercialization challenges for their output as compared to those who were not engaged. However, it emerged that there are limitations regarding observance of the critical success factors, thereby hindering progress of the prevailing PPPs. The findings of this study imply that there are limited understandings surrounding the value that could be unlocked in commercializing research institutes' innovations through PPPs. To the few existing PPPs, there is lack of integrative frameworks for the management of, and success of the PPPs. Anchored on promoting ideal collaborations in which all key values are honoured, the study proposes a framework that emphasizes a collaboration in which the public research institute concentrates on research and development, while the private firm partner uses her market analytics to focus on getting the product to the market.

Keywords: Commercialization, Developing Economies, Innovations, Research Institutes, PPPs

1. INTRODUCTION

PPPs have indeed become prominent of late, and their importance has become more significant over time. Jamali (2004; 2007) observed that the growing appreciation of the importance of the market mechanism, coupled with the success of privatization in various countries has sharply increased interest in the continuously emerging PPP phenomenon. PPPs have thus become a popular institutional arrangement, as they are perceived to remedy a lack of dynamism in traditional public service delivery. Over the recent years, the public sector has been faced with various conflicting pressures emanating from global competition, public debt problems and a more sophisticated and demanding consumer base (Ancarani & Capaldo, 2001; Wright, 1994) thus the sector is being challenged to improve its performance through the use of 'market-like approaches' to public sector activities, management decentralization, and focus on constantly improving service quality (Kelly, 2005), and PPPs have appeared on top of the recommendations list. However, while research on R&D networks is abundant, network relations in the

commercialization of innovations have amazingly attracted little attention and consideration (Aarikka-Stenroos & Sandberg, 2012) and there has been no systematic evaluation of the policy requirements for successful PPP implementation (Jamali, 2004) predominantly in developing economies that have only just begun to try out with some few practical applications of such partnerships in commercializing their hard-earned research output.

This paper explores the role of PPPs, and a framework drawn from literature is extracted to guide especially developing economies in formulating successful PPPs, while guidelines for assessing the effectiveness of such partnerships are also depicted.

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1. PPPs and their various forms

Different countries exploit varied approaches to PPPs. As such the partnerships are becoming more common and as their literature is growing hence the discussion of partnership aspects may occasionally

cause confusion due to differences in vocabulary and underpinning concepts. Mouraviev and Kakabadse (2012) critically assessed some of these conflicting and overlapping views on contractual and institutional PPPs, their forms and models, and the authors further draw insights especially for developing and transitional economies. The term 'public-private partnership' (PPP) has been described mainly from contractual (Renda & Schrefler, 2006) and institutional (Hall, 2008a) perspectives, thus it is important to contextualize the PPP, given that the term has been understood differently.

For instance, Witters *et al.* (2012: 81) describe a PPP as a relationship in which public and private resources are blended to achieve a goal or set of goals deemed to be reciprocally beneficial both to the private entity and to the public. Sedjari (2004: 303) argues that a PPP is a new cultural phenomenon by itself and defines it as an "a culture of engagement...a capacity for the collective mobilization of participants which now forms the substance and strength of public programmes..." According to Nijkamp *et al.* (2002), a PPP is an institutionalized form of cooperation of public and private actors, who on the basis of their own indigenous objectives, work together towards a joint target. PPPs are a means of public sector procurement using private sector finance and best practice thus they can involve design, construction, financing, operation and maintenance of public infrastructure and facilities, or the operation of services, to meet public needs (Jefferies, 2006). Thus PPPs imply collaborations to achieve common goals, while leveraging joint resources and capitalizing on the respective competences and strengths of the public and private.

We can still gather a lot more views and perspectives of PPPs as the concept has attracted worldwide attention and has become of much interest especially in the context of developing economies. A closer look at the above views is however sufficient to conclude that academics have not given complete definition of PPPs. Instead, different scholars have concentrated on selected characteristics of PPPs. Taking into account that conceptual frameworks that may be useful for studying PPPs vary, Mouraviev & Kakabadse (2012:264) have come to the realization that though there are different perspectives of PPP analysis, the bulk of studies fall in three major domains: partnerships as a policy tool; a PPP as an organizational and financial arrangement; and PPP performance, risk allocation, and critical success factors.

2.2. Forms of PPPs

Börzel & Risse (2005) present their understanding in terms of about four distinct types of PPPs namely regular consultation and cooptation of private players, delegation of state functions to private actors, co-regulation of public and private actors as well as private self-regulation in the shadow of hierarchy. The authors have also adopted a fifth PPP form, state adoption of privately negotiated regimes (Kerwer, 2002; Lehmkuhl, 2000).

According to Li *et al.* (2004), the UK government identified eight types of PPPs including (1) Asset sales, (2) Wider market, (3) Sales of

business, (4) Partnership companies, (5) Private Finance Initiative, (6) Joint ventures, (7) Partnership investments, and (8) Policy partnerships. The authors however noted that the most used PPP model developed economies such as in the UK is the Privately Financed Projects (PFI). In support of these views, Jefferies (2006) noted that alternative PPP project delivery systems can include the Build-Own-Operate-Transfer (BOOT) system and the Privately Financed Projects (PFP).

Hellowell *et al.* (2008) used slightly different criteria. They believed that PPP contractual forms vary from those where there is a great deal of public sector involvement to those where there is very little involvement. Different forms also present different levels of risk transfer. Thus The Price Waterhouse Coopers Report (Ireland) reports that the spectrum of contractual options ranges from Design, Build and Operate (DBO) contracts to Design, Build, Operate and Finance (DBOF) contracts and Concession contracts. The BOOT and concession contracts appear to be common in many developing countries.

McQuaid & Scherrer (2010) however summed up all preceding studies on PPPs and concluded that all PPP forms can be categorized as follows: Provision of services (including infrastructure) to the public sector, Ownership i.e. the introduction of private sector ownership into state-owned businesses, generating commercial value from public assets through selling of public sector services to others, as well as Promotional PPPs.

As noted above, it can be concluded that there are various forms and / or types of PPPs and each form involves a unique set of rules, requirements in terms of investment and eventually this impacts on the degree of risk(s) involved. Developing economies could thus learn from success stories by different economies who have adopted different forms of PPPs. A starting point would rather be going for those PPP forms that involve less risks before embarking of high-return but highly risky projects. For this reason, PPPs have become very common as they have demonstrated their capability to be a good starting point for any PPPs in any economy.

2.3. The role of PPPs in R & D and commercialization of Technological Innovations (TIs)

2.3.1. Innovation risks sharing

Preceding researches (*e.g.* Mohr *et al.*, 2005) have reiterated that risks are inevitable in the development and commercialization of TIs. Under a *legal* construction of PPPs (Witters *et al.*, 2012), the partners share risk, reward, and responsibility for a shared investment (Akkawi, 2010). PPPs are therefore not merely paraphernalia for projects funding - they call for full dedication from all parties involved to ensure minimum risks prevail.

2.3.2. Facilitating commercialization of innovations

According to Witters *et al.*, (2012), the PPP legal construction can cover three types of arrangements, and these go a long way in facilitating commercialization of TIs. "...first, it can be used to introduce private-sector ownership into state-owned businesses through a public listing or the introduction of an equity partner. Second, it can

become a private finance initiative, where the government takes advantage of private-sector management skills by awarding long-term franchises to a private-sector partner, which assumes the responsibility for constructing and maintaining the infrastructure and for providing the public service. Third, it can cover the selling of government services to private-sector partners, which can better exploit the commercial potential of public assets. In these three arrangements, the private-sector consortium typically forms a special company, called a 'special purpose vehicle' (SPV) - to develop, build, maintain, and operate the assets for the contracted period. In cases where the government has invested in the project, it is usually - but not always - allotted an equity share in the SPV..." Witters *et al.* (2012: 81).

Thus by exposing the technological innovations invented in the public research institutes to competitive tendering, PPP's enable the quality and cost of such TI's to be benchmarked against the prevailing international market standards, thereby helping to secure efficiency improvements within the economy as a whole.

2.3.3. Economy sustainability through PPPs

Research shows that PPPs can improve urban living through collaborations that combine innovative efforts from the private sector, forward-thinking policies from governments, and support from non-profit organizations (Crozier, 2010). Hence PPPs can revive an economy and improve living standards through employment creation, education, economic development, public safety, healthcare, and other social services. Rather than cutting back on these critical services, the government may rope in the private players and transform the manner in which such products and services are developed, commercialized and distributed.

2.3.4. PPPs drive innovation

PPPs are critical instruments for innovation. They help governments become more inventive by creating a space outside the government structure that allows innovation to flourish. They also help to inject a broader set of skills and talents, as well as a more diligent and responsive work culture into the government machinery and to create a solid foundation for innovative thinking and creativity. PPPs also help private companies embrace innovation and bring together new financial resources and business capital to help open the door for the creation of new industry clusters, thus ultimately helping to facilitate innovation in increasingly competitive environments (Witters *et al.* (2012).

2.3.5. Use of private sector expertise

Besides provision of quicker and long term private financing options (NCPPP, 2003), PPPs ensure the use of the private sector expertise in terms of technology, marketing, management, and customer service for implementation of the public sector objectives (Brinkerhoff & Brinkerhoff, 2004; Sedjari, 2004). Thus it can be concluded that PPPs provide a platform upon which the state can provide capital resource outlays that will help in R & D, for example

the infrastructures and natural resources; while the private players will use their marketing skills to get the TI sail through to the market.

2.3.6. PPPs on innovation policies

Nurturing relationships in the National Innovation System (NIS) has become one of the R & D, and commercialization major policy focus areas, with PPPs being the main policy instrument. Research has proven that PPPs in the field of TI are essential for the competitiveness of regions and individual countries, and various regions are making moves to identify the best use of PPPs in this respect (Witters *et al.*, 2012; Akkawi, 2010). For instance, the European Commission is building up a specific legal framework to facilitate the creation of PPPs and ensure that risks and responsibilities are shared (European Commission, 2011; Europa, 2010); the intent being to assure access to finance through grants, public procurement, or investment.

Back home, a study by Akkawi (2010) reveals that in the Middle East and North Africa, PPPs are also taking centre stage in terms of regulatory requirements. It is apparent from these observations that any commercializing policy should revolve around linkages and PPPs make the policy complete. Zimbabwe can thus derive some lessons from the above case studies through defining legal frameworks and policies to develop and make the use of PPPs more transparent and better integrated in the national context for the betterment of the economy.

2.3.7. PPPs improve economic competitiveness & modernises national infrastructure

The concept of PPP's recognizes that there are some activities that the public sector does best and other activities where the private sector has more to offer. Through permitting each sector to focus upon what it does best can the Government provide the quality services that the public expect of them. PPP's can thus generate substantial benefits for both consumers and taxpayers. PPPs also enable the public sector to deliver its objectives better and to focus upon its core activities of procuring services, enforcing standards and protecting the public interest.

3. METHODOLOGY

Given the insufficiency of original research related PPP issues in developing economies, and the comparative nature of this study, a sequential process of combining the extant literature on assessing the effectiveness of PPPs, with real-world practices was adopted. More specifically, the method formulated a checklist on the criteria for assessing the effectiveness of PPPs as well as a set of interview questions, based on literature. This was then used to establish the situation on the ground. As posited by Yin (1994), this research approach is quite useful when developing well-grounded theory and is helpful in explaining how and why events have occurred in a certain manner. The extant literature reviewed brought to light some features of effective PPPs, and these were blended together with literature on university-industry collaboration (*e.g.*

Dooley & Kirk, 2007; Philbin, 2008; Saruchera *et al.*, 2014), as well as the role such partnerships can play particularly in ensuring successful commercialization of technological innovations in Zimbabwe. Thus the systematic analysis of literature resulted in the development of two instruments used in this study – a checklist used in assessing the effectiveness of the existing PPPs, and a string of structured interviews questions that were administered on select staff both institutes with and without PPPs. Eight (8) interviews were scheduled and held with five participants from public research institutes and the remaining three from private research institutes. Each interview lasted for 25-35 minutes. The structured interviews were administered on key informants from both private and public research institutes; and on appointed liaison officers in cases where PPPs exist.

An interview guide was used to facilitate the interviews, which acted as a basis to discuss the key PPP issues. A preliminary interview guide was used for the first round of three, which was then refined, based on the nature of responses emerging from these three sessions. This was meant to improve the quality and flow of the questions, thus certain questions were removed as they were deemed duplicate. Thus the revised guide contained eight main questions, whose questioning revolved around key PPP issues pertaining; (1) key elements and resources needed to establish PPPs, (2) PPP role distribution, funding and resource management issues, (3) principal factors that make PPPs successful, (4) role of PPPs in R & D and commercialization new products – actual and perceived, (5) Managing organizational diversity, (6) PPPs appraisal, and (8) Making PPPs in Zimbabwe more effective.

In obtaining the data, written consent was sought and obtained from both the research institutes and interviewees who took part in this study. Ethical Clearance, (Ref: *HSS/0457/013D*) was obtained from the University of Kwa-Zulu Natal, through the university's Humanities and Social Sciences Research Ethics Committee.

SPSS *Text Analytics* were used to sort the qualitative data emerging from the interview responses, into clusters and to locate the subsets of the data according to specified criteria. As a result a the responses were grouped in a related manner to cluster analysis as propounded by Aldenderfer & Blashfield (1984), in order to help structure the data to convey meaning. Most of the responses to the interview questions were common in nature. Section 4 provides some select responses from the interviews, most of which were indeed in line with literature. Table 1 gives a summary of the issues that emerged on the state of prevailing PPPs as guided by checklist constructs obtained from literature review, embedded with interview findings. Some of the data was used in the selection and proposal of a PPP framework, in section 5.

4. MAIN FINDINGS

To start with, it emerged from the study that although all respondents from different institutes appreciate the idea of PPPs and their role, participants from two institutes only indicated that their institutes were engaged into “serious” collaborations – one identified as a BOOT and the

other, it emerged that it was a concessionary partnership. Statistically, these two translate to the fact that only 25% of the institutes that took part in the study have some PPP arrangements – a clear indication that PPPs formulation are still at grassroots level in developing economies such as Zimbabwe. Thus interview questions that revolved around the role of PPP's had ready answers from those respondents whose institutes were engaged in some PPPs. For instance, common roles that emerged from the study were in line with literature reviewed and these included: risk sharing, facilitation of technological commercialization, economy sustainability, innovation drive through sharing of ideas and expertise and modernization of the economy's infrastructure. One of the most common roles that emerged across all respondents was the fact that interviewees strongly felt that PPPs help in improving the economic competitiveness of the nation as a whole. This, the respondents said, can be enhanced through PPPs' ability to modernize national infrastructure. For instance, one respondent stressed that:

Indeed, PPPs help in resolving national problems. Take for instance, the E10 fuel PPP which saw the erection of the gigantic ethanol plant in Chisumbanje, how many jobs has it created? How many living standards have the structure improved? How many access roads have roads have been constructed? What about houses...?

In support of this opinion, another respondent echoed:

Of course we have a lot to gain than to lose with these alliances. You see when we engage in these alliances, in most cases we erect structures for production, sales and marketing, administration etc. hence employment is created, living standards are improved; peoples' tastes improve as they move along with technology. This means our new technologies' market uptake improves as well.

On the contrary, participants whose firms were not engaged in any PPP had nothing much to offer. It was only after trying to elaborate further about PPPs, that some began to recognize the potential value in PPPs. The participants however indicated that there was need for, besides financial resources – commitment, clear role distribution (which should be supported by “effective implementation”), willingness to participate, need for creation of, and adherence to clear PPP principles, transparency in all dealings – if success is to be achieved through PPPs. The majority of the interviewees alluded to the fact that PPPs have a great potential in unlocking the technological commercialization equation if they could get the necessary support and motivation. Thus the study supports the views of Witters *et al.*, (2012) who established that the PPP legal construction can go a long way in facilitating commercialization of TIs, building on the work of Brinkerhoff and Brinkerhoff (2004) and Sedjari (2004).

Asked the level of general public awareness they thought exist of the existence of some PPPs in Zimbabwe, the majority of the participants strongly felt that the general public is not very much aware of the existence of PPPs in Zimbabwe, “serve for a few” “constituencies” of respective research institutes.

With regards to managing organizational diversity, it emerged that in any PPP set-up, diversity

was indeed most likely to be inevitable. Due to diversified nature of the backgrounds from which each of the PPP players come from, multi-disciplinary proposals are most likely to emerge thus the respondents unanimously suggested that there is need for “stronger management...to make sure we get things done...”. Philbin (2008) notes that when commercializing technology, there is need to analyze both the technical and commercial positions, thus managing the expectations on both sides (diversity) is indeed crucial.

It was however evident from the findings that PPPs appraisal issues are still being looked down upon as most of the participants professed ignorance on how such appraisal could be done on existing partnerships. Thus, in order to fill in this gap, the researchers made use of the embedded checklist to assess the commercialization performance of the institutes with partnerships, and their overall performance was eventually compared against that of institutes without partnerships. Such performance was rated in terms of public awareness, market knowledge of the institutes' products and general market preferences.

4.1. Evaluating the effectiveness of the existing PPPs

Literature reviewed established that there are a number of ways that can be used to determine the effectiveness of PPPs. To start with, Chandran *et al.* (2009a) talks of the number of collaborative activities, networks and partnerships as one of the key indicators of the extent to which value is placed on PPPs. This is however influenced by the degree of interest to collaborate with public organizations among industries, which is in turn, also influenced by the gap in the nature of R & D activities between industry and research institutes. In assessing PPPs, Lund-Thomsen (2009; 2007) dominates the literature framework as he posits an integrated framework for assessing PPPs, which consists of about six criteria for assessing the impact of PPPs. These include relevance, effectiveness, impact, efficiency, sustainability, participation and the accountability criterion. Using these criteria, supported with views from other authors, Table 1 below summarizes issues that emerged on the state of prevailing PPPs as guided by checklist constructs.

Table 1. Literature and empirical responses on state of PPPs in Zimbabwe

<i>Criteria</i>	<i>Literature reference(s)</i>	<i>Findings / current state</i>
Relevance	This criterion is helpful in relation to evaluating whether clear objectives have been established for a given PPP, and whether these objectives are in line with those of partner organizations and intended beneficiaries. (Lund-Thomsen, 2007)	Most PPP arrangements are often initiated with a clearly stated objective but it is the consideration of whether the intended objective is in line with the interests of an intervention's intended beneficiaries that usually lacks.
Effectiveness	The criterion draws attention to whether PPPs are capable of meeting the stated objectives (Lund-Thomsen, 2007)	Respondents indicated that though their PPPs had the capacity to meet objectives, efforts are shuttered through “claims that are made in the name of PPPs that never will be fulfilled
Impact	This criterion relates to the theoretical critique of PPPs, including whether partners are co-opted, regulatory efforts undermined, an internal culture of censorship developed (Lund-Thomsen, 2007).	Since our PPPs are mostly inclusive of the state, as the regulators, correct procedures are followed though at times, “shortcuts” are taken.
Efficiency	This useful in considering whether the PPP has used its resources efficiently in order to achieve its intended objectives (Lund-Thomsen, 2007)	Shared resources make all work fairly smoothly though at times there are issues over ownership.
Sustainability	The <i>sustainability</i> criterion helps assess whether the benefits generated through PPPs can be sustained over time, whether the PPP can financially sustain itself	Shared efforts make this possible (1+1=3).
Participation	The process through which stakeholders influence and share control over priority setting, policy-making, resource allocations and access to public goods and services	With cleared laid rules, participation is almost guaranteed. What lacks is the ability to identify, and concentrate efforts on what one partner is good at.
Accountability	How to keep power under control....how to prevent its abuse, how to subject it to certain procedures and rules of conduct” (Schedler <i>et al.</i> , 1999:13). Newell and Garvey (2005	It is made clear that all involved are aware that they are accountable for their actions.
Social capital	As expressed through the social capital theory (Adler and Kwon, 2002)	Participants emphasized the need to gradually build up trust and commitment between the partners
Special Project Vehicle (SPV) / Collaboration agent	Woods <i>et al.</i> (2004) calls for the need for leaders and project co-coordinators	There are more benefits derived from having a person (special vehicle) who “drives forward” the partnership ensuring that the vigor is maintained.
Economic benefits	A PPP is said to have been effective if it reaps more socio-economic benefits than private benefits and industrial R & D and commercialization success.	This is especially true if the PPP was created with the society at heart.
Technology transfer	PPP success is achieved in terms of transfer of technology (Rasiah & Chandran, 2009).	Speedy, efficient and cost effective delivery of projects
Stakeholder consultation	Necessary in the development of PPPs programme, progress review etc. (Hellowell <i>et al.</i> , 2008)	Almost inevitable. The platforms help in shaping the way forward for improvement.

5. DEVELOPING A FRAMEWORK FOR CREATION OF PPPs

Both developed and developing economies are working towards formulating and sustaining PPPs in their various forms. However, most developing countries have lacked a framework for developing such partnerships. And to those economies who

have managed to set up some PPPs, not much has been done in terms of assessing how effective such partnerships have been. Various authors have identified factors they consider critical to the success of PPPs. Table 2 below attempts to summarize these CSFs that could be adopted in developing economies such as Zimbabwe.

Table 2. Critical success factors of PPPs

<i>Critical success factor (s)</i>	<i>Main contributors (Source)</i>
Consistent and justified changes in network relations	Aarikka-Stenroos & Sandberg (2012)
Argue that ICT is necessary to facilitate the formation and operation of virtually every PPP	Witters <i>et al.</i> (2012)
Informal networks often facilitate more formal relationships that facilitate spinoff and licensing arrangements with established firms	Martinelli <i>et al.</i> (2008); Landry <i>et al.</i> (2002)
Composition of the founding team, their collective industry experience, management capability, and knowledge are critical.	Pollock <i>et al.</i> , (2007); Rothaermel <i>et al.</i> (2007); O'Shea <i>et al.</i> (2005); Shane and Stuart (2002)
Need for a workable and efficient procurement protocol	Zhang (2005)
Available financial market	Jefferies <i>et al.</i> (2002); Qiao <i>et al.</i> (2001); Akintoye <i>et al.</i> (2001a)
Government involvement by providing guarantees	Qiao <i>et al.</i> (2001); Kanter (1999); Zhang <i>et al.</i> (1998); Stonehouse <i>et al.</i> (1996)
Good governance	Qiao <i>et al.</i> (2001); Badshah (1998); Frilet (1997)
Political support	Qiao <i>et al.</i> (2001); Zhang <i>et al.</i> (1998)
Stable macro-economic environment	Qiao <i>et al.</i> (2001); Dailami and Klein (1997)
Technology transfer	Qiao <i>et al.</i> (2001)
Appropriate risk allocation and risk sharing	Qiao <i>et al.</i> (2001); Grant (1996)
Sound economic policy	EIB (2000)
Shared authority between public and private sectors	Kanter (1999); Stonehouse <i>et al.</i> (1996)
Commitment/responsibility of public/private sectors	Kanter (1999); Stonehouse <i>et al.</i> (1996)
Favourable legal framework	Bennett (1998); Jones <i>et al.</i> (1996); Stein (1995)
Social support	Frilet (1997)
Well-organized public agency	Finnerty (1996); Jones <i>et al.</i> (1996); Stein (1995)

Haque (2004) underlines mutuality and organizational identity as the two key features for such partnerships. In support of O'Shea *et al.* (2005) and Shane and Stuart (2002), Rothaermel *et al.* (2007) emphasize that composition of the founding team, their collective industry experience, management capability, and knowledge, are all critical. Unfortunately, most of the few PPP's in developing economies teams lack these characteristics. Lack of most CSFs in developing economies has been attributed to the continued failure of PPPs.

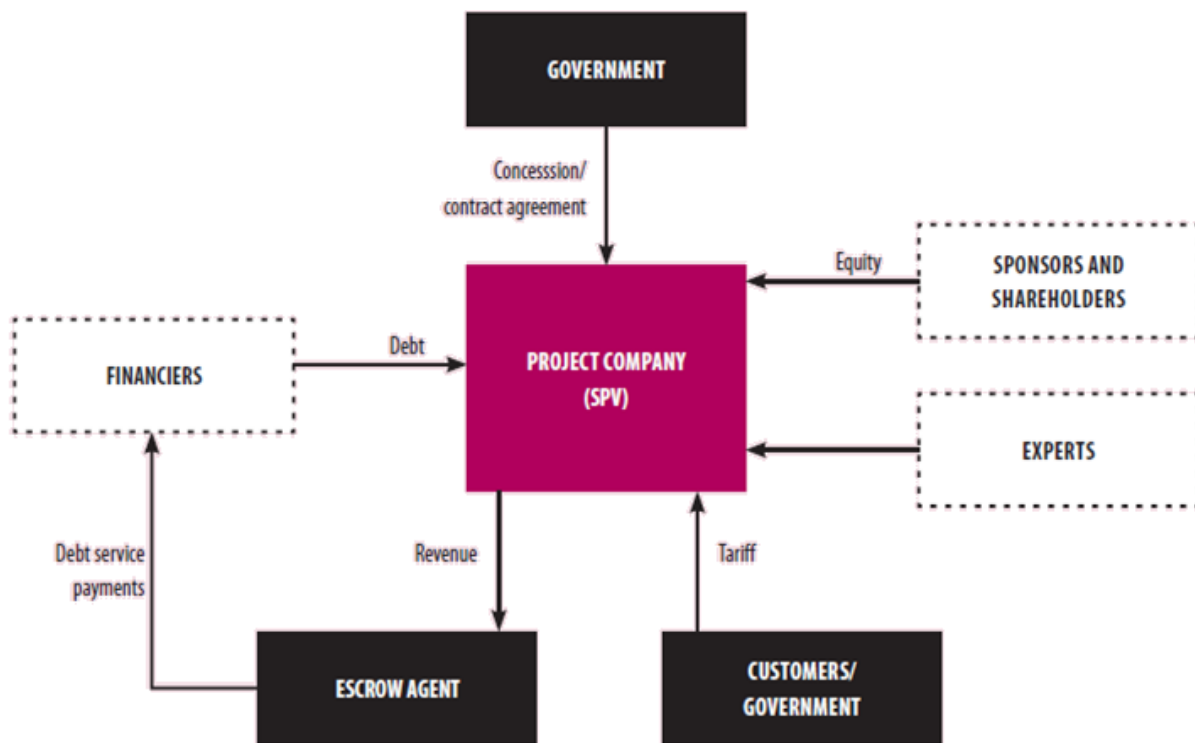
As can be noted from the summary table, quite a considerable number of studies have focused on PPPs success factors. While these studies have developed different lists of critical success factors (CSF) for PPP/PFI projects, similarities and differences can be established. To this end, Li *et al.* (2005) have thus attempted to rank these CSFs according to their perceived relative importance – the top five CSFs being (1) Strong private consortium, (2) Appropriate risk allocation and risk sharing (3) Available financial market (4) Commitment/responsibility of public/private sectors and (5) Thorough and realistic cost/benefit assessment¹.

However, despite these CSFs, which have been mostly proven in PPPs / PFIs in developed economies, some problems have been reported with the partnerships, especially in the area of procurement. Pertinent issues include cost restraints on innovation, high costs in tendering, complex negotiation as well as differing or conflicting

objectives among the project stakeholders (Akintoye *et al.*, 2001). Some of these challenges can, however, be resolved by ensuring that an appropriate structure is set up for the PPP.

As can be noted from Figure 1, there is need to share risk amongst various participants in the partnership, including the government, financiers, agents and support from shareholders and various experts is also vital. Through this interaction, the private-sector consortium typically forms a special company—called a 'special purpose vehicle' (SPV)—to develop, build, maintain, and operate the assets for the contracted period (Witters *et al.*, 2012). Within the PPP, it is the SPV that then signs the contract with the government and with subcontractors (where necessary) to build the facility and then maintain it.

Different participants play varying roles for the achievement of the common goal in the PPP. For instance, the shareholders provide equity into the SVP, while the experts are the providers of some specialized knowledge. The government provides a conducive legal framework (Qiao *et al.*, 2001), sound economic policy (EIB, 2000) as well as the appropriate resource base; while financiers should financially support the partnership. All partners involved share risk, reward, and responsibility for a shared investment (Akkawi, 2010). And as noted earlier on, Witters *et al.*, (2012) reiterate that PPPs are not simply tools for funding projects, but they require full commitment from all partners (as shown in the structure) for the entire undertaking.

Figure 1. Typical structure of a PPP project

Source: UN ESCAP, 2011 in Witters et al., 2012

The precise roles and responsibilities of the public and private sectors in any PPP will depend upon the contractual terms agreed and will vary from project to project. However, in most PPP's private sector contractors become long-term service providers rather than simple upfront asset builders. As a result, central and local government agencies become more involved as regulators and focus their resources upon service planning, performance monitoring and contract management rather than upon the direct management and delivery of services (Hellowell et al., 2008).

6. CONCLUSIONS AND RECOMMENDATIONS

Research shows that collaborative R & D and commercialization activities among industries in most developing economies are still low though there is a great potential for improvement. Most literature dwells on PPPs in national service delivery and very little work has been done focusing on TIs' commercialization PPPs. This paper has proven that PPPs can be safely used in R & D and commercialization of TIs in the same manner they are utilized elsewhere.

The findings of this study imply that there are limited understandings surrounding the value that could be unlocked in commercializing research institutes' innovations through PPPs. Thus there is need to educate various research institutes of the "miracles" a carefully-run PPP can work in getting new TIs to the market. In a modern competitive world where standardization is slowly taking precedence due to globalization forces, the only way is to cooperate with other firms. Some have even opted to collaborate with their competitors, a move described as "co-petition", all meant to prove that

the combined efforts of two or more, far surpass individual efforts (1+1=3).

To the few existing PPPs in Zimbabwe, the findings show that there is lack of integrative frameworks for the management of, and success of the PPPs. Anchored on promoting ideal collaborations in which all key values are honoured, the study thus proposes a framework that emphasizes a collaboration in which the public research partner concentrates on research and development, while the private partner uses her market analytics to focus on getting the product to the market.

7. DIRECTIONS FOR FURTHER STUDY

While most authors sing the PPPs tune as a partnership between the private institute and the government (public institute), Greer and Lei (2012) emphasize that research institutes should engage into Collaborative Innovation with Customers (CIC), a concept which the authors argue has not been fully explored and put into practice. From the review of some recent literature on the subject (e.g. Lichtenthaler, 2011, 2009; Ojanen and Hallikas, 2009), it would seem that a blending of the CIC concept with PPPs could bring some unique but complete results. Though this paper study did not necessarily blend these concepts, efforts were made to ensure that the model developed encompassed concepts from both PPP and CIC schools of thought.

REFERENCES

1. Aarikka-Stenroos, Leena, & Sandberg, Birgitta. (2012). From new-product development to commercialization through networks. *Journal of Business Research*, 65(2), 198-206.

2. Adler, P. and Kwon, S. (2002). Social capital: prospects for a new concept. *Academy of Management Review*, 27 (1), 17-40.
3. Aldenderfer, M.S. and Blashfield, R.K. (1984). *Cluster Analysis*, Sage Publications, Beverly Hills, CA.
4. Akintoye, A., Beck, M., Hardcastle, C., Chinyio, E., & Asenova, D. (2001). The financial structure of Private Finance Initiative projects. Paper presented at the 17th ARCOM Annual Conference, Salford University, Manchester.
5. Akkawi, A. (2010). INSEAD—PPPs as Policy Instruments. http://campuses.insead.edu/abu_dhabi/events/PPPPresentation29.11.10.pdf.
6. Ancarani, A. and Capaldo, G. (2001). Management of standardized public services: a comprehensive approach to quality assessment. *Managing Service Quality*, 11(3), 331-341.
7. Antioco, M., & Kleijnen, M. (2010). Consumer adoption of technological innovations: Effects of psychological and functional barriers in a lack of content versus a presence of content situation. *European Journal of Marketing*, 44(11/12), 1700 - 1724.
8. Bennett, E. (1998). Public-private Co-operation in the Delivery of Urban Infrastructure Services (Water and Waste), Background paper: Public Private Partnerships for the Urban Environment Programme (PPPUE), UNDP/Yale Collaborative Programme. New York: United Nations Development Programme.
9. Börzel, Tanja A. & Risse, Thomas. (2005). Public-private partnerships: Effective and legitimate tools of international governance. *Reconstituting Political Authority. Complex Sovereignty and the Foundations of Global Governance*, Toronto, 195-216.
10. Brinkerhoff, D. and Brinkerhoff, J. (2004). Partnerships between international donors and non-governmental development organizations: opportunities and constraints. *International Review of Administrative Sciences*, 70(2), 253-270.
11. Caerteling, Jasper S., Halman, Johannes I. M., & Dorée, André G. (2008). Technology Commercialization in Road Infrastructure: How Government Affects the Variation and Appropriability of Technology. *Journal of Product Innovation Management*, 25(2), 143-161. doi: 10.1111/j.1540-5885.2008.00289.x
12. Caerteling, Jasper S., Halman, Johannes I. M., Song, Michael, Dorée, André G., & Van Der Bij, Hans. (2013). How Relevant Is Government Championing Behavior in Technology Development? *Journal of Product Innovation Management*, 30(2), 349-363. doi: 10.1111/j.1540-5885.2012.01003.x
13. Chandran, V.G.R. (2010). R & D commercialization challenges for developing countries: the case of Malaysia. *Tech Monitor* (Nov - Dec 2010), 25 - 30.
14. Chandran, V.G.R. , Farha, A.G., & Veera, P. . (2008). The commercialization of research results among researchers in public universities and research institutions. *Asian Profile*, 36(3), 235-250.
15. Chandran, V.G.R., Farha, A.G., & Veera, P. (2009). The role of collaboration, market and intellectual property rights awareness in university technology commercialization *International Journal of Innovation and Technology Management*, 6(4), 363-378.
16. Commission, European. (2011). *New Public-Private Partnerships for Research in the Manufacturing, Construction and Automotive Sectors: European PPP Research Supports Economic Recovery Progress Report: July 2011*.
17. Dailami, M. and Klein, M. (1997). Government support to private infrastructure projects in emerging markets, in Irwin, T. (ed.) *World Bank Latin American and Caribbean Studies Viewpoints: Dealing with Public Risk in Private Infrastructure*. Washington: World Bank.
18. Dooley, L. and Kirk, D. (2007). University-industry collaboration: grafting the entrepreneurial paradigm onto academic structures, *European Journal of Innovation Management*, 10(3), 316-32.
19. Elofson, G. and Robinson, W.N. (2007). Collective customer collaboration impacts on supply-chain performance. *International Journal of Production Research*, 45, 2567-2594.
20. Etgar, M. (2008). A descriptive model of the consumer co-production process. *Journal of the Academy of Marketing Science*, 36, 97-108.
21. Europa. (2010). *Developing Public Private Partnerships* http://europa.eu/legislation_summaries/employment_and_social_policy/eu2020/em0026_en.htm (July 13, 2013)
22. Frilet, M. (1997). Some universal issues in BOT projects for public infrastructure. *International Construction Law Review*, 14(4), 499-512.
23. Grant, T. (1996). Keys to successful public-private partnerships. *Canadian Business Review*, 23(3), 27-28.
24. Greer, Charles R., & Lei, David. (2012). Collaborative Innovation with Customers: A Review of the Literature and Suggestions for Future Research *International Journal of Management Reviews*, 14, 63-84.
25. Grimsey, D. and Lewis, M.K. (2002). Evaluating the risks of public private partnerships for infrastructure projects. *International Journal of Project Management*, 20, 107-118.
26. Grimsey, D. and Lewis, M.K. (2004). *Public Private Partnerships: The Worldwide Revolution in Infrastructure Provision and Project Finance*. Cheltenham: Edward Elgar.
27. Hellowell, Mark, Price, David, & Pollock, Allyson M. (2008). The use of private finance initiative (PFI) public private partnerships (PPPs) in Northern Ireland: NIPSA.
28. Jamali, Dima. (2004). Success and failure mechanisms of public private partnerships (PPPs) in developing countries: Insights from the Lebanese context. *The International Journal of Public Sector Management*, 17(5), 414-430.
29. Jamali, Dima. (2007). A study of customer satisfaction in the context of a public private partnership. *International Journal of Quality & Reliability Management*, 24(4), 370-385.
30. Jefferies, Marcus (2006). Critical success factors of public private sector partnerships: - A case study of the Sydney SuperDome. *Engineering, Construction and Architectural Management*, 13(5), 451-462.
31. Jefferies, M., Gameson, R., & Rowlinson, S. (2002). Critical success factors of the BOOT procurement system: reflection from the Stadium Australia case study. *Engineering, Construction and Architectural Management*, 9(4), 352-361.
32. Kelly, J. (2005). The dilemma of the unsatisfied customer in a market model of public administration. *Public Administration Review*, 65(1), 76-84.
33. Leonard-Barton, D.L. (1988). Implementation as mutual adaptation of technology and organizations. *Research Policy*, 17.
34. Li, Bing, Akintoye, Akintola, Edwards, Peter J, & Hardcastle, Cliff. (2005). Critical success factors for PPP/PFI projects in the UK construction industry. *Construction management and economics*, 23(5), 459-471.

35. Lichtenthaler, U. (2009). Absorptive capacity, environmental turbulence, and the complementarity of organizational learning processes. *Academy of Management Journal*, 52, 822-846.
36. Lichtenthaler, U. (2011). Open innovation: past research, current debates, and future directions. *Academy of Management Perspectives*, 25, 79-93.
37. Lockett, A. & Wright, M. (2005). Resources, Capabilities, Risk Capital and the Creation of University Spin-Out Companies: Technology Transfer and Universities' Spin-out Strategies. *Research Policy*, 34(7), 1043-1057.
38. Lund-Thomsen, Peter. (2009). Assessing the impact of public-private partnerships in the global south: The case of the Kasur Tanneries Pollution Control Project. *Journal of Business Ethics*, 90(1), 57-78.
39. McQuaid, Ronald W. , & Scherrer, Walter (2010). Changing reasons for public-private partnerships (PPPs). *Public Money & Management*, 30(1), 27-34.
40. Michell, W. and K. Singh. (1996). Survival of businesses using collaborative relationships to commercialize complex goods. *Strategic Management Journal*, 17, 169-195.
41. Mohr, J. and Spekman, R. (1994). Characteristics of partnership success: partnership attributes, communication behaviour, and conflict resolution techniques. *Strategic Management Journal*, 15, 135-152.
42. Mouraviev, Nikolai, & Kakabadse, Nada K. (2012). Conceptualising public-private partnerships: A critical appraisal of approaches to meanings and forms. *Society and Business Review*, 7(3), 260-276.
43. Mowery, D., Nelson, R., Sampat, B., & Ziedonis, A. (2001). The growth of patenting and licensing by US universities: An assessment of the effects of the Bayh-Dole Act of 1980. *Research Policy*, 30, 99-119.
44. Mustafa, A. (1999). Public-private partnership: an alternative institutional model for implementing the private finance initiative in the provision of transport infrastructure. *Journal of Project Finance*, 5, 64-79.
45. NCPPP. (2003). *The National Council for Public-Private Partnerships: NCPPP White Paper*. Washington, DC.
46. Nijkamp, P., van der Burch, M., & Vindigni, G. (2002). A comparative institutional evaluation of public-private partnerships in Dutch urban land-use and revitalization projects. *Urban Studies*, 39(10), 1865-1880.
47. O'Shea, R., Allen, T., Chevalier, A., & Roche, F. (2005). Entrepreneurial Orientation, Technology Transfer, and Spin-off Performance of U.S. Universities. *Research Policy*, 34(7), 994-1009.
48. Ojanen, V. and Hallikas, J. (2009). Inter-organisational routines and transformation of customer relationships in collaborative innovation. *International Journal of Technology Management*, 45, 306-322.
49. Ojanen, V. and Hallikas, J. (2009). Inter-organisational routines and transformation of customer relationships in collaborative innovation. *International Journal of Technology Management*, 45, 306-322.
50. Osborne, S.P. (Ed.). (2000). *Public-Private Partnerships: Theory and Practice in International Perspective* (Vol. London): Routledge.
51. Philbin, S. (2008). Process model for university-industry research collaboration. *European Journal of Innovation Management*, 11(4), 488-521.
52. Pongsiri, N. (2002). Regulation and public private partnerships. *The International Journal of Public Sector Management*, 15(6), 487-495.
53. Qiao, L., Wang, S.Q., Tiong, R.L.K., & Chan, T.S. (2001). Framework for critical success factors of BOT projects in China. *Journal of Project Finance*, 7(1), 53-61.
54. Rasiah, R., & Chandran, V.G.R. (2009). University-industry collaboration in the automotive, biotechnology and electronics firms in Malaysia. *Seoul Journal of Economics*, 22(4), 529-550.
55. Renda, A. and Schrefler, L. (2006). Public-private partnerships: models and trends in the European Union 1-15.
56. Sadka, E. (2007). Public-private partnerships - a public economics perspective. *CESifo Economic Studies*, 53(3), 466-490.
57. Saruchera, Fanny, Tukuta, Marian, Ndoda, Gladys R, & Sikwila, Mike N. (2014). Driving Industry Growth through Academic Excellence: A Study on the Strategic Contribution of University-Industry Knowledge Transfer in Revamping Manufacturing SMEs in Developing Economies. *Mediterranean Journal of Social Sciences*, 5(14), 252.
58. Sedjari, A. (2004). Public-private partnerships as a tool for modernising public administration. *International Review of Administrative Sciences*, 70(2), 291-306.
59. Stein, S.W. (1995). Construction financing and BOT projects. *International Business Lawyer*, 23(4), 173-180.
60. Stonehouse, J.H., Hudson, A.R., & O'Keefe, M.J. (1996). Private-public partnerships: the Toronto Hospital experience. *Canadian Business Review*, 23(2), 17-20.
61. Vining, A. and Boardman, A. (2008). Public-private partnerships: eight rules for governments. *Public Works Management & Policy*, 13(2), 149-161.
62. Wettenhall, R.A. (2003). The rhetoric and reality of public-private partnerships. *Public Organization Review: A Global Journal*, 3, 77-107.
63. Widdus, R. (2001). Public private partnerships for health: their main targets, their diversity and their future directions. *Bulletin of the World Health Organization*, 79(4), 713-720.
64. Witters, Louis, Marom, Revital, & Steinert, Kurt. (2012). *The Role of Public-Private Partnerships in Driving Innovation: The Global Innovation Index*.
65. Woods, K., Curran, R., Raghunathan, S. and McKeever, C. (2004). Barriers to the success of strategic university - industry collaborative research projects. *Proceedings of the American Institute of Aeronautics and Astronautics (AIAA) 4th Aviation Technology, Integration and Operations Forum*, Chicago, Illinois, 20th-22nd September
66. Wright, V. (1994). Reshaping the state: the implications for public administration. *Western European Politics*, 17(3), 102-137.
67. Yin, R.K. (1994). *Case Study Research Design and Methods*, Vol. 5, Sage, Newbury Park, CA.
68. Zhang, W.R., Wang, S.Q., Tiong, R.L.K., Ting, S.K. , & Ashley, D. (1998). Risk management of Shanghai's privately financed Yan'an Donglu tunnels. *Engineering, Construction and Architectural Management*, 5(4), 399-409.
69. Zhang, Xueqing. (2005). Critical success factors for public-private partnerships in infrastructure development. *Journal of Construction Engineering and Management*, 131(1), 3-14.

GOOD CORPORATE GOVERNANCE AND EARNINGS MANAGEMENT IN INDONESIAN INITIAL PUBLIC OFFERINGS

Tatang Ary Gumanti*, Ari Sita Nastiti*, Ayu Retsi Lestari**

* Faculty of Economics, Universitas Jember, East Java, Indonesia

**Faculty of Economics, Universitas Muhammadiyah Jember, East Java, Indonesia

Abstract

This study investigates the relationship between corporate governance mechanisms and earnings management (as measured by discretionary current accruals) for Indonesian IPO firms. Previous studies have mainly focused on an examination of the effect of corporate governance on the earnings management of publicly traded firms, whilst this study examines newly listed firms. It employs a modified Jones model to measure earnings management as developed by Tykvova (2006). The hypothesis predicts that Indonesian IPO firms with good corporate governance will engage in less earnings management in the periods prior to the IPO year. The sample consists of 75 IPOs and the results show that the proportion of board of commissioners, public ownership, institutional ownership and managerial ownership constrain the extent of earnings management of IPO firms. This study contributes to the literature in showing that corporate governance mechanism is an important determinant in earnings management practices for Indonesian IPO firms.

Keywords: Corporate Governance, Earnings Management, Initial Public Offering, Indonesia

1. INTRODUCTION

Pricing newly issued shares in an initial public offering (IPO) is difficult because, prior to becoming a public firm, limited or no publicly available information is available about the firm. One relevant source of information used by potential investors in assessing the firm is the financial statement contained in the prospectus (Friedlan, 1994). The potential relationship between accounting information and the offering price of an IPO implies that issuers may have an incentive to choose certain accounting methods. Such selected methods can increase revenues from selling the new shares by managing the firm's profit through so-called earnings management. An information gap or information asymmetry between firms and potential investors during the IPO stimulates the incentive for the firm owners to increase profits that are not detected by the market (Healy and Wahlen, 1999). Rahmawati and Nurul (2006) have revealed that the higher the information asymmetry, the greater the possibility of earnings management practices.

Earnings management studies for IPOs have been widely performed. For example, Friedlan (1994) and Teoh et al. (1998) find evidence of earnings management practices of firms that conduct IPOs in the United States. Tykvova (2006) also documents the earnings management practices of IPOs in Germany. However, Aharony et al. (1993) report the absence of any strong indication of the occurrence of earnings management at the time of IPO.

In Indonesia, the findings are mixed. Gumanti (2001) examines Indonesian IPOs that went public

from 1995 to 1997 and finds earnings management in a two-year period before the IPO. A similar finding is reported in Irawan et al.'s research (2013). Amin (2007) also provides evidence of earnings management during IPO. Joni and Hartono (2009) find that the value of earnings management profit fell in the two-year period prior to the IPO and increase in the period of five years after the IPO. However, Warganegara and Indriastari (2009) report no evidence of 28 IPOs that went public during 2001-2006 inflating their reported earnings.

One effort that can be done to avoid the practice of earnings management is the implementation of good corporate governance (Siregar and Utama, 2005; Ujiyantho and Pramuka, 2007; Gumanti and Prasetiawati 2011; Lande et al., 2014). According to Boediono (2005), corporate governance is one of the most efficient ways to reduce conflicts of interest and ensure the achievement of corporate objectives. Darmawati et al. (2004) state that good corporate governance can help to provide a structure that facilitates the determination of goals and the means to determine the performance monitoring techniques that can be a key element of improving the economic efficiency of an enterprise. Some corporate governance mechanisms, amongst others, include the presence of an independent board of commissioners, audit committees and the structure of ownership in a firm.

The existence of the external independent board is expected to carry out the supervisory function more effectively in a firm, so as to minimize managers' opportunistic actions. The

effective role of independent board in that matter has been evidenced (Peasnell et al., 2005; Xie et al., 2003; Wilopo, 2004; Cornett et al., 2008). In addition to independent directors, the establishment of an audit committee is also expected to help monitor the performance of directors and management. The existence of an audit committee will ensure the quality of financial reporting, thereby minimizing the occurrence of earnings management (Raja et al., 2014).

Another form of corporate governance mechanism that is believed to control the earnings management is the structure of ownership. According to Jensen (1993), public ownership can create governance systems in order to function properly; that is, it is able to increase monitoring of the management measures so as to enable the limiting of the occurrence of earnings management. A high level of institutional ownership will also encourage institutional investors to oversee and monitor the performance of management with the aim of ensuring the integrity of financial statements (Raja et al., 2014). Managerial ownership is believed to reduce the potential of conflict between principal and agent. Share ownership by managers will encourage the pooling of interest between principal and agent so as to improve firm performance (Jensen, 1986).

This study aims to examine the effect of corporate governance mechanisms in terms of the composition of the board of directors, audit committee and corporate ownership structure on the earnings management of Indonesia IPO firms. Previous studies have examined the effect of corporate governance on the earnings management of firms that have already gone public, while this study tests the newly listed firms, which certainly have different motivations for earnings management. Using a sample of 75 IPO firms, this study finds evidence that the proportion of independent board of commissioner and ownership structure are able to limit earnings management at the time of IPOs. The study also finds that the cash flow from operating activities is negatively related to earnings management.

The paper is organized as follows. Section Two provides a literature review and hypotheses development. Section Three presents the research methods. Section Four presents the findings and discussion and the final section provides a conclusion and outlines directions for future study.

2. LITERATURE REVIEW

Corporate governance is a concept based on agency theory, which contains a set of rules governing the relationship between shareholders, the managers of firms, creditors, government, employees and other stakeholders related to rights and obligations in order to achieve the firm's goals. Corporate governance mechanisms are expected to minimize agency conflicts within the firm. If the mechanism of corporate governance can work effectively and efficiently, then the whole process of the firm's activities will run well and hence it will be able to improve the firm's performance, both in financial and non-financial terms (Brown and Caylor, 2004). The application of good corporate governance is also expected to reduce the unprofessional actions of the management firm that can hurt many parties.

Earnings management is an act when managers use their judgment in financial reporting process

and in arranging transactions to affect the financial statements on the basis of the economic performance of the organization or to influence the results in accordance with the contract that depends on the reported accounting numbers (Healy and Wahlen, 1999). Healy and Wahlen (1999) and Scott (2011) confirm that the IPO setting provides an opportunity for the emergence of earnings management. Ball and Shivakumar (2008) give two reasons for the existence of earnings management in the IPO; namely, market demand and the firm's response to all sorts of rules as a public firm. IPO could be one of the driving factors for management to perform management actions by increasing the firm's profits with the goal of creating a positive image to potential investors (Friedlan, 1994; Teoh et al., 1998). Previous studies - amongst others Friedlan (1994), Teoh et al. (1998), Gumanti (2001) and Tykova (2006) - document the existence of earnings management conducted by the management prior to the IPO year.

Various studies have been carried out in relation to corporate governance mechanisms serving to minimize earnings management practices. Some of these studies show the components of corporate governance, such as composition of the independent board of commissioner, the existence of audit committee, the duality of roles, ownership structure, reduce earnings management (Saleh et al., 2005; Rahman and Ali, 2006; Bradbury et al., 2006; Gumanti and Prasetyawati, 2011).

2.1. Independent board of commissioner and earnings management in IPO

According to Fama and Jensen (1983), a non-executive director (independent director) has a supervisory in regard to management policies and can act as a mediator when dispute occurs among internal managers. The presence of an independent director strongly influences the effectiveness of the role of the board of directors in balancing the power of the CEO (Zahra and Pearce, 1989). Independent boards of directors will hence be more effective in monitoring the firm's financial reporting process (Klein, 2002).

The existence of an external board member may not only improve control measures, but also impact on the low utilization of discretionary accruals (Cornett et al., 2008). Several studies have shown that the role of independent board is to limit earnings management. For example, Peasnell et al. (2005) examine the effectiveness of the board of directors and independent directors in the UK and show that the presence of independent directors is able to limit earnings management action. Xie et al. (2003) also conclude that the expertise of independent directors and audit committees has been an important factor in preventing the tendency of managers to manage earnings. In Indonesia, Wilopo (2004) concludes that the presence of independent board and audit committee reduce earnings management practices. The term 'independent board of directors' in Western countries is synonymous to the independent board of commissioners in Indonesia.

Based on those arguments, we propose the following hypothesis:

H₁ The presence of independent board has a negative effect on the earnings management of IPOs.

Peasnell et al. (2005) argue that the composition of the board of commissioners affects earnings management practices. Increased supervision by independent commissioners can be associated with a smaller use of discretionary accruals (Cornett et al., 2008). Dechow et al. (1996), as well as Nasution and Setiawan (2007), conclude that there is a significant negative effect on the proportion of independent board members on earnings management practices. Accordingly, we propose the following hypothesis:

H₂ A proportion of board independence has a negative effect on the earnings management of IPOs.

2.2. Audit committee and earnings management in IPO

The audit committee is a committee established in order to implement the principles of good corporate governance, with the aim of helping to oversee the performance of directors and management team. The audit committee is obliged to maintain a professional level of independence in assessing performance and management responsibilities. An audit committee is acknowledged to be capable of affecting the behavior of management and should so be more cautious in carrying out their duties (Tiswiyanti et al., 2012).

Raja et al. (2014) state that the existence of independent audit committee will ensure the quality of financial reporting, thereby minimizing the occurrence of earnings management. This finding is in line with Wilopo (2004), Bradbury et al. (2006), and Nasution and Setiawan (2007) who find evidence that the existence of audit committee has a negative effect on earnings management. Accordingly, we propose the following hypothesis:

H₃ The audit committee has a negative effect on the earnings management of IPOs.

2.3. Ownership structure and earnings management in IPOs

The proportion of public ownership is the percentage of the firm's shares offered to the public during the IPO, compared to the total number of shares issued and fully paid. The financial interests of public investors can create a corporate governance system that can improve the function of the supervision of the management and create measures to enable the limiting of the occurrence of earnings management (Jensen, 1993).

Raja et al. (2014) have examined firms listed at the Indonesia Stock Exchange to show that the greater the percentage of shares offered to the public during the IPO, the lower the level of earnings management activity. This happens as a result of increased public scrutiny of the information presented by management firms. Based on this argument, the proposed hypothesis is:

H₄ Public ownership has a negative effect on the earnings management of IPOs.

Institutional ownership is one form of the implementation of corporate governance mechanisms, which shows the percentage of shares owned by the institution; namely banks, insurance firms, investment firms or private firms. Jensen and Meckling (1976) state that institutional ownership has an important role in minimizing the agency conflict that occurred between owners and managers. A high level of institutional ownership

will encourage institutional investors to a greater scrutiny so that it can deter managers' opportunistic behavior. Institutional investors are often referred to as sophisticated investors because they have a better ability to use the current period information to predict future earnings compared to non-institutional investors (Siregar and Utama, 2005).

Institutional ownership is expected to increase managerial accountability because the manager will act more cautiously in making decisions that can affect the integrity of the financial statements. Jiambalvo (1996) finds that the absolute value of discretionary accruals is negatively related to institutional ownership. Raja et al. (2014) conclude that the greater the level of institutional ownership, the greater is the power of the voice and the encouragement of financial institutions to oversee the management so as to restrict the actions of earnings management. Based on this argument, the proposed hypothesis is:

H₅ Institutional ownership has a negative effect on the earnings management of IPOs.

One way of reducing the conflicts between principals and agents is by improving the managerial ownership of a firm (Wiranata and Nugrahaniti, 2013). When associated with the agency theory, share ownership by managers will encourage the pooling of interest between principal and agent so as to improve firm performance (Jensen, 1986). Managers will also be more cautious in making decisions because every decision will have a direct impact on the welfare of the manager who is also the shareholder of the firm. Accordingly, managerial ownership is expected to reduce the motivation of managers to manage earnings that will adversely affect the firm. Ujiyantho and Pramuka (2007) show that managerial ownership can become corporate governance mechanisms that can limit earnings management action. Based on this argument, the proposed hypothesis is:

H₆ Managerial ownership has a negative effect on the earnings management of IPOs.

2.4. Firm size, cash flows from operating activities, and the earnings management of IPOs

Here, two variables are used as control variables; namely, the size of the firm and the operating cash flow. Under the political cost hypothesis of the positive accounting theory, large firms will have less incentive in managing earnings compared to small firms (Watts and Zimmerman, 1986). Chen et al. (2005) and Nuryaman (2008) conclude that the size of a firm has a significant negative effect on earnings management because large firms have little incentive to undertake earnings management as they generally receive close supervision of financial analysts and investors. Although Nastiti and Gumanti (2011) and Pambudi and Sumantri (2014) report that the size of the firm has a positive effect on earnings management, this study predicts that firm size is negatively related to earnings management in the IPO.

The quantity of cash flows arising from operating activities is an indicator of whether the firm's operational activities can generate sufficient cash flows to repay loans, maintain the operating capability, pay dividends and make new investments without relying on external sources of financing. Meythi (2006) states that cash flow information is a financial indicator that is superior to accounting

income due to the fact that the cash flow statement is relatively easier to interpret and relatively difficult to manipulate. One way to determine the indication of earnings management is to compare the distribution of net cash flow from operating activities standardized by total assets in the previous year (Irawan et al., 2013). Dechow et al. (1995), Chen et al. (2005) and Nastiti and Gumanti (2011) show that operating cash flow has a significant negative relationship with earnings management. Thus, this study predicts that operating cash flow is negatively related to earnings management in the IPO.

3. METHODOLOGY

3.1. Population and sample

The subjects of this study are the firms making IPOs at the Indonesian Stock Exchange from 2003 to 2012. The sample is determined using a purposive sampling method, with the following criteria:

- firms operating in the financial sector (banking, insurance, financial institutions and property, real estate and construction) are not included in the sample selection, as it has specific accounting rules that might affect the measurement of current discretionary accruals (DCA);
- firms must have three years of audited financial statements in the prospectus in order to calculate the components of the DCA;
- firms should be in the industrial sub-sectors where there are at least four firms in the same sub-sector. This is related to the industry sub-sector approach used to estimate the current value of non-discretionary accruals (NDCA).

Table 1 presents the process of sample determination. As can be seen in Table 1, from the 163 firms that went public from 2003 to 2012, 75 of them met the selection criteria.

Table 1. Sample determination process

No.	Description	Number of firms
1	Firms went public from 2003 to 2012	163
2	Firms in banking, insurance, financial institutions and property, and real estate and construction.	(58)
3	Firms with less than three years of financial statement available in the prospectuses	(5)
4	Firms with extreme DCA value	(3)
5	Prospectuses are not available in the database	(22)
Final sample		75

3.2. Calculation of DCA

This study uses an approach that focuses on accruals to indicate the current earnings management, as in Nastiti and Gumanti (2011). It is based on the assumption that the manager has the flexibility and better control to the current accruals than the long-term accruals (Dechow et al., 1995; Teoh et al., 1998). Current accruals can be classified as non-discretionary and discretionary component, in which the determination of non-discretionary component of accruals (NDCA) is restricted by regulations, firms' policies and industry conditions, whilst the components of current discretionary accruals (DCA) can be controlled by the manager.

In the IPO context, the time series approach to estimating discretionary accruals developed by

Jones (1991) is difficult to apply because to be able to use the Jones model, we need longer time series data. Generally, the financial statements contained in the firm's IPO prospectuses in Indonesia consist on average of three periods only. Therefore, this study follows the approach used by Tykvova (2006), which is a cross-sectional modification of the Jones model (1991).

To estimate the value of NDCA of firms making IPOs (firms i), we use the NDCA components from other firms (firm k) which are in the same sub-sector as the IPO firm (sub-sector j) of the same year as the IPO firm (year t). The NDCA component of the firms in the sub-sector j is then regressed and the results are used as the regression coefficient for calculating the NDCA component of the IPO firm.

The steps to calculating DCA are as follows:

a. Calculate Current Accruals (CA) of IPO in year t using the following equation:

$$CA = \Delta (\text{current assets} - \text{cash}) - \Delta (\text{current liabilities} - \text{long term liabilities due in less than 1 year}) \quad (1)$$

b. Calculate the NDCA components of firm k in the sub-sector j using the following equation:

$$\frac{CA_{jk,t}}{TA_{jk,t-1}} = \alpha_{j,t,0} \frac{1}{TA_{jk,t-1}} + \alpha_{j,t,1} \frac{\Delta REV_{jk,t}}{TA_{jk,t-1}} + \varepsilon_{jk,t} \quad (2)$$

Where $CA_{jk,t}$ = Current accruals of firm k in the sub-sector j at year t ; $TA_{jk,t-1}$ = Total assets of firm k in the sub-sector j at year $t-1$; $\Delta REV_{jk,t}$ = the change of revenues (year t minus year $t-1$) of firm k in the sub-sector j ; $\alpha_{j,t,0}$, $\alpha_{j,t,1}$ = regression coefficients of NDCA components of firm k in the sub-sector j .

c. Calculate NDCA of IPO firm at year t from regression coefficients of equation (2) using the following equation:

$$NDCA_{ji,t} = \alpha_{j,t,0} \frac{1}{TA_{ji,t-1}} + \alpha_{j,t,1} \frac{\Delta REV_{ji,t} - \Delta TR_{ji,t}}{TA_{ji,t-1}} \quad (3)$$

Where $NDCA_{ji,t}$ = non discretionary current accruals (NDCA) of IPO firm in sub-sector j at year t ; $TA_{ji,t-1}$ = Total assets of IPO in sub-sector j at year $t-1$; $\Delta REV_{ji,t}$ = the change of revenues (year t - year $t-1$) of IPO firm in sub-sector j ; $\Delta TR_{ji,t}$ = the change of account receivable (year t - year $t-1$) of IPO firm in sub-sector j ; $\alpha_{j,t,0}$, $\alpha_{j,t,1}$ = regression coefficients of NDCA components of firm k in the sub-sector j from equation (2).

The change of account receivables is used as a component in calculating the IPO firm's NDCA because there is a possibility that the issuers would manipulate the value of credit sales in an effort to play down a high level of sales in the financial statements at the time of IPO (Dechow et al., 1995)

d. Calculate DCA of IPO firm in sub-sector j at year t using the following equation:

$$DCA_{ji,t} = \frac{CA_{ji,t}}{TA_{ji,t-1}} - NDCA_{ji,t} \quad (4)$$

Where $DCA_{ji,t}$ = discretionary current accruals of IPO firm in sub-sector j at year t ; $CA_{ji,t}$ = Current accruals IPO firm in sub-sector j at year t .

Table 2 presents the summary of variables measurement used in the study.

Table 2. Summary of variables measurement

No	Variable	Notation
1	<i>Independent board of commissioner:</i> The existence of an independent board is measured using dummy variable. A value of 1 is given to company that has independent board, and 0 for otherwise.	IBOD
2	<i>Proportion of independent board of commissioner:</i> The proportion of independent board is calculated by dividing the number of independent board members over the total of all board members.	PBOD
3	<i>Audit committee:</i> The audit committee is measured using dummy variable. A value of 1 is given if the firm has an audit committee, and 0 for otherwise.	AC
4	<i>Public ownership:</i> Public ownership is the percentage of shares offered to the public during the IPO expressed in terms of percentage.	PO
5	<i>Institutional ownership:</i> Institutional ownership is the percentage of shares owned by the institution of the entire outstanding shares at the time of IPO.	IO
6	<i>Managerial ownership:</i> Managerial ownership is the percentage of shares owned by the management of all the firm's outstanding shares at the time of IPO.	MO
7	<i>Firm size:</i> Firm size is the natural logarithm of total sales value at the end of the year <i>t</i> . Year <i>t</i> is the year of the last complete financial statements included in the prospectus.	FS
8	<i>Operating cash flows:</i> Operating cash flow is the operating cash flows in year <i>t</i> standardized by total assets of the previous year (<i>t-1</i>). Year <i>t</i> is the year of the last complete financial statements included in the prospectus	CFO

The following regression model is used to test the proposed hypotheses:

$$DCA_i = \beta_0 + \beta_1 IBOD_i + \beta_2 PBOD_i + \beta_3 AC_i + \beta_4 PO_i + \beta_5 IO_i + \beta_6 MO_i + \beta_7 FS_i + \beta_8 CFO_i + e_i \quad (5)$$

Where *DCA* = Discretionary Current Accruals; *IBOD* = Independent board of commissioner; *PBO* = Proportion of independent board of commissioner; *AC* = Audit committee; *PO* = Public ownership; *IO* = Institutional ownership; *MO* = Managerial ownership; *FS* = Firm size; *CFO* = Cash flows from operation.

4. RESULTS

Table 3 presents the descriptive statistics of the variables. The average DCA is -0.046 with standard deviation of 0.343 which indicates a large level of variation in DCA. Firm with the lowest DCA is PT. Trikomsel Oke, Tbk. that went public in 2009 and firm with the highest DCA is PT. Aneka Kemasindo Utama, Tbk.

Table 3. Descriptive statistics of variables

Variable	Minimum	Maximum	Mean	Std. Deviation
DCA	-1.98	1.09	-0.046	0.343
PBOD	0.00	0.67	0.365	0.098
PO	0.09	0.73	0.264	0.136
IO	0.00	0.90	0.627	0.251
MO	0.00	0.90	0.085	0.209
FS	9.26	13.17	11.839	0.717
CFO	-0.49	1.03	0.099	0.212

Note: *DCA* = Discretionary Current Accruals. *PBOD* = Proportion of board of commissioner, *PO* = public ownership, *IO* = Institutional ownership, *MO* = Managerial ownership, *FS* = Firm size, *CFO* = Cash flows from Operating. The descriptive statistics of the independent board of commissioner and audit committee are not presented as they are dummy variables

The average proportion of independent commissioners is 0.365, meaning that on average each firm has about one-third of independent commissioner. The average public ownership is 26.44%, the average institutional ownership is 62.67% and the average managerial ownership is 8.47%. These findings show that the public owns just above a quarter of total outstanding shares of the firms. Interestingly, almost two-third ownership of the firms is under the institutional ownership.

Although it is not reported in this paper, the regression model has satisfied the assumption of non-heteroscedasticity. Table 4 presents the results of hypothesis testing.

Multiple regression analysis shows that proportion of commissioners has negative significant effect on the earnings management of Indonesian IPO firms ($t = -2.188$; $p < 5\%$). Similarly, public ownership ($p < 10\%$), institutional ownership ($p < 1\%$) and managerial ownership ($< 5\%$) have negative significant effect on earnings management. Of the two control variables, operating cash flows has negative significant effect on earnings management ($t = -2.651$; $p < 1\%$).

The study finds that the existence of independent board of commissioners does not affect the level of earnings management. Proportion of independent board of commissioners affects negatively and significantly the level of earnings management in the IPO. The effectiveness of the board of commissioners in balancing the power of the CEO is strongly influenced by the level of independency of the board of commissioners (Wardhani, 2006). Higher number of members of independent board is perceived to limit earnings management practice. The result supports Dechow et al. (1996) and Nasution and Setiawan (2007) who assert that the proportion of independent board could limit earnings management. As an independent party or external to the firm, she has less conflict of interest so transparency in corporate financial reporting is more warranted (Nasution and Setiawan, 2007).

The existence of an audit committee is not proven capable of limiting the earnings management practice in the IPO. This result is consistent with Siregar and Utama (2005). However, it contradicts the research of Wilopo (2004), Bradbury et al. (2006), Nasution and Setiawan (2007), and Raja et al. (2014) who report that earnings management activity can be controlled effectively through the existence of the audit committee of a firm.

Public ownership has a negative and significant effect on earnings management. This indicates that a high percentage of shares owned by the public could

minimize earnings management practice. We may hence argue that a larger number of public ownership will force the firm to be overseen by more

parties so reducing the management's opportunistic behavior. This study supports those of Jensen (1993) and Raja et al. (2014).

Table 4. Results of least square regression

Variables	Predicted sign	Unstandardized coefficients	Standardized coefficients	t-value
Constant		2,076		3,170***
IBOD	-	0,347	0,164	1,035
PBOD	-	-1,097	-0,313	-2,188**
AC	-	0,104	0,125	1,182
PO	-	-0,810	-0,321	-1,744*
IO	-	-1,068	-0,781	-2,756***
MO	-	-0,908	-0,555	-2,184**
FS	-	-0,090	-0,189	-1,633
CFO	-	-0,508	-0,314	-2,651**

Adj R² = 0.224, F-Value = 3.667***

Note: the dependent variable is DCA = Discretionary Current Accruals. IBOD = independent board of commissioner, PBOD = proportion of independent board of commissioner, AC = audit committee, PO = public ownership, IO = Institutional ownership, MO = managerial ownership, FS = firm size, CFO = cash flows from Operating; *, **, *** denote significant at 10%, 5%, and 1%, respectively

Institutional ownership affects negatively and significantly the extent of earnings management in the Indonesian IPOs. These results support the studies of Jiambalvo (1996) and Raja et al. (2014) who assert that the larger the institutional ownership, the greater is the effort of overseeing the performance of the firm's management; in turn, this would minimize the opportunities of management to manipulate earnings.

Managerial ownership has a negative and significant effect on earnings management at the time of the IPO. This finding advocates that managerial ownership is one of the mechanisms of corporate governance that can reduce the conflict between principal and agent as well as to encourage the pooling of interest between principal and agent so as to avoid the opportunistic behavior of managers. This study supports Ujiyantho and Pramuka (2007).

Of the two control variables, the size of the firm does not have a significant effect on earnings management. This result is not consistent with Chen et al. (2005), Siregar and Pramuka (2005), Sanjaya (2008) and Nuryaman (2008), who find that the size of the firm has a significant negative effect on earnings management. In addition, this finding does not support the political cost hypothesis (Watts and Zimmerman, 1986).

Operating cash flow is found to minimize the occurrence of earnings management of firms making IPO in Indonesia. The result supports Chen et al. (2005), Aussenegg et al. (2009), and Nastiti and Gumanti (2011) who conclude that firms with high operating cash flow will avoid using discretionary accruals to increase their reported profits. This is because the cash flow from operating activities reflects the real prosperity of the firm in generating funds (funds flow) so that if the firms' cash flows from operating activities is high, the motivation to perform earnings management will decline because of the firm's capability to generate sufficient funds is also high (Nastiti and Gumanti, 2011).

5. CONCLUSION

This study aims to analyse the mechanisms of corporate governance as measured by the composition of the independent board, along with

the audit committee. It has also explored the existence of ownership structure in limiting the practice of earnings management of 75 firms making an IPO in the Indonesia Stock Exchange from 2003 to 2012. This study also includes two control variables, eg. the size of the firm and the operating cash flow. The results show that, as predicted, the proportion of commissioners, public ownership, institutional ownership and managerial ownership have a negative significant effect on earnings management. The study also finds that the operating cash flow has a significant negative effect on earnings management.

There are two things to keep in mind with regard to the findings reported here that can be treated as the limitations of the study. First, this study is limited to investigating the mechanism of corporate governance based on several characteristics; namely, the composition of the independent board, audit committee and ownership structure that still cannot be fully used as a reference to determine the effect of corporate governance on earnings management practices in an IPO setting. Thus, future study may expand by comparing their relation to earnings level prior to and after the offering. Second, the model to estimate discretionary current accruals has been applied without prior testing to determine whether it is appropriate for the condition in Indonesia. Furthermore, it uses regression estimates from other firms that are in the same sub-sector with the IPO firms to estimate the DCA. The value of the IPOs' DCA may not represent the actual value because the condition of each firm is different. Thus, future study may accommodate the scale or magnitude of the firm in considering the model used for regression or sector-based instead of being sub-sector based.

REFERENCES

- Aharony, J., Lin, C. and Loeb, M.P. (1993) "Initial public offerings, accounting choices, and earnings management", *Contemporary Accounting Research*, Vol. 10 No. 1, pp.61-81.
- Amin, A. (2007) "Pendeteksian earnings management, underpricing, dan pengukuran kinerja perusahaan yang melakukan initial public

- offering (IPO) di Indonesia", Simposium Nasional Akuntansi (SNA) X, Makassar, Indonesia.
3. Aussenegg, W., Inwinkl P. and Schneider, G. (2009) "Earnings management and accounting standards in Europe", Proceedings of the 2009 MFA Annual Meeting.
 4. Ball, R. and Shivakumar, L. (2008) "Earnings quality at initial public offerings", Journal of Accounting and Economics, Vol. 45 No. 2-3, pp.324-349.
 5. Boediono, G.S.B. (2005) "Kualitas laba: studi pengaruh mekanisme corporate governance dan dampak manajemen laba dengan menggunakan analisa jalur", Simposium Nasional Akuntansi VIII. Surakarta, Indonesia.
 6. Bradbury, M., Mak, Y. and Tan, S. (2006) "Board characteristics, audit committee characteristics and abnormal accruals", Pacific Accounting Review, Vol. 18 No. 2, pp.47-68.
 7. Brown, L. D. and Caylor, M.L. (2004) "Corporate governance and firm performance", Georgia State University, Working Paper.
 8. Chen, K., Lin, K. and Zhou, J. (2005) "Audit quality and earnings management for Taiwan IPO firms", Managerial Auditing Journal, Vol. 20 No. 1, pp.86-104.
 9. Cornett, M. M., Marcus, A.J. and Tehranian, H. (2008) "Corporate governance and pay-for-performance: the impact of earnings management", Journal of Financial Economics, Vol. 87 No. 2, pp.357-373.
 10. Dechow, P., Sloan, R. and Sweeney, A. (1995) "Detecting earnings management", The Accounting Review, Vol. 70 No. 2, pp.193-225.
 11. Darmawati, D., Khomsiyah. and Rahayu, R.G. (2004) "Hubungan corporate governance dan kinerja perusahaan", Simposium Nasional Akuntansi VII. Denpasar, Indonesia.
 12. Fama, E.F. and Jensen, M.C. (1983) "Separation of ownership and control", Journal of Law and Economics, Vol. 26 No. 2, pp.301-325.
 13. Friedlan, M.L. (1994) "Accounting choices of issuers of initial public offerings", Contemporary Accounting Research, Vol. 11 No. 1, pp.1-31.
 14. Gumanti, T.A. (2001) "Earnings management pada penawaran pasar perdana di bursa efek Jakarta", Jurnal Riset Akuntansi Indonesia, Vol. 4 No. 2, pp.165-183.
 15. Gumanti, T.A. and Prasetyawati, W. (2011) "Board of commissioner, duality role and earnings management of IPO in Indonesia", Jurnal Akuntansi dan Keuangan, Vol. 13 No. 2, pp.80-86.
 16. Healy, P. and Wahlen, J. (1999) "A review of earning management literatures and its implication for standard setting", Accounting Horizon, Vol. 13 No. 4, pp.365-383.
 17. Irawan, M.A., Gumanti, T.A. and Manik, E. (2013) "Earnings and cashflows performances surrounding IPOs", EKUITAS: Jurnal Ekonomi dan Keuangan, Vol. 17 No. 1, pp.54-70.
 18. Jensen, M.C. (1986) "Agency cost of free cash flow, corporate finance and takeover", American Economics Review, Vol. 76 No. 2, pp.323-329.
 19. Jensen, M.C. (1993) "The modern industrial revolution, exit, and the failure of internal control systems", The Journal of Finance, Vol. 48 No. 3, pp.831-880.
 20. Jensen, M.C. and Meckling, M.H. (1976) "Theory of the firm: managerial behavior, agency cost and ownership structure", Journal of Financial Economics. Vol. 3 No. 4, pp.305-360
 21. Jiambalvo, J. (1996) "Discussion of causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by SEC", Contemporary Accounting Research, Vol. 13 No. 1, pp.37-47.
 22. Jones, J. (1991) "Earnings management during import relief investigations", Journal of Accounting Research, Vol. 29 No. 2, pp.193-228.
 23. Joni and Hartono, J.M. (2009) "Hubungan manajemen laba sebelum IPO dan return saham dengan kecerdasan investor sebagai variabel pemoderasi", Jurnal Riset Akuntansi Indonesia, Vol. 12 No. 1, pp.51-67.
 24. Klein, A. (2002) "Audit committee, board of director characteristics, and earnings management", Journal of Accounting and Economics, Vol. 33 No. 3, pp.375-400.
 25. Lande, A., Subekti, I. and Mardiaty, E. (2014) "Pengaruh tata kelola perusahaan, kecakapan manajerial, dan rasio leverage terhadap manajemen laba", Simposium Nasional Akuntansi (SNA) XVII. Mataram, Indonesia.
 26. Meythi. (2006) "Pengaruh arus kas operasi terhadap harga saham dengan persistensi laba sebagai variabel intervening", Simposium Nasional Akuntansi (SNA) IX, Padang, Indonesia.
 27. Nastiti, A.S. and Gumanti, T.A. (2011) "Kualitas audit dan manajemen laba pada initial public offering di Indonesia", Simposium Nasional Akuntansi (SNA) XIV, Banda Aceh, Indonesia.
 28. Nasution, M. and Setiawan, D. (2007) "Pengaruh corporate governance terhadap manajemen laba di industri perbankan Indonesia", Simposium Nasional Akuntansi (SNA) X, Makassar, Indonesia.
 29. Nuryaman. (2008) "Pengaruh konsentrasi kepemilikan, ukuran perusahaan, dan mekanisme corporate governance terhadap manajemen laba", Simposium Nasional Akuntansi (SNA) XI. Pontianak, Indonesia.
 30. Pambudi, J.E. and Sumantri, F.A. (2014) "Kualitas audit, ukuran perusahaan dan leverage terhadap manajemen laba", Simposium Nasional Akuntansi (SNA) XVII, Mataram, Indonesia.
 31. Peasnell, K.V., Pope, P.F. and Young, S. (2005) "Board monitoring and earnings management: do outside directors influence abnormal accruals?", Journal of Business Finance & Accounting, Vol. 32 No. 7&8, pp.1311-1346.
 32. Rahman, A.R. and Ali, M.F.H. (2006) "Board, audit committee, culture and earnings management: Malaysian evidence", Managerial Auditing Journal, Vol. 21 No. 7, pp.783-804.
 33. Rahmawati, Y.S., and Nurul, Q. (2006) "Pengaruh asimetri informasi terhadap praktik manajemen laba pada perusahaan perbankan publik yang terdaftar di bursa efek Jakarta", Simposium Nasional Akuntansi VI, Padang, Indonesia.
 34. Raja, D. R., Anugerah, R., Desmiyawati., and Kamaliah. (2014) "Aktivitas manajemen laba: analisis peran komite audit, kepemilikan institusional, persentase saham publik dan leverage", Simposium Nasional Akuntansi (SNA) XVII, Mataram, Indonesia.
 35. Saleh, N. M., Iskandar, T. M., and Rahmat, M. M. (2005) "Earnings management and board characteristics: evidence from Malaysia", Jurnal Pengurusan, Vol. 24 No. 4, pp.77-103.
 36. Sanjaya, I. P. (2008) "Auditor eksternal, komite audit, dan manajemen laba", Jurnal Riset Akuntansi Indonesia, Vol. 11 No. 1, pp.97-116.
 37. Scott, W. S. 2011. Financial Accounting Theory, 6th ed. Canada: Prentice Hall.
 38. Teoh, S., Welch, J., and Wong, T. (1998) "Earnings management and the long-run performance of initial public offering", Journal of Finance, Vol. 53 No. 4, pp.1935-1974.

39. Tiswiyanti, W., Fitriyani, D., and Wiralestari. (2012) "Analisis pengaruh komisaris independen, komite audit, dan kepemilikan institusional terhadap manajemen laba", *Jurnal Penelitian Universitas Jambi Seri Humaniora*, Vol. 14 No. 1, pp.61-66.
40. Tykvova, T. (2006) "IPOs and earnings management in Germany, in Gregorio, G. ed. *Initial Public Offerings: An International Perspective*. pp. 281-296.
41. Ujiyantho, M. A., and Pramuka, B.A. (2007) "Mekanisme corporate governance, manajemen laba dan kinerja keuangan (studi pada perusahaan go public sektor manufaktur)", *Simposium Nasional Akuntansi (SNA) X*, Makassar, Indonesia.
42. Siregar, S.V. and Utama, S. (2005) "Pengaruh struktur kepemilikan, ukuran perusahaan, dan praktik corporate governance terhadap pengelolaan laba (earnings management)", *Simposium Nasional Akuntansi (SNA) VIII*, Solo, Indonesia.
43. Wardhani, R. (2006) "Mekanisme corporate governance dalam perusahaan yang mengalami permasalahan keuangan (financially distressed firms)", *Simposium Nasional Akuntansi (SNA) IX*, Padang, Indonesia.
44. Warganegara, D. dan Indriastari, I. (2009) "Do Indonesian firms inflate their reported earnings prior to IPOs?", *Journal of Financial Reporting & Accounting*, Vol. 7 No. 2, pp.61-79.
45. Watts, R. and Zimmerman, J. (1986) *Positive Accounting Theory*, Edgewood Cliffs, NJ: Prentice Hall.
46. Wilopo. (2004) "The analysis of relationship of independent board of directors, audit committee, corporate performance and discretionary accruals", *Ventura*, Vol. 7 No. 1, pp.73-83.
47. Wiranata, Y.A. and Nugrahanti, Y.W. (2013) "Pengaruh struktur kepemilikan terhadap profitabilitas perusahaan manufaktur di Indonesia", *Jurnal Akuntansi dan Keuangan*, Vol. 15 No. 1, pp.15-26.
48. Xie, B., Davidson, W.N. and Dadalt, P.J. (2003) "Earnings management and corporate governance: the roles of the board and the audit committee", *Journal of Corporate Finance*, Vol. 9 No. 3, pp.295-316.
49. Zahra S. A. and Pearce J. A. (1989) "Boards of directors and corporate performance: a review and integrative model", *Journal of Management*, Vol. 15 No. 2, pp.291-334.

CORPORATE GOVERNANCE IN ISLAMIC BANKS: A COMPARATIVE STUDY OF CONSERVATIVES, MODERATES, AND LIBERALS

Sunil Kumar Khandelwal*, Khaled Aljifri*

*Regional Head Tagetik Middle East, United Arab Emirates University

Abstract

This study seeks to fill the gap in the current literature on corporate governance in Islamic banks. A major limitation of these studies, leading to skewed results when analyzing corporate governance and other issues, is their treatment of all the Islamic banks in one category. This study addresses this issue with results showing that corporate governance is not uniform across various categories of Islamic banks. The study analyzes various aspects of corporate governance in Islamic banks by first classifying them into three categories (i.e., Liberals, Moderates, and Conservatives). A comparison of four important variables of corporate governance (i.e., size of SSB, size of audit committee, size of board of directors, and board composition) within these three categories was expected to yield some new findings. The study uses a sample of 80 fully Islamic banks for the years 2009-2014, from the countries of the GCC, Yemen, Egypt, Sudan, Tunisia, Syria, Turkey, Indonesia, Malaysia, Pakistan, Bangladesh, the UK, and South Africa. The study aims to strengthen and enhance our knowledge of some relevant corporate governance mechanisms in Islamic banks. The results of this study are expected to be useful to practitioners of corporate governance in Islamic banks, customers, and financial regulators including central banks and other relevant stakeholders. In addition, it may allow further research to bring necessary reforms to the corporate governance of Islamic banking and thus generally strengthen its practice.

Keywords: Corporate Governance, Islamic Finance, Shari'ah Supervisory Board, Board of Directors, Audit Committee, Board Composition

1. INTRODUCTION

Corporate governance in Islamic banks has been debated for over two decades and the Islamic Financial Services Board (IFSB)¹ issued a guideline in 2006 on this topic². The main difference, as far as corporate governance is concerned, between conventional and Islamic banks lies in the additional role of the Shari'ah Supervisory Board (SSB) and the moral and ethical dimension of Islamic banking. The key differences are summarized in the table in Appendix A³:

Corporate governance in Islamic banks is heavily dependent on the SSB. The role of the SSB is all-pervading and covers almost everything from strategy to day-to-day operations. At the level of strategy, the SSB's vision and functions provide guidelines for various corporate governance

components in Islamic banking, including accounting, products, reporting, risk management, compliance, and audit. These are then translated into operational rules and guidelines for all Islamic banks (Khandelwal, 2008). The SSB provides an additional layer of governance sometimes called the *Supra Authority* layer (Choudhury and Hoque, 2006), which is missing in conventional banks. As widely misunderstood, the SSB's role is not limited to transaction approval alone, but it covers all aspects of banking. By virtue of this ever-pervading role, SSB's impact on corporate governance is far more complex and wider than many believe.

The SSB's composition and structure have a direct bearing on the corporate governance in Islamic banks (Khandelwal, 2008). The number of Shari'ah scholars and the independence of the whole group⁴ may have an impact on the quality of corporate governance. In addition, the SSB also plays a role in monitoring and controlling the appointment of members of a bank's board, thus affecting their numbers and independence. In a study by Warde (2000) it is found that the number of

¹ In addition to the IFSB, Hawkamah at the Dubai International Financial Centre and Malaysian Central Bank has also issued guidelines on Corporate Governance for Islamic banks. However, these banks have no single universally acceptable Corporate Governance standard.

² Principle 3.1 of the IFSB Standards on the corporate governance of Islamic financial institutions reads as follows: "IFSB shall have in place an appropriate mechanism for obtaining rulings from Shari'ah scholars, applying fatwa and monitoring Shari'ah compliance in all aspects of their products, operations and activities (IFSB, 2006, p. 11)."

³ For a more detailed comparison, see Lewis (2005) p. 19 (IB vs managed corporation/socially responsible corporation), Hasan (2009), p. 288 (IB vs Anglo-Saxon/European), Abu-Tapanjeh (2009), pp. 564-565 (IB vs OECD).

⁴ Warde (2000, pp. 227), "A number of issues have been raised in connection with Shari'ah boards. One is about their independence. Insofar as they derive what is frequently their principal income from their membership in a Shari'ah board, some scholars may legitimate the most dubious operations. The debate on 'fatwas for sale' raged in Egypt, especially at the time of the Islamic Money Management Companies (IMMCs). The debate was ideological, political, and of course financial, as much as it was religious."

Shari'ah Board members ranged from one to nine (pp. 227).

The literature has produced a number of research works on corporate governance in Islamic banks compared to that in their conventional counterparts, following Western corporate governance models (Abu-Tapanjeh, 2009; Chapra and Ahmed, 2002; Choudhury and Hoque, 2006; Hasan, 2009; Malekian and Daryaei, 2010; Haniffa and Hudaib, 2002; Lewis, 2005⁵; Nienhaus, 2007; Perry 2011, Graiss and Pellegrini, 2006b). However, not much has been written to explore the link between the extent of Shari'ah compliance and corporate governance within Islamic banks (Garas, 2012; Graiss and Pellegrini, 2006c; Khandelwal, 2008). What is worse is that putting all Islamic banks into a single category without looking into the level of Shari'ah compliance within them, may distort or bias the research results.

This study is thus an attempt to fill the gap in the current literature on corporate governance in Islamic banks. The study analyses various aspects of corporate governance in Islamic banks by classifying these banks into three categories, (i.e., Liberals, Moderates, and Conservatives). A comparison of four important variables of corporate governance (i.e., size of SSB, size of audit committee, size of board of directors, and board composition) within these three categories presents some new findings. The study aims to strengthen and enhance our knowledge of some of the relevant corporate governance mechanisms in Islamic banks. It is expected that the results of this study will be useful to practitioners of corporate governance in Islamic banks, customers, financial regulators including central banks and other relevant stakeholders. In addition, it could help to enable further research to bring necessary reforms to the corporate governance in Islamic banking and thus generally strengthen its practice.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Two major institutions, AAOIFI⁶ and IFSB,⁷ have provided the guiding principles for corporate governance. Although not mandatory, the framework for corporate governance in Islamic banks that they provide is authoritative. A number of studies have compared the corporate governance in conventional and Islamic financial institutions (Abu-Tapanjeh, 2009; Chapra and Ahmed, 2002; Choudhury and Hoque, 2006; Hasan, 2009; Malekian and Daryaei, 2010; Haniffa and Hudaib, 2002; Lewis, 2005⁸; Nienhaus, 2007; Perry 2011; Graiss and Pellegrini, 2006b). These studies have also addressed some issues related to corporate governance in Islamic banks.

Lewis (2005) points to the wider connotation of corporate governance in the Islamic community, as

opposed to the conventional meaning of corporate governance. He summarizes six key issues of corporate governance in Islamic financial institutions: (1) the conventional concept of corporation, (2) the treatment of shareholders as creditors in Islamic finance, (3) specific issues with *Mudārabah* investors, (4) accounting and reporting, (5) examining parallels rather than differences between conventional and Islamic corporate governance, and (6) the poor record of corruption in many Muslim countries. Hasan, (2009) compares the Anglo-Saxon and European model with the Islamic model of corporate governance; he also points out *maqasid* Shari'ah as the ultimate goal and thus highlights the role of Shari'ah in protecting all the stakeholders. Nienhaus (2007) raises serious concerns about the practice of smoothing returns⁹ and its impact on corporate governance in Islamic banks. Abu-Tapanjeh (2009) compares the Islamic corporate governance model with the OECD model and concludes that it is difficult to compartmentalize the roles and responsibilities of SSBs, similar to OECD principles of corporate governance. Chapra and Ahmed (2002) provide an overview of several aspects of corporate governance in Islamic banks covering three key stakeholders, viz., regulators, Islamic financial institutions (IFIs), and depositors. The results show that the regulatory environment for IFIs needs improvements; that there are several variations in the status of corporate governance structures in IFIs; and that depositors are keen to punish IFIs if they produce returns below the market level or carry out their transactions not according to Shari'ah principles. Chapra and Ahmed (2002) also provide the results of a survey of corporate governance issues in Islamic banks, but this is limited in sample size and coverage, as well as concentrating on only three countries (Bahrain, Sudan, and Bangladesh) and fifteen banks.

A few studies focus on a specific country (or group of countries) in considering corporate governance issues in Islamic banks. Garas (2012) presented a study covering the GCC countries which examines the superiority of Shari'ah supervision to external audit and Shari'ah audit to internal audit. According to this study, the reporting of the Shari'ah Control Department, which is responsible for the implementation of SSB's fatwas, is significantly related to SSB control. Governance in Islamic banks has been growing differently, especially as regards the GCC and Malaysia (Hasan, 2011, Gintzburger, 2011). Hameed and Sigit, (2005) and Darmadi (2013) presented studies of disclosures in annual reports related to corporate governance in Indonesian banks and concluded that the banks disclosed most on Board of Commissioners and Board of Directors (BOD) and least on internal control and external audit. Ghayad (2008) examined the effect of corporate governance in Islamic banks on performance and proposed that the scope of Investment Account Holders (IAH) should be

⁵ Lewis provides a comparison of alternative approaches to Corporate Governance (pp. 19).

⁶ The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) is an Islamic international autonomous non-for-profit corporate body that prepares accounting, auditing, governance, ethics and Shari'a standards for Islamic financial institutions and the industry.

⁷ For more details on the IFSB guidelines on corporate governance, see Appendix B.

⁸ Lewis (2005) provides a comparison of alternative approaches to corporate governance (p. 19)

⁹ Several Islamic banks use specific practices to provide Islamic investors (unrestricted and restricted) with a rate of return matching the market rate of return. These practices are termed *smoothing returns* and include: (1) foregoing part of the *Mudarib* share, (2) transferring the profits belonging to shareholders to an Unrestricted Profit Sharing Investment Account (UPSIA) on the basis of *Hibah*, and (3) the creation of two special reserves – the Profit Equalization Reserve (PER) and the Investment Risk Reserve (IRR). The former is used to manage the volatility of the rate of return and the latter is used to compensate for loss of capital in the UPSIA (negative returns).

broadened, and these holders should be represented on the Board. However, this study is based on only one country, Bahrain. Various models of Shari'ah governance, based on six countries – Malaysia, Pakistan, Kuwait, Bahrain, UAE, and Qatar – are discussed briefly by Hasan (2007). The discussion focuses on the differences in these six countries in regard to Shari'ah governance.

A good historical summary of corporate governance in the Islamic financial system is provided by Hasan (2008). A recent study by Ai (2010) draws attention to a creative synthesis of the *Tawhid* episteme and *maqasid al Shari'ah* in corporate governance which provides a Shari'ah-based (not merely Shari'ah compliant) model of corporate governance. Islamic banks have been found not truly honoring their social commitment¹⁰ (Usmani, 2002; Maali *et al.*, 2006; Aggarwal and Youssef, 2000). Aggarwal and Youssef (pg. 119) stresses that economic incentives are currently shaping the structure of Islamic banking more than religious norms. The history of Islamic finance, according to Grais and Pellegrini, (2006a) shows the failure of corporate governance. There are several cases of Islamic banks' failing, sometimes associated with their corporate governance. El-Gamal (2006) presents three cases of failed corporate governance in Islamic banks¹¹, which have largely lost their focus. This may be attributed to several factors, including rapid unplanned growth in Islamic finance, the absence of a global governing body, lack of consensus on several Shari'ah related issues, limited legislative development, the unpreparedness of regulators and, most critically, to the desire of Islamic banks to emulate the growth models of conventional banks.

None of these studies highlights the corporate governance issues to do with the strictness of Shari'ah compliance, thus leaving a gap in the relevant literature. Moreover, to the best of the authors' knowledge, no study divides Islamic banks into categories. Ioannis and Khandelwal, (2008) mention briefly the four classical schools of thought in Islamic jurisprudence, namely, the Hanafi, Maliki, Shafi'i, and Hanbali schools. There is some evidence that these schools implement Shari'ah laws with varying degrees of strictness, giving rise to the fundamental issue that Islamic banks do not apply Shari'ah laws uniformly, but to varying levels¹². Different schools of thought on Islamic finance offer different interpretations of permissible financial contracts (El-Hawary *et al.*, 2007). This raises the question whether corporate governance compliance may be influenced by various features of the three categories used in this study. Consequently, this

study predicts that there will be differences in using and structuring the corporate governance mechanisms of the three categories discussed in this study. The governance mechanisms selected for the study are the size of the board of directors, the size of the Shari'ah board, the size of the audit committee, and the composition of the board. These four mechanisms are found to be important corporate governance mechanisms. The study focuses on board size as a proper monitoring mechanism (Lipton and Lorsch, 1992; Jensen, 1993). Mixed results have been found in the literature on the effects on firm value of small and large boards of directors (e.g., Kamran *et al.*, 2006; Aljifri and Moustafa, 2007). However, the present study does not test the effect of this mechanism on firm value; instead, it examines the differences, if any, in the size of boards between the three categories, as stated below. For the same reason, this study uses SSB as a good mandatory monitoring mechanism (e.g., Alman, 2012). In fact, SSB is the most effective corporate governance mechanism for helping Islamic banks to comply with Shari'ah laws (Bukhari *et al.* 2013). This study focuses on the differences in the size of the SSB between the three categories. An audit committee is also treated in this study as a useful corporate indicator for monitoring; the first call for such a committee was stated in the Sarbanes-Oxley Act (Hoi and Tesson, 2007). In the same area of interest, this study tests the differences in committee size, as discussed below, between the three categories. Finally, this study uses the board's composition (i.e., the proportion of outside directors) as a good indicator of corporate governance. The results on the effect of board composition on firm value are mixed (e.g., Yermack, 1996; Weir *et al.* 2002; Jackling and Johl, 2009). The present study investigates the differences in board composition, if any, between the three categories. Building on the above, the following are the hypotheses of this study:

H1: The size of the Shari'ah board differs between liberal, moderate, and conservative banks.

H2: The size of the board of directors differs between liberal, moderate, and conservative banks.

H3: The size of the audit committee differs between liberal, moderate, and conservative banks.

H4: The board composition differs between liberal, moderate, and conservative banks.

H5: The size of the Shari'ah board differs between liberal and moderate banks.

H6: The size of the Shari'ah board differs between liberal and conservative banks.

H7: The size of the Shari'ah board differs between conservative and moderate banks.

H8: The size of the board of directors differs between liberal and moderate banks.

H9: The size of the board of directors differs between liberal and conservative banks.

H10: The size of the board of directors differs between conservative and moderate banks.

H11: The size of the audit committee differs between liberal and moderate banks.

H12: The size of the audit committee board differs between liberal and conservative banks.

H13: The size of the audit committee differs between moderate and conservative banks.

H14: The board composition differs between liberal and moderate banks

¹⁰ Wealth maximization as a corporate objective has always been deeply rooted in the conventional financial system which side-lines the broader goal of social responsibility, due to the excessive focus on maximizing the value for shareholders (Mintzberg *et al.*, 2002). Maximizing the Shareholder's value is a standard of corporate governance followed under the Anglo-American model; a similar model is followed by Franco-German model, although it seeks to maximize the value for all stakeholders, not shareholders alone. While the Corporate Governance model of Islamic banks is closer to the Franco-German model, they have been operating in the same market with similar objectives and hence there is a drag on social commitment.

¹¹ The three cases are the Ilhas Finance House, the Patni Cooperative Credit Society, and the Bank of Credit and Commerce International (BCCI).

¹² It should be noted that the implementation of the "major Shari'ah laws" between the four classical schools of thought is essentially the same. For more details, please refer to Ioannis and Khandelwal (2008).

H15: The board composition differs between liberal and conservative banks.

H16: The board composition differs between conservative and moderate banks.

3. BACKGROUND OF THE MODIFIED KK ISLAMIC BANKING RATING MODEL

There are, to the best of the authors' knowledge, only two studies that focus directly or indirectly on the classification of Islamic banks on the basis of the ethical, or Shari'ah dimension: the study of Obaidullah (2005) and the study of Muljawan (2002). Obaidullah (2005) proposes a model for an overall rating of Islamic financial institutions, similar to the lines of ratings as used by the rating methodologies of Standard and Poor, Moody and Fitch. Obaidullah's study had two objectives: first to identify or develop a method of rating Islamic financial institutions including financial and ethical performance, and second to provide a score called the Islamic Value Rating (IVR) based on data which are collected from answers to questionnaires.

The proposed model, in brief, was as follows:

$$V_n = W_1 V_1 + W_2 V_2 + W_3 V_3 + W_4 V_4 + W_5 V_5 \quad (1)$$

V_n represented the IVR; Factor 1 = concern for *riba* (interest) and speculation; Factor 2 = concern for human rights; Factor 3 = concern for social enterprise or support to charities and the broad range of organizations involved in the Social Enterprise sector, including: co-operatives, credit unions, community finance initiatives; Factor 4 = emphasis on partnership-based economy; Factor 5 = concern for under-privileged sector.

The study focused primarily on creating an alternative rating model for Islamic financial institutions which included some element of IVR. However in the calculation of IVR, the study did not take into account the use of various core Islamic contracts. In other words, it failed to incorporate into the model the six major contracts which represent major items in the financial statements of an Islamic bank.

The study by Muljawan focuses on an adaptation of the CAMELS rating to Islamic financial institutions. The proposed model covered: C (Capital), A (Asset quality), M (Management), E (Earnings), L (Liquidity), and S (Sensitivity). Shari'ah compliance was included in the M (Management) category. However, the study did not cover any specific Shari'ah compliance dimension in its rating.

Studies to date have addressed the rating of Islamic financial institutions more from a financial perspective though with some elements of ethical and moral concerns, including the strictness of application of the Shari'ah rules. The initial idea for this classification comes from El-Gamal's criticism of Islamic finance practices (2006)¹³. He analyzed the

concept of Shari'ah Arbitrage according to the various shapes and forms that it took in different countries. El-Gamal's idea of Shari'ah Arbitrage raises several questions regarding the interpretation of the sacred texts on which to base Shari'ah approvals and hence brings up the question of how strictly Shari'ah laws are applied. Shari'ah law can be implemented in varying degrees in different circumstances, thus allowing, in simple terms, strict, moderate or liberal interpretation. "Egypt and Malaysia have very liberal interpretations of Shari'ah law, while Saudi Arabia and Kuwait are quite strict. Dubai is somewhere in the middle."¹⁴ (Perry and Rehman, 2011). We aimed at extending this discussion, looking for a more structured and quantified way of classifying banks.

The key objective of the Khaled Khandelwal (KK) model for rating Islamic banks was to provide a scoring methodology for assessing the level of adherence to Islamic financial laws (Aljifri and Khandelwal, 2015). The modified KK model was introduced in this study to classify Islamic banks as liberal, moderate, or conservative, as already noted. To the original model, the modified KK model added more relevant dimensions (i.e., social responsibility, and ethical aspects of disclosure and transparency). The model consisted of set of questions covering the following dimensions:

- Banking Products;
- Shari'ah Board Requirements;
- Accounting Standards;
- Compliance with corporate governance;
- Legality;
- Social Responsibility of IFIs;
- Ethical Aspects of Disclosure and Transparency.

A specific set of questions were then used under each dimension to generate scores based on the level of Shari'ah compliance. These scores were then aggregated and used on a scale of 0.00 to 1.00 to form the classification. Several rounds of discussions were held with senior Islamic bankers in order to establish the cut-off points for each category.

4. DATA AND METHODOLOGY

This study tests the corporate governance efficiency in 80 fully Islamic banks, using a sample that includes most of the countries which have a significant number of Islamic banks. The choice of banks was largely based on the availability of data and level of access to senior individuals for personal interviews. Conventional banks with an Islamic window were not included in the sample. Data were collected for the years 2009 - 2014 through financial statements, other public disclosures, and personal interviews. Some banks' financials were not available and hence they were excluded from the study, while a few banks' financials were in the local language (not English), which could not be translated. Other banks did not report the required variables needed

¹³ See Gamal (2006); he speaks of "the irony in reports that "Islam forbids interest" or "the Quran forbids interest," followed by a statement of the interest rate paid by Islamic instruments" (p. 45). "Thus, instead of seeking to replace the mechanics of conventional financial practices with inefficient analogs synthesized from premodern contract forms, Islamic finance should focus on the substance of Islamic Law with regard to how financial instruments are used, rather than how they are constructed" (pp. 49) ... "Even the most conservative contemporary jurists do not consider all forms of what economists and regulators call interest to be forbidden (*riba*). A simple examination of *riba*-free Islamic financial methods such as

mark-up credit sales (*murabaha*) and lease (*ijara*) financing shows that those modes of financing are not "interest-free" (p. 71). "The art of Sharia arbitrage consists of identifying a captive market, with religious injunctions that forbid a given set of financial products and services, and synthesizing those products and services from variations on those premodern nominate contracts (p. 175)."

¹⁴ This statement was stated by Khaled Yousaf, the head of business development in the Islamic finance sector of the Dubai International Finance Center, as Perry and Rehman mentioned in their paper.

in the study and hence were excluded. Therefore, the total sample was 118 banks; however, the study was restricted to 80 banks. The sample was drawn from the following countries: the countries of the GCC, Yemen, Egypt, Sudan, Tunisia, Syria, Turkey, Indonesia, Malaysia, Pakistan, Bangladesh, the UK, and South Africa.

Based on the scorecard analysis, Figure 1 shows that the sample was grouped into twenty-nine conservative banks (36%), twenty-nine moderate banks (36%), and twenty-two liberal banks (28%). This is because Islamic banks are still in a developmental phase, and some would, therefore, adopt a cautious approach avoiding extremes on both sides. Further analysis of results highlights the fact that specific categories tend to concentrate in certain geographical regions (see El-Gamal 2006, pp. 16-20). For example, the Shari'ah Board of a bank in Malaysia may approve a financial product which may not be acceptable or ratified in a country within the GCC (Perry, 2011). More information on the study sample is provided in Table 1.

Figure 1. Sample selection in the three categories

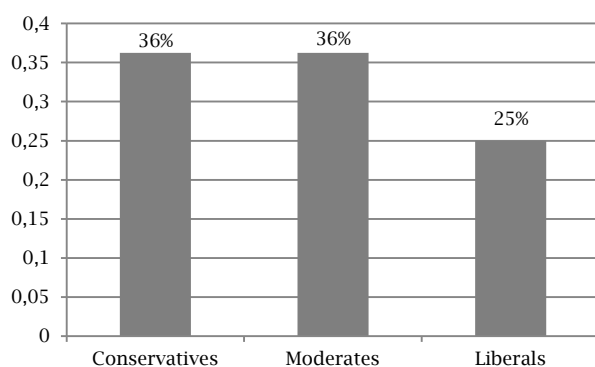


Table 1. Country-wise distribution of the sample

Country	Frequency	Percent	Cumulative percent
Bahrain	26	32.5	32.5
Qatar	3	3.8	36.3
Sudan	1	1.3	37.5
Malaysia	12	15.0	52.5
Pakistan	4	5.0	57.5
Bangladesh	2	2.5	60.0
UAE	6	7.5	67.5
Indonesia	2	2.5	70.0
UK	3	3.8	73.8
Egypt	1	1.3	75.0
South Africa	1	1.3	76.3
Yemen	1	1.3	77.5
KSA	10	12.5	90.0
Kuwait	8	10.0	100.0
Total	80	100.0	

5. RESULTS AND DISCUSSION

Table 2, and Figures 2, 3, and 4 summarize and illustrate the descriptive analysis of the sizes of SSB, audit committee, and board in the three categories. The table shows that the size of the audit committees among the liberals ranges from 2 to 5 members with a mean of 3.14 and standard deviation of 0.86. The mean of audit committee size for the moderates is 3.53 with standard deviation of

0.73, while its range lies between 3 and 5. The table also shows that the audit committee size for conservatives remains constant at 3, with a mean of 3.00 and standard deviation of 0.00. The results of the SSB size for liberals indicate that the mean is 3.67 with standard deviation of 0.84; the range is from 3 to 5. The mean of SSB size for moderates is 4.16 with standard deviation of 1.67, and the range is from 2 to 6. For the conservatives, the range of SSB size is from 3 to 7, and the mean is 3.89 with standard deviation of 1.27. The table also shows that the mean of the board size for liberals is 8.83 with standard deviation of 2.59, and the range is from 5 to 15. The mean of board size for moderates is 8.00 with standard deviation of 1.92 whilst the range is from 5 to 11. However, for conservatives, the mean of the board size is 7.89 with standard deviation of 2.15, and the range is from 3 to 12. Important results are also presented about the board composition: for liberals, the mean is .47 with standard deviation of 0.51, for moderates, the mean is .48 with standard deviation of 0.43, and for conservatives, the mean is .72 with standard deviation of 0.42. Regarding bank size, the table presents that the range of the size for liberals is from 14.09 to 26.02, and the mean is 20.06 with standard deviation of 3.70. A very close result is found regarding the size of moderate banks: the range is from 13.93 to 25.44, and the mean is 20.97 with standard deviation of 3.34. Regarding the size of conservative banks, the mean is 17.82 with standard deviation of 4.63, and the range is from 11.80 to 24.70.

The table reveals that moderate banks are the largest in size, including the size of the audit committee and SSB. In contrast, the liberal banks have the lowest numbers and percentages of SSB members and board composition. The same is true for the conservative banks, which seem to be the smallest category in size and have audit committee with the fewest and most stable members. However, the results show that they have a higher proportion of outside directors (i.e., in their board composition) than either moderate or liberal banks.

Nonparametric tests (i.e., Kruskal-Wallis and Mann-Whitney) were used in this study to examine its hypotheses. Table 2 presents the results of a Kruskal-Wallis (KW) test to examine the differences, if any, between the size of the audit committee, SSB size, board size, and board composition in the three categories. It shows that there is a significant difference between the three categories in the audit committee size, the board composition, and the bank's size (as a control variable) but not for the other two variables (i.e., SSB size and board size). However, when a Mann-Whitney (MW) test was used, the results revealed significant differences only between the moderate and the conservative banks in the size of audit committee, board compositions, and the control variable. The result also showed a significant difference in the control variable between liberal and the conservative banks. This can be explained by the detailed results presented above, which state that conservative banks are smaller in size than moderate and liberal ones are. In short, these results allow us to accept the following alternative hypotheses: H3, H4, H13, and H16 and reject all the others.

One possible reason for these results is that, unlike conservative banks, moderate banks, due to their larger size, appear to tolerate significant differences in the audit committee size and board composition. This is evident from the result of the MW test presented in Table 2. The result of the bank size is consistent with the study of Aljifri and Khandelwal (2015), which documented that the size of moderate banks appears to be greater than either liberal or conservative banks. The literature contains a number of studies that examine board size, SSB size, audit committee size, and board composition and come up with mixed findings (e.g., Lipton and Lorsch, 1992; Jensen, 1993; Kamran *et al.*, 2006;

Aljifri and Moustafa, 2007; Alman, 2012; Bukhari *et al.* 2013). In order to successfully justify the results of this study, one would have to depend mainly on the relevant studies of similar issues and understand the effect of the seven dimensions used for classifying banks into the above three categories. Unfortunately, the idea of dividing banks into these categories is new and, to the best of the authors' knowledge, no study has done so before. This greatly limits the benefit of using the current literature to justify and/or support the results because of its irrelevance to the unique aims of the present study.

Table 2. Comparison between the corporate governance variables in the three categories

Variable	Values	Liberals	Moderates	Conservatives	Liberals	Moderates	Conservatives
Size of AC	Min	2	3	3	2	3	3
	Max	5	5	3	5	5	3
	Mean	3.14	3.53	3.00	3.14	3.53	3.00
	SD	0.86	0.73	0.00	0.86	0.73	0.00
	MW Test	.060		1.00		.001*	
	KW Test	.002*					
Size of SSB	Min	3	2	3	3	2	3
	Max	5	6	7	5	6	7
	Mean	3.67	4.16	3.89	3.67	4.16	3.89
	SD	0.84	1.67	1.27	0.84	1.67	1.27
	MW Test	.120		.814		.232	
	KW Test	.269					
Size of Board	Min	5	5	3	5	5	3
	Max	15	11	12	15	11	12
	Mean	8.83	8.00	7.89	8.83	8.00	7.89
	SD	2.59	1.92	2.15	2.59	1.92	2.15
	MW Test	.326		.228		.838	
	KW Test	.467					
Board composition	Min	0	0	0	0	0	0
	Max	1	1	1	1	1	1
	Mean	.47	.48	.72	.47	.48	0.72
	SD	0.51	0.43	0.42	0.51	.43	0.42
	MW Test	.413		.067		.004*	
	KW Test	.001*					
Size of Banks***	Min	14.09	13.93	11.80	14.09	13.93	11.80
	Max	26.02	25.44	24.70	26.02	25.44	24.70
	Mean	20.06	20.97	17.82	20.06	20.97	17.82
	SD	3.70	3.34	4.63	3.70	3.34	4.63
	MW Test	.341		.041**		.001*	
	KW Test	.004*					

Note: *The result is statistically significant at the $p < 0.01$; ** The result is statistically significant at the $p < 0.05$;
 *** Bank's size is measured by the natural logarithm of total assets

Figure 2. Average SSB size

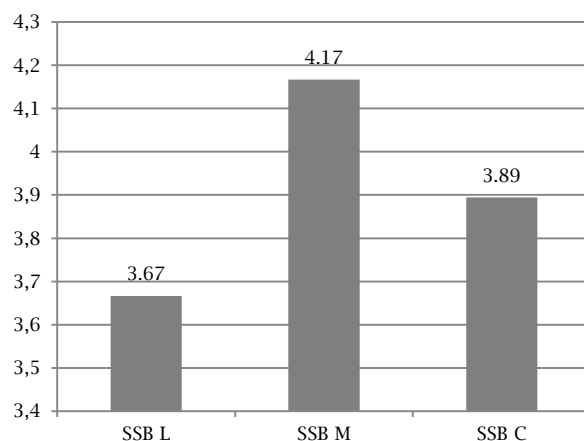


Figure 3. Average audit committee size

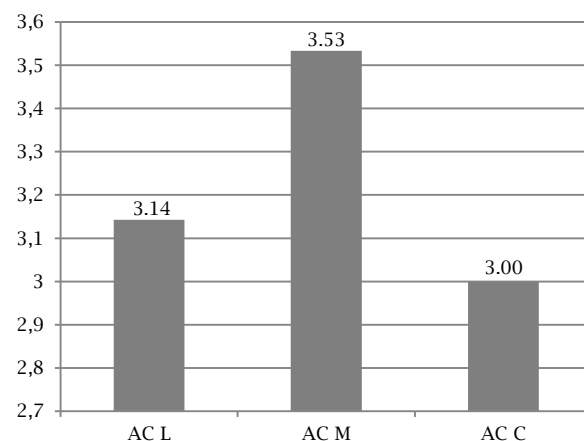
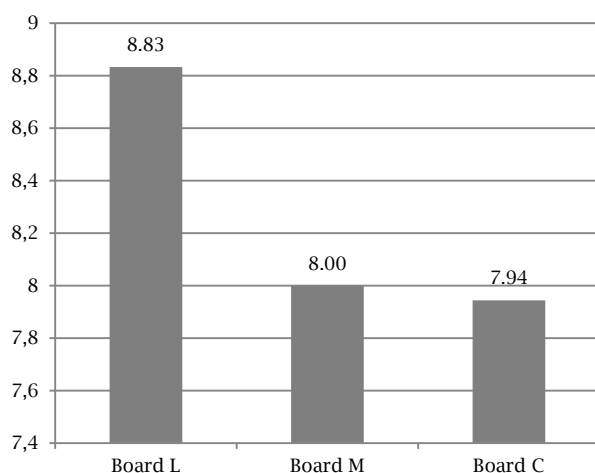


Figure 4. Average board size

Note: L - Liberals; M - Moderates; and C - Conservatives

6. CONCLUSION

Though studies have been written on corporate governance in Islamic banks versus conventional banks, some researchers believe that all Islamic banks have almost the same structure and level of adopting corporate governance. However, this study classifies Islamic banks into three categories: conservative, moderate, and liberal banks. This classification was conducted by introducing a modified KK rating model that brings to the original model some critical dimensions related to social responsibility, and ethical aspects of disclosure and transparency. The study examined four corporate governance mechanisms (i.e., board size, size of SSB, size of audit committee, and board composition) to see if there were any differences between the three categories in the structure of their adopting these indicators. The results reveal that there are significant differences in the audit committee size and the board composition between the three categories. The findings also show that the significant differences lie only between moderate banks and conservative banks.

There are certainly major differences between Islamic banks and conventional banks; however, the studies on the topic of the present paper are limited because Islamic banks have not so far been classified in this way and they have all been treated as a single group, which is surely mistaken. All Islamic banks do not share the same structure, product composition, corporate governance setup, reporting rules, accounting standards, and operational efficiencies. Therefore, a robust classification of Islamic banks on Shari'ah compliance, their most important parameter, is expected to open several new avenues of study and additional work in the field of Islamic accounting and finance by extending and initiating new research. A comparison of several dimensions of Islamic finance within the three groups provides deeper insight into Islamic banks and also allows more segmental studies within and outside Islamic banks.

The limitation of the present study lies in its limited coverage of its variables. The study did not examine other related characteristics to the board of

directors, SSB, and audit committee. Examples of these features are the structure of expertise among audit committee members, the number of meetings, and the level of dedication of the SSB. Such information is not always publicly available and in most cases much time and efforts would require to collect them manually. Future research using larger samples and a longer time series should be conducted, taking into consideration the limitations of this study.

REFERENCES

1. Abu-Tapanjeh, A. M. (2009). "Corporate Governance from Islamic Perspective: A Comparative Analysis with OECD Principles." *Critical Perspective on Accounting*, Vol. 20, pp. 556-567.
2. Aggarwal, R. K. and Youssef, T. (2000). "Islamic Banks and Investment Financing." *Journal of Money, Credit, and Banking*, Vol. 32, pp. 93-120.
3. Ai, M.O.S. (2010). "Corporate Governance in Islamic Banking and Financial Institutions: Islamization Trends and Issues." FEB Working Paper Series, Universiti Malaysia Sarawak (UNIMAS), No. 1008, August.
4. Aljifri, L., and Khandelwal, S., K. (2015), "The Profitability and Efficiency of Islamic Banking: A Comparative Study of Conservatives, Moderates, and Liberals." In GRM Islamic Finance Books, Vol 3, *Islamic Finance: Performance and Efficiency*, Gerlach Press, Berlin and London, University of Cambridge, UK.
5. Aljifri, K., and Moustafa, M. (2007). "The Impact of Corporate Governance Mechanisms on the Performance of UAE Firms: An Empirical Analysis." *Journal of Economic and Administrative Sciences*, Vol. 23, No. 2, pp. 71-93.
6. Alman, M. (2012). "Shari'ah Supervisory Board Composition Effects on Islamic Banks' Risk-Taking Behavior." *Journal of Banking Regulation*, Vol. 14, 134- 163.
7. Bank Negara Malaysia. (2011). "Guidelines on Corporate Governance for Licensed Islamic Banks." Islamic Banking and Takaful Department, Bank Negara Malaysia. Reference number BNM/RH/GL 002-1. March.
8. Chapra, M.U. and Ahmed, H. (2002). "Corporate Governance in Islamic Financial Institutions. Occasional", Papers No. 6, Islamic Research and Training Institute (IRTI).
9. Choudhury, M.A. and Hoque, M.Z. (2006). "Corporate Governance in Islamic Perspective." Emerald Group Publishing Limited, *Corporate Governance*, Vol. 6, No. 2, pp. 116-128.
10. Darmadi, S. (2013). "Corporate Governance Disclosure in the Annual Reports: An Exploratory Study on Indonesian Islamic Banks." *Humanomics*, Vol. 29, No. 1, pp. 4-23.
11. El-Gamal, M., (2006). "Islamic Finance, Law, Economic, and Practice." New York: Cambridge University Press.
12. El-Hawary, D., Grais, W., and Iqbal, Z. (2007). "Diversity in the Regulations of Islamic Financial Institutions." *The Quarterly Review of Economics and Finance*, Vol. 46, pp. 778-800.
13. Garas, S.N. (2012). "The Control of the Shari'ah Supervisory Board in the Islamic Financial Institutions." *International Journal of Islamic and Middle Eastern Finance and Management*, Vol 5, No. 1, 8-24.

14. Ghayad, R. (2008). "Corporate Governance and the Global Performance of Islamic Banks." *Humanomics*, Emerald Publishing, Vol. 24, No. 3.
15. Gintzburger, A. S. (2011). "An Analysis of Global Trends and Regional Pockets in the Application of Islamic Financial Contracts in Malaysia and the Gulf Cooperation Council." *Islamic Capital Markets: Products and Strategies*, John Wiley & Sons, West Sussex (UK), 307-339.
16. Grais, W., and Pellegrini, M. (2006a). "Corporate governance in Institutions Offering Islamic Financial Services: Issues and Options." *World Bank Policy Research Paper Number 4052*. November.
17. Grais, W., and Pellegrini, M. (2006b). "Corporate Governance and Stakeholders' Financial Interest in Institutions Offering Islamic Financial Services." *World Bank Policy Research Paper Number 4053*. November.
18. Grais, W., and Pellegrini, M. (2006c). "Corporate Governance and Shari'ah Compliance in Institutions Offering Islamic Financial Services." *World Bank Policy Research Paper Number 4054*. November.
19. Hameed, S.M.I., and Sigit, P. (2005). "Analysis of Corporate Governance Disclosure in Islamic Commercial Banks' Annual Reports: A Comparative Study of Islamic Commercial Banks in Malaysia and Indonesia." Paper Presented at the Islamic Perspective Conference, March, 29-31, Jakarta. Available at <http://www.scribd.com/doc/9882916/Sigits-Paper-for-Prof-Omar-Conference>.
20. Haniffa, R., and Hudaib, M. A. (2002). "A Theoretical Framework for the Development of the Islamic Perspective of Accounting." *Accounting, Commerce & Finance: The Islamic Perspective Journal*, Vol. 6, No. 1/2, pp. 1-74.
21. Hasan, A.B. (2007). "Optimal Shari'ah Governance in Islamic Finance." Available at http://www.nzibio.com/IB2/04_01.pdf.
22. Hasan, Z. (2008). "Corporate Governance of Islamic Financial Institutions." Paper Presented at the Conference on Malaysian Study of Islam, University of Wales, June, UK.
23. Hasan, Z., (2009). "Corporate governance: Western and Islamic Perspective." *International Review of Business Research Papers*, Vol. 5, No. 1, pp. 277-293, January.
24. Hasan, Z., (2011). "A Survey on Shari'ah Governance Practices in Malaysia, GCC countries and the UK." *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 4, No. 1, 30-51.
25. Hoi, C-KS, Robin, A., and Tesson, D. (2007). "Sarbanes-Oxley: Are Audit Committees up to theTask?" *Managerial Auditing Journal*, Vol. 22, No. 3, pp. 255-67.
26. IFSB, (2006). "Guiding Principles on Corporate Governance for Institutions Offering only Islamic Financial Services." *Islamic Financial Services Board*, December.
27. Ioannis, A, and Khandelwal, S.K. (2008). "Financial Risk Management in Islamic Banking and Finance." *Palgrave McMillan*, UK.
28. Jackling, B., and Johl, S. (2009). "Board Structure and Firm Performance: Evidence from India's Top Companies." *Corporate Governance: An International Review*, Vol. 17, No. 4, pp. 492-509.
29. Jensen, M. (1993.). "The Modern Industrial Revolution, Exit and the Failure of Internal Control Systems." *Journal of Finance*, Vol. 48, 831-880.
30. Kamran, A., Mahmud, H., and Mike, A. (2006). "The Effects of Board Composition and Board Size on the Informativeness of Annual Accounting Earnings." *Corporate Governance: An International Review*, Vol. 14, No. 5, 418-431.
31. Khandelwal, S.K., (2008). "Corporate Governance and Role of Shari'ah in Islamic Banking." Paper Presented at the 5th Workshop on Corporate Governance, The European Finance Association, Brussels.
32. Lewis, M., (2005). "Islamic Corporate Governance." *Review of Islamic Economics*. Vol. 9, No. 1, pp. 5-29.
33. Lipton, M., and Lorsch. J.W. (1992). "A Modest Proposal for Improved Corporate Governance." *Business Lawyer*, Vol. 48, pp. 59-77.
34. Maali, B., Casson, P. and Napier, C. (2006). "Social Reporting by Islamic Banks." *ABACUS*. Vol. 42, pp. 266-289.
35. Malekian, E. and Daryaei, A. A. (2010). "Islamic Values Forward into Better Corporate Governance Systems." Available at http://www.globalresearch.com.my/proceeding/icber2010_proceeding/PAPER_113_IslamicCorporate.pdf.
36. Mintzberg, H., Simons, R., and Basu, K. (2002). "Beyond Selfishness." *MIT Sloan Management Review*, Fall, pp. 67-74.
37. Muljawan, D., (2005). "A Design for Islamic Banking Rating System: An Integrated Approach." *The Sixth International Conference on Islamic Economics and Finance: Islamic Economics and Banking in the 21st Century*, the International Association for Islamic Economics, University of Indonesia.
38. Nienhaus, Volker, (2007). "Governance of Islamic Banks." A Chapter in M. Kabir Hassan and Mervyn K. Lewis (eds.), *Handbook of Islamic Banking*, Edward Elgar, pp. 128-143.
39. Obaidullah, M. (2005). "Rating of Islamic Financial Institutions: Some Methodological Suggestions." *Scientific Paper 1426/2005*, Scientific Publishing Centre, King Abdul Aziz University, Saudi Arabia.
40. Perry, F.V. (2011). "The Corporate Governance of Islamic Banks: A Better Way of Doing Business?" *Michigan State University Journal of International Law*, Vol. 19, No. 2, pp. 251-277.
41. Perry, F.V., and Rehman, S.S. (2011). "Globalization of Islamic Finance: Myth or Reality? *International Journal of Humanities and Social Science*, Vol. 1 No. 19; December.
42. Usmani, M. T. (2002). "An Introduction to Islamic Finance." *Arab and Islamic Law Series*, Kluwer Law International, Amsterdam, pp. 12-13.
43. Warde, I. (2000). "Islamic Finance in the Global Economy." *Second Edition*, Edinburgh University Press, Edinburgh.
44. Weir, C, Laing, D., and McKnight, P.J. (2002). "Internal and External Governance Mechanisms: Their Impact on the Performance of Large UK Public Companies." *Journal of Business Finance and Accounting*, Vol. 29, No. 5/6, pp. 579-611.
46. Yermack, D. (1996). "Higher Market Valuation of Companies with a Small Board of Directors." *Journal of Financial Economics*, Vol. 40, No. 2, pp. 185-211.

Appendix A

Table A.1. Corporate governance in Conventional and Islamic banks

	<i>Stakeholders</i>	<i>Presence of SSB</i>	<i>Ethical dimension</i>	<i>Commercial Model</i>	<i>Structure</i>	<i>Reporting</i>
CB	Shareholders, Board of Director, Customers, Employees, Government, Regulators	Not applicable	Limited ethical dimension	Agency theory represents typical commercial model of CG in CB	Shareholder and BOD represent the top-most layer of CG	Reporting is limited to statutory reports including financial reporting. This also includes Statutory Audit.
IB	All of the above and society, investors, UPSIA and RPSIA holders, Partners under various Islamic contracts	Presence of SSB adds specific layer to corporate governance	Complete ethical model, including specifications on type of activities, distribution of profits and social contributions.	Although Agency Theory applies to IB, there are several gaps and there is no specific commercial model to represent CG in IB	SSB represents the top-most layer of CG	In addition to the above, reporting by Shari'ah is mandatory and provides an additional layer of transparency to CG. In addition to statutory audit, there is a concept of religious audit.

Note: UPSIA - Unrestricted Profit Sharing Investment Account, RPSIA - Restricted Profit Sharing Investment Account, SSB - Shari'ah Supervisory Board, CB - Conventional Banking, IB - Islamic Banking

Appendix B

Table B.1. IFSB guidelines on corporate governance for IFS

<i>Part 1: General Governance Approach of IIFS</i>	
Principle 1.1	IIFS shall establish a comprehensive governance policy framework which sets out the strategic roles and functions of each organ of governance and mechanisms for balancing the IIFS's accountabilities to various stakeholders
Principle 1.2	IIFS shall ensure that the reporting of their financial and non-financial information meets the requirements of internationally recognized accounting standards which are in compliance with <i>Shari'ah</i> rules and principles and are applicable to the Islamic financial services industry as recognized by the supervisory authorities of the country
<i>Part 2: Rights of Investment Account Holders (IAHs)</i>	
Principle 2.1	IIFS shall acknowledge IAHs' right to monitor the performance of their investments and the associated risks, and put into place adequate means to ensure that these rights are observed and exercised
Principle 2.2	IIFS shall adopt a sound investment strategy which is appropriately aligned to the risk and return expectations of IAH (bearing in mind the distinction between restricted and unrestricted IAH), and be transparent in smoothing any returns
<i>Part 3: Compliance with Shari'ah Rules and Principles</i>	
Principle 3.1	IIFS shall have in place an appropriate mechanism for obtaining rulings from <i>Shari'ah</i> scholars, applying <i>fatāwā</i> and monitoring <i>Shari'ah</i> compliance in all aspects of their products, operations, and activities
Principle 3.2	IIFS shall comply with the <i>Shari'ah</i> rules and principles as expressed in the rulings of the IIFS's <i>Shari'ah</i> scholars. The IIFS shall make these rulings available to the public
<i>Part 4: Transparency of Financial Reporting in respect of Investment Accounts</i>	
Principle 4	IIFS shall make adequate and timely disclosure to IAH and the public of material and relevant information on the investment accounts that they manage

Source: IFSB (2006)

ENVIRONMENTAL MANAGEMENT ACCOUNTING (EMA) IN THE DEVELOPING ECONOMY: A CASE OF THE HOTEL SECTOR

Celani John Nyide*, Lawrence Mpela Lekhanya**

* Department of Finance and Information Management, Durban University of Technology, South Africa

** Department of Public Management and Economics, Durban University of Technology, South Africa

Abstract

The adoption of EMA is triggered by certain factors such as human resources, compliance to legislation, market factors, just to name but a few. However, the literature points out that there are limiting factors that impede the application of EMA, particularly in the developing economy. Currently, there is limited existing research on EMA practices available for use by the hotel sector in the developing economies. The overall aim of this study was to, therefore, investigate and describe factors that enable and limit the use of EMA tools by the hotel sector in South Africa, a developing economy. The research was an exploratory study and qualitative in nature using a single case study with embedded units approach. ABC Hotel Management Group formed part of this study along its 3 hotels which met the selection criteria. In-depth semi-structured interviews comprised the main method of data collection. Additional documents were analysed which included financial statements, policy documents, the Group's website, the hotels' websites, Group Energy Profile Analysis (GEPA) programme, and Building Monitoring Systems (BMS). There were 10 participants in this case study which included the group engineer, who is the main custodian of the Group's environmental management systems, 3 general managers, 3 financial managers, and 3 maintenance managers. The study discovered certain external and internal factors enabling the implementation of EMA tools; and there was the existence of limiting factors, internal and external, such as the shortage of skills and knowledge.

Keywords: Developing Economy, EMA Tools, Environmental Costs, Environmental Performance, Enabling and Limiting Factors

1. INTRODUCTION

Environmental issues and concerns are world-wide reality. There are a number of significant environmental threats to the future of humanity, including the over-consumption of non-renewable resources and global air pollution (Jones, 2010). Due to these environmental problems, the moral, ethical, social, and political arguments for taking action on environmental issues are becoming more persuasive and more widely accepted (Chan and Hawkins, 2012). A significant amount of research on the environmental management systems and initiatives has been done in the developed economies (Hsiao, Chuang, Kuoc and Yu, 2014). The emphasis is on industries, such as manufacturing, chemicals, farming, construction, farming, and electronics, but limited research has been done on the service industries (Chan and Hawkins, 2012). Even though the economic impacts of the service industries are significant, their environmental impacts are yet to be better known and are overlooked (Shrake, Bilec and Landis, 2013).

Various companies in the hotel sector, a service sector, have adopted various environmental initiatives to curb the scourge of the adverse environmental impact on our planet (Pirani and Arafat, 2014). According to Chan and Hawkins (2010), the hotel industry is embarking on a drive to engage on various initiatives, whether for the sake of

the environment, for economic reasons, or to build a positive image. However, literature reveals that there is limited research pertaining to the application of EMA tools, particularly in the hotel sector. As a result, the implementation and application process of EMA remains unclear. Gunaratne and Lee (2015) support this argument by stating that the development stages of EMA have not been empirically investigated well enough. Thus, there is a need to identify and demonstrate how companies have continuously developed and systematically adopted environmental strategies with the support of EMA practices over the years, especially in the hotel industry. Qian, Burritt, and Chen (2015) add that the main focus of EMA studies has been on highly polluting and energy intensive industries. Jamil, Mohamed, Muhammad and Ali (2015) add that the importance and benefits of EMA have been reported by empirical studies. However, the level of adoption and implementation of EMA practice is still weak in firms in many countries, especially in developing countries.

2. PROBLEM STATEMENT

Traditional management accounting systems and mechanisms have been reported to be unable to add value in terms of providing adequate and appropriately meaningful knowledge that would assist environmental administration and

administrating-related environmental overheads (Vasile and Man, 2012). This has led to the understatement of costs and benefits that would ordinarily be achieved by organisations that adopt or implement appropriate EMA tools (Christ and Burritt, 2013). EMA is increasingly being investigated in order to fill in this gap. However, researchers point out that there are several factors that enable and/or limit the implementation of EMA tools (Mensah 2014; Ni, Chan and Wong, 2006).

3. AIM AND OBJECTIVES

3.1. Aim

The main aim of this research is to identify critical factors enabling and limiting the use of EMA tools by the hotel sector in the developing economy.

3.2. Objectives

The objectives of the study are as follows:

- to identify internal and external factors enabling the use of EMA tools by the hotel sector in the developing economy;
- to identify internal and external factors limiting the use of EMA tools by the hotel sector in the developing economy;
- to suggest recommendations that are aimed at improving the use of EMA tools by the hotel sector in the developing economy.

4. LITERATURE REVIEW

4.1. The adoption of environmental management practices

Research reveals that concerns for environmental issues are less intense in developing economies (Kang, Stein, Heo and Lee, 2012). For example, in Brazil, the adaptation of environmental management systems (EMS), which include EMA, is still low compared to the developed countries (de Oliveira, Serra and Salgado, 2010). Massoud, Fayad, El-Fadel and Kamle (2010) confirm this finding by adding that the adoption of the EMS in developing countries of Central and Eastern Europe accounts for an insignificant proportion. Latin America, Africa and the Middle East together account for less than 3% of ISO 14001 certified organisations worldwide. Developed countries, on the other hand, are trend setters in as far as the implementation of the EMS is concerned. For example, the Hotel Association of Canada has what is called Green Leaf Eco-rating System which is used to rate the hotels' environmental performance (Hsiao et al., 2014).

Phan and Baird (2015) point out that, often times, there is the variation in the extent to which organisations implement different environmental management practices given that the adoption of EMS and the certification of EMS is voluntary. Chan and Hawkins (2012) also acknowledge that there are different approaches in the application of EMS. Consequently, EMS can differ significantly across organisations in the comprehensiveness of their coverage and the ambitiousness of their objectives (Phan and Baird, 2015). Singh, Brueckner, and Padhy (2015) point out that organisations may well adopt environmental management practices as a means of merely signalling good environmental responsiveness to market, while in real terms, their

environmental performance may indeed be lower than that of their peers.

4.2. The emergence of EMA

The economic activities of an organisation may result in certain costs being incurred. However, coupled with an effective environmental management practices, this may result in benefits and cost savings. Several authors argue that traditional or conventional accounting methods do not offer the ideal framework capable of identifying necessary data as they generally focus upon the resources' cost employed and their accumulation without paying attention to activities (Jones, 2010; Vasile and Man, 2012). Consequently, Masanet-Llodra (2006) concedes the significance of exploring more accurate and precise measures for the physical flows (of energy, water, waste, etc.) and their associated costs. The accounting system could thus be employed to seek out, identify and exploit financial savings in resources' usage, waste and energy emissions that would necessarily lead to reductions in the organisation's environmental impacts.

Literature adds that the role that has been played by the traditional management accounting system has been determined to be complex due to certain factors such as identification, classification, measurement and reporting of environmental and social information (Farouk, Cherain, and Jacob, 2012). Conventional management accounting systems and practices often do not provide sufficiently accurate information for environmental management and environment-related cost management (Gale 2006). As a result, many organisations significantly underestimate both the costs and benefits of sound environmental management (Jasch, 2003). To fill in this gap, recently, the emerging field of EMA has been receiving increasing attention. Due to several limitations associated with the conventional management accounting, the United Nations Commission for Sustainable Development formed the Expert Working Group in 1998, whose responsibility included discussions and negotiations of environmentally-friendly practices (Jasch, 2003). The participants in the Expert Working Group (EWG) are from national environmental agencies and ministries, international organisations, industry, accounting firms, academia, and United Nations agencies (Jasch, 2003). The EWG published a report in 2001 titled 'Improving the Role of Government in the Promotion of Environmental Management Accounting (EMA)' (Farouk et al., 2012). The report was published in order to describe certain principles and procedures related to EMA, focusing particularly on techniques to quantify environmental costs for the development of national EMA guidelines and framework. According to this report, both conventional cost accounting and non-environmental costs of the accounts are assumed to be hidden with respect to management (Jasch 2003; Farouk et al., 2012).

4.3. EMA defined

Scholarly work by Burrit and Saka (2006); Janković and Krivačić (2014); and Jamil et al. (2015) maintain that, over the years, several attempts have been

made towards developing a comprehensive framework of EMA to reflect the following: EMA definition; description of internal and external users of environmental accounting information; and identification, tracking and allocation of monetary and non-monetary information relating to the environmental activities of an organisation. Burritt and Saka (2006) define EMA as the identification, collection, analysis and use of two types of information for internal decision making: i) physical information on the use, flows and destinies of energy, water and materials (including wastes); and ii) monetary information on environment-related costs, earnings and savings. According to De Beer and Friend (2006), EMA is an innovative sustainability initiative.

The International Federation of Accountants (IFAC), as quoted by Chang (2013), defines EMA as the management of environmental and economic performance through the development and implementation of appropriate environment-related accounting systems and practices. While this may include reporting and auditing in some companies, EMA typically involves life-cycle costing, full-cost accounting, benefits assessment, and strategic planning for environmental management. According to Vasile and Man (2012), the elements of the EMA, as integrated in the definition, makes EMA become a pivotal tool not only for the management of the environment but also for improved planning of processes, efficient allocation and control of costs, better pricing strategies and effective performance evaluation. The EMA definition encompasses three elements:

- The identification, allocation, and analysis of financial and physical information - this process may entail tracing and analysing the activities of the firm and then allocate costs on the 'cause and effect' basis. This process may assist in determining the precise financial and non-financial information that is likely to add value in determining accurate environmental costs incurred by the organisation.

- Environmental costs (internal and external) - there is general consensus in the body of knowledge that environmental costs are costs that emanate from the activities of the firm than, in turn, adversely affect organisations (Internal), society and individuals (External). They result from activities that affect quality of the environment, and can be expressed in monetary and non-monetary items (de Beer and Friend, 2006; Papaspyropoulos, Blioumis, and Christodoulou, 2012; Bouten and Hoozée, 2013). Irrespective of the types of environmental costs, it is important to incorporate them into internal cost accounting to facilitate internal decision making (Janković and Krivačić, 2014).

- Cost allocation - scholars maintain that environmental costs should be allocated directly to the relevant cost drivers, that is, to the activity that causes the costs (de Beer and Friend, 2006 and Chang, 2013). The management is able to identify cost saving opportunities by identifying, analysing and allocating environmental costs (de Beer and Friend, 2006).

Gunarathne and Lee (2015: 363) make an interesting observation that the definition of EMA stresses the importance of providing both financial and physical information and this potentially contributes in the establishment of two types of

EMA systems: monetary EMA (MEMA) and physical EMA (PEMA). The authors went on to describe these EMA systems as follows: MEMA deals with environmental aspects of corporate activities expressed in monetary units, while PEMA focuses on a company's impact on the natural environment expressed in terms of physical units (Gunarathne and Lee, 2015). Since this study investigates the EMA tools used by the hotels in South Africa, a developing economy, a single EMA system which, incorporates monetary and physical information, was investigated. This is in line with several studies conducted in the same area, where EMA has been described as a single system that incorporates both monetary and physical information.

4.4. EMA application within the hotel sector

Literature reveals that there is limited research pertaining to the application of EMA tools, particularly in the hotel sector. As a result, the implementation and application process of EMA remains unclear. Schaltegger, Viere, and Zvezdov (2012) point out that the even the EMA framework, like the multitude of proposed environmental accounting tools, does not explain the processes as to how corporate decision makers design their environmental information management and use processes. Gunarathne and Lee (2015) support this argument by stating that the development stages of EMA have not been empirically investigated well enough. Thus, there is a need to identify and demonstrate how companies have continuously developed and systematically adopted environmental strategies with the support of EMA practices over the years, especially in the tourism sector. Qian et al. (2015) add that the main focus of EMA studies has been on highly polluting and energy intensive industries. Jamil et al. (2015) add that the importance and benefits of EMA have been reported by empirical studies. However, the level of adoption and implementation of EMA practice is still weak in firms in many countries, especially in developing countries.

5. RESEARCH METHODOLOGY

The research consisted of literature review and empirical study. The historical review laid a foundation that guided empirical study and provided an insight and understanding into the research problem.

Qualitative exploratory case study research method has been adopted in this study. This type of case study is used to explore those situations in which the intervention being evaluated has no clear, single set of outcomes (Yin, 2009). The use of case study as a research methodology to collect data is appropriate for this study because it is a means to provide rich drawings, descriptions, considerations and clarifications of the events being investigated. The primary data collection for this study came in the form of in-depth interviews using semi-structured questions. Furthermore, additional documents were analysed. These included the hotels' Group Energy Profile Analysis programme (GEPA), Building Management System (BMS), financial statements, policies and the group websites together with their individual hotel websites.

Purposive sampling was used in this study because, with purposive sampling, one needs to use one's judgement to select cases that will best enable the researcher to answer research questions and to meet objectives (Saunders, Lewis, and Thornhill, 2012). The hotels had to have an already developed EMS. Therefore, it had to have either a Green Leaf Eco Standard certification, Heritage Environmental certification or Fair Trade Tourism certification. The selected case is that of a hotel management company (for confidentiality purposes will be referred to as ABC Hotel Management Group) with its 3 hotels which met the selection criteria. The environmental management challenges faced by these establishments are universal. A total of 10 individuals participated in this study, which consisted of 3 general managers, 3 financial managers, 3 maintenance managers, and the Group engineer. Creswell (2015) recommends a sample size of between 3 to 10 participants for phenomenology studies like this one. The interviews

were conducted between May and June 2015 based on the availability of the informants.

6. RESEARCH FINDINGS

To ensure triangulation, field notes from direct observation, documentation and hotel websites were also incorporated into the analysis of data to complement in-depth interviews. This exercise was performed to ensure reliability and validity of the findings and thus address bias. Cross-case synthesis was used and the results were analysed in accordance to the theme and objectives. Table 2 shows the theme, objectives and interview questions that were used in this study. For each hotel, group interviews were held with the hotel management team (hence each table has only four columns which represent responses from the Group engineer and the management team from hotel A, B, and C).

Table 1. Themes, objectives and interview questions

Themes	Objectives	Interview questions
1. Internal and external factors enabling the use of EMA tools.	To identify internal and external factors enabling the use of EMA tools by the hotel sector in the developing economy.	<ul style="list-style-type: none"> Do you think the hotel has provided enough incentives to motivate general managers or administrative divisions to control, or reduce environmental costs? How do you see the potential use of EMA practices in providing such incentives? What would trigger the hotel to consider the major environmental costs when making management decisions? Are any internal pressures forcing the hotel to account for any of its impacts on the environment? Who imposes the pressure? How does the hotel react to the pressure and what are the actions taken?
2. Internal and external factors limiting the use of EMA tools.	To identify internal and external factors limiting the use of EMA tools by the hotel sector in the developing economy.	<ul style="list-style-type: none"> Are there barriers (either technical or political) in the provision of such environmental reporting? If yes, please explain. Are there any impediments, either technical and/ or political, to provide an internal report on environmental performance to related parties? Are you aware of any compulsory regulations, or requirements, on hotels to control, or reduce, their major environmental costs? If yes, what are they? If no, do you think the government will impose compulsory regulations on hotels to control, or reduce, their major environmental costs? Are any external pressures forcing the hotel to account for any of its impacts on the environment? Who imposes the pressure? How does the hotel react to the pressure and what are the actions taken?

6.1. Internal and external factors enabling the use of EMA tools

Table 2 reveals that, according to informants, the hotel has the culture to motivate management to

control and reduce environmental costs. Therefore, the overall response suggests that there are no financial rewards provided as incentives but directives embedded in the corporate culture.

Table 2. Incentives

Question	Do you think the hotel has provided enough incentives to motivate general managers or administrative divisions to control, or reduce environmental costs?			
	Hotel A	Hotel B	Hotel C	Group Engineer
There are no monetary incentives.		Not necessarily expected but part of the culture.	Yes, not monetary but part of the culture.	Not incentives but directives.

Table 3. EMA as a tool for incentives

Question	How do you see the potential use of EMA practices in providing such incentives?			
	Hotel A	Hotel B	Hotel C	Group Engineer
Owners must comment on this and must be understood by managers.		It is very important.	Yes, to provide KPIs.	'Key, provided there are fair KPIs in place'.

Table 4. What triggers the hotel to consider environmental costs?

Question	What would trigger the hotel to consider the major environmental costs when making management decisions?			
	Hotel A	Hotel B	Hotel C	Group Engineer
Cost Reductions. Meeting Green Leaf Eco Standards. Recyclability of materials bought. Acquisition of eco-friendly equipment.		Reduction of environmental impact by the hotel and reduction of costs.	Cost reduction and sustainability.	Costs.

Table 3 illustrates that the hotel management was positive towards the potential use of EMA practices in providing incentives to motivate general managers or administrative divisions. However, there is a concern that the EMA practices must be understood by managers and key performance indicators (KPIs) must be in place.

Cost reduction was the main trigger for the hotel to consider the major environmental costs when making decisions according to the respondents in Table 4. Meeting Green Leaf Eco Standards and sustainability were also considered.

Table 5. Internal pressures

Question	Are any internal pressures forcing the hotel to account for any of its impacts on the environment? Who imposes the pressure? How does the hotel react to the pressure and what are the actions taken?		
Hotel A	Hotel B	Hotel C	Group Engineer
Yes. Directors Green Leaf Eco Standard gives directives.	No.	No.	Yes. The group engineer and regional director. More work but it gets done.

Table 6. External pressures

Question	Are any external pressures forcing the hotel to account for any of its impacts on the environment? Who imposes the pressure? How does the hotel react to the pressure and what are the actions taken?		
Hotel A	Hotel B	Hotel C	Group Engineer
None but international visitors somehow. No action.	Yes. International organisations. No action.	Occasionally by the government. No action.	Yes. Tourists Initiatives and projects as set out in previous questions.

Table 5 shows that the management of hotels B and C in unison towards the questions asked. They responded that there is no internal pressure. However, hotel A and the group engineer agreed that there is internal pressure by citing the group engineers and directors as internal pressures forcing the hotel to account for the hotel's impact on the environment. The management responded that more work is expected from the general managers and Green Leaf Eco Standard provides the directive on how to react to the pressures.

The management was positive towards the questions asked in Table 6 and the general response was that there are no actions taken to respond to external pressures other than projects and initiatives

already done by the hotel. International visitors were said to be the main external pressures forcing the hotel to account for its impact on the environment.

6.2. Internal and external factors limiting the use of EMA tools

Table 7 shows that the hotel management is congruent with the question in responding that there are no barriers to the provision of environmental reporting. However, there is some consideration that technical skills are a potential barrier. Lack of in-house knowledge and skills is considered by Massoud et al. (2010: 207) as a major barrier for the provision of environmental reporting.

Table 7. Barriers for environmental reporting

Question	Are there barriers (either technical or political) in the provision of such environmental reporting? If yes, please explain.		
Hotel A	Hotel B	Hotel C	Group Engineer
No barriers.	No barriers.	No barriers.	It would require technical skills.

Table 8. Impediments for internal reporting

Question	Are there any impediments, either technical and/or political, to provide an internal report on environmental performance to related parties?		
Hotel A	Hotel B	Hotel C	Group Engineer
Yes. Confidentiality if provided externally.	No.	No.	Yes. Technical skills

Table 9. Awareness of regulations

Question	Are you aware of any compulsory regulations, or requirements, on hotels to control, or reduce, their major environmental costs? If yes, what are they? If no, do you think the government will impose compulsory regulations on hotels to control, or reduce, their major environmental costs?		
Hotel A	Hotel B	Hotel C	Group Engineer
No.	Yes.	Yes/ (No).	No.
They should.	International standards.	Green Leaf Eco Standards and upholding the hospitality regulations. (It may happen).	In the future, Yes. The carbon tax.

The hotel management's responses were divided towards the question in Table 8. The main

concerns were confidentiality and the availability of technical skills.

According to Table 9, respondents were divided in their responses to the questions. There is, however, an awareness of the Green Leaf Eco Standards and international standards that need to be adhered to. The informants responded that the government should or might impose compulsory regulations on hotels, carbon tax being one of them. Leonard and Dlamini (2014: 4) state that the Carbon Tax Policy, the Renewable Energy Policy and the Waste Policy have detailed measures on how government seeks to promote environmental sustainability with emphasised targets and goals to reach. However, there are limited, or no control measures in place.

6.3. Summary of key findings

The study identified the following internal factors perceived as motivating the use of EMA tools by the hotel sector:

- *Cost-reduction.* It was discovered that the strategic focus of investigated cases was to reduce costs.

- *Top-management's commitment to environmental management.* It is evident from the study that the top management, from the cases investigated, is committed towards environmental management and sustainability.

The following external factors were discovered as enabling the hotel sector to implement and use EMA tools:

- *Compliance to regulations.* Subscribing to certification programmes such as Green Leaf Eco Standard and Heritage Environmental Programme enable the hotel sector to implement and use EMA tools. This is due to the fact that, through such certification initiatives, the hotels' performance is continuously assessed to ensure full compliance and to ensure that the hotel is achieving its own environmental management objectives.

- *Pressures from international visitors.* Informants pointed out that some of the reasons why they participate in environmental management activities was the pressure received from international visitors who seek eco-friendly hotels. Therefore, as its marketing strategy, the hotels have implemented and used EMA tools in their eco-friendly activities to build a corporate image that attracts green travellers who desire to stay in eco-friendly establishments.

It was discovered by this study that there exist several internal factors that limit the use of EMA tools by the hotel sector. These are:

- *Lack of skills, knowledge, experience and specialist staff.* The main barriers established in the cases investigated were the shortage of skilled personnel who are able to use EMA tools appropriately and efficiently. This study acknowledges that these barriers are attributed to the fact that the area of EMA is still new in this sector, particularly in the developing economies such as South Africa.

- *Absence of appraisal system.* The informants admitted that there are no monetary incentives aimed at rewarding employees who achieve KPIs set for them. This limiting factor is exacerbated by the fact that there is lack of sufficient expertise required to set clear KPIs and align them with the efficient use of EMA tools so that these KPIs are achieved by

employees.

- *Inconsistent application of environmental management technologies within the Group.* There appears to be inconsistencies in terms of the installation of environmental management technologies within the properties managed by the same Group. This contributes to the incomparability of data used to assess, monitor and benchmark the performance between these hotels. Therefore, if the performance of the hotels which are not installed with technologies, such as BMS and GEPA, is better than those with these systems, then it would not make sense to invest in such technologies in those properties. However, it will limit the application of EMA tools.

- *Lack of proper communication of information within the Group.* The lack of knowledge and the inconsistencies in the application of environmental management technologies within the Group can be attributed to the lack of proper communication within the Group. The analysis of data demonstrated there were serious communication challenges within Group and these challenges would inevitably affect the application of EMA tools.

The following external factors were found by this study to be limiting the use of EMA tools within the hotel sector.

- *Lack of sector specific implementation guidelines and examples.* Limited research has been done that reveals the use of EMA tools within the hotel sector. This is a limiting factor because there are no real life examples that the hotel sector can refer to for the implementation of these tools.

- *Lack of promotion of use of EMA tools.* The existing environmental initiatives fall short in promoting EMA tools and providing convincing evidence that should encourage hotels to use these tools. Even if the environmental management initiatives such as the certification programmes are starting to increase within this sector, there is no clear indication as to how EMA tools can be integrated with these programmes.

- *Lack of government support.* The implementation of environmental practices is voluntary and the government support is absent. It was discussed in the preceding chapters that the government's role in promoting the use of environmental management accounting is very limited and the country is challenged since the government is not playing an effective role in assisting the hotel sector to establish an eco-friendly framework that will guide the implementation of EMPs.

- *Lack of promotion and enforcement of government regulation.* In as much as the country is endowed with environmental laws and policies, these are not actually enforced. The findings of investigated cases reveal that most of the environmental regulations that exist within the country are not known and, therefore, limit the use of EMPs that will, in turn, require the use of EMA tools.

7. LIMITATIONS

This study was limited to hotels within the province of KwaZulu-Natal, a province in South Africa, using a single case study with embedded units approach. Generalisation should be exercised with care in

terms of the findings being applicable to all hotels in the developing economy. It may add value to use multiple case studies in order to increase rigour of the analysis and to compliment this study.

8. IMPLICATIONS

The practice of EMA by the hotel industry in the developing economies remain arguably shallow. This is due to the fact that limited investigation has been done in this area. This study contributes to the identification and critical evaluation internal and external factors enabling and limiting the use of EMA by hotels based on the experiences applied by ABC Hotel Management Group.

9. RECOMMENDATIONS

9.1. Recommendations for ABC Hotel Management Group

It is evident from the findings that the group has implemented the environmental management systems to reduce its environmental costs. The study investigated only 3 of 11 hotels managed by the group, which is indicative of the fact that the hotel is at an infancy stage in terms of implementing these systems. It is recommended that the group appoints a group environmental officer who will assist in tracing and tracking environmental costs incurred by the hotels and establish the activities performed that results in these costs being incurred. The group is encouraged to conduct workshops for its hotel management and all the decision makers to create awareness about systems that are used in reducing and managing environmental costs. Uniformity and consistency is also recommended in the application of the EMA tools across all hotels in order to maintain order and facilitate the comparability of data and to improve monitoring and controlling.

9.2. Recommendations for future research

A longitudinal case study approach can be used to identify and evaluate EMA tools used by the hotel sector. This type of study would provider a much richer and more detailed evaluation of the EMA tools used by the hotel sector. This approach can assist in determining the extent at which these tools are used and how effective are they in reducing and controlling environmental costs and how are they reported. This study used a qualitative approach and therefore a quantitative method is recommended to test the relationship between various variables.

REFERENCES

1. Bouten, L. and Hoozée, S. 2013. On the interplay between environmental reporting and management accounting change. *Management Accounting Research*, 24:333 - 348.
2. Burritt, R.L. and Saka, C. 2006. Environmental management accounting applications and eco-efficiency: case studies from Japan. *Journal of Cleaner Production*, 14: 1262 - 1275.
3. Chan, E.S.W. and Hawkins, R. 2010. Attitude towards EMSs in an international hotel: An exploratory case study. *International Journal of Hospitality Management*, 29: 641 - 651.
4. Chan, E.W.S. and Hawkins, R. 2012. Application of EMSs in a hotel context: a case study. *International Journal of Hospitality Management*, 31: 405 - 418.
5. Chan, E.W.S. and Wong, S.C.K. 2006. Motivations for ISO 14001 in the hotel industry. *Tourism Management*, 27: 481 - 492.
6. Chang, H. 2013. Environmental management accounting in Taiwanese higher education sector: Issues and opportunities. *International Journal of Sustainability in Higher Education*, 14(2): 133 - 145).
7. Christ, K.L. and Burritt, R.L. 2013. Environmental management accounting: the significance of contingent variables for adoption. *Journal for Cleaner Production*, 41: 163 - 173.
8. De Beer, P. and Friend, F. 2006. Environmental accounting: A management tool for enhancing corporate environmental and economic performance. *Ecological Economics*, 58: 548 - 560.
9. De Oliveira, O.J., Serra, J.R., and Salgado, M.H. 2010. Does ISO 14001 work in Brazil? *Journal of Cleaner Production*, 18: 1797 - 1806.
10. Farouk, S., Cherian, J. and Jacob, J. 2012. Green Accounting and Management for Sustainable Manufacturing in developing countries. *International Journal of Business and Management*, 7(20): 36 - 43.
11. Gale, R. 2006. Environmental management accounting as a reflexive modernization strategy in cleaner production. *Journal of Cleaner Production*, 14: 1228 - 1236.
12. Gunarathne, N. and Lee, K.H. 2015. Environmental Management Accounting (EMA) for environmental management and organizational change: An eco-control approach. *Journal of Accounting & Organizational Change*, 1 (3): 362 - 383.
13. Hsiao, T.Y., Chuang, C.M, Kuoc, N.W. and Yu, S.M.F. 2014. Establishing attributes of an environmental management system for green hotel evaluation. *International Journal of Hospitality Management*, 36: 197 - 208.
14. Jamil, C.Z.M., Mohamed, R., Muhammad, F. and Ali, A. 2015. Environmental management accounting practices in small medium manufacturing firms. *Procedia - Social and Behavioural Sciences*, 172: 619 - 626.
15. Janković, S. and Krivačić, D. 2014. Environmental accounting as perspective for hotel sustainability: Literature review. *Tourism and Hospitality Management*, 20 (1): 103 - 120.
16. Jasch, C. 2003. The use of Environmental Management Accounting (EMA) for identifying environmental costs. *Journal of Cleaner production*, 11: 667 - 676.
17. Jones, M.J. 2010. Accounting for the environment: towards a theoretical perspective for environmental accounting and reporting. *Accounting Forum*, 34: 123 - 138.
18. Kang, K.H., Stein, L., Heo, C.Y. and Lee, S. 2012. Consumers' willingness to pay for green initiatives of the hotel industry. *International Journal of Hospitality Management*, 31: 564 - 572.
19. Leonard, L. and Dlamini, T. 2014. Greening within the Johannesburg tourism and hospitality sectors. *African Journal of Hospitality, Tourism and Leisure*, 4 (2): 1 - 8.
20. Masanet-Llodra, M.J. 2006. Environmental Management Accounting: A case study research on innovative strategy. *Journal of Business Ethics*. 68: 393 - 408.
21. Massoud, M.A., Fayad, R., El-Fadel, M., and Kamle, R. 2010. Drivers, barriers and incentives to

- implementing environmental management systems in the food industry: A case of Lebanon. *Journal of Cleaner Production*, 18 (2010), 200 - 209.
22. Mensah, I. 2014. Stakeholder pressure and hotel environmental performance in Accra, Ghana. *Management of Environmental Quality: An International Journal*, 25 (2): 227 - 243.
23. Ni, S., Chan, W. and Wong, K. 2012. Enhancing the Applicability of Hotel Uniform Accounting in Hong Kong. *Asia Pacific Journal of Tourism Research*, 17 (2), 177 - 192.
24. Papaspyropoulos, K.G., Blioumis, V. and Christodoulou, A.S. 2012. Challenges in implementing environmental management accounting tools: the case of a non-profit forestry organization. *Journal of Cleaner Production*, 29-30: 132 - 143.
25. Phan, T.N. and Baird, K. 2015. The comprehensiveness of environmental management systems: The influence of institutional pressures and the impact on environmental performance. *Journal of Environmental Management*, 160: 45 - 56.
26. Pirani, S.I. and Arafat, H.A. 2014. Solid waste management in the hospitality industry: A review. *Journal of Environmental Management*, 146: 320 - 336.
27. Qian, W., Burritt, R. and Chen, J. 2015. The potential for environmental management accounting development in China. *Journal of Accounting and Organizational Change*, 11 (3): 406 - 428.
28. Saunders, M., Lewis, P. and Thornhill, A. 2012. *Research methods for business students*. 6th Edition. Harlow, Essex: Pearson Education Limited.
29. Schaltegger, S., Viere, T. and Zvezdov, D. 2012. Tapping environmental accounting potentials of beer brewing: Information needs for successful cleaner production. *Journal of Cleaner Production*, 29-30: 1 - 10.
30. Shrake, S.O., Bilec, M.M. and Landis, M.E. 2013. The application of a multi-faceted approach for evaluating and improving the life cycle environmental performance of service industries. *Journal of Cleaner Production*, 42: 263 - 276.
31. Singh, M., Brueckner, M. and Padhy, P.K. 2015. Environmental management system ISO 14001: effective waste Minimisation in small and medium enterprises in India. *Journal of Cleaner Production*, 102: 285 - 301.
32. Vasile, E. and Man, M. 2012. Current dimension of environmental management accounting. *Procedia - Social and Behavioural Sciences*. 62: 566 - 570.
33. Yin, R.K. 2009. *Case Study Research: design and methods*. 4th Edition: Applied Social Research Method Series. Volume 5. California: SAGE Publications, Inc.

CORPORATE GOVERNANCE IMPACT ON BANK PERFORMANCE EVIDENCE FROM EUROPE

Salma Belhaj*, Cesario Mateus*

*University of Greenwich, Faculty of Business, Department of Accounting and Finance, London, United Kingdom

Abstract

This paper investigates the impact of corporate governance on European bank performance during the period 2002-2011. Using a sample of 73 banks from 11 European countries, we examine the relationship between corporate governance measures more specifically the board size and composition, the gender diversity and the CEO duality on the European bank performance. During the period 2002-2011, our results show that the board size and the gender diversity have a positive and significant impact on bank performance. Large board of directors with more female members led to better bank performance, whereas, the board composition and the CEO duality have no significant effect in explaining the bank performance for the European countries. During the global financial crisis, our findings show that the board size and the board composition are negatively and significantly correlated to the bank performance. Smaller boards of directors with less number of independent (non-executive) directors have outperformed the ones with larger boards and more independent directors during the crisis. However, the gender diversity and the CEO duality have no significant impact on the European bank performance.

Keywords: Corporate Governance, Bank Performance, European Countries, Board Size, Board Composition, Gender Diversity, CEO Duality

1. INTRODUCTION

In 2008 the world economy confronted the most terrible and dangerous financial crisis, since the Great Depression of 1930s. The contagion started in United States in 2007 and spread quickly first to the whole US financial sector and then to different financial markets overseas. A spectacular fall in prices of the shares appeared in all important world markets followed by a massive number of collapses. Many European and American banks declared huge losses in 2007-2008. Moreover, largest bankruptcies have taken place during the financial crisis 2008, such as the bankruptcy of the Lehman Brothers, the oldest investment bank, Merrill Lynch, Morgan Stanley and then Goldman Sacks, due to the huge economic catastrophe, the US government have intervened in order to stop further collapse and bankruptcy. However, the contagion spread everywhere and hit also the European banks. The Global Financial crisis showed how little we know about the corporate governance in banks and how it is important for the banking sector. Corporate governance in banks has special features compared to non-financial companies. The credit institutions are larger than the industrial firms regarding the balance sheet aggregates, also they are characterized by their complex organizational structure. (Hermalin and Weisbach, 2003). The complexity of the banks increases the information asymmetry and decreases the stakeholder's capability to supervise the decisions of the bank managers. Banks play a crucial role for the overall health of an economy. They are also characterized by a high level of leverage due mostly to the deposits collected from their customers. For all these reasons, banks need special

corporate governance features than the other companies, since they have the responsibility to protect the right of the depositors, guarantee the solidity of the payment system and decreasing the systematic risk.

There are different types of corporate governance measures. On one hand, the internal corporate governance proxies which consist on the characteristic of the board of directors such board composition, gender diversity, board size, the CEO duality. On the other hand the external corporate governance proxies which consist on the audit committee, the government regulations, the leverage and the debt. The Basel Committee on Banking Supervision (BSBS) has paid more attention to the need to understand and improve the corporate governance of financial corporations and especially for banks, by stating that good corporate governance is essential to guarantee a better bank performance. Enhancing corporate governance structure including the size and the composition of the board has been the major issue undertaken by the international authorities (Basel Committee, 2006). In addition, corporate governance is regulated by local establishments and the framework of such guidelines is changing over the time for instance, Norway, Germany and UK are among the European countries who updated their corporate governance code in 2012.

Many studies have focused on the impact of corporate governance on non-financial companies and few of them have concentrated on banks' corporate governance (eg, Andreas and Vallelado, 2008; Adams and Mahran, 2008; Caprio et al, 2007). Moreover, a limited number of researchers have investigated the corporate governance on European countries (eg. Staikouras, 2007; Conyon and Peck,

2010). Therefore, the issue associated to the effect of corporate governance and bank performance especially in European countries has received unequal attention compared to non-financial firms and American banks.

This paper aims to narrow down the gap and offer a better understanding of the corporate governance in European banks. We investigate whether there is a relationship between corporate governance and European banks performance, focusing on different proxies of governance such as the board size, the board composition, the gender diversity and the CEO duality and their impact on bank performance over the period 2002-2011. In addition, the global financial crisis of 2008 in the banking sector and its effect on the collapse of stock prices and recession of the economy worldwide may yet oblige the companies to enhance their corporate governance mechanisms and regulations. Moreover, this study is the first, to our knowledge associated the bank performance with the corporate governance measures during the global financial crisis 2008 for the European countries.

The paper is organized as follows: session 2 presents the literature review which includes the specific characteristics of corporate governance in banks, the corporate governance regulations on European countries as well as the theoretical and empirical evidences related to the relationships between the corporate governance and bank performance in general and during the crisis. In session 3 we describe our sample, variables and the model used to test the impact of corporate governance in European banks performance and finally, the last session presents the findings and discussion.

2. CORPORATE GOVERNANCE IN BANKS

2.1. What is special about corporate governance in banks?

Most of the existing literature on corporate governance has focused on firm performance and very limited researches have been paid attention to the corporate governance of banks (Levine 2004, Caprio et al 2007). However, the corporate governance on banks is very complex and unique compared to non-financial firms for different reasons. First, banks are large organizations and corporate governance is necessary for banks to perform effectively. Second, according to Levine (1997) the banks play an important role on economic development and growth. Moreover, these organizations have a central role on mobilizing savings and convert them into productive investment. They are a source of external financing for the others firms especially in emerging and developing economies. Banks also play a key role in corporate governance of different firms as equity holders and creditors of firms in different countries. Thus, it is necessary that banks have a good corporate governance so they can apply efficient governance to the companies they fund. Since the banking sector is vulnerable to shock, deficiency in corporate governance can damage the financial system and pose systematic risk to the economy (OECD, 2006). Governments are afraid about the reputation of the banks. So, they pay a special

attention to regulate the governance of these large corporations. As a failure in bank's governance would affect their performance and affects respectively the country's economy and could even spread globally, this is what happened during the Asian financial crisis in 1997 (Pathan et al., 2008) and U.S financial crisis in 2008 (Peni and Vahamaa, 2012). In addition, Kirkpatrick (2009) claimed that the reasons of the financial crisis could be explained by the weaknesses and the failure of corporate governance. For instance, they explain that there are some insufficient areas in regulatory requirement and accounting standards. Corporate governance of banks is also unique. Banks have two special characteristics that make them different from the others firms: Regulation and opaqueness. First, banks are more opaque than non-financial firms, Morgan (2002) claims that the problem of information asymmetries between insiders and outsiders still higher in banks. In addition, the higher opacity in banks increases the agency problem. For instance, the depositors and shareholders would be unable to monitor the banks managers and it could be easier for insiders to exploit outside investors. Second, banks are extremely regulated. The importance of banks in the development and the growth of economy make it essential for the government from all over the world to put strict regulations requirement for the banks which can be considered as supplementary corporate governance mechanisms (Levine 2004).

The traditional corporate governance mechanisms could be limited by the impact of the regulations policies imposed by different countries. For instance, many governments have restrained the concentration of bank ownership. Furthermore, there are certain restrictions of the ability of outsiders to purchase a large proportion of banks' shares without the approval of the government. Also the Basel Committee on Banking Supervision (BCBS) has set up a regulation regarding the number of independent directors in the board of directors. Moreover, the Sarbanes - Oxley act of 2002 requires that the boards of audit committees should have only independent outside directors. Overall, regarding the importance of the banks in country's economy, banks should pay attention to their governance. As good corporate governance has a positive impact on bank performance. However, there are several measures of corporate governance such as the characteristics of boards of directors, the ownership structure, which have an impact on banks performance.

2.2. Corporate governance regulations in European banks

After the global financial crisis that hit the world economy in 2008, many Europeans banks have set up many rules and regulations related to the corporate governance in order to improve their banks performance. Corporate governance rules and norms are essential components for successful market economies. European countries have shown their interest in improving corporate governance guidelines since it could have a significant impact on bank performance. There is a major difference between corporate governance on European countries related to the board structure, some of the

European countries use the unitary system the others use the two-tier system.

The one-tier board structure is predominant in European countries and it is characterized by one single board including both executive and non-executive directors. All the directors have the same objectives and goals and they are responsible for all the activities of the company. The one-tier board structure is predominant in UK, Spain, Ireland, Portugal and Italy (Maassen, 2002). On the other hand, the two-tier board structure require a strict separation between the management function (executives) and the supervisory function (non-executives). The management board has the responsibility to run the business while the supervisory board has the obligation to oversee the direction of the business. This type of board structure is mandatory in Germany, Netherlands, Austria and Denmark (Macy and O'Hara, 2003). Despite the formal structural differences between the two types of boards structure the one-tier and the two-tier system, there are a significant similarities in both structures. The two types of systems are elected by shareholders. Moreover, there is usually a managerial function and a supervisory function for both structures, while this distinction is more formalized in two-tier board structure. Both board systems have comparable functions, the supervisory board and the unitary board usually designate the directors of the managerial function. In addition, both systems have the responsibilities to ensure that the control systems and the financial reporting are working properly and the company is in agreement with law (Weil et al, 2002). Other rules and regulations are established related to the leadership structure in European countries in order to improve the corporate governance of the banks. The leadership structure is whether the CEO and the chairman of the board should be the same or different person, for the two-tier systems each of the management and supervisory boards have their own separate leadership, the CEO and the chairman of the board is two different person (Hagendorff et al, 2013). However, in the unitary board system, it is common but not usual that the chairman of the board of directors is also the executive director of the company. Therefore, some codes suggest to separate the leadership role in order to increase the independency of the unitary board, to differentiate between the different roles and to reduce the conflict of interest. (Hagendorff et al, 2013), for instance, in France, for decade, the law related to the unitary boards has required that the leadership should be combined, after a period the law has been changed to allow corporations to choose between separating or combining the CEO and the chairman in the unitary board (Vienot, 2002). In contrast, the most common practice in both Spain and Italy is to combine the role of the leadership structure in order to balance the power of the CEO and the chairman (Weil et al, 2002).

Gender diversity on corporate boards still an important challenge for the European Union (EU) members. The women still face several barriers to be presented on the board of directors of banks. However, the board diversity is considered to be essential for the performance and effectiveness of the corporations (European commission, 2012). Several EU member have already established rules on

gender quotas for firm boards for example, France and Spain require 40 percent of female by 2017 and 2015 respectively, Italy 30 percent female quota by 2015. Others countries insisted for equal representation between the two genders, for instance, Netherlands, require 30 percent for each gender by 2016 (Davies, 2014).

However, only Norway, which is non EU member has implanted a law with strong sanctions for boards of directors with less than two women by 2006 and less than 40 percent women by 2008 (Rasmussen and Hughes, 2011).

To conclude, many European countries have established rules and regulations related to the corporate governance in order to improve the banks performance, therefore, there are different corporate governance measures which have an effect on bank performance. The following section presents the empirical evidence related to these relationships.

2.3. Corporate governance and bank performance

Different proxies of corporate governance have impact on bank performance. The board features (the board size, the board independence and the gender diversity) and CEO characteristic (CEO duality) are an important measures of corporate governance. In this section, the empirical and theoretical literature related to the relationship between the corporate governance proxies and bank performance in general and during the financial crisis 2008 is presented.

2.3.1. Board size

The board size of directors is an important measure of the corporate governance. However, different empirical studies find different results regarding the relationship between the corporations' performance and the board size of directors. Scholars argue that a large board of directors could be more effective for the firm performance because they raise the pool of resources and expertise in the company which help them to make the best decision, and make it harder for the domination of a CEO. However, other studies demonstrate a negative correlation between the board size and firm performance. As the boards of directors' increase, they become less efficient and might be more associated with bureaucratic problems and increase of decision-making time (Jensen, 1993). Moreover, others scholars explain when the boards of directors get too large, it becomes difficult to communicate, to coordinate and to participate, this would lead to a decrease in the company performance (Golden and Zajac, 2001).

Some empirical studies related to the banking sector find different findings, Adams and Mehran (2005, 2008) show there is no negative relationship between board size and firm performance, they use a sample of 35 US large bank holding companies (BHCs) between the period of 1959 and 1999. They found in contrast with non-financial companies, that the banking firms with large board of directors have a positive relationship with Tobin's Q.

The size of the board of directors is significantly related to the features of bank holding companies (BHC) structure and they explain that the difference between the results depends on the types

of companies; whether it is holding companies, financial or non-financial companies.

Consistent with the finding of Adams and Mehran (2005, 2008), Andres and Vallelado (2008) examine a sample of large commercial banks from different developed countries France, UK, Spain US and Canada and Italy. They find a positive relation between the board size and bank performance. The scholars explain that the presence of several directors in the board has a positive effect on the advisory functions, the monitoring, the improvement of governance and the increase of returns. However, the authors show that there is a limit of approximately of 19 directors.

Other empirical studies find a negative relation between the board size and bank performance. Using a sample of 58 large European Banks during the period 2002-2004, Staikouras et al. (2007) find a negative relationship between bank profitability and the size of the Board of directors. Furthermore, Trabelsi (2010) reveal that the improvement of the number of board of directors has a negative impact on the performance of the banks which is measured by Tobin Q.

Other studies demonstrate there is no significant relationship between board size of directors and bank performance. Ramano et al. (2012), Using a sample of 25 Italian banking groups during the period 2006 - 2010 they find that the board size does not impact the performance of the Italian bank in terms of ROA and ROE. They explain there is not an ideal board size for the banks and an increasing or decreasing in the board director's size could have a negative or positive impact on the bank's performance. Regarding the different contrasting theoretical and empirical evidence mentioned above we expect:

H1: Board Size is positively related with bank performance.

Different empirical studies have examined the impact of the board size on bank performance during the financial crisis, for example, Erkens et al (2012), using a sample of 296 financial firm from 30 countries, they show that during the crisis (2007-2008) there is no significant relationship between the board size and firm performance. Moreover, Berger et al (2014) based on a sample of 256 no default and 85 default US commercial banks they found that the management structure including the board size were not decisive for the bank performance during the financial crisis (2007-2010).

Other empirical evidences show different results, Aebi et al (2012) employing a sample of 372 US bank during the financial crisis 2007-2008, they find a positive relationship between the board size and the bank performance measured by ROE and bank's stock returns. However, Hoque and Muradoglu (2010) based on a sample of 347 global banks from 57 countries around the world find that the board size and bank performance (ROA, ROE) are negatively related, they explain that smaller board of directors performs better than the larger one during the financial crisis. In addition, Peni and Vahama (2012) examine a sample of large publicly traded US banks they find that smaller boards have greater profitability and higher market valuation and less negative stock returns during the crisis. They explain that small board of directors is more efficient in tough periods as they take quick decision

compared to the larger boards. Consistent with the previous empirical studies we expect that:

H2: Board size and bank performance are negatively related during the financial crisis.

2.3.2. Board composition

Board composition is a significant corporate governance practice as it could affect the deliberations of the board and the capacity to control the different results and decisions. The findings of previous studies regarding the impact of the board composition to the bank performance are not conclusive.

Andres and Vallelado (2008) explain that appointing outside directors is beneficial for the bank performance since it would avoid the conflict of interest between stakeholders and achieve the different functions of advising and monitoring in effective manner, these directors should have the majority on the board. However, the authors highlight that such majority has a limit and they explain that an extreme proportion of non-executive directors could harm the advisory role of boards, as the executive directors play an important role in facilitating the transfer of the information among the management and directors and provide information and skills that outside directors would find not easy to gather. Moreover, Romano and Guerrini (2012) find that when the percentage of the independent directors on the board is higher, the financial reporting fraud is lower. This explaining by the great percentage of independent directors who appears to guarantee more efficient control. The findings regarding the impact of outside directors are mixed in the banking sector. Some empirical studies show there is no relationship between the board composition and bank performance, for instance, Love and Rachinsky (2007) using a sample of 50 banks in Ukraine and 107 banks in Russia during the period 2003-2006 find there is no relationship between the two variables. However, other studies find that a great presence of independent member (non-executives) in their boards achieve a better performance than others. Busta (2007) after using a sample of 69 listed banks from different countries such France, UK, Spain, Italy and Germany, the author show that the banks who present a higher proportion of non-executives perform better in Continental countries while they find opposite result regarding the case of United Kingdom. Moreover, Staikouras et al (2007) show there is a positive and significant relation between the board independence and the bank performance measured by ROA, ROE and Tobin Q, using a sample of 58 European banks. They explain that the independent directors have a more objective opinion which is more efficient for the supervisory function. Based on the existing literature we expect:

H3: The proportion of non-executive directors is positively related with bank performance.

During the crisis, different empirical evidence have shown the impact of non-executive directors on bank performance, for instance, Cornett et al (2010) find a positive relationship between different corporate governance measures and bank performance during the crisis period, they explain that the more independent directors on the board, the better the bank performance during the crisis

based on a sample of 300 US banks. However, other scholars find different results, Beltratti et al (2012) employing a sample of 98 large banks over the period 2007 until the end of 2008, the authors report that banks with more independent boards experienced lower stock returns during the financial crisis. This is in line with the finding of Erkens et al (2012). Moreover, Minton et al (2010) Using a sample of 652 US banks over the period before and during the financial crisis 2008. They find that during the crisis there is a negative and significant relation between the board independence and the bank performance measured by Tobin Q and stock returns. They explain that boards with fewer interconnections are more efficient during the crisis, so that directors can concentrate more on a specific board. Based on the existing literature our hypothesis is as following:

H4: Board independence is negatively related with bank performance during the financial crisis.

2.3.3. Gender diversity

Gender diversity is considered as an important component of corporate governance, according to Anastasopoulos et al (2002) the presence of women in the boards of directors is good instrument to enhance the board diversity.

There are a small number of literatures which are concentrated on the impact of the gender diversity on bank performance for instance, Zahra and Stanton (1988) find there is no significant relationship between the firm performance and gender diversity based on US context. However, according to Heinfeldt (2005) there is a positive correlation between the proportion of the female present on the board of directors and the market value added (MVA).

In contrast with these findings, Shleifer et al (1997) using a sample of 200 US large firms find that the higher percentage of women on the board of directors is disproportionately associated with higher firm performance. They explain that the number of women in the top management is relatively low and present only 4.5% and there are no female chief executives.

Focusing on the banking sector, de Cabo et al (2009), using a sample of 612 European banks during the period 1998 to 2004, their findings indicate that there is no significant relationship between the presence of the female on the board of directors and bank performance measured by ROA and ROE.

Ramano et al. (2012) find that the presence of women on boards of directors has a positive impact on the bank performance measured by ROE and ROA; they explain that their presence on the board of directors of the bank holding enhance the economic findings and can contribute to a large pool of skills knowledge, competencies and relationships useful to rise the performances of the banks. However, the authors show that the presence of the women in the board of the banks holding companies is still limited.

Selvam et al (2006) analysing a sample of 13 Indian banks over the period 2012-2013 they find that women directorship has a positive impact on the performance of banks where the government

has a significant stake. Considering the existing literature our hypothesis:

H5: Banks performance is positively related with the proportion of female in the board of directors.

The issue of gender diversity has become more serious and persistent during the financial crisis, many researchers and economists have examined whether the higher participation of the women on the board of directors is related to better performance or not.

Muller-Kahle and Lewellyn (2011) report that a higher proportion of female present on the board of directors is related with an increase in risk-taking during the US sub-prime crisis. Goel and Thakor (2008) consider that women are less confident than male, however, they explain that overconfidence is related to less information acquisition and provide poorer investment decision.

Finally, due to the lack of the empirical evidence related to the impact of the gender diversity to the bank performance during the crisis, we expect that more female on the board of directors improve bank performance during the global financial crisis as it is important to appoint the most skilled and talented people independently of their gender in order to enhance the corporate governance as well as to accelerate and facilitate the changes that will be requested for a better economic prosperity growth (De Cabo et al, 2009). Even though that women are more risk averse and less overconfident regarding the financial decision making (Agnew et al, 2003). They have other important skills related to the leadership, creativity and innovation which are important to better corporate governance during the financial crisis.

H6: Gender diversity is positively related with bank performance during the financial crisis.

2.3.4. CEO duality

CEO duality is another important measure of corporate governance and it refers to the situation when the CEO of the company also holds the position of the chairman of the board.

There are a limited number of empirical studies who examined the impact of the CEO duality on the bank performance. Most of the previous studies have focused on non-banking sectors.

The results of the previous studies are mixed and still no conclusive, Some of the empirical studies find no significant relationship between the CEO duality and bank/firm performance the others demonstrate a positive or negative relationship.

The supporters of the CEO duality advocate that the CEO duality places the CEO in a powerful position in directing the company operations and allows him to make faster decisions (Finkelstein and Hambrick, 1996). Moreover, the CEO duality could be efficient when such duality can enhance performance and improve conformity. In addition, a CEO who also held the title of the chairman board is able to coordinate and manage board actions and set strategies more quickly especially in tough conditions such crisis. CEO duality could create stability for a company (by decreasing the likelihood of conflict of interest between the board of directors and the management) and thus improve performance.

However, the opponent of the CEO duality, such as the agency theory has underlined the need of separating the two positions in order to guarantee the board independence as well to enhance the firm transparency (Jensen, 1993), moreover, the concentration of the power can worsen the conflict of interest and reduces the supervision of the board manager and also decreases the information flow between the other board of directors (Fama & Jensen, 1983 Jensen, 1993).

The empirical evidence regarding the banking sectors are insufficient, using a sample of 174 banks during the period 1995-2002, Belkhir (2009) found a positive and significant relationship between the CEO duality and bank performance measured by the Tobin Q and ROA. Whereas, Pi and Timme (1993) using a sample of 112 US banks during the period 1987-1990 demonstrate that American banks where the CEO and the chairman of the board are not the same person outperformed the banks with dual CEO. Moreover, Mishra and Nielsen (2000), using a sample of large bank holding companies demonstrate a negative and significant relationship between the CEO duality and accounting performance (ROE, ROA).

Other empirical studies found there is no significant relationship between CEO duality and bank performance for example, Boussaada and Karmani (2015), based on the sample of 38 banks in Middle East and North Africa region (MENA) over the period 2004-2011, the result indicates there is no significant relationship between the CEO duality and bank performance measured with ROA and ROE. They conclude that CEO duality has not impact on the MENA bank performance. Based on the previous empirical studies we expect that:

H7: CEO duality is negatively related with bank performance.

A limited number of empirical studies have focused on the CEO duality and bank performance during the global financial crisis. Aebi et al (2012) show that there is no significant relation between the CEO duality and bank performance measured with buy and hold returns and ROE, using a sample of US bank during the period 2007-2008, Moreover, Berger et al (2012) using a sample of 294 US bank failures and 4021 non default US commercial banks during the financial crisis 2007-2010, they demonstrate that the CEO duality do not have significant impact on bank performance.

Carty and Weiss (2012) using a sample of US banks, they show there is no relation between CEO duality and bank failure during the financial crisis. Grove et al (2011) based on the sample of US commercial banks find a negative relation between the CEO duality and bank performance measured by ROA during the period of pre-crisis (2006-2007) and negative but no significant association during the crisis (2008).

Whether the CEO is also the chairman of the board or a different person there is not a significant impact for a better bank performance. Consistent with previous empirical studies we expect that:

H8: CEO duality is not related with bank performance during the financial crisis.

To sum up, based on the previous empirical studies, different corporate governance measures such as the board size, the board composition the gender diversity and CEO duality have an effect on bank performance, this relationship depend on the

period of the study whether it is in general or during the crisis

3. SAMPLE, VARIABLES AND MODEL SPECIFICATION

3.1. Sample

In this study we examine the impact of corporate governance (the board size, the board composition, the gender diversity and the CEO duality) on European bank performance. A lot of attention has been given on the corporate governance in US banking sector (eg, Peni and Vähämaa, 2011; Adam and Mehran, 2003; Yermack, 1996) However, a limited number of studies has focused on corporate governance in European countries (eg, Staikouras et al, 2007, Conyon and Peck, 2010). For this reason, we decided to choose a sample of European banks and examine if there are similar results to the previous studies. The time period from 2002-2011 has been chosen by the idea to investigate the impact of corporate governance on bank performance during a long period of 10 years and to compare first our results to the existing empirical studies without differentiate between the crisis and non-crisis periods after that we divide our sample into two period and examine the relationship before the crisis (2002-2006) and during the crisis 2008. In our research we use a secondary data. Our initial sample consist of the 110 largest European banks defined as banks that have at least a total assets of €10 billion between the period 2002-2011.

The focus on the largest credit institutions helps to minimize the high cost of the manual data collection for the governance variables and to exclude the smallest banks. In addition, the requirement of large banks is imposed to examine the role of corporate governance in banks where the potential effect of poor governance could be more serious (Adams and Mehran, 2003; Booth et al, 2002). The 100 largest banks are collected from 11 European countries (Belgium, France, Germany, Greece, Italy, Netherlands, Poland, Spain, Sweden, Switzerland, and United Kingdom). We restrict our sample to banks that are covered by *BoardEx* which is the data source for our corporate governance variables. The *BoardEx* is the leading database specialized in information on boards' composition and directors. This restriction decreases our sample to 82 banks. In addition, data related to bank performance (ROE, ROA and Tobin Q) are gathered from the annual balance sheet and income statement of these banks using Thomson Reuters Worldscope and ORBIS. Due to the data shortage, our final sample consists of balanced panel of data with 73 banks from 11 European countries (see appendix 1) and 730 bank-year observations.

3.2. Variables

3.2.1. Dependent variables

The bank performance is the dependent variable in this study. Following the previous empirical researches (e.g., Andres and Vallelado, 2008; Caprio et al. 2007; Staikouras et.al, 2007) we employ Tobin Q, return on equity (ROE), return on assets (ROA) as proxies to measure the market valuation and the financial performance of the banks.

We define Tobin Q as the book value of total assets minus the book value of the equity plus the market value of the equity divided by the book value of total assets. Many other studies use this measure as dependent variable in order to examine the effectiveness of corporate governance such as Andres and Vallelado (2008) and Staikouras et.al (2007).

Tobin Q is used to capture the value of future opportunities in investment. A higher Tobin Q advocates that the market anticipate that the company will raise its value due to various factors. In terms of this study, those factors could comprise the characteristics of the board of directors. If the market anticipates the characteristics of company increase the future performance, the Tobin Q will increase.

We apply another measure of performance, the return on asset (ROA) which in the contrast of Tobin Q measure the actual company performance and it is calculated as the profit before tax divided by the total assets. Moreover, we use the return on the equity (ROE) which is calculated as the profit before tax divided by the equity. In both cases the earnings are collecting before tax to avoid the different taxation systems that are applied across the European countries.

3.2.2. Explanatory variables

The explanatory variables in this study are related to the board structure of the banks (the board size, the board composition and gender diversity) and CEO Characteristic (CEO duality).

Following previous studies such as Conyon and Peck (2010) and Stairoukas (2007), the board size (BOASIZE) is defined as the natural logarithm of the number of director on the board.

The board composition (OUTSIDERS) is calculated by using the proportion of outside directors which is defined as the number of non-executive directors to the total number of directors. (Andres and Vallelado, 2008; Staikouras et.al, 2007; Link et.al, 2008). In addition, regarding the

banks who adopt the two-tier board system, which consist of separating the two boards; the management boards and the supervisory boards, such Germany, the directors that belong to the supervisory board are considered as non-executives (Van Greuning and Brajovic-Bratanovic, 2003). As in De Cabo *et al* (2011), the Gender diversity variable is measured as the proportion of female directors relative to the total number of the board of directors. There are a few empirical studies who examine the importance of gender diversity and its impact on the European banks performance. CEO Duality which is a dummy variable and used to capture the board independency. Consistent with Setiyono and Tarazi (2014), this variable is equal to one if the CEO is the chairman of the board otherwise it is equal to zero.

3.2.3. Control variables

Besides these two types of measures (dependent and independent variables), we introduce a set of control variables such as the Bank Size, financial leverage (Equity to total assets) and liquidity ratio (Loan to total assets ratio). Considering the existing empirical literature, different methods are used to calculate the bank size variable, such the net

Income, the number of employees and the total assets, In this case and following Hermalin and Weisbach (2003) Staikouras et.al (2007), we have chosen to calculate this variable by using the natural logarithm of the total assets, since it is the most homogenous proxy used among different types of banks. The equity to asset (EA) is included as a measure of the overall capital strength and leverage. A low ratio indicates that the bank is relatively in risky position and a negative coefficient is expected on this variable. However, a higher equity could be explained by a cheaper cost of the capital and therefore a positive effect on profitability (Molyneux 1993). The loan to assets (LA) ratio is used as proxy for catching bank liquidity. Since loans represent an important part of bank's assets and difficult to trade in the secondary market, they are the least liquid assets in a bank's balance sheet after fixed assets. Therefore, a low ratio indicates that the bank is characterized with excess stored liquidity while a high ratio suggest a relative illiquid bank.

Table 1. Definition of the variables

Variables	Definition
Dependent variables	
Return on asset (ROA)	Profit before tax divided by Total Assets
Return on equity (ROE)	Profit before tax divided by Total Equity
Tobin Q	Book Value of Assets minus Book Value of Equity plus Market value of Equity divided by Book Value of Assets
Independent variables	
Board Size	Natural logarithm of the number of directors on the board
Outsiders	The ratio number of non-executive directors over the total number of directors
Gender Diversity	Proportion of female directors to the total number of the board of directors
CEO Duality	Binary variable equal to one if the CEO is the chairman of the board and zero otherwise
Control variables	
Bank Size	Natural logarithm of the total assets
Financial leverage ratio	Total Equity divided by Total Assets
Liquidity ratio	Loans divided by Total Assets

3.3. Model specification

In order to examine the relationship between the corporate governance and bank performance we employ panel data analysis. The panel data analysis has several advantages. First, it controls the unobservable and the constant heterogeneity which is in this case the specific characteristics of each banks for example the market perception, the management style and quality and business strategy. Moreover, panel data can identify time and individual effects which is difficult to be detectable by pure time series data or pure cross sectional. In particular, panel data are able to examine the complex issues related to dynamic behavior (Baltagi, 2005). To analyze the relationship between the characteristics of corporate governance and bank performance, numerous studies have used the panel data analysis using the pooled Ordinary least squares (OLS) or fixed effects estimation (Yermak, 1996; Belkhir, 2009; Adam and Mehran, 2008; Staikouras et al, 2007, Andreas and Vallelado, 2008,

among others). Andreas and Vallelado (2008) suggest that when the unobserved and the independent variables are correlated, pooled OLS estimations produces estimators that are inconsistent and biased. In order to overcome this econometric problem they used either the first differences or the fixed effects. In our research, we use panel data analysis fixed and random effects. In order to select the most efficient and consistent model, we use the Hausmen test to choose between the two models. The fixed effects model control the effect of time invariant with the effects of time invariant variables, while the random effect model, it assumes that the unobserved variables are uncorrelated with all the observed variables.

We model the performance of bank i at time t by:

$$Performance_{i,t} = \beta_{0,i} + \sum_{k=1}^K \beta_{1,k} Y_{i,k,t} + \varepsilon_{i,t} \quad (1)$$

Table 2. Descriptive statistics (2002-2011) for all countries

Variables	# Obs.	Mean	Median	Standard deviation	Minimum	Maximum
Dependent variables						
Tobin Q	730	1.0272	1.0158	0.1664	0.0842	2.0322
ROA	730	0.0114	0.0098	0.0427	-0.1256	0.1057
ROE	730	0.0970	0.1068	1.0680	-0.3607	0.5000
Independent/Control variables						
Board Size	730	15.8699	15.0000	5.7987	6.0000	34.0000
Outsiders	730	0.7567	0.7692	0.1346	0.1379	0.9630
Gender Diversity	730	0.0898	0.0667	0.1001	0.0000	0.6250
CEO Duality	730	0.3014	0.0000	0.4592	0.0000	1.0000
Bank Size	730	10.9346	10.6319	2.0187	4.4976	14.7658
Financial leverage	730	0.1163	0.05914	0.1762	-0.2103	0.9916
Liquidity ratio	730	0.5187	0.60837	0.2894	0.0000	1.0004

The number of the board of directors varies from 6 to 34 directors. Moreover, the mean and median size of the board are 15.86 and 15 respectively. Our results are close to Andres and Vallelado (2008) who found that the average board of directors is 15.78 over the period 1995 to 2005. Moreover, Booth et al (2002) demonstrate that banking holding companies have larger board of directors (16.37 directors in 1999) than the industrial firm (11.79 directors in 1999). The characteristic of a large board of directors in credit institutions is explained by different reasons. First, board size and bank size are positively related (Hermalin and Weisbach, 2003; Yermalik, 1996) moreover, banks are bigger than manufacturing firms regarding their balance sheets aggregates. Second, the larger board of directors in banks is explained by their organizational structure which is very complex. Banks may control or own different subsidiary financial institutions which each of them has its own board. Therefore, the co-ordination amongst these different boards could have an impact on the structure of the bank board size. Finally, the nature of mergers and acquisitions in the financial sector has an important role in maintaining a larger board size of directors. The number of non-executives directors varies from 13.79% to 96.29%, with a mean of 75.66% (Table 2) similar to Stairkouras et al (2007) they found that the number of non-executive directors in European banks varies from 16.67% to 90%. Furthermore, Booth et al (2002) demonstrate that industrial firms present a significantly a lower percentage of outside directors in their board of directors. They show that the outsiders (non-executive) directors present an average of 71.80 % which is less than the respective

Where $Performance_{i,t}$ is the stacked vector of the dependent (endogenous) variable (the i -th bank performance on the t -th period), $Y_{i,k,t}$ is the matrix of K bank-specific corporate governance measures and control independent (explanatory) variables, $\beta_{0,i}$ is the bank-specific intercept in the fixed-effects model, $\beta_{1,k}$ is the matrices of coefficients and $\varepsilon_{i,t}$ is a vector of error terms.

4. EMPIRICAL RESULTS

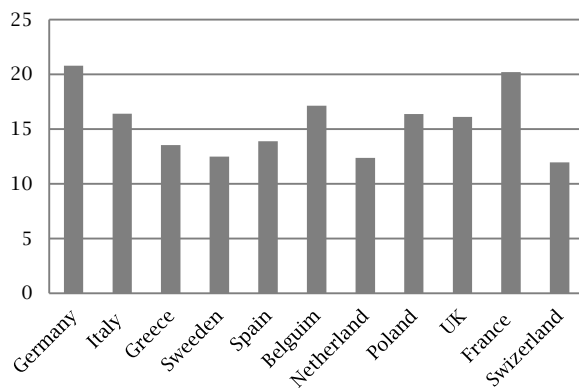
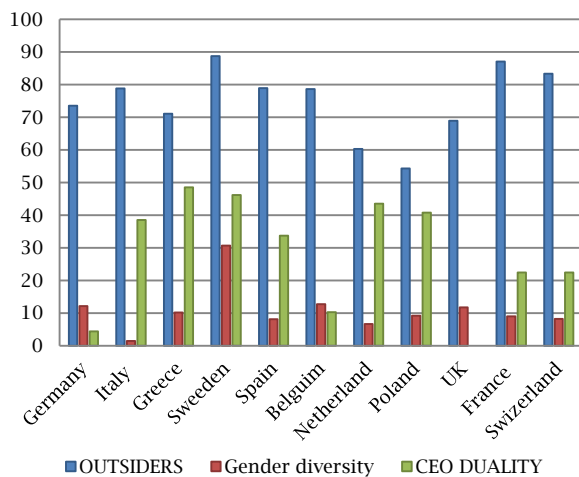
4.1. Descriptive statistics

Table 2 summarizes the descriptive statistics on the corporate governance variables, the bank performance measures and the control variables for the sample of European banks over the period 2002-2011.

board size in banks 81.29%. The proportion of female on the board of directors varies between 0% and 62.5% with a mean of 8.97%. The presence of the female on the board of directors still very low in the European banks. According De Cabo et al (2009) only 7% of the seats are held by women in a sample of 20 European banks. They find also that the maximum number of women in any European banks is 10 percent. Regarding the variable CEO duality, 30 % of the CEO is also the chairman of the board however; the remaining 60% has a separation between the function of the CEO and chairman. Our results are different from Belkhir (2009) who find that 65% of the cases that the CEO is also the chairman of the bank in a sample of 174 banks over the period 1995 -2002. As it concerns the bank performance measures over the period 2002-2011, The average Tobin Q ratio is higher than 1 and it varies between 0.08 and 2.03, the average return on assets (ROA) stands for 1 % and it floats between -12.57 % and 10.55% while the average return on equity (ROE) is 9.69 %. Our findings are close to Stairkouras et al (2008) which they find that the average Tobin Q is 1.03%, ROA is 0.75% and ROE is 14.25% using a sample of 58 European banks. For the control variables, the average Equity to Asset ratio arises at 11.62% (the median is 5.91%), Loan to Asset ratio stands at 51.87 % and the median accounts for 60.83 %, the mean value of the SIZE which is the natural logarithm of the total assets is 10.93. Table 3 reports the average value per country of the corporate governance variables (BOARDSIZE, Outsiders, Gender Diversity and CEO duality) and the bank performance measures (ROA, ROE, Tobin Q) and Figure 1 shows the board size of directors per country over the period 2002 – 2011.

Table 3. Descriptive statistics (2002-2011) per country

Countries	Variables							
	# Obs.	Board Size	Outsiders	Gender Diversity	CEO Duality	ROE	ROA	Tobin Q
Germany	90	20.80	73.53%	12.15%	4.44%	6.63%	0.98%	0.915
Italy	179	16.40	78.83%	1.46%	38.55%	7.79%	1.57%	1.009
Greece	68	13.56	71.11%	10.21%	48.53%	6.77%	0.37%	1.026
Sweden	39	12.49	88.78%	30.65%	46.15%	17.20%	1.59%	1.204
Spain	89	13.89	78.96%	8.11%	33.71%	13.50%	1.27%	1.035
Belgium	29	17.14	78.61%	12.73%	10.34%	4.55%	1.41%	0.978
Netherlands	39	12.38	60.36%	6.70%	43.59%	12.99%	1.25%	1.052
Poland	49	16.39	54.34%	9.25%	40.82%	14.05%	1.56%	1.165
UK	39	16.13	68.91%	11.79%	0.00%	12.74%	0.94%	1.012
France	49	20.22	87.08%	9.03%	22.45%	8.76%	0.65%	0.999
Switzerland	49	11.98	83.39%	8.26%	22.45%	8.74%	0.66%	1.059

Figure 1. Board size of directors per country**Figure 2.** Outsiders, gender diversity and CEO duality per country

The mean size of the board of directors varies between 12.49 and 22.80 in the European Banks.

The French and German banks have the largest board of directors with 20.22 and 20.80 members respectively, whereas Switzerland has the smallest board of directors with only 12.49 members.

All the banks in the sample show a high proportion of non-executive directors. Swedish and French banks show a high proportion of outside director's accounts for 88.78 % and 87.07% respectively. However, Netherlands and Poland show the lowest proportion with 54.34% and 60.36%

respectively. The presence of the women on the board of directors varies according to the European banks. Sweden present the highest proportion of the female on the bank's board with an average of 30.65 % followed by Belgium with 12.73% and Germany 12.15%. Italian banks, on the other hand, have the lowest proportion 1.46% followed by Dutch banks with 6.70%. The difference in the proportion of female in the board directors could be explained by the regulations imposed in some European countries.

Regarding The CEO duality variable whether the Chief Executive Officer (CEO) holds the same position as the Chairman of the board. UK banks present the lowest proportion of the CEO duality, in our sample UK banks separate the role of the board chair and the CEO. Also, German Banks present a low percentage of CEO duality with 4.44 % as most of German banks adopt two-tier board structure where the supervisory and the management board are separated. Greece and Sweden present the highest percentage of this variable account for 48.53 % and 46.15 % respectively.

The different results between the European banks are explained by the fact that some countries use the one-tier system and the other adopt the two-tier system. As it concerns, the bank performance variables, during the period 2002-2011, Swedish banks present the highest return on equity (17.20%) return on asset (1.59 %) and Tobin Q (1.204). Although, Belgium presents the lowest return on equity with (4.55%), France the lowest return on asset (0.65%) and Germany the lowest TOBIN Q with (0.915).

4.2. Corporate governance empirical results

4.2.1. Corporate governance and European bank performance during 2002-2011

We first start by examining the relation between the corporate governance variables and the European banks performance (*Tobin Q*, *ROE* and *ROA*) for the full sample period (2002-2011). We apply the usual procedure for choosing between fixed and random effects by using the Hausman test statistic for the difference between the fixed-effects and random effects estimates. The test rejects the random-effects specification to all model specifications so fixed effects estimations are employed. Table 4 report the results.

Table 4. Corporate governance and bank performance (2002-2011)

The sample consists of 73 European banks for the period 2002 to 2011. <i>Tobin Q</i> is the book value of assets minus book value of equity plus market value of equity divided by book value of assets, <i>Return on assets</i> (ROA) is calculated as profit before tax divided by total assets, <i>Return on equity</i> (ROE) is defined as profit before tax divided by total equity, <i>Board Size</i> is defined as the natural logarithm of the number of directors on the board, <i>Outsiders</i> is the ratio number of non-executive directors over the total number of directors, <i>Gender Diversity</i> is the proportion of female directors to the total number of the board of directors, <i>CEO Duality</i> is a binary variable equal to one if the CEO is the chairman of the board and zero otherwise, <i>Bank Size</i> is calculated as the Natural logarithm of the total assets, <i>Financial leverage</i> ratio is calculated as total equity divided by total assets and <i>Loans</i> is defined as loans divided by total assets. t-statistics in parenthesis. Superscripts indicate statistical significance at 0.01 (*), 0.05 (***) and 0.10 (**) percent levels.			
	<i>Tobin Q</i>	<i>ROE</i>	<i>ROA</i>
Board Size	0.0669*** (4.306)	-0.0361*** (-2.986)	0.0192** (2.0431)
Outsiders	0.0249 (0.6438)	0.1263*** (4.201)	0.0004 (0.086)
Gender Diversity	0.2547*** (4.863)	0.0352 (0.863)	0.00434 (0.0070)
CEO Duality	0.0084 (0.766)	0.0076 (0.884)	0.0007 (0.520)
Equity	-0.4665*** (-14.321)	-0.0733*** (-2.892)	0.0188*** (4.866)
Loans	-0.0354* (-1.760)	-0.0092 (-0.585)	-0.0058** (-2.433)
Size	-0.0321*** (-10.855)	0.0058** (2.512)	-0.0012*** (-3.420)
Constant	1.2260*** (24.060)	0.234*** (5.913)	0.0197*** (3.256)
Adj. R-Squared	0.349	0.185	0.140
Nr. observations	730	730	730
Hausman test $\chi^2(7)$	25.216***	26.497***	36.991***

The adjusted R-squared for the different performance measures used varies between 14 and to 35% which indicates a very reasonable overall fit of the data to the regression line. When *Tobin Q* is used as dependent variable, the board size has a positive impact on the bank performance ratio at 1% level of significance. Banks with large board of directors have higher *Tobin Q* ratio. The results show that a large board of directors has a positive impact on bank performance when it is measured by *Tobin Q*. Boards with large number of directors has crucial role in improving the advisory and monitoring functions, enhance governance and increase returns. Also, having a great number of advisors and supervisors reduces the power of the CEO. Moreover, the positive relationship could be explained by the fact that the banks are characterized by their complexity therefore, they need a large board of directors which play an important role in dealing with complexity. Our results are contrary to the theories which predict that small number of directors on the board are more efficient (eg. Staikouras et al, 2007). Our findings are in line with Belkhir (2009), Andres and Vallelado (2008) and Adams and Mehran (2005) who find that the addition of new director in the board has a significant and positive relationship with *Tobin Q*. They provide evidence that rise in board sizes would add value to bank holding company. The coefficient of Outsiders variable, which is the proportion of non-executive directors on the board, is positive but insignificant. This result is consistent with Andres and Vallelado (2008), Adams and Mehran (2003) and Love and Rachinsky (2007). As it concerns the banking sector, the positive relationship between the board composition and the performance is explained by the objective view of the non-executive directors regarding the company. Therefore, they are more suitable to accomplish the

supervisory function. However, the insignificant relationship between the two variables is consistent with the theory; due to regulatory requirement, directors do not emphasize to maximize the value of the company over the soundness and safety. Thus, Banks' regulations have an important role on board structure with regard to size and composition. The Gender diversity variable is positive and significant at 1 % level meaning that the proportion of females on the board of directors has a positive impact on the bank performance measured by *Tobin Q* ratio. The presence of the female on the board of directors has a crucial role in increasing board's independence since women tend to ask different questions than male directors. Moreover, female directors are considered as hard working person and have better communication skills which enable them to add value in the firm by improving the decision making ability and the problem solving of the board. Our findings are consistent with Carter et al (2003) and Pathan and Faff (2013). Still according to the results in table 4, the coefficient of CEO duality is positive but insignificant in relation with *Tobin Q*. The fact that the CEO is also the board chair of the directors has no significant impact on the bank performance, because the additional responsibilities accorded to the CEO do not significantly add capacity to the CEO to influence the performance. This results support Griffith et al (2002) and Adnan et al (2011). However, the result of this study contradicts different number of previous studies Belkhir (2009) which implying that the CEO duality enhance the bank performance. As it concerns the control variables, the bank size appears to be negatively and statistically significant with *Tobin Q* ratio at 1 % level of significance. This could be explained by the increase of portfolio diversification which leads to lower the risks and therefore lower the return of the bank. Our results support Staikouras et al (2007) while it contradicts

the previous studies which explain that the bank size and bank performance are positively correlated this is due to the economies of scale, they demonstrate that the economies of scale increases with bank size which in turn improves the bank performance (Akhavain et al, 1997). The coefficient of the Loan to total asset (LA) demonstrates a negative and significant effect on bank performance at 10% level of significance. This ratio is used as a proxy to measure the bank liquidity. Our results are on line with Molyneux and Thornton (1992). The negative relationship could be explained by the fact that the banks are rapidly growing their loan portfolio therefore they have to pay a greater cost for their funding requirement and this could have a negative impact on the value of the firm. Finally, the equity to total asset ratio (EA) coefficient is negative and statistically significant at 1 % level of significance. This ratio is included as a measure of leverage and capital strength and its effect on bank performance.

In the second model we use ROE (return-on-equity) as bank performance measure. The results show that the Board size coefficient (BOARDSIZE) is negative and significant at 1% level for ROE. This illustrates that the performance of the European banks is deteriorated with the presence of large board of directors. This result is consistent with the results of the studies conducted by Stairoukas et al (2007), Hermalin and Weisbach (2003) and Yermack (1996). The board of directors become less efficient when the number of directors rises, this is due to the considerable problems related to the decision making time, coordination and communication between the boards. The presence of non-executive directors improves the monitoring of management and decreases the conflict of interest among the stakeholders. Moreover, when banks employ a new outside director with advisory competences, the strategic decisions should enhance since there is a complementary relationship between the counselling capabilities of the non-executive directors and those of the CEO. Thus, the bank performance will be improved. Regarding the gender diversity and the CEO duality variables, results show that the coefficients of these two variables are positive but not statistically significant for ROE. The presence of the female on board of directors has no significant impact on bank performance, this is due to the low proportion of female the European banks, therefore, they play a minor role on the board of director. In addition, small boards, who are male dominated and where the homogeneity preference's is stronger will pursue to hold back the female to the access to the top positions on banks. Our finding supports Setiyono and Tarazi (2014), Terjesen and Singh (2008), De Cabo et al (2009). The coefficient of the equity to total asset (EA) illustrates a negative and significant at 1 % level of significance (same result as Tobin Q). Also, the sign of the Bank size is positive and statistically significant at level of 5%, the result is different when Tobin Q is used as dependent variable which shows a negative and significant relationship between the two variables. This is due to the different proxies used to measure the bank performance. Finally, the coefficient of the loan to total assets (LA) is negative but statistically insignificant.

In the last model on table 4, we use ROA (return-on-assets) as a performance measure. Similar to previous findings when Tobin Q is used as

dependent variable, the board size (BOARDSIZE) is positive and significant with the ROA ratio at 5% level of significance. Moreover, the coefficient of the non-executive directors (OUTSIDERS) is positive but insignificant with ROA (same results as for Tobin Q). The significance of this variable is only observed when ROE is used as dependent variable. Regarding CEO duality, the coefficient of this variable is positive but statistically insignificant, this result ties on well with those studies that find no significant relationship between CEO duality and ROA such as Griffith et al,(2002); Adnan et al, (2011). For gender diversity we find a positive and significant relationship with ROA supporting Pathan and Faff (2013), the presence of the female on the board of director has significant impact on bank performance. For this model, all the control variables are significant. The Equity to total assets (EA) presents a positive and significant relationship with ROE at 1% level of significance. This results are consistent with the finding conducted by Stairkouras et al (2007) and Molyneux and Thornton (1992). The positive relationship could be explained by a high level of equity which suggests a decrease in the cost of capital and therefore, this variable may have a positive effect on profitability. On the other hand, a rise in capital may increase the expected earnings by decreasing the estimated cost of financial distress, as well as the bankruptcy cost. The coefficient sign of the bank size (SIZE) is negative but significant at 1% level of significance. Moreover, the Loan to total asset (LA) presents negative and significant relationship with ROA at 5% level of significance.

To sum up, under different measures of the bank performance (Tobin Q, ROE, ROA), we find a mixture of results, regarding the Board size (BOARDSIZE), there is *positive and significant* relationship between board size and bank performance using Tobin Q and ROA. The results are in line with Andreas and Vallealdo (2008) Adams and Mahran (2005). Boards with large number of directors has crucial role in improving the advisory and monitoring functions, enhance governance and increase returns. Also, banks are characterized by their complexity therefore, they need a large board of directors which play an important role in dealing with complexity. This result are in line with our expectation, *hypothesis 1 is accepted*.

The board composition is *positively* related to bank performance, whereas the sign of the coefficient is *not significant* in most of the cases (Tobin Q and ROA). As we mentioned above, the positive relationship between the board composition and the performance could be explained by the objective view of the non-executive directors regarding the company. Therefore, they are more suitable to accomplish the supervisory function. While the non-insignificance relationship is consistent with the regulatory requirement in banking sector, directors do not emphasize value maximization over the soundness and the safety of the firm. Our finding is consistent with Stairoukas (2007) but is not in line with our expectation as we assumed a positive and significant relationship with the bank performance, *Hypothesis 3 is rejected*.

The Gender diversity and the bank performance are *positively and significantly* related to the bank performance in most specification, our findings are consistent with Carter et al (2003) and Pathan and Faff (2013). The female directors are considered as hard working person and have better

communication skills which enable them to add value in the firm by improving the decision making ability and the problem solving of the board. *The hypothesis 5 is accepted.*

In all the models, CEO duality presents a *positive* but *non-significant* relationship under the different proxies of the bank performance (ROE, ROA, and Tobin Q). The funding supports Griffith et al (2002) and Adnan et al (2011). This could be explained that the additional responsibilities accorded to the CEO do not significantly add capacity to the CEO to influence the performance. Or it could be explained by the relative variability of the CEO duality variable during the sample period which it makes hard to identify the effect of the leadership structure on bank performance. This result is not in line with our expectation, *hypothesis 7 is rejected.*

4.2.2. Corporate governance and European bank performance during (pre and during/post financial crisis)

In this section we divide the sample of European banks in two sub-periods: pre financial crisis (2002 to 2006) and during/post financial crisis (2007-2011). We consider a period during/post financial crisis since the literature is not clear regarding the beginning and end of the financial crisis in particular in the banking sector due to the successive government bailouts in different years. In table 5, panels A and B the results for the period pre (2002-2006) and during/post financial crisis are presented. Again we employ fixed effects estimations.

Table 5. Corporate governance and bank performance pre, during/post financial crisis (2002-2006)

The sample consists of 73 European banks for the period 2002 to 2006. <i>Tobin Q</i> is the book value of assets minus book value of equity plus market value of equity divided by book value of assets, <i>Return on assets</i> (ROA) is calculated as profit before tax divided by total assets, <i>Return on equity</i> (ROE) is defined as profit before tax divided by total equity, <i>Board Size</i> is defined as the natural logarithm of the number of directors on the board, <i>Outsiders</i> is the ratio number of non-executive directors over the total number of directors, <i>Gender Diversity</i> is the proportion of female directors to the total number of the board of directors, <i>CEO Duality</i> is a binary variable equal to one if the CEO is the chairman of the board and zero otherwise, <i>Bank Size</i> is calculated as the Natural logarithm of the total assets, <i>Financial leverage</i> ratio is calculated as total equity divided by total assets and <i>Loans</i> is defined as loans divided by total assets. t-statistics in parenthesis. Superscripts indicate statistical significance at 0.01 (*), 0.05 (***) and 0.10 (**) percent levels.			
Panel A: Pre Financial Crisis (2002-2006)			
	Tobin Q	ROE	ROA
Board Size	0.0213** (2.048)	0.0385*** (2.924)	-0.0036 (-0.660)
Outsiders	0.3182*** (3.452)	0.0293 (0.338)	0.0147 (1.302)
Gender Diversity	0.2265 (1.674)	0.3199** (2.424)	0.0373** (2.168)
CEO Duality	-0.0219 (-0.757)	-0.0153 (0.5759)	-0.0032 (-0.897)
Equity	0.1892 (0.0905)	0.0922 (0.881)	0.0671*** (4.907)
Loans	0.2229*** (3.159)	0.0212 (0.319)	0.0113 (1.303)
Size	0.0457*** (2.993)	0.0565*** (3.938)	0.00837*** (4.473)
Constant	0.1681 (0.785)	-0.439** (-2.179)	-0.092955*** (-3.539)
Adj. R-Squared	0.773	0.343	0.589609
Nr. observations	365	365	365
Panel B: During/Post Financial Crisis (2007-2011)			
	Tobin Q	ROE	ROA
Board Size	-0.0378* (-2.337)	-0.0267* (-2.478)	0.0061 (0.006)
Outsiders	-0.0331* (-1.673)	-0.1963* (-1.909)	0.0014 (0.085)
Gender Diversity	-0.1211 (0.985)	-0.0130 (-0.101)	-0.0091 (-0.444)
CEO Duality	-0.0864** (-2.385)	-0.0041 (-0.107)	-0.0008 (-0.135)
Equity	0.7492*** (3.2827)	0.5848** (2.449)	0.234*** (6.172)
Loans	0.1691 (1.5356)	-0.0222 (-0.1922)	0.0013 (0.070)
Size	0.0301 (0.832)	-0.0794** (-2.099)	0.0070 (1.164)
Constant	0.4559 (1.031)	1.1254 (2.433)	-0.1120 (-1.526)
Adj. R-Squared	0.659	0.419	0.292
Nr. observations	365	365	365

The board size variable presents a positive and significant coefficient at level of 5 % before the financial crisis for all the performance measures except of ROA while a negative and significant coefficient at level of 10 % for the most bank performance (expect for ROA) during/after the financial crisis. The result shows that boards with small number of directors have performed better than the largest ones during and post financial 2008. Our finding is consistent with Hoque and Muradoglu (2010). Our result could be explained that smaller boards are quicker and faster in making better decisions in tough period such crisis. Therefore our *second hypothesis is accepted*.

The *Outsiders* variable which is defined as the proportion of non-executive directors on the board of directors had a positive but insignificant coefficient for the overall sample (expect for ROE) reported in the previous section. According to the result shown in the table 5 (panel A), the board composition (outsiders) presents a positive and significant relationship with Tobin Q at 1 % level of significance but insignificant relationship with ROE and ROA. Whereas, during/post the financial crisis, the results show that the board composition and the performance measures are negatively (expect for ROA) and statistically significant at 10% level of significance for ROE and Tobin Q. This implies that the performance of the bank is better when there are fewer external directors on the board of directors. Thus, boards with fewer interconnections were more efficient during the financial crisis, so that directors can concentrate more on a specific board. This result support Guner et al (2008) and Erkens et al (2012). They find that board with higher number of independent directors perform worse during the crisis 2008. *Hypothesis 4 is accepted*.

The presence of women on the board of directors, before the crisis (2002-2006) is positive and significant at level of 5 % for ROE and ROA (10% level for Tobin Q). However, during the global financial crisis the gender diversity variable is *negatively but not significantly* related to all the performance measures used in this paper. Gender diversity does not add any value to the bank performance during the crisis as the woman are more risk averse and are afraid in making decision compared to the male during the crisis. Our result is in line Hoque and Muradoglu (2010). *Hypothesis 6 is rejected*.

Regarding the impact of *CEO Duality* on bank performance during/post and before the crisis, we notice that the sign of the coefficient variable is negative but statistically no significant during pre-crisis for all the performance measures, while during/post crisis there is a negative but non-significant relationship in most cases with ROA and ROE (except for *Tobin Q*). *Hypothesis 8 is accepted*. This implies when the CEO of the bank hold also the position chairman of the board, the performance of the bank declines. This is in contradiction to general belief, when during the crisis there is a positive and significant relation between the CEO duality and firm performance as when the two positions are combined, one single leader could have a better influence. The person has a greater knowledge to the company and industry than an external chairman, moreover, the CEO-chairman can fix a clear goal to raise the shareholder value and recover from the

crisis. However, the negative and non-significant relationship in our studies could be explained that both of the CEO and the chairman of the bank have respond collaboratively and prudently to the financial crisis but their collaboration do not add value to the bank. The results support Grove et al (2011) and Carty and Weiss (2012). With regards to the control variables, the equity to total asset (EA) present a positive and significant relationship with ROA at 1% level of significance during the period of non-crisis, while during/post the crisis we found a positive and significant relationship with all the performance measures analysed. The loan to total asset (LA) and the bank performance measures are positively and significantly related to 1% with only *Tobin Q* during the non-crisis, whereas is positively but not statistically significant to *Tobin Q* and ROA and negatively related to ROE during/post crisis. During the financial crisis, the bank performance has decreased dramatically as loan losses has increased. During the period of non-crisis the bank size demonstrates a positive and significant relationship with all the dependent variables at level of 1 % while during/post crisis a negative and significant relation with only ROE at level of 5%. This is implies that the biggest banks saw the largest loss during the financial crisis compared to the smaller ones. This funding supports Cornett et al (2009). Overall, during and post financial crisis larger banks are less profitability than smaller ones.

5. CONCLUSION

In this study we investigate the impact of the corporate governance on bank performance in a sample of 73 large European banks over the period 2002-2011. More specifically, the corporate governance proxies examined in this study are the board size, the gender diversity, the CEO Duality and the proportion of non-executive directors on the board of directors, whereas the bank performance is captured by accounting measures (*ROA* and *ROE*) and market value measure (*Tobin Q*).

To our knowledge, this is the first study which relates bank performance with corporate governance measures during and post the global financial crisis in 2008 for European countries.

Our results can be summarized as follows: i) board size is positively related with performance before crisis and negative afterwards; ii) During/post financial crisis the board with small number of directors have outperformed the one with the larger boards this could be explained that small board of directors is more efficient in tough periods as they take quick decision compared to the larger boards; iii) During/post the crisis, the results show that the board composition and the performance measures are negatively and statistically significant; iv) no significant relationship was found between gender diversity and the bank performance

Overall, our results show that corporate governance variables have a real impact on bank performance. The mixture of the results depend on the performance measure used as well the time period analysed. Additional research is needed to better understand the impact of corporate governance on bank performance, for example, it is worthy to include other corporate governance measures such the composition and the nature of

the audit committee, the ownership structure, or to incorporate other variables related to the characteristics of the board of directors or the CEO, for instance, the average tenure in bank, the education or the trajectory carrier.

We believe that this paper had added further empirical evidence to the past studies. As we stated above this paper is the first, to our knowledge associated the bank performance with the corporate governance measures during the global financial crisis for European countries. In addition, we employed different corporate governance proxies such as the gender diversity and the CEO duality, since most of the studies related to the European countries have used only the board size and the board composition.

REFERENCES

- Adams, R.B., and Mehran, H. (2003), 'Is Corporate Governance Different for Bank Holding Companies?' *FRBNY Economic Policy Review*, 9(1), 123-142.
- Adams, R.B., and Mehran, H. (2005), *Corporate Performance, Board Structure and its Determinants in the Banking Industry*, EFA, Moscow Meetings.
- Adams, R.B., and Mehran, H. (2008), corporate performance, board structure and their determinants in the banking industry, Federal Reserve Bank of NY, Staff Report No 330.
- Adnan, M.A., Htay, S.N., Ab. Rashid, H.M. and Meera, A.K. (2011), 'A panel data analysis on the relationship between corporate governance and bank efficiency', *Journal of Accounting, Finance and Economics*, 1 (1), pp. 1-15.
- Aebi, V., Sabato, G. and Schmid, M., (2012) 'Risk management, corporate governance, and bank performance in the financial crisis'. *Journal of Banking and Finance*, 36(12), 3213-3226.
- Akhavain, J., Berger, A. and Humphrey, D. (1997), *The Effects of Megamergers on Efficiency and Prices: Evidence from a Bank Profit Function*, SSRN Electronic Journal.
- Anastasopoulos, V., Brown, D. and Brown, D. (2002), *Women on Boards: Not just the right thing ... but the 'bright' thing*, The Conference Board of Canada, Report, 341-402.
- Andres, P. and Vallelado, E. (2008), 'Corporate governance in the banking industry: The role of the board of directors' *Journal of Banking & Finance*, 32, 2570-2580.
- Baltagi, B. (2005), *Econometric analysis of panel data*, Chichester: Wiley.
- Basel Committee on Banking Supervision (BCBS) (2006), 'Enhancing corporate governance for banking organizations'.
- Belkhir (2009), 'Board of Directors' Size and Performance in the Banking Industry', *the International Journal of Managerial Finance*, 1-24.
- Beltratti, A., and Stulz, R., (2012). 'The credit crisis around the globe: Why did some banks perform better during the credit crisis?', *Journal of Financial Economics*, 105(1), 1-17.
- Berger, A., Kick, T., and Schaeck, K., (2012), 'Executive board composition and bank risk taking', *Deutsche Bundesbank*.
- Berger, A., N., Imbierowicz, B., and Rauch, C., (2014). 'The roles of corporate governance in bank failures during the recent financial crisis', *European banking center*.
- Booth, J., Cornett, M., and Tehranian, H. (2002), 'Board of directors, ownership and regulation' *Journal of Banking and Finance*, 26, 1973-1996.
- Boussaada, R., & Karmani, M., (2015), 'Did Board of Directors Have an Impact on MENA Bank Performance?' *International Journal of Economics and Finance*, 46-56.
- Busta, I. (2007), *Board effectiveness and the impact of the legal family in the European banking industry*, FMA European Conference, Barcelona-Spain.
- Caprio, G., Laven and L., Levine, R. (2007) 'Governance and bank valuation', *Journal of Financial Intermediation*, 16(4), 584-617.
- Carter, D., Simkins, B. J., & Simpson, W. G. (2003), 'Corporate governance, board diversity, and firm performance', *Financial Review*, 38(1), 33-53.
- Carty, R., and Weiss, G. (2012), 'Does CEO duality affect corporate performance? Evidence from the US banking crisis', *Journal of Financial Regulation and Compliance*, 20 (1), 26-40.
- Conyon, M., J. and Peck, S., L. (2010) *Board size and corporate performance: evidence from European countries*, *The European Journal of Finance*, 4(3), 291-304.
- Cornett, M., Mc Nutt, J.J., and Tehranian, H., (2009) *The financial crisis, internal corporate governance, and the performance of publicly-traded U.S. bank holding companies*, *Journal of Corporate Finance*, 15, 412-430.
- Dahia, J., Dimitrov, O., and McConnell, J., J. 'Dominant Shareholders, Corporate Boards and Corporate Value: A Cross-Country Analysis' *Journal of Financial Economics*, 87, 73-100.
- Davies, L., et al (2014), 'Women on boards: Davis Review', Department for Business, Innovation & Skills, UK: London.
- De Cabo, R., M., and Nogues, R., G and Nieto, M.J., (2009), 'Gender diversity on European banks' board of directors: Traces of discrimination'.
- De Cabo, R., M. & Gimeno, R., Nieto, M., (2011). 'Gender Diversity on European Banks' Boards of Directors', *Journal of business Ethics*, 1-32.
- Erkens, D., Hung, D., and Matos, P., P (2012). 'Corporate governance in the 2007-2008 financial crisis: Evidence from financial institutions worldwide'. *Journal of Corporate Finance*, 18(2), 389-411.
- European commission (2012) "Women in economic decision-making in the EU: Progress report", Luxembourg: Office of the European Union, 1-23.
- Fama, E., and Jensen, M. C. (1983), 'Separation of Ownership and Control', *Journal of Law and Economics*, 88(2), 301-325.
- Finkelstein, S. and Hambrick D., C. (1996), 'Strategic Leadership: Top Executives and Their Effects on Organization', *The Academy of Management Review*, 22(3), 802-820.
- Goel, A., M., and Thakor, A., (2008), 'Overconfidence, CEO selection, and corporate governance', *Journal of Finance*, 63, 2737-2784.
- Golden, B.R., and Zajac, E.J. (2001) 'When will boards influence strategy? Inclination of power in strategic change', *Strategic Management Journal*, 22, 1087-1111.
- Griffith, J.M., Fogelberg, L. & Weeks, H.S. (2002), *CEO ownership, corporate control, and bank performance*, *Journal of Economics and Finance*, 26 (2), pp. 170-183.
- Grove, H., Patelli, L., Victoravich, L., M., and Xu, P., (2011). 'Corporate governance and performance in the wake of the financial crisis: Evidence from US

- commercial banks'. *Corporate Governance: An International Review*, 19(5), 418-436.
35. Guner, A. B., Malmendier, U., and Tate, G., (2008), 'Financial expertise of directors', *Journal of Financial Economics*, 88, 323-354.
 36. Hagendorff, J. and Keasey, K. and Vallascas, F., (2013) 'Size, risk, and governance in European banking', Oxford and New York: Oxford University Press.
 37. Heinfeldt, J. (2005), 'Gender diversity and firm value: an extension of mean-variance portfolio theory', *Journal of Academy of Business and Economics*, 5(2), 25-38.
 38. Hermalin, B., E. and Weisbach, M. S., (2003), *Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature*, FRBNY Economic Policy Review, 9, 7-26.
 39. Hoque, H., & Muradoglu, G. (2010) 'Bank Boards, CEO Characteristics and Performance: Evidence from Large Global Banks during the Crisis'.
 40. Hsiao, C. (2003), 'Analysis of Panel Data', 2nd edition Cambridge University Press, Cambridge.
 41. Jensen, M. (1993). 'The modern industrial revolution, exit and the failure of internal control systems'. *Journal of Finance*, 48(3), 831-880.
 42. Kirkpatrick (2009), 'The corporate governance lessons from the financial crisis' *Financial Market Trends*, N 96, 1-30.
 43. Levine, R. (1997), 'Financial development and economic growth: view and agenda' *Journal of Economic Literature*, 35, 688- 726.
 44. Levine, R. (2004), 'The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence', World Bank Policy Research Working Paper 3404.
 45. Linck, J.S., Netter, J.M., Yang, T. (2008), 'The determinants of board structure', *Journal of Financial Economics* 87, pp. 308-328.
 46. Love, I. and Rachinsky, A. (2007), 'Corporate Governance, Ownership and Bank Performance in Emerging Markets: Evidence from Russia and Ukraine', Working paper.
 47. Maassen, G. F. (2002), 'An International Comparison of Corporate Governance Models', Third Edition, Spencer Stuart, Amsterdam.
 48. Macey, J., and O' Hara, M. (2003), 'The corporate governance of banks', FRBNY Economic Policy Review, 91-107.
 49. Minton, B., Taillard, J., and Williamson, R., (2010). 'Board composition, risk taking and value: Evidence from financial firms'.
 50. Mishra, C. S. and Nielsen, J. F. (2000), 'Board Independence and Compensation Policies in Large Bank Holding Companies', *Financial Management*, 29(3), p. 51-70.
 51. Molyneux, P. (1993). 'Structure and performance in European banking' Doctoral Dissertation, University of Wales, Bagnor.
 52. Molyneux, P., & Thornton, J. (1992), Determinants of European bank profitability: A note. *Journal of Banking and Finance*, 16, 1173-1178.
 53. Morgan, D., (2002), 'Rating banks: risks and uncertainty in an opaque industry', *American Economic Review*, 92, 874-888.
 54. Muller-Kahle, M., and Lewellyn, K.B., (2011). 'Did board configuration matter? The case of US subprime lenders'. *Corporate Governance: An International Review*, 19(5), 405-417.
 55. OECD (2006) 'Policy brief on corporate governance of banks in Asia', Paper for the Asian roundtable on corporate governance, Thailand, June.
 56. Pathan, S., Skully, M., and Wickramanayake, J. (2008) 'Reforms in Thai Bank Governance: The Aftermath of the Asian Financial Crisis'. *International Review of Financial Analysis*, 17(2), p345-362.
 57. Pathen, S. and Faff, R., (2013). 'Does board structure in banks really affect their performance?' *Journal of banking and finance*. 37, 1573-1589.
 58. Peni, E. and Vähämaa, S. (2012). 'Did good corporate governance improve bank performance during the financial crisis?' *Journal of Financial Services Research*, 41(2), 19-35.
 59. Pi, L., & Timme, S. (1993). 'Corporate Control and Bank Efficiency' *Journal of Banking and Finance*, 17, 515-530.
 60. Rasmussen, J. A. and Huse, M. (2011) 'Corporate governance in Norway: women and employee-elected board members', *Handbook on International Corporate Governance*, Second Edition. Cheltenham: Edward Elgar.
 61. Romano, G., Ferretti, P. and Quirici M.C. (2012), 'Corporate Governance and Performance in Italian Banking Groups', *Managerial Auditing Journal*, 27(7), 622-638.
 62. Selvam, M., Raja, J., Kumar, A.S. (2006), 'Corporate governance and performance - indian banking system', Working paper.
 63. Setiyono, B. & Tarazi, A., (2014) 'Does diversity of board of bank board affect performance and risk? Evidence from an emerging market'.
 64. Shleifer, A., and Vishny, R.W (1997), 'A survey of corporate governance', *Journal of Finance*, 737-783.
 65. Staikouras, P., Staikouras, C. and Agoraki, M.E. (2007), 'The effect of board size and composition on European bank performance', *European Journal of Law and Economics*, 23(1), 1-27.
 66. Trabelsi, M., A. (2010), 'Governance and Performance of Tunisian Banks', *International Journal of Economics and Finance*, 2(3), 189-198.
 67. Van Greuning, H., & Brajovic-Bratanovic, S. (2003). 'Analyzing and managing banking risk: A Framework for assessing corporate governance and financial risk', Third edition, World Bank.
 68. Viénot, M., (1999), 'Report of the AFEP-MEDEF Committee on Corporate Governance', Paris.
 69. Weil, J., Gotshal, T., Manges, L. (2002). 'Comparative study of corporate governance codes relevant to the European Union and its member states', European Commission, 1-107.
 70. Yermack, D. (1996) 'Higher market valuation of companies with a small board of Directors' , *Journal of Financial Economics*, 40, 185-211.
 71. Zahra, S., A. and Stanton W., W. (1988), 'The Implications of Board of Directors Composition for Corporate Strategy and Performance', *International Journal of Management*, 5, 229-236.

REASONS FOR AND IMPLICATIONS OF THE PRESENCE OF INSTITUTIONAL INVESTORS IN THE OWNERSHIP STRUCTURE OF BRAZILIAN COMPANIES

Lélis Pedro de Andrade*, Aureliano Angel Bressan**,
Robert Aldo Iquiapaza**, Wesley Mendes-Da-Silva***

*Federal Institute of Minas Gerais (IFMG), Campus Formiga, Brazil

**Universidade Federal de Minas Gerais (UFMG), Brazil

***Fundação Getulio Vargas Business School at São Paulo, Brazil

Abstract

Using 3,057 observations from 2000 to 2012, we found the risk of expropriation of minority shareholders by controlling shareholders is positively associated with participation of institutional investors in equity funding. There is no evidence that these investors increase the likelihood of substituting the chief executive officer or increase the company's value or its financial performance. However, the presence of institutional investors is associated with higher company debt. This study suggests that institutional investors assume a function not fully explained by agency theory, such as enabling greater access to debt markets, but accentuate the agency conflict between controlling and minority shareholders. The main results show that the presence of institutional investors mitigates agency conflicts between shareholders and creditors, but increases the risk of expropriation of minority shareholders.

Keywords: Corporate Governance, Institutional Investor, Firm Value, Brazilian Stock Market

Acknowledgment

This study was financially supported by CAPES (Coordination of Improvement of Higher Education Personnel, Brazil)

1. INTRODUCTION

The presence of institutional investors is usually considered a positive factor for improving the quality of corporate governance practices within companies. However, the evidence is still inconclusive about the effectiveness of these investors at mitigating conflict among controlling and minority shareholders, which is the main agency problem in markets with high ownership concentration. Therefore, the objective of this study was to identify and verify the reasons for and implications of the presence of institutional investors, such as banks or investment funds, in Brazilian companies.

From a theoretical point of view, there are different perspectives in the literature on the importance of participation of large investors in a company's capital. Grossman and Hart (1980), for example, highlighted that the presence of a large investor may solve problems related to free riders, which are found in companies with dispersed ownership structures. Jensen and Meckling (1976) shared this view, arguing that the presence of a large investor is sufficient to ensure the monitoring of a chief executive officer (CEO) on behalf of all shareholders. However, Shleifer and Vishny (1986) argued that even in the presence of a major investor, low monitoring would continue, because the investor has an incentive to protect only the rights of its shares, and its efforts providing greater legal

protection to all investors would be reduced. In this sense, the arguments of Jensen and Meckling (1976) and Grossman and Hart (1980) seem to accept the premise that there is a need for strong legal protection.

While these theoretical perspectives point out the costs and benefits of the presence of a large investor in a company's capital, to the best of our knowledge, there is no theory that explains why institutional investors, such as banks or pension funds, do not take advantage of the benefits of diversification, and allocate their resources to companies that have concentrated control structures and high risk of expropriation of minority shareholders.

Our results fill this gap by suggesting that the development of corporate governance practices could depend on the controlling shareholder interest, which is able to find alternatives to make its preference for entrenchment effective and to protect against hostile takeovers. This occurs even when the controller signals to the market that it has been engaged in improving the quality of corporate governance within the company, by attracting institutional investors as holders of ordinary shares.

From an empirical viewpoint, the evidence for a positive relationship between the presence of institutional investors and their activism to monitor the decisions of the controlling shareholder and/or the CEO against the risk of expropriation of minority shareholders appears to depend on the level of legal

protection within the country. This argument is based on evidence found by Li et al. (2006) in a study conducted in 45 countries. In addition, the activism of institutional investors appears to depend on the influence of foreign investors, especially from countries with strong legal protection, as evidenced by Aggarwal et al. (2011) in a survey conducted in 23 countries. The evidence and the arguments in favor of activism of institutional investors were also found in Gillan and Starcks (2003), Parrino et al. (2003), Ferreira and Matos (2008), McCahery et al. (2010), Chung and Zhang (2011), and Iliev et al. (2015). Another interesting point is that in markets dominated by banks, as major institutional investors, the evidence points to the costs and benefits of such a structure. For example, Morck et al. (2000), studying the Japanese market, found that a company's value tends to increase linearly with the participation of non-financial investors in the capital because banks have different objectives to maximize the company's value compared with the interests of other shareholders.

However, in markets with high risk of expropriation of minority shareholders by the controlling shareholder, there is a lack of empirical evidence to explain whether institutional investors are effective at practicing activism. Even in these markets, the literature indicates that institutional investors choose to allocate their resources to companies with the best corporate governance practices, as identified by Giannetti and Simonov (2006), in the Swedish market, and Leuz et al. (2009) in 29 emerging economies.

In the Brazilian market, Punsulvo et al. (2007) found a negative relationship between the presence of pension funds in a company's capital and the quality of governance measured by a broad index, suggesting a trade-off between the participation of pension funds and the quality of corporate governance. The evidence in Brazil found by Punsulvo et al. (2007) contrasts with that found in the US market by Chung and Zhang (2011), who found that the effectiveness of institutional investors depends on better quality of corporate governance practiced by the company. In that case, the US results suggest that the presence of institutional investors and the quality of corporate governance within the company are complementary.

Although there is a trend toward greater participation of institutional investors in companies' capital, in the Brazilian market, domestic institutional investors, such as funds or public and private banks, are still prevalent. Lazzarini (2007)

suggested there is a small world among owners of Brazilian public companies, in a study conducted from 1995 to 2003. According to Lazzarini (2007), these owners are business groups and the government itself, through public pension funds and state-owned enterprises. Recently, Claessens et al. (2008) argued that because the main Brazilian banks are state-owned, companies that contribute to financing of political campaigns are later favored with greater access to financing debt capital.

The remainder of this paper is organized as follows. Section 2 presents a brief description of the Brazilian regulatory environment of which corporate governance is a part. Section 3 presents the methodology, specifically, the sample description, definition of variables, and development of the empirical research models. Subsequently, Section 4 presents the data analysis and main results. Finally, the main conclusions of the study and suggestions for future research are presented in Section 5.

2. CORPORATE GOVERNANCE IN THE BRAZILIAN MARKET

The Brazilian market is an interesting case study because of its complexity, providing challenges for its regulators to mitigate the risk of expropriation of companies' minority shareholders.

A major Brazilian market characteristic is the fact that this market has undergone changes in the legal and institutional environment, starting in early 2000. For example, the main corporate law has been reformulated, and differentiated levels of listing segments for corporate governance have been created, such as level 1, level 2, and *Novo Mercado* (New Market), which are encouraged by the main stock exchange, the BM&FBOVESPA. Table 1 shows the characteristics of these levels compared to the traditional market, especially with regard to the type of shares issued, percentage of free float, share dilution, tag-along concession, and composition of the board.

Black et al. (2014) found a positive impact of changes in the Brazilian institutional environment on companies' quality of corporate governance and on the market value of these companies. According to the authors, the evolution of corporate governance practices is due to two reasons: first, the adherence of companies to Level 2 and New Market; and second, and the improvement of corporate governance practices when a company decides to migrate to a listing segment with higher standards.

Table 1. Differentiated levels of corporate governance and the traditional market

	<i>New Market</i>	<i>Level 2</i>	<i>Level 1</i>	<i>Traditional market</i>
Characteristics of shares issued	Only shares with voting rights (ON)	Allows non-voting shares (PN) with additional rights.	Allows ordinary and preference shares (according to law)	
Minimum percentage of outstanding shares (<i>free float</i>)	Minimum 25%			No rule
Public distribution of shares	Share dilution efforts			No rule
Tag-along Concession	100% for ordinary shares	100% for ordinary and preference shares; 80% for PN (up to 09/05/2011)	80% for ordinary shares (according to law)	
Annual public meeting and corporate event calendar	Mandatory			Optional
Composition of the board of directors	Minimum of five members; 20% must be independent		Minimum of three members (according to law)	
Stopping the accumulation of positions (from 10/05/2011)	Chairperson and CEO is the same person (grace period of 3 years from accession)			There is no rule

Source: Adapted from BM&FBOVESPA (2014)

On the other hand, Gorga (2009) argued that the changes in the corporate law were below expectations. One of these arguments is that although the new legislation (Law n. 10303 / 01) has reduced the limit of the proportion of preference shares from 66.67%, based on previous legislation up to 2001, to 50% of the company's total capital, this change applies only to companies that went public after the 2001 law change. According to the Brazilian Institute of Corporate Governance (IBGC, 2014), despite the deepening of the debate on corporate governance and increasing pressure for the advancement of good governance practices in companies, Brazilian companies are still characterized by high concentration of shares in the hands of controlling shareholders. The low effectiveness of boards of directors and the overlap between ownership and management suggests that even after taking into account possible evolution, there are still weaknesses in corporate governance practiced by companies.

3. METHODOLOGY

3.1. Sample and data collection

Our study considered a 13-year period from 2000 to 2012. The rationale for choosing this period was the possibility of including the most possible data after major changes in the legal and institutional environment, such as the creation of the *Novo Mercado* in the early 2000s. To form the sample of studied companies, we excluded financial institutions, as these have different financial statements and peculiar characteristics that prevent comparison with other sectors. In order to avoid inflationary effects, the figures were adjusted for

inflation, using the variation of the general price index on December 31, 2012. We considered valid observations from companies that presented sufficient information on variables to develop the objective proposed in this study.

The source for financial indicators was Economática. Meanwhile, to collect information regarding ownership structures and boards of directors, we used the website of the Brazilian Securities Commission (*Comissão de Valores Mobiliários*). After the data collection, companies that did not have all the necessary information for the research were excluded. Thus, our database comprised unbalanced panel data for 462 companies with 1 to 13 observations per company, making 3,057 observations.

3.2. Development of empirical models and definition of variables

The broad classification of an institutional investor covers any type of investor that is not an individual. However, as highlighted by Aggarwal et al. (2011) and Chung and Zhang (2011), institutional investors, such as banks, insurance companies, and pension funds, have strong fiduciary responsibilities that characterize them as more likely to improve the corporate governance of a company. Thus, to identify the companies with institutional investors in the Brazilian market, we used a dummy variable (DLarg) that takes a value of 1 if at least one of the major shareholders of the company is clearly termed a bank or investment fund, either public or private, and is set to 0 otherwise. A complete description of the variables used in this study is provided in Table 2.

Table 2. Description of variables

N	Variable	Measure
1	Tobins' Q	Ratio of the market value of the company to the book value of total assets.
2	ROA	Ratio between the operating result and the total asset at the end of period <i>t</i> .
3	CEO-Turnover	Variable equal to one (1) if the CEO of company <i>i</i> was replaced at time <i>t</i> compared to <i>t-1</i> , and zero (0) otherwise.
4	DLarg	Binary variable equal to one (1) if the company has at least one institutional investor, such as a bank or investment fund, as capital shareholder, and zero (0) otherwise.
5	GrD/TA	Ratio of gross debt to total asset value.
6	Cont1; Cont5	Percentage of ordinary shares held by the largest shareholder (Cont1) and the five largest shareholders (Cont5).
7	Wedg1; Wedg5	Excess voting power by the largest shareholder (Wedg1) and five largest shareholders (Wedg5). These variables were calculated by the following equation: $Wedge = [(Con / Own) - 1]$, which was applied to the largest and five largest shareholders.
8	Dual	Binary variable equal to one (1) if the company has two classes of shares, and zero (0) otherwise.
9	AA	Binary variable equal to one (1) if the company has a shareholder's agreement, and zero (0) otherwise.
10	Pyr	Binary variable equal to one (1) if the company has indirect ownership or pyramid control, and zero (0) otherwise.
11	Fam	Binary variable equal to one (1) when the controlling shareholder is family, and zero (0) otherwise. We considered family control cases when at least one of the five largest investors is an individual person.
12	CGI	Binary variable equal to one (1) if the company has shares listed on the CGI, and zero (0) otherwise.
13	NM	Binary variable equal to one (1) if the company has shares listed on the New Market (<i>Novo Mercado</i>) (NM), and zero (0) otherwise.
14	SizeBoard	Number of members belonging to the board of directors.
15	Out	Percentage of outside directors to the total number of board members.
16	CEOdu	Binary variable equal to one (1) if the CEO concurrently holds the position of chairperson of the board of directors, and zero (0) otherwise.
17	CEOb	Binary variable equal to one (1) if the CEO simultaneously occupies the position of regular board member at the same company, and zero (0) otherwise.
18	Ln TA	Natural logarithm of the total value of assets.
19	ST Debt	Ratio of short-term debt to total debt of the company.
20	Sector	Sector of economic activity in which the company belongs, according to Economática's classification.
21	Liquidity	Liquidity of shares on the stock exchange (BM&FBovespa).

Source: Prepared by the authors

For the first empirical model tested in this work, we considered the contributions of Giannetti and Simonov (2006), Li et al. (2006), and Leuz et al.

(2009), who argued that institutional investors choose companies with lower risks of expropriation of minority shareholders to allocate their resources.

$$DLarg_{it} = \beta_0 + \beta_1 Cont1_{it} + \beta_2 Wedg1_{it} + \beta_3 AA_{it} + \beta_4 Pyr_{it} + \beta_5 Z_{it} + u_i + \eta_t + \varepsilon_{it} \quad (1)$$

Where *Cont1* refers to ownership concentration, *Wedg1* to excess voting power of the largest shareholder, *AA* to the existence of a shareholder's agreement, and *Pyr* to the pyramid control structure. These are considered the main independent variables of interest, which aim to verify that the risk of expropriation of minority shareholders is an important aspect that explains the presence of institutional investors in Brazilian companies' capital. The aim is to test, using equation 1, and the validity of the following Hypothesis 1.

Hypothesis 1. The practice of mechanisms to leverage the voting power of the controlling shareholder in the Brazilian market is negatively associated with the participation of institutional

investors, such as banks and pension funds, in the capital of Brazilian companies.

For the reasoning of the second empirical model tested in this work, we took into account the contributions developed by Parrino et al. (2003), DeFond and Hung (2004), Giannetti and Simonov (2006), Li et al. (2006), Leuz et al. (2009), Aggarwal et al. (2011), Chung and Zhang (2011), and Iliev et al. (2015). They argued that the presence of institutional investors has a positive influence on monitoring of activities by insiders and, consequently, there is better financial performance and the shareholders are more likely to replace the CEO, as described in equation 2,

$$Perf_{it} = \beta_0 + \beta_1 DLarg_{it} + \beta_2 PE_{it} + \beta_3 PE * DLarg_{it} + \beta_4 Out_{it} + \beta_5 Out_{it} * DLarg_{it} + \beta_6 Z_{it} + u_i + \eta_t + \varepsilon_{it} \quad (2)$$

$$Turn_{it} = \beta_0 + \beta_1 Perf_{it-1} + \beta_2 DLarg_{it} + \beta_3 PE_{it} + \beta_4 PE * DLarg_{it} + \beta_5 Out_{it} + \beta_6 Out_{it} * DLarg_{it} + \beta_7 Z_{it} + u_i + \eta_t + \varepsilon_{it} \quad (3)$$

in which the dependent variables $Perf_{it}$ represents the financial performance of company *i* at time *t*, and $Turn_{it}$ represents the turnover, which is a binary variable that takes a value of 1 if the CEO of company *i* was replaced in periods *t* to *t-1*, and 0 otherwise.

It is noteworthy that, in equations 2 and 3, the main independent variables are almost the same. Thus, *DLarg* is a dummy variable that takes a value of 1 if firm *i* has in its ownership structure at least one institutional investor in time *t*, and 0 otherwise. *PE* is a set of variables related to the company's ownership structure, especially equity concentration, such as the percentage of votes of the largest and five largest shareholders (*Cont1*) and (*Cont5*), respectively; the excess voting power of those shareholders (*Wedg1*) and (*Wedg5*), respectively, or the family nature of the controlling shareholder (*Fam*). The variable (*Out*) represents the percentage of outside directors on the board and the variable (*Out * DLarg*) is the interaction term between the percentage of outside directors and the presence of institutional investors. The purpose of including the variables related to the board is to separate the

possible effects that the presence of foreign investors has on the dependent variables highlighted in equations 1 and 2, either directly or through the independence of directors.

In equation 3, we added a variable related to financial performance with one lagged period ($Perf_{t-1}$), which aims to verify the sensitivity of CEO turnover before a poor financial performance.

The development of equations 2 and 3 aims to testing Hypotheses 2 and 3, respectively, as described below.

Hypothesis 2. The participation of institutional investors, such as banks and pension funds, in the capital of Brazilian companies is positively associated with their value/financial performance.

Hypothesis 3. The participation of institutional investors, such as banks and pension funds, in the capital of Brazilian companies is positively associated with the replacement of the CEO of the company.

Finally, the reasoning for the fourth empirical model took into account the possibility of the presence of the institutional investor being relevant for mitigating the potential agency conflict between shareholders and creditors in the Brazilian market.

$$GrD/TA_{it} = \beta_0 + \beta_1 DLarg_{it} + \beta_2 PE_{it} + \beta_3 PE * DLarg_{it} + \beta_4 Out_{it} + \beta_5 Out_{it} * DLarg_{it} + \beta_6 Z_{it} + u_i + \eta_t + \varepsilon_{it} \quad (4)$$

In equation 4, the dependent variable is represented by the amount of debt, which is measured by the percentage of gross debt in relation to the total value of assets (GrD / TA) of firm *i* at time *t*. Just as in equations 2 and 3, the reason for including variables related to the board of directors is to separate the possible effects that the presence of foreign investors has on the dependent variable highlighted in equation 4, either directly or via the independence of directors. The other control variables, placed in equations 1-4, are represented by the vector Z_{it} , which is a set of exogenous variables, such as the observable characteristics of companies, while u_i , η_t , ε_{it} are the unobserved heterogeneity and time-invariant, the time fixed effects, and the random error term, respectively.

The development of this empirical model took into account the evidence of Paligorova and Xu (2012) in a study conducted in the G7 countries; Faccio et al. (2010) in East Asia and Western Europe; Liu and Tian (2012) in China; and, Mendes-Da-Silva et al. (2007), Claessens et al. (2008), and Fernandes and Barros (2010) in the Brazilian market.

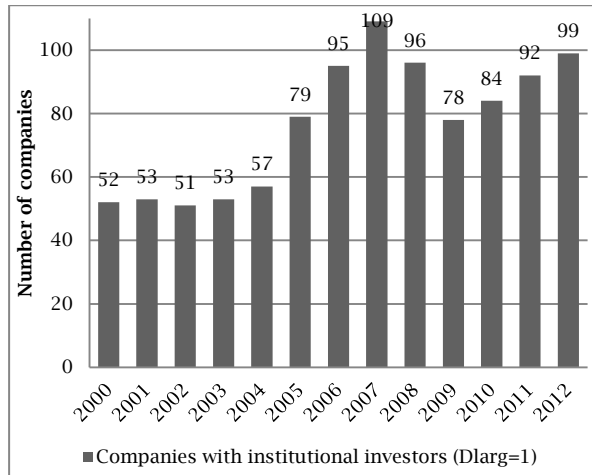
Thus, the formulation of equation 4 aims to test Hypothesis 4, as described below.

Hypothesis 4. The participation of institutional investors, such as banks and pension funds, in the capital of Brazilian companies is positively associated with a lower risk of expropriation of creditors by shareholders.

4. RESULTS

The data presented in Figure 1 show that the number of companies in which financial institutions were invested increased substantially (90.3%) from 2000 to 2012. In 2007, the highest number of investee companies (109 companies) was registered, representing an increase of 109.6% from 2000.

Figure 1. Number of companies invested by institutional investors from 2000 to 2012



Source: Authors using research data

As Figure 1 shows, the total numbers of companies in which institutional investors were invested declined only in 2008 and 2009, possibly due to the 2008 financial crisis.

4.1. Regression analysis

In Table 3, we present the regression results for equation 1, the aim of which is to verify possible determinants of the presence of institutional investors in the capital of Brazilian companies.

Regarding corporate ownership structure, the data in Table 3 show that the voting power of the largest shareholder (*Cont1*) presented a negative likelihood ratio with the dependent variable, the presence of institutional investors (*DLarg*). This relationship was statistically significant in the regressions from 1-4. When analyzing the voting power of the five largest shareholders (*Cont5*), the relationship was not statistically significant, as shown in the regressions from 5-8. Thus, the high ownership concentration of the largest shareholder is a possible barrier to the company having institutional investors as the main shareholders. However, the excess voting power of the controlling shareholder (*Wedg1*) presented as a relevant aspect that positively influences the presence of institutional investors. The coefficient of *Wedg1* was statistically significant at the 1% level in regression 4, confirming the arguments in Section 3 that the institutional shareholders were more likely to undertake investment opportunities in preference shares, compared to investment opportunities in stocks that enable control of Brazilian companies. One possible explanation is that the largest shareholder was resistant to sell part of its controlling shares to institutional investors, due to the negative sign of the variable *Cont1*. However, when there was leverage of control by the largest shareholder (*Wedg1*), it increased the likelihood that the company had an institutional investor as a holder of ordinary shares.

Table 3. Determinants of the presence of institutional investors in companies' capital

Var. -DLarg	1	2	3	4	5	6	7	8
β_0 - Constant.	-6,84***	-6,96***	-6,47***	-6,00***	-7,31***	-7,32***	-6,60***	-7,93***
β_1 - Cont1	-0,04***	-0,04***	-0,03***	-0,04***	-	-	-	-
β_2 - Wedg1	-	-	-	1,38***	-	-	-	-
β_3 - Cont5	-	-	-	-	0,000	0,000	0,001	0,003
β_4 - Wedg5	-	-	-	-	-	-	-0,55**	-
β_5 - Dual	1,09***	1,30***	-	-	0,18	0,43	-	-
β_6 - AA	0,32	0,19	0,31	1,84	0,59***	0,47**	0,48***	0,55***
β_7 - Pyr	0,80**	0,90**	0,91***	1,00***	-0,09	0,01	0,06	0,02
β_8 - CGI	-	0,76**	-	-	-	0,87***	0,85***	-
β_9 - NM	-	-	-0,30	-	-	-	-	0,43
β_{10} - Ln TA	0,13	0,12	0,15	0,09	0,13	0,10	0,07	0,15
β_{11} - GrD/TA	0,03***	0,02***	0,02***	0,02***	0,03***	0,03***	0,03***	0,03***
β_{12} - Tobin's Q	-	-0,005	-0,03	-	-	0,09	-	-0,008
β_{13} - ROA	-	-0,04***	-0,04***	-	-	-0,04***	-	-0,04***
β_{14} - Sector	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
β_{15} - Natu	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
β_{16} - Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N (obs)	2997	2997	2997	2997	2997	2997	2997	2997
N (companies)	440	440	440	440	440	440	440	440
Prob (Chi ²)	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Source: Authors using research data

Notes: The table shows the results of a logit regression to identify the determinants of the presence of institutional investors, where *DLarg* is a dependent dummy variable that takes a value of 1 when institutional investors, such as banks or pension funds, have significant participation as shareholders. Several regressions were estimated using the random-effects model. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively

The opposite relationship was found when analyzing the excess voting power of the five largest shareholders (*Wedg5*), showing a negative and statistically significant relationship with the dependent variable (*DLarg*). In this way, the perception of institutional investors against the risk of expropriation is different when it results from excess voting power by the largest shareholder (*Wedg1*), and when it is due to leverage of the voting power practiced by the five largest shareholders (*Wedg5*).

In addition, we found that an increased risk of expropriation of minority shareholders, especially due to the excess voting power of the largest shareholder, seems not to be a restriction for the presence of institutional investors in the companies' capital. This assertion was supported not only by the analysis carried out for the variable *Wedg1*, but also when analyzing the coefficients of the variables related to the issuance of two classes of shares, shareholders' agreement and pyramid control structure. The issuance of two classes of shares (*Dual*) showed a positive sign and was statistically significant in regressions 1 and 2; the shareholders' agreement (*AA*) coefficient showed a positive sign and was statistically significant in regressions 5–8, and pyramid structure control (*Pyr*) coefficient was positive and statistically significant in the regressions 1–4.

It is argued that this evidence supports the argument that the effort within the company to offer greater protection to minority shareholders, at least by not using mechanisms for leveraging voting power, is associated with lower likelihood ratios of the company to have an institutional investor. This result is consistent with the evidence of Punsulvo et al. (2007) in the Brazilian market, which suggests that the quality of corporate governance, when measured by a broad index, and the presence of institutional investors are substitutes.

The coefficients of *Dual* and *Pyr* were statistically significant only in the regressions that took into account the percentage of control by the largest shareholder (*Cont1*), while the variable (*AA*) was statistically significant only in the regressions that took into account the percentage of control by the five largest shareholders (*Cont5*). One possible interpretation of this evidence is that in the absence of the variable associated with the percentage of control by the largest shareholder (*Cont1*), the variable related to the shareholders' agreement (*AA*) already captures the risks of expropriation by the largest controlling shareholder. This risk could arise whether from the use of the issue of two classes of shares and/or the presence of pyramid control structure (*Pyr*), which are positively associated with the presence of institutional investors as holders of ordinary shares in Brazilian companies.

Regarding corporate governance practices, the variable related to the listing of the company's shares in the Corporate Governance Index (CGI) had a positive relationship with the odds ratio of the company having an institutional investor as a holder of ordinary shares. This relationship was statistically significant in regressions 2, 6, and 7. On the other hand, when analyzing the variable associated with the New Market (*NM*), there was no positive relationship with the analyzed dependent variable. When analyzing the characteristics of the companies, the size of the company (*ln TA*) did not influence the likelihood ratio of the company having

institutional investors, while there was a positive relationship with the company's debt (*GrD/TA*), which was statistically significant in all regressions with the dependent variable. Regarding the financial performance, the presence of institutional investors seems to be influenced by *Tobin's Q*, but companies with lower levels of operating profitability (*ROA*) were more likely to attract institutional investors to its shareholder structure. The coefficients of the binary variables associated with the sector of activity (*industry*), the nature of the controlling shareholder (*Natu*), and the time fixed effects were included in the regressions. The nature of the largest investor as well as the variables associated with the years from 2005 showed positive likelihood ratios and were statistically significant in all the analyzed regressions.

The regressions presented in Table 4 aimed to verify if there is a relationship between the presence of institutional investors (*DLarg*) and the market value of Brazilian companies, as measured by *Tobin's Q*. The coefficient of *DLarg* was not significant in any of the estimated regressions.

In Table 4, we observe that the percentage of outside directors on the board (*Out*) positively affects the company's *Tobin's Q*, as evidenced by the coefficient β_{11} , which was statistically significant in all analyzed regressions. However, this relationship between percentage of outside directors and company value does not seem to be influenced by whether the company has at least one institutional investor in its ownership structure, which is evidenced by the β_{10} coefficient in regression 7, and although the coefficient has a positive value, it was not statistically significant.

These findings indicate that the presence of an institutional investor had little effect in positively influencing the company's *Tobin's Q*. Such evidence was found only when there is excess of voting power by the five largest shareholders. Under that condition, the presence of institutional investors mitigated the negative effect caused by excess voting power of the largest investors, as shown by the sum of the coefficients β_5 and β_9 in regression 6.

The evidence does not generate conclusions about whether the institutional investor itself practices leverage of voting power. However, from the previous results that suggest institutional investors are more likely to acquire shares without voting rights, we could infer that the leverage of voting power by the five largest shareholders would be *financed* through investments made by institutional investors. That is, in this case, institutional investors would have a greater chance of representing the interests of minority shareholders who are not part of the five largest investors, and of mitigating the risks of expropriation of the five largest investors, although at sub-optimal levels. Another possible explanation is that the largest shareholder tends to be able to attract resources from institutional investors that have different objectives to maximizing the company's value. It is argued that the estimates for the coefficients β_6 and β_8 support this statement, because they indicate the ineffectiveness of the presence of institutional investors to mitigate the risk of expropriation from the high ownership concentration of the largest shareholder (*Cont1*), or of their excess voting power (*Wedg1*).

Table 4. Effectiveness of institutional investors (*DLarg*) to increase the company's value

Var. - Tobin's Q	1	2	3	4	5	6	7
β_0 - Constant	3,03***	3,76***	3,09***	3,91***	3,07***	3,76***	3,05***
β_1 - <i>DLarg</i>	0,03	-0,008	-0,08	-0,34	-0,003	-0,04	-0,05
β_2 - <i>Cont1</i>	0,0009	-	0,0003	-	0,0009	-	0,009
β_3 - <i>Wedg1</i>	-0,09**	-	-0,10***	-	-0,12***	-	-0,09***
β_4 - <i>Cont5</i>		-0,001		-0,002		-0,001	
β_5 - <i>Wedg5</i>		-0,24***		-0,24***		-0,26***	
β_6 - <i>Cont1*DLarg</i>			0,002	-			
β_7 - <i>Cont5*DLarg</i>				0,004			
β_8 - <i>Wedg1*DLarg</i>					0,06	-	
β_9 - <i>Wedg5*DLarg</i>						0,10*	
β_{10} - <i>Out*DLarg</i>							0,10
β_{11} - <i>Out</i>	0,28*	0,23*	0,28*	0,22*	0,27*	0,23*	0,26*
β_{12} - <i>CGI</i>	0,27***	0,26***	0,27***	0,26***	0,27***	0,26***	0,27***
β_{13} - <i>CEOb</i>	0,05	0,05	0,05	0,05	0,05	0,05	0,05
β_{14} - <i>SizeBoard</i>	-0,007	-0,008	-0,007	-0,008	-0,007	-0,009	-0,008
β_{15} - <i>Ln TA</i>	-0,13**	-0,17***	-0,13**	-0,17***	-0,13***	-0,16***	-0,13***
β_{16} - <i>GrD/TA</i>	-0,005***	-0,005***	-0,005***	-0,005***	-0,005***	-0,005***	-0,005***
β_{17} - <i>ROA</i>	0,01***	0,01***	0,01***	0,01***	0,01***	0,01***	0,01
β_{18} - <i>Liquidity</i>	0,04	0,04	0,04	0,05	0,04	0,04	0,04
N (obs)	2747	2747	2747	2763	2747	2763	2747
N (companies)	409	409	409	410	409	410	409
Prob (Chi ²)	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Source: Authors using research data

Notes: The table shows regression results for equation 2, thereby verifying the effectiveness of the presence of institutional investors (*DLarg*), such as banks or pension funds, in increasing the company's value. The regressions were estimated using the fixed-effects model with White (1980) robust standard errors. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively

The coefficients of other characteristics of the board, such as the total number of members (*SizeBoard*) and the duality of the CEO functions, either as chairperson of the board of directors or as a regular board member (*CEOb*), were not statistically significant. On the other hand, the binary variable associated with adherence to the CGI presented a positive sign and was statistically significant in all analyzed regressions.

Still, in Table 4, it appears that the control variables related to firm size (*Ln TA*) and the volume of debt (*GrD/TA*) showed negative signs and were statistically significant in all regressions, while the variable related to operating performance to assets (*ROA*) presented a positive sign and was statistically significant in the analyzed regressions. Finally, the liquidity of the shares on the stock exchange (*Liquidity*) showed no statistically significant relationship with Tobin's Q.

A similar analysis, presented in Table 5, shows the regressions estimated considering the operating performance on assets (*ROA*) as the dependent variable. While the presence of institutional investors was not generally associated with Tobin's Q of the companies, except under restricted conditions, the presence of such investors in the capital of Brazilian companies was negatively associated with operating return on assets (*ROA*). The coefficient β_1 had a negative sign and was statistically significant in almost all analyzed regressions.

Data in Table 5 show that concentration of the largest shareholder (*Cont1*) or the five largest shareholders (*Cont5*), as well as variables related to excess voting power of such investors, (*Wedg1*) and (*Wedg5*), respectively, were not statistically significant in establishing relationship with financial performance measured by variable *ROA*. When

analyzing the interaction between those variables with *DLarg*, the coefficients β_6 to β_9 did not show a statistically significant relationship with the company's financial performance. This evidence suggests that the presence of institutional investors negatively affected the company's operating performance, as measured by *ROA*. The same results were found when replacing the dependent variable (*ROA*) by other financial metrics, such as operating margin, the return on equity (*ROE*), or annual growth of company net revenue (*ΔRec*). In addition, we highlighted that the methodology did not take into account the simultaneous relationship between the variables *DLarg* and *ROA*, since the less profitable companies had greater probability of attracting institutional shareholders, as shown in Table 3.

The coefficient of the board of directors' characteristics, the percentage of outside directors (*out*), was positive and statistically significant in all analyzed regressions except regression 2, which included the variable related to the dual leadership exercised by the same person, in the positions of CEO and chairperson of the board of directors (*CEOdu*). In regression 2, both variables *Out* and *CEOdu* showed no statistically significant correlation with financial performance. In the other regressions, the β_{14} coefficient was positive, possibly by taking into account the possibility of the CEO as a director, but being a regular member and not just assuming the role of chairperson. The number of board members (*Sizeboard*) was not statistically significant in the analyzed regressions.

Among the other control variables, such as firm size (*Ln AT*) and volume of debt (*GrD/TA*), only debt had a negative and statistically significant relationship with the financial performance in all analyzed regressions.

Table 5. Effectiveness of institutional investors (*DLarg*) to increase the company's financial performance

Var. -ROA	1	2	3	4	5	6	7
β_0 - Constant	12,80	18,94***	12,83	11,08	12,58**	9,97***	13,45*
β_1 - <i>DLarg</i>	-1,58***	-1,44**	-1,45	-4,35*	-1,38**	-1,71***	-3,85
β_2 - <i>Cont1</i>	-0,01	-0,01	-0,006		-0,01		-0,01
β_3 - <i>Wedg1</i>	0,38	0,35	0,17		0,54		0,38
β_4 - <i>Cont5</i>				-0,01		-0,007	
β_5 - <i>Wedg5</i>				0,84		0,58	
β_6 - <i>Cont1*DLarg</i>			-0,0009				
β_7 - <i>Cont5*DLarg</i>				0,03			
β_8 - <i>Wedg1*DLarg</i>					-0,36		
β_9 - <i>Wedg5*DLarg</i>						1,06	
β_{10} - <i>Out*DLarg</i>							2,64
β_{11} - <i>Out</i>	4,80*	-0,13	4,71*	4,85*	4,84*	4,88*	4,27*
β_{12} - <i>CGI</i>	-0,72	-0,76	-0,66	-0,65	-0,72	-0,62	-0,76
β_{13} - <i>CEOb</i>	1,83***		1,79***	1,76**	1,82**	1,79**	1,88***
β_{14} - <i>CEOdu</i>		-0,52					
β_{15} - <i>SizeBoard</i>	-0,13	-0,09	-0,12	-0,12	-0,13	-0,13	-0,14
β_{16} - <i>Ln TA</i>	-0,35	-0,43	-0,37	-0,23	-0,34	-0,22	-0,36
β_{17} - <i>GrD/TA</i>	-0,09***	-0,09***	-0,09***	-0,09***	-0,09***	-0,09***	-0,09***
N (obs)	2747	2747	2747	2763	2747	2763	2763
N (companies)	409	409	409	409	409	409	409
Prob (Chi ²)	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Source: Authors using research data

Notes: The table presents the regression results to verify the effectiveness of the presence of institutional investors (*DLarg*), such as banks or pension funds, to increase the company's financial performance (ROA). The regressions were estimated using the fixed-effects model, and White (1980) robust standard errors. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively

After verifying a relationship between the presence of institutional investors and Tobin's *Q* or the operating profitability of company assets (ROA), we attempted to verify if the presence of such investors in the company's ownership structure increased the likelihood ratio of CEO turnover (equation 3). Specifically, the aim was to verify the effectiveness of institutional investors in practicing monitoring activity.

The data in Table 6 show that the presence of institutional investors had no significant relationship with the replacement of the company's CEO. On the contrary, the presence of such investors reduced the likelihood ratio of the turnover of the CEO when the company has high levels of concentration of voting power by the largest shareholder.

Those statements were established when analyzing the β_2 coefficients of variable *DLarg*, which were not statistically significant in all regressions, and β_{10} of the interaction between *Cont1* and *DLarg*, which had a negative sign and was statistically significant in regression 5. The other interactions between *DLarg* and the variables associated with ownership concentration, such as *Cont5*, *Wedg1*, *Wedg5*, and *Fam*, were not statistically significant, indicating that the turnover of the CEO was not sensitive to the presence of institutional investors as shareholders of Brazilian companies during the sample period.

The percentage of outside directors (*Out*) increased the probability of CEO replacement, as identified by the coefficient β_3 , which was statistically significant in all regressions. However, there was no evidence that the effectiveness of the percentage of outside directors had an effect on the turnover of the CEO in companies with at least one

institutional investor in the group of the company's five largest shareholders.

The evidence presented in Table 6 suggests that the presence of institutional investors is not effective in preventing the possible practice of the entrenchment by the controlling shareholders. This is confirmed by negative and statistically significant relationships with the variables *Cont5* and *Fam*, which measure the percentage of voting power by the five largest shareholders and the family nature of the company's voting capital, respectively. In addition, a negative relationship that family nature assumes with the substitution of the CEO could be observed by the coefficient variable *CEOdu*, which refers to the dual functions of CEO and chairperson occupied by the same person.

Taken together, the results presented in Tables 4, 5, and 6, show little evidence that the presence of institutional investors add value to the company. On the contrary, the evidence allows the rejection of the hypothesis that the presence of institutional investors increases the chances of aligning the interests between controlling shareholders and minority shareholders, given its ineffectiveness in enhancing the operating profitability on assets and/or monitoring the CEO, and replacing it when needed.

Given such evidence and the fact that the institutional investor may be considered as a minority shareholder and in a better position than other minority shareholders to monitor the company's controlling shareholder, the question arises about what the benefit for the company is in attracting resources from institutional investors. Therefore, in Table 7, we analyze if the presence of institutional investors is associated with debt volume, measured as the ratio of gross debt to total assets (*GrD/TA*).

Table 6. Effectiveness of institutional investors (*DLarg*) in CEO turnover

<i>Var. -Turnover</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
β_1 - L_1 -Tobin's Q	-0,26*	-0,26*	-0,26*	-0,27*	-0,26*	-0,26*	-0,31***
β_2 - <i>DLarg</i>	-0,10	-0,28	-0,39	-1,27	0,48	-0,35	-0,24
β_3 - <i>Out</i>	3,33***	3,16***	3,15***	2,99***	3,33***	3,16***	3,96***
β_4 - <i>Out*DLarg</i>	-	-	-	1,14	-	-	-
β_5 - <i>Wedg1</i>	0,23	-	-	0,10	0,19	-	-
β_6 - <i>Wedg1*DLarg</i>	-0,26	-	-	-	-	-	-
β_7 - <i>Wedg5</i>	-	-0,35	-0,45	-	-	-0,36	-
β_8 - <i>Wedg5*DLarg</i>	-	-	0,31	-	-	-	-
β_9 - <i>Cont1</i>	-0,001	-	-	-0,001	0,02	-	-0,004
β_{10} - <i>Cont1*DLarg</i>	-	-	-	-	-0,014*	-	-
β_{11} - <i>Cont5</i>	-	-0,01*	-0,01*	-	-	-0,013*	-
β_{12} - <i>Cont5*DLarg</i>	-	-	-	-	-	0,00	-
β_{13} - <i>Fam</i>	-	-	-	-	-	-	-0,53*
β_{14} - <i>Fam*DLarg</i>	-	-	-	-	-	-	0,23
β_{15} - <i>CEOdu</i>	-0,62**	-0,58**	-0,58**	-0,61**	-0,62**	-0,59**	-
β_{16} - <i>SizeBoard</i>	-0,10*	-0,12**	-0,12**	-0,11**	-0,11**	-0,12**	-0,11**
β_{17} - <i>GCI</i>	-0,16	-0,18	-0,17	-0,17	-0,16	-0,18	-0,07
β_{18} - <i>Ln TA</i>	0,36*	0,28	0,28	0,35*	0,35*	0,28	0,38*
β_{19} - <i>ST Debt</i>	0,00	0,00	0,00	0,00	0,00	0,00	0,00
N (obs)	1406	1416	1416	1406	1406	1406	1420
N (companies)	192	194	194	192	192	192	192
Prob (Chi ²)	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Source: Authors using research data

Notes: The table shows the results of logit regressions to see if the presence of institutional investors (*DLarg*), such as banks or pension funds, is effective in promoting the replacement (turnover) of the CEO. The regressions were estimated using the fixed-effects model. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively

Table 7. Effectiveness of institutional investors (*DLarg*) in increasing the indebtedness of the company

<i>Var. -GrD/TA</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
β_0 - Constant	-81,57	-87,86***	-81,92***	-87,83***	-82,51**	-87,95**	-81,55**
β_1 - <i>DLarg</i>	1,88*	2,44**	2,64	2,36	2,96**	3,30**	1,81
β_2 - <i>Cont1</i>	-0,05*		-0,05		-0,05*		-0,05*
β_3 - <i>Wedg1</i>	2,73**		2,80**		3,59***		2,73**
β_4 - <i>Cont5</i>		0,01		0,01		0,01*	
β_5 - <i>Wedg5</i>		1,83		1,83		2,46	
β_6 - <i>Cont1*DLarg</i>			-0,01				
β_7 - <i>Cont5*DLarg</i>				0,000			
β_8 - <i>Wedg1*DLarg</i>					-1,97*		
β_9 - <i>Wedg5*DLarg</i>						-2,64	
β_{10} - <i>Out*DLarg</i>							0,07
β_{11} - <i>Out</i>	5,42	5,19	5,46	5,19	5,75	5,17	5,40
β_{12} - <i>CGI</i>	-4,99***	-4,61***	-4,99***	-4,61***	-4,99***	-4,66***	-5,00***
β_{13} - <i>CEOb</i>	0,74	0,62	0,73	0,62	0,66	0,59	0,74
β_{14} - <i>SizeBoard</i>	-0,20	-0,16	-0,21	-0,16	-0,21	-0,15	-0,20
β_{15} - <i>Ln TAt</i>	7,47***	7,66***	7,47***	7,66***	7,49***	7,64***	7,47***
β_{16} - <i>ROA</i>	-0,23***	-0,23***	-0,23***	-0,23***	-0,23***	-0,23***	-0,23***
N (obs)	2747	2747	2747	2763	2747	2763	2747
N (companies)	409	409	409	410	409	410	409
Prob (Chi ²)	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Source: Authors using research data

Notes: The table presents regression results to verify if the presence of institutional investors (*DLarg*), such as banks or pension funds, is effective in attracting debt resources to the company. Regressions were estimated using the fixed-effects model with White (1980) robust standard errors. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively

The data in Table 7 show that the presence of institutional investors (*DLarg*) positively affected the volume of debt contracted by the company, and the β_1 coefficient was statistically significant in all regressions except regression 3.

Regarding the variables of ownership concentration, it appears that the highest percentage

of control of the largest shareholder (*Cont1*) and the five largest shareholders (*Cont5*) had negative and positive effects, respectively, on volume of a company's debt. However, the magnitude of the parameters was relatively low, as shown in β_2 parameters, but statistically significant in all regressions, except regression 3, while β_4 was

statistically significant only in regression 6. When analyzing the excess voting power of the largest (*Wedg1*) and five largest shareholders (*Wedg5*), only the coefficient of *Wedg1* was positive and statistically significant in all regressions. This evidence suggests that excess voting power of the largest shareholder was not understood by company's creditors as a risk of expropriation, as understood by the minority shareholders. Another possible explanation is that lenders use collateral to protect themselves from the risk of expropriation, and excess voting power is a limiting factor for the company to attract funds in the stock market, which would increase the chances of debt being the main source of funding.

When analyzing the interaction between the presence of institutional investors and participation of the largest shareholder and five largest shareholders, we found that the interaction between *Wedg1* and *Dlarg* was statistically significant, with a negative effect, β_8 . One explanation for this evidence is that the volume achieved with equity resulting from investments by institutional shareholders in the company reduces their need for new loans. The exchange of debt for equity from institutional investors could increase the discretionary power that the controlling shareholder would have to allocate these resources, especially when institutional investors do not display the activism expected by other minority shareholders.

Only three control variables showed statistically significant coefficients in all the regressions: adherence to the CGI (*CGI*), firm size (*LnTA*), and operating return on assets (*ROA*). While most profitable companies and those with shares listed in the CGI tended to reduce the company's debt volume, possibly because of better opportunities to raise equity, the size of the company was a relevant aspect for the company to have higher debt (they had more assets for collateral). The variables related to the board of directors, such as the number of members (*SizeBoard*), the percentage of outside directors (*Out*), and the dual role of the CEO as a regular board member (*CEOb*), did not show significant coefficients in all analyzed regressions.

5. CONCLUSIONS

The objective of this study was to identify and verify the reasons for and implications of the presence of institutional investors, such as banks or investment funds, in Brazilian companies. No evidence was found that the presence of institutional investors mitigates the risk of expropriation of minority shareholders at Brazilian companies or that such investors mitigate this conflict. The presence of a bank or an investment fund in the ownership structure of Brazilian companies seems to be influenced by business characteristics that are associated with the practice of leverage of the voting power of the controlling shareholder. This is contrary to the evidence and arguments that such investors are more likely to avoid making investments in companies with poor quality of corporate governance, as identified by Giannetti and Simonov (2006), Li et al. (2006), and Leuz et al. (2009). Moreover, it turns out that, on the one hand, the presence of institutional investors is not

associated with increasing value of companies or with monitoring the CEO or controlling shareholder. On the other hand, the evidence suggests that the presence of institutional investors mitigates the agency conflicts between shareholders and creditors, but possibly at the expense of minority shareholders. Thus, we infer that the development of best corporate governance practices depends on the interest of the controlling shareholder, which is able to find alternatives to effect its preference for entrenchment and protect against hostile takeovers, even signaling to the market that it has been engaged in improving the quality of corporate governance within the company.

Finally, it appears that the presence of institutional investors in Brazilian companies' ownership structure plays an unforeseen role in agency theory, enabling greater leverage of the voting power of the largest shareholder of the company and in this way, accentuating the agency conflict between controlling shareholders and minority shareholders. Analyzed together, these findings contrast with those of McCahery et al. (2010) and Iliev et al. (2015), who argued that the presence of institutional investors was a possible solution for companies to improve their corporate governance systems. On the other hand, our results are consistent with those of Amaral et al. (2008) in Brazil, who found evidence that the presence of institutional investors, as well as excess voting power of the largest shareholder, were associated with longer delays in the disclosure of financial reports. It appears, therefore, that corporate governance development still lacks evidence for a better understanding of what the relevant aspects of ownership structure are for mitigating possible agency conflicts between controlling and minority shareholders in emerging markets.

The main limitation of this study is that it did not use alternative proxies associated with the characteristics of institutional investors. In this sense, future research could explore the divisions between banks and pension funds based on whether they are public or private, and domestic or foreign. In addition, future studies could verify the ownership of the institutional investor, with the aim of explaining why these investors fail to mitigate the agency conflict between controlling and minority shareholders. In addition, future studies could verify the diversification of institutional investors, since these characteristics may affect decision-making processes in companies, especially the risk level of investments, as argued Dhillon and Rossetto (2015). Finally, future work may seek to explain what makes the institutional investor engage in activism for corporate governance in Brazil. Parrino et al. (2003), McCahery et al. (2010), and Iliev et al. (2015), for example, provide possible starting points to meet this goal. Another suggestion for future research is verification of the relevance of political factors that motivate the choice of institutional investors, such as banks or pension funds, to invest in Brazilian companies, as developed by Claessens et al. (2008).

REFERENCES

1. Aggarwal, R., Erel, I., Ferreira, F., and Matos, P. (2011), "Does governance travel around the world? Evidence from institutional investors", *Journal of Financial Economics*, Vol. 100, No. 1, pp. 154-181.

2. Amaral, H.F., Iquiapaza, R.A., Tomaz, W.P., and Bertucci, L.A. (2008), "Governança corporativa e divulgação de relatórios financeiros anuais (Corporate governance and release of annual financial statements)", *Contabilidade Vista & Revista*, Vol. 19, No. 1, pp. 61-82.
3. Black, B.S., Carvalho, A.G., and Sampaio, O.J. (2014), "The evolution of corporate governance in Brazil", *Emerging Markets Review*, Vol. 20, pp. 176-195.
4. BM&FBovespa. (2014), "Comparative list of segments". available at: <http://www.bmfbovespa.com.br/pt_br/listagem/acoes/segmentos-de-listagem/sobre-segmentos-de-listagem/>, accessed September 22, 2014.
5. Chung, K. and Zhang, H. (2011), "Corporate governance and institutional ownership", *Journal of Financial and Quantitative Analysis*, Vol. 46 No. 1, pp. 247-273.
6. Claessens, S., Feyen, E.E., and Laeven, L. (2008), "Political connections and preferential access to finance: the role of campaign contributions", *Journal of Financial Economics*, Vol. 88, No. 3, pp. 554-580.
7. DeFond, M. and Hung, M. (2004), "Investor protection and corporate governance: evidence from worldwide CEO turnover", *Journal of Accounting Research*, Vol. 42, No. 2, pp. 269-312.
8. Dhillon, A. and Rossetto, S. (2015), "Ownership structure, voting, and risk", *Review of Financial Studies*, Vol. 28, No. 2, pp. 521-560.
9. Faccio, M., Lang, L.H.P., and Young, L. (2010), "Pyramiding vs leverage in corporate groups: international evidence", *Journal of International Business Studies*, Vol. 41, No. 1, pp. 88-104.
10. Fernandes Jr, M. and Barros, L.A.B.C. (2010), "O controle familiar ou individual e o desempenho das companhias abertas brasileiras (The family or individual control and performance of Brazilian companies)", In: *Brazilian Meeting of Finance*, 2010, São Paulo. Proceedings of the Brazilian Meeting of Finance, Sao Paulo: SBFIN.
11. Ferreira, F. and Matos, P. (2008), "The colors of investors' money: the role of institutional investors around the world", *Journal of Financial Economics*, Vol. 88, No. 3, pp. 499-533.
12. Giannetti, M. and Simonov, A. (2006), "Which investors fear expropriation? Evidence from investors' portfolio choices", *Journal of Finance*, Vol. 61, No. 3, pp. 1507-1547.
13. Gillan, S. and Starks, L. (2003), "Corporate governance, corporate ownership, and the role of institutional investors: a global perspective", *Journal of Applied Finance*, Vol. 13, No. 2, pp. 4-22.
14. Gorga, E. (2009), "Changing the paradigm of stock ownership from concentrated towards dispersed ownership? Evidence from Brazil and consequences for emerging countries", *Northwestern Journal of International Law & Business*, Vol. 29, No. 2, pp. 439-554.
15. Grossman, S. and Hart, O. (1980), "Takeover bids, the free rider problem, and the theory of the corporation", *Bell Journal of Economics*, Vol. 11, No. 1, pp. 42-64.
16. Iliev, P., Lins, K.V., Miller, D.P., and Roth, L. (2015), "Shareholder voting and corporate governance around the world", *Review of Financial Studies*, Vol. 28, No. 8, pp. 2167-2202.
17. Brazilian Institute of Corporate Governance (IBGC). (2014) "Governança que cria valor: um processo em evolução" (Governance that creates value: a process in evolution), available at: <<http://www.ibgc.org.br>>, accessed September 20, 2014.
18. Jensen, M.C. and Meckling, W. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3, No. 4, pp. 305-360.
19. Lazzarini, S.G. (2007), "Mudar tudo para não mudar nada: análise da dinâmica de redes de proprietários no Brasil como 'mundos pequenos' (Changing everything to change nothing: analyzing the dynamics of owner networks in Brazil as small worlds)", *Revista de Administração Eletrônica (Electronic Management Journal)*, Vol. 6, No. 1, Article 6.
20. Leuz, Christian, Lins, K., and Warnock, F. (2009), "Do foreigners invest less in poorly governed firms?", *Review of Financial Studies*, Vol. 22, No. 8, pp. 3245-3285.
21. Li, D., Moshirian, F., Pham, P.K., and Zein, J. (2006), "When financial institutions are large shareholders: the role of macro corporate governance environments", *The Journal of Finance*, Vol. 61, No. 6, pp. 2975-3007.
22. Liu, Q. and Tian, G. (2012), "Controlling shareholder, expropriations and firm's leverage decision: evidence from Chinese non-tradable share reform", *Journal of Corporate Finance*, Vol. 18, No. 4, pp. 782-803.
23. McCahery, J.A., Sautner, Z., and Starks, L.T. (2010), "Behind the scenes: the corporate governance preferences of institutional investors", available at: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1571046>, accessed February 26, 2015.
24. Mendes-Da-Silva, W., Famá, R., and Martelanc, R. (2007), "Governança corporativa e decisões de estrutura de capital em empresas brasileiras de capital aberto (Corporate governance and capital structure decisions in Brazilian public companies)", In: *Proceedings of XXXI Meeting of the Association of Graduate Programs and Research in Business Administration*, 2007, Rio de Janeiro: ANPAD.
25. Morck, R., Nakamura, M., and Shivdasani, A. (2000), "Banks, ownership structure, and firm value in Japan", *The Journal of Business*, Vol. 73, No. 4, pp. 539-567.
26. Paligorova, T. and Xu, Z. (2012), "Complex ownership and capital structure", *Journal of Corporate Finance*, Vol. 18, No. 4, pp. 701-716.
27. Parrino, R., Sias, R., and Starks, L. (2003), "Voting with their feet: institutional ownership changes around forced CEO turnover", *Journal of Financial Economics*, Vol. 68, No. 1, pp. 3-46.
28. Punsulvo, F.R., Kayo, E.K., and Barros, L.A.B. (2007), "Activism of pension funds and corporate governance quality", *Revista de Contabilidade e Finanças (Accounting and Finance Journal)*, Vol. 18, No. 45, pp. 63-72.
29. Shleifer, A. and Vishny, R. (1986), "Large shareholders and corporate control", *Journal of Political Economy*, Vol. 94, No. 3, pp. 461-488.
30. White, H. (1980). "A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity", *Econometrica*, Vol. 48, No. 4, pp. 817-838.

THE DETERMINANTS OF FIRM VALUE: THE ROLE OF EARNINGS MANAGEMENT AND GOOD CORPORATE GOVERNANCE

Steph Subanidja*, Aiaz Rajasa*, Eduardus Suharto*, Jalu Dwi Atmanto**

*Faculty of Business and Economic, Perbanas Institute, Jakarta, Indonesia

**The Ministry of Women Empowerment and Child Protection, Jakarta, Indonesia

Abstract

The conflict of interest between managers (agents) and the owner (principals) occurs all the time, although the level of the conflict is not always similar. This is because there are separation roles or a difference of interests. In many Indonesian banks, the implementation of Good Corporate Governance (GCG) is mandatory. But, in manufacturing companies in Indonesia, GCG is still not a must. So, what is the role of GCG in conjunction with firm value in manufacturing companies? In addition, many manufacturing companies use earnings management as a benchmark of firm value. It is clear that earnings management can be placed as an antecedent of firm value. The purpose of this research is to analyze the determinants of firm value in relation to earnings management and the mechanism of GCG as a moderating variable. The GCG is not viewed as an antecedent variable. The research sample is 46 companies in the entire industry of consumer goods of manufacturing companies in the Indonesia Stock Exchange. By specific considerations, the number of the sample is reduced to 39 out of 46 companies. The method used is a moderated regression analysis (MRA). The results show that the earnings management and the mechanism of GCG have an impact on the firm value. The dimension of GCG, namely, independent commissioner, managerial ownership, and audit quality can be placed as moderating variables and as determinants of firm value. In order to increase the firm value, it is advisable that this industry should strictly apply the mechanism of GCG as mandatory. However, the issue of GCG as an independent or moderating variable still remains debatable.

Keywords: Firm Value, Earnings Management, Good Corporate Governance (GCG)

1. INTRODUCTION

Approaches to measuring the firm value are not always the same in each company due to varying purposes of doing business. However, a company's profit tends to be a tool to measure the firm value. Furthermore, GCG serves as a good benchmark for, at least, showing society including customers that the company is well managed. Nevertheless, many companies, including manufacturing companies in Indonesia, do not use GCG as a variable which is used to operate the business.

As an antecedent of a firm value, earnings management needs to be done properly. Nevertheless, the implementation of earnings management may result in an accounting scandal caused by the conflict of interest between an agent and the principal. Role separation between the agent and the principal and information asymmetry lead to weak decision-making (Siallagan and Machfoedz, 2006).

Agency theory provides a view that management problems, in particular, the issue of earnings management, can be eradicated by supervisory mechanisms of GCG. Barnhart and Rosenstein (1998) state that some mechanisms of GCG are expected to address the problem of the agency.

Several studies related to earnings management and GCG mechanism show that some GCG mechanisms and earnings management have a negative effect on company performance (Midiastuty and Machfoedz, 2003; Meutia, 2004; Wedari, 2004; Suranta and Midiastuty, 2004; Ujiyantho and Pramuka, 2007 and Herawaty, 2008) whereas other GCG mechanisms, namely managerial ownership, board of commissioners, the proportion of independent commissioners and the number of the board of directors and earnings management, have a positive impact on the firm value (Suranta and Midiastuty, 2004 and Ujiyantho and Pramuka, 2007). In the aforementioned research, GCG was regarded as an antecedent.

The novelty of this research lies in viewing the GCG mechanism as a moderating variable which makes GCG optional. The aim of this research is to analyze the trigger impact of GCG and earnings management on firm value of manufacturing companies in Indonesia, with GCG as a moderating variable.

2. STUDY OF LITERATURE

The main purpose of a company is to maximize prosperity for shareholders (principals). Management, including workers as agents who are appointed by the shareholders, is working in a

company for some benefits of shareholders. In some cases, role difference between agents and principles creates a conflict. The conflict occurs due to several reasons. Eisenhard (1989) in Sabeni (2005) argue that the conflict is grounded by three basic assumptions: (1) assumption about human nature, (2) organizational assumption, and (3) assumption about information.

Beaudoin, Cianci and Tsakumis (2015) inform that incentive conflict and ethics management (EM) interact to determine CFOs' discretionary accruals such that (a) in the presence of incentive conflict, CFOs with low (high) EM-Ethics tend to give in to (resist) the personal incentive by booking higher (lower) expense accruals; and (b) in the absence of an incentive conflict, CFOs with low (high) EM-Ethics tend to give in to (resist) the corporate incentive by booking lower (higher) expense accruals. We also find support for a mediated-moderation model in which CFOs' level of EM-Ethics influences their moral disengagement tendencies which, in turn, differentially affect their discretionary accruals, depending on the presence or absence of incentive conflict.

Both principals and agents have bargaining positions. Principals, being the owners of the capital, have access rights to the company's internal information, while agents, who run the company, have real and thorough information about the operation and performance of the company. At the same time, agents do not have absolute authority over decision making, particularly over strategic and long-term decisions. It is the latter decisions that allow the principal authority remain the owner of the company.

The position, function, interests, and background of principals and agents are different and mutually contradictory, but both parties need each other. The contradictory nature of agent-principal relationship causes conflict in practice. The role asymmetry gives rise to difficulties of monitoring and controlling the agent's actions. Jensen and Meckling (1976) state that problem is about moral hazard and adverse selection.

Agency concept is expected to serve as a tool to give confidence that (1) the manager will give an advantage to investors, (2) investors will not be embezzled by investing into projects that do not create a benefit, and (3) the investor can control managers (Shleifer and Vishny, 1997 and Herawaty, 2008). A GCG problem appears due to an agency conflict. In other words, it is necessary to reduce some problems of the GCG agency.

There exists no certain definition of GCG. The concept of GCG can be seen based on the Shareholding Theory (Monks and Minow (1995), Sabeni (2005)). While the World Bank defines the GCG as a collection of laws, regulations and norms that must be met, which may encourage the performance of company resources for functioning efficiently generating economic long-term sustainable value for shareholders as well as the surrounding communities as a whole.

FCGI (Forum for GCG in Indonesia) in 2000, described GCG as that including transparency, disclosure, independence, accountability, responsibility, and fairness. According to the Cadbury Report (1992), the main principles of GCG are transparency, integrity, and accountability.

Meanwhile, the Organization for the Economic Corporation and Development (OECD), mentions that basic principles of GCG include fairness, accountability, transparency, and corporate responsibility.

These principles are expected to be a point of reference for government in building a framework for GCG implementation. Businessmen and capital market principals can take them as a guideline in implementing the best practices for increasing value and sustainability of the company.

Boediono (2005) informs that GCG mechanism is a system which is able to control, direct and execute some activities of the company as well as the parties that are involved in it. Thus, it can be used to suppress the occurrence of agency problems. In addition, Shleifer and Vishny (1997), Ujijantho and Pramuka (2007) state that the mechanism of GCG is required in order to reduce agency problem that takes place between the owners and the managers.

Research on GCG has produced a variety of mechanisms that aim to ensure managers' actions aligned with the interests of the stakeholders. According to Barnhart and Rosenstein (1998) mechanisms of the GCG may be divided into two perspectives: (1) internal mechanisms, like composition of board of directors/commissioners, managerial ownership and executive compensation, and (2) external mechanisms, such as controlling the quality of auditing and the level of debt financing by the market.

Some researchers provide different definitions of earnings management. Fisher and Rosenzweig (1995), Healy & Wahlen (1999), Sugiri (1998), and Scott (1997), mention that earnings management is the management of intentional efforts to manipulate financial statement, in the limits allowed by the accounting principles, with the aim to provide misleading information to the users. The normative objective of financial decision is to maximize the firm value which can be measured using Tobin's Q Ratio (1967). This ratio can explain many phenomena in the activities of the company such as the occurrence of cross-sectional differences in the decision-making of investment and diversification, as well as the relationship between share ownership and corporate value management (Sukamulja, 2004).

This ratio is a concept which suggests that the current financial market can be estimated by the value of the returns of investment (Herawaty, 2008). A greater value of Tobin's Q ratio shows that the company has good growth prospects. According to Brealy and Myers (2000) in the Sukamulja (2004), companies with a high Tobin's Q ratio usually have a strong brand image of companies. On the contrary, companies that have low Tobin's Q ratio are generally involved in a very competitive industry or an industry that begins to shrink.

Sloan Research (1996) in Herawaty (2008) shows that the performance of profits derived from components of accrual earnings management activities has a persistence of being lower than its cash flow. Whereas, in relation to the mechanism of GCG, Klapper and Love (2002) in Herawaty (2008) find a positive relationship between the mechanism of GCG and company performance as measured by Return on Assets (ROA) and Tobin's Q ratio. Moreover, it is said that the implementation of GCG

makes more sense in developing countries than in developed countries. It shows that companies which have implemented GCG will gain greater benefit in emerging countries.

In conjunction with this research, Midiastuty and Machfoedz (2003) conclude that: (1) managerial and institutional ownership is associated with negative income, whereas, the number of BOD is associated with positive earnings management; (2) managerial and institutional ownership is positively associated with the quality of earnings, but the number of BOD has no effect on the quality of earnings. Furthermore, the managerial and institutional ownership is associated with negative earnings, while the size of BOD correlates with positive earnings. Managerial and institutional ownership also has a positive correlation with the quality of earnings.

Meutia (2004) mentions that (1) the higher quality of auditing will have lower earnings management, (2) non-audit services have impact on the quality of auditing through increasing absolute discretionary accruals at the time the company received non-audit services, and (3) the longer-term auditor in a workplace will improve audit quality.

Christensen, Kent, Routledge and Stewart (2015) state that formation of an audit committee is significantly associated with improved earnings quality for small and large companies. However, compliance with other governance recommendations is not systematically associated with improved performance or earnings quality.

Wedari (2004) shows that (1) the proportion of BOD and the audit committee have a significantly negative effect on earnings management, (2) the interaction between the BOD and the audit committee is not effective in reducing the earnings management activities, (3) managerial and institutional ownership do not have an apparent influence on earnings management activities, and (4) the quality of an auditor has a negative influence on earnings management activities.

Kothari, Mizik and Roychowdhury (2016) state that earnings management is most consistently and predictably linked with post-seasoned equity offering stock market underperformance when it is driven by real activities manipulation. Demerjian, Lewis-Western and McVay (2015) show that intentional smoothing by high-ability managers is not associated with declines in future operating performance.

Boediono (2005) mentions that managerial ownership and the composition of the board of commissioners have an impact on earnings management. Midiastuty and Suranta (2004) show that audit committee and the institutional ownership have a weak effect on implementing the mechanisms of GCG. Meanwhile, independent commissioners, size of BOD, and the managerial ownership play a limitation role in implementing the GCG.

Siallagan and Machfoedz (2006) conclude that the mechanism of GCG has an impact on firm value. In addition, Herawaty (2008) shows that earnings management has an effect on firm value and implementation of GCG, which is represented through institutional ownership, managerial ownership, quality of auditing. Besides, independent commissioners also have an effect on firm value.

Black, Kim, Jang and Park (2015) conclude that large firms, whose controllers have incentive to tunnel, earn strong positive returns, relative to mid-sized firms. Authors also show that better governance moderates the negative effect of related-party transactions on value and increases the sensitivity of firm profitability to industry profitability.

The outlined concept and some of the abovementioned research give us the following research model.

2.1. Model 1

$$Q_{it} = \alpha_0 + \alpha_1 EM_{it} + \alpha_2 LEV_{it} + \alpha_3 SIZE_{it} + e \quad (1)$$

2.2. Model 2

$$Q_{it} = \alpha_0 + \alpha_1 IO_{it} + \alpha_2 MO_{it} + \alpha_3 IC_{it} + \alpha_4 QA_{it} + \alpha_5 LEV_{it} + \alpha_6 SIZE_{it} + e \quad (2)$$

2.3. Model 3

$$Q_{it} = \alpha_0 + \alpha_1 EM_{it} + \alpha_2 IO_{it} + \alpha_3 MO_{it} + \alpha_4 IC_{it} + \alpha_5 QA_{it} + \alpha_6 |EM_{it} - IO_{it}| + \alpha_7 |EM_{it} - MO_{it}| + \alpha_8 |EM_{it} - IC_{it}| + \alpha_9 |EM_{it} - QA_{it}| + \alpha_{10} LEV_{it} + \alpha_{11} SIZE_{it} + e \quad (3)$$

Where Q_{it} = Tobin's Q ratio = proxy of company value in year t ; α_0 = constant; $\alpha_1, \dots, \alpha_{11}$ = regression coefficient of each variable; EM_{it} = earnings management in year t ; IO_{it} = institutional ownership percentage in year t ; MO_{it} = percentage of managerial ownership in year t ; IC_{it} = percentage of the total independent commissioners in year t ; QA_{it} = quality of audit = dummy variable; LEV_{it} = leverage company in year t , the ratio is between total debt and total assets; $SIZE$ = size of company, proxy with value of natural logarithm of company's equity markets at the end of the year, the number of shares at the end of the year, and the stock market price; e = error term.

3. RESEARCH METHODS

The method of this research is *ex post facto*. The approach used is the moderated regression analysis (MRA) which considers the mechanism of GCG as a moderating variable. The sample of this research is the entire industry of consumer goods manufacturing companies that are listed on the Indonesia stock exchange (IDX), that is, 46 companies. Criteria which are used to calculate the sample include: (1) companies in sub-groups of consumer goods manufacturing, (2) listed companies, (3) companies that publish financial reports, (4) companies that published financial statements on 31 December, and (5) companies which have the completeness of data and information regarding institutional, managerial ownership, independent commissioner and public accountant. From the obtained sample criteria, the sample of this research is 39 companies.

The mechanisms of GCG that are used in this research are the internal mechanisms, namely, the institutional ownership, managerial ownership, independent commissioners, and the external mechanism of the quality of auditing. The firm value is seen in terms of financial ratios and changes in

stock prices. The firm value is measured using Tobin's Q ratio, which compares the value of the market value of assets and the book value of assets (Sukamulja, 2004). The market value of equity is derived from the value of market capitalization. The book value of assets is obtained from the total assets. The book value of the equity is acquired from shareholder equity. The greater value of Tobin's Q ratio shows that the company has good growth prospects.

Earnings management is measured by proxy of the discretionary accruals. The value of discretionary accruals is calculated with the modified model by Jones (Dechow *et al.*, 1995 in Midiastuty and Machfoedz, 2003). This model uses the total accrual which is classified into discretionary and non-discretionary components. Institutional ownership is measured through the number of share ownership by the institution such as insurance companies, banks, investment companies, asset management and ownership of other institutions. Indicators which are used to measure institutional ownership are the percentage of shares, owned by the institution.

Managerial ownership is measured through the number of share in ownership. The ownership, in this study, is placed as a dummy variable. The independent commissioner is measured based on a number of the board of commissioners who are not affiliated with management, free from any business or other relationships that can affect their ability to act independently or acting solely in the interest of the company. The composition of independent commissioners is calculated based on the total number of independent commissioners in the board of commissioners divided by the total number of commissioners.

The quality of auditing is a systematic review process, based on certain quality standards and is conducted by a professional auditor. The audit quality is measured by classifying the audit conducted by a public accountant. Control variables are the leverage and the size of the company. The leverage is measured by the ratio of total debt to total assets, while the size is measured by using a natural logarithm of total assets (Midiastuty and Machfoedz, 2003).

The data of the research is pool data from Indonesia stock Exchange (IDX), Indonesian Capital Market Directory (ICMD), and JSX Statistics. Data processing techniques are descriptive statistical, causality relationship, and moderated regression analysis.

4. RESULTS AND DISCUSSION

Model I shows that the value of adjusted R² is 0,091 and the regression equation is:

$$\begin{array}{l} \text{InverseQ}_{it} = -1.627 + 0.047 \text{InversePM}_{it} + 63.464 \\ \quad \text{InverseLEV}_{it} + 0.067 \text{InverseSIZE}_{it} \\ t \quad -3.4 \quad 3.563 \quad 4.971 \quad 1.429 \\ \text{sig.} \quad 0.001 \quad 0.000 \quad .0.000 \quad 0.154 \end{array} \quad (4)$$

From this equation, it can be concluded that there are two variables that significantly affect the firm value (Q_{it}), namely, earnings management (PM_{it}) and leverage (LEV_{it}). However, the control variable

that is size of company (SIZE_{it}) does not significantly influence the firm value (Q_{it}).

In regression model II, the value adjusted R² is 0,128, and regression equation is:

$$\begin{array}{l} \text{Inverse Q} = -0,079 - 0,654 \text{IO}_{it} + 0,154 \text{MO}_{it} - \\ 0,295 \text{IC}_{it} - 0,163 \text{QA}_{it} - 51,430 \text{InverseLEV}_{it} - 0,173 \\ \quad \text{InverseSIZE}_{it} \end{array} \quad (5)$$

Based on model II, it can be concluded that there are four variables that significantly influence the firm value variables (Q_{it}), i.e., three independent variables and one control variable. The variables are as follows: (1) managerial ownership (PM_{it}), (2) the independent commissioner (IO_{it}), (3) the quality of auditing (QA_{it}), and (4) leverage (LEV_{it}). Meanwhile, the control variables that are institutional ownership (IO_{it}) and size (SIZE_{it}) do not significantly influence the firm value (Q_{it}).

Regression Model III shows that adjusted R square is 0,256. The equation of model III is shown as follows.

$$\begin{array}{l} Q_{it} = -575 + 258 \text{PM}_{it} + 0.24 \text{IO}_{it} + 98 \text{MO}_{it} - 0.063 \text{IC}_{it} - \\ \quad 0.056 \text{QA}_{it} - 210 \text{PM}_{it} - \text{IO}_{it} - 111 \text{PM}_{it} - \text{MO}_{it} - \\ \quad 0.077 \text{PM}_{it} - \text{IC}_{it} - 100 \text{PM}_{it} - \text{QA}_{it} + 45.584 \text{LEV}_{it} + \\ \quad 107 \text{SIZE}_{it} + e \end{array} \quad (6)$$

Based on the equation model III, it can be concluded that the quality of auditing is not significant as a moderating variable whereas institutional ownership, managerial ownership, and independent commissioners are significant as moderating variables. Moreover, those three variables decrease an effect of earnings management on firm value. These variables as manifest variables of latent variable, that is GCG do not increase the influence of earnings management on firm value. It indicates that there is a conflict of interest between an agent and a principal. In addition, the size of a company and institutional ownership do not affect firm value. Based on the value of R square, the biggest number of R square is model number III. Thus, this model is more appropriate to measure firm value.

The research result shows that improvement in earnings management will improve the firm value. This result is in compliance with research result of Sloan (1996) in Herawaty (2008) that earnings management, in a short period of time, has the capability to improve the firm value. Does the mechanism of GCG influence the firm value? This research informs that institutional ownership does not have an effect on firm value. This result is not in compliance with the research result of Herawaty (2008). A high percentage of institutional ownership in Indonesian public companies, enable institutional investors to intervene with management process and composition of financial reports.

The research result also shows that the mechanism of GCG which is represented by managerial ownership has a negative effect on firm value. This result is not in compliance with the research result conducted by Jensen and Meckling (1976). However, this research is in compliance with Herawati (2008). This result indicates that the proportion of managerial ownership can reduce the firm value. It means that many Indonesian companies in this sample have a significant number

of shares. Thus, they have enough votes to control management activities.

In addition, the mechanism of GCG, which is represented by an independent commissioner, has a positive effect on firm value. This result is similar to Herawaty's (2008) and Midiastuty and Machfoedz's (2003) research results. It means that the presence of independent commissioners can influence earnings management activities, such as reducing moral hazard, and the firm value.

Moreover, the mechanism of GCG, which is represented by the quality of the audit, has a positive impact on the firm value. It means that the firm value will increase when the company is audited by a public accountant. This result is in compliance with Meutia's (2004) research result.

Additionally, the mechanism of GCG, with proxy by institutional ownership, independent commissioner, and the quality of auditing, simultaneously, has a positive impact on firm value. This result is in consistence with Herawati's (2008) research result.

Furthermore, the mechanism of GCG with proxy by institutional ownership, managerial ownership, an independent commissioner, and the quality of auditing simultaneously has a negative effect on firm value. It means that those manifest variables have the capability to reduce the cost of the agency by controlling the conflict of interest between the principal and the agent. This way the firm value can be improved.

5. CONCLUSIONS AND RECOMMENDATIONS

Based on the research results, it can be concluded that: (1) earnings management has a positive impact on firm value, (2) institutional ownership does not have an impact on firm value, (3) managerial ownership has a negative effect on firm value, (4) an independent commissioner has a positive effect on the firm value, (5) the quality of auditing has a positive effect on firm value, (6) leverage of a company as a control variable, has a positive and significant effect on firm value (7) company's size as a control variable has a negative but not a significant effect on firm value, (8) the mechanism of GCG with proxy by (a) institutional ownership; (b) managerial ownership; (c) an independent commissioner; and (d) the quality of auditing has a positive and significant effect on firm value, and these manifest variables of GCG as a latent variable can be placed as a moderating variable on the effect of earnings management on firm value. Theoretically, earnings management has a positive impact on firm value. However, firm value can be manipulated through financial statements.

In this research, manifest variables which are used to measure the mechanism of GCG as a latent variable are only four manifest variables. Managerial ownership cannot be used due to inability to measure the amount of shares. The quality of auditing is only measured by using one measurement, whether it is audited or not audited by a public accountant.

The low coefficient of adjusted R^2 on all models of regression, in this research, shows that there are still many other variables that can affect the relationship between earnings management and firm value. In model III, there is no "multicollinearity"

result, so there is no correlation between independent variables.

This research suggests that the effect of earnings management on firm value is just a temporary situation. A company should consider many aspects in the long period of time. It is not only financial aspects but also all strategic aspects. The mechanism of GCG is able to reduce the effect of earnings management on firm value. Therefore, it is predicted that earnings management activities still evoke the conflict of interest between the principal and the agent. However, it is highly suggested that the mechanism of GCG can be applied as a moderating variable, and this variable can also be a mandatory variable to convince the public that a company is well governed. However, GCG can be considered as an independent or moderating variable in the future research.

REFERENCES

1. Ardiati, Aloysia Yanti (2003). Pengaruh Manajemen Laba terhadap Return Saham dengan Kualitas Audit sebagai Variabel Pemoderasi, Surabaya: Simposium Nasional Akuntansi VI.
2. Barnhart, Scott W. dan Rosenstein, Stuart (1998). Board Composition, Managerial Ownership, and Firm Performance: An Empirical Analysis. Financial Review, November. Available on-line at <http://ssrn.com/abstract=127689> (accessed on November 12, 2012)
3. Beaudoin, C. A., Cianci, A. M., & Tsakumis, G. T. (2015). The impact of CFOs' incentives and earnings management ethics on their financial reporting decisions: The mediating role of moral disengagement. Journal of business ethics, 128(3), 505-518.
4. Boediono, Gideon S.B. (2005). Kualitas Laba: Studi Pengaruh Mekanisme GCG dan Dampak Manajemen Laba dengan Menggunakan Analisis Jalur, Surakarta: Simposium Nasional Akuntansi VIII.
5. Black, B. S., Kim, W., Jang, H., & Park, K. S. (2015). How corporate governance affect firm value? Evidence on a self-dealing channel from a natural experiment in Korea. Journal of Banking & Finance, 51, 131-150.
6. Brigham, Eugene F dan J Fred Weston (1994). Dasar-Dasar Manajemen Keuangan, Jilid 2. Edisi Kesembilan, Jakarta: Erlangga.
7. Cadbury, Adrian. (1992). Report of The Committee on The Financial Aspects of GCG, London: Gee.
8. Chen, X., Cheng, Q., & Wang, X. (2015). Does increased board independence reduce earnings management? Evidence from recent regulatory reforms. Review of Accounting Studies, 20(2), 899-933.
9. Chu, J., Dechow, P. M., Hui, K. W., & Wang, A. Y. (2016). The Valuation Premium for a String of Positive Earnings Surprises: The Role of Earnings Manipulation. Available at SSRN 2607219.
10. Christensen, J., Kent, P., Routledge, J., & Stewart, J. (2015). Do corporate governance recommendations improve the performance and accountability of small listed companies?. Accounting & Finance, 55(1), 133-164.
11. Darmawati, dkk. (2005). Hubungan GCG dan Kinerja Perusahaan. Jurnal Riset Akuntansi Indonesia, 8, (6), 65 - 81.
12. DeAngelo, Linda Elizabeth (1981). Auditor Size and Audit Quality. Journal of Accounting and Economics 3, (3), 183 - 199.

13. Demerjian, P. R., Lewis-Western, M. F., & McVay, S. E. (2015). Earnings Smoothing: For Good or Evil?. Available at SSRN 2426313.
14. Departemen Keuangan Republik Indonesia (2002).Siaran Pers Badan Pengawas Pasar Modal Tanggal 27 Desember 2002, Jakarta: Badan Pengawas Pasar Modal.
15. Departemen Keuangan Republik Indonesia (2003).Siaran Pers Hasil Pemeriksaan Kasus Laporan Keuangan dan Perdagangan Saham PT Bank Lippo Tbk 17 Maret 2003, Jakarta: Badan Pengawas Pasar Modal.
16. Effendi, Muh.Arief (2009).The Power of GCG, Teori dan Implementasi, Jakarta: Salemba Empat.
17. Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of management review*, 14(1), 57-74.
18. Faisal (2004), Analisis Agency Costs, Struktur Kepemilikan dan Mekanisme GCG,Bali: Simposium Nasional Akuntansi VII.
19. Fama, Eugene F. dan Jensen, Michael C. (1983). "Agency Problems and Residual Claims," *Journal of Law and Economics*, 26, (2), 327 - 357. Available on-line at <http://ssrn.com/abstract=94032> (accessed on November 17, 2012).
20. Fidyati, Nisa. (2004). Pengaruh Mekanisme GCG Terhadap Earnings Management Pada Perusahaan Seasoned Equity Offering (SEO).*Jurnal Ekonomi, Manajemen dan Akuntansi*, 2, (1), 1 - 23.
21. Fischer, Marilyn dan Kenneth Rosenzweig (1995). Attitude of Student Practitioners Concerning the Ethical Acceptability of Earnings Management. *Journal of Business Ethic*, 14, (6), 433 - 444.
22. Forum for GCG in Indonesia. (2001).GCG, Artikel, Available on-line at <http://www.fcgi.or.id/corporate-governance/about-good-corporate-governance.html>. (accessed on November 22, 2012).
23. Ghozali, Imam (2009). Aplikasi Analisis Multivariate dengan Program SPSS,Semarang: Badan Penerbit Universitas Diponegoro.
24. Gunarsih, Tri (2004). Masalah Keagenan dan Struktur Diversifikasi. *KOMPAK*, 10, Januari - April, 52 - 69.
25. Healy, Paul M. dan Wahlen, James Michael. (1999). A Review of the Earnings Management Literature and its Implication for Standard Setting, *Accounting Horizon*, 13, (4), 365 - 383.
26. Herawaty, Vinola (2008). "Peran Praktik GCG Sebagai Moderating Variabel dari Pengaruh Earnings Management Terhadap Nilai Perusahaan. *Jurnal Akuntansi dan Keuangan*, 10, (2), 97 - 108.
27. Husnan, Suad, (2000).Manajemen Keuangan, Teori dan Penerapan (Keputusan Jangka Panjang), Yogyakarta: Badan Penerbit Fakultas Ekonomi.
28. Ikatan Akuntan Indonesia (IAI) (2009).Standar Akuntansi Keuangan,Jakarta: Salemba Empat.
29. Institute for Economic and Financial Research, (2001 sd 2010), Indonesian Capital Market Directory 2010, Jakarta: ECFIN.
30. Jensen, Michael. C. dan Meckling, William H. (1976). "Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure." Working Paper. Available on-line at <http://www.ssrn.com/abstract=94043> (accessed November 28, 2012).
31. Keputusan Ketua Bapepam Nomor Kep-29/PM/2004 Tahun 2004, Tentang Pembentukan dan Pedoman Pelaksanaan Kerja Komite Audit.
32. Kothari, S. P., Mizik, N., & Roychowdhury, S. (2015). Managing for the moment: The role of earnings management via real activities versus accruals in SEO valuation. *The Accounting Review*, 91(2), 559-586
33. Kusmayadi, Dedi (2009).Kasus Enron: Dalam Perspektif Etika Bisnis dan Profesional Akuntan Bersama Implikasinya, Artikel, Available on-line at <http://dedik68.blogspot.com/2009/06/kasus-enron-dalam-perspektif-etika.html>. (accessed on November 28, 2012).
34. Lastanti, Hexana Sri. (2005).Hubungan Struktur GCG dengan Kinerja Perusahaan dan Reaksi Pasar, *Proceeding Konferensi Nasional Akuntansi*. Jakarta: FE Universitas Trisakti.
35. Meutia, Inten (2004). Pengaruh Independensi Auditor Terhadap Manajemen Laba untuk KAP Big 5 dan Non Big 5.*Jurnal Riset Akuntansi Indonesia*, 7, (3), 333 - 350.
36. Midiastuty, Pratana Puspa dan Machfoedz, Mas'ud (2003), Analisis Hubungan Mekanisme GCG dan Indikasi Manajemen Laba, *Simposium Nasional Akuntansi VI*, Surabaya.
37. Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of financial economics*, 20, 293-315.
38. Ndofor, H. A., Wesley, C., & Priem, R. L. (2015). Providing CEOs with opportunities to cheat the effects of complexity-based information asymmetries on financial reporting fraud. *Journal of Management*, 41(6), 1774-1797
39. Organization for Economic Co-operation and Development (OECD), (1999), *OECD Principles of GCG*, OECD, Perancis. Available on-line at <http://www.oecd.org/dataoecd/32/18/31557724.pdf>. (accessed on December 4, 2012).
40. Primanita dan Setiono. (2006). Manajemen Laba: Konsep, Bukti Empiris, dan Implikasinya. *SINERGI*, 8, (1), 43 - 51.
41. Pustaka Bisnis Indonesia (2001 sd 2010).Jakarta Stock Exchange (JSX) Watch 2010, Jakarta.
42. Sabeni, Arifin. (2005).Peran Akuntan dalam Menerapkan Prinsip GCG pada Perusahaan di Indonesia (Tinjauan Perspektif Teori Keagenan), Disampaikan pada Sidang Senat Guru Besar Universitas Diponegoro dalam rangka Pengusulan Jabatan Guru Besar. Semarang: Universitas Diponegoro.
43. Scott, William R. (1997).Financial Accounting Theory, Prentice Hall, New Jersey.
44. Setiawati, Lilis dan Na'im, Ainun. (2000). Manajemen Laba. *Jurnal Ekonomi dan Bisnis Indonesia*, 15, (4), 424 - 441.
45. Sharpe, William F., et al., (1997), *Investasi*, Jilid 2 (terjemahan), Jakarta: PT Prenhallindo.
46. Siallagan, Hamonangan dan Machfoedz, Mas'ud (2006).Mekanisme GCG, Kualitas Laba dan Nilai Perusahaan,Padang: Simposium Nasional Akuntansi IX.
47. Solomon, Jill dan Aris Solomon. (2004).GCG and Accountability,England: John Wiley and Sons Limited.
48. Sugiri, Slamet. (1998). Earnings Management Theory, Model dan Bukti Empiris.*Telaah*, (2), 1 - 18.
49. Sugiyono, (2008), *Metode Penelitian Bisnis*,Bandung: CV Alfabeta.
50. Sukamulja, Sukmawati. (2004). GCG di Sektor Keuangan: Dampak GCG Terhadap Kinerja Perusahaan (Kasus di Bursa Efek Jakarta). *BENEFIT*, 8, (1), 1 - 25.
51. Surat Keputusan Menteri Badan Usaha Milik Negara Nomor 117/M-MBU/2002 tahun 2002, TentangPenerapanGCGdalamBadan Usaha Milik Negara (BUMN).
52. Suranta, Eddy dan Midiastuty, Pratana Putra. (2004).Income Smoothing, Tobin's Q, Agency

- Problems dan Kinerja Perusahaan, Bali: Simposium Nasional Akuntansi VII.
53. Tarjo (2002). Analisis Free Cash Flow dan Kepemilikan Manajerial Terhadap Kebijakan Utang pada Perusahaan Publik di Indonesia, Yogyakarta: Universitas Gadjah Mada.
 54. The Ministry of Industry, Financial Services and Corporate Affairs, (2004), The Report on GCG for Mauritius, The National Committee on GCG, Mauritius.
 55. The Indonesian Institute for GCG (IICG) (2000), Artikel, Available on-line at http://www.iicg.org/index.php?option=com_content&task=view&id=53&Itemid=27. (accessed on December 12, 2012).
 56. Tjager, I Nyoman, dkk. (2003). GCG: Tantangan dan Kesempatan bagi Komunitas Bisnis Indonesia. Cetakan ke-1, Jakarta: PT Prenhallindo.
 57. Ujiyantho, Muh. Arief dan Pramuka, Bambang Agus (2007). Mekanisme GCG, Manajemen Laba dan Kinerja Keuangan, Makassar: Simposium Nasional Akuntansi X.
 58. Wardhani, Ratna. (2006). Mekanisme GCG dalam Perusahaan yang Mengalami Permasalahan Keuangan (Financially Distressed Firm), Padang: Simposium Nasional Akuntansi IX.
 59. Wedari, Linda Kusumanin. (2004). Analisis Pengaruh Proporsi Dewan Komisaris dan Keberadaan Komite Audit Terhadap Aktivitas Manajemen Laba, Bali: Simposium Nasional Akuntansi VII.
 60. Wening, Kartikawati. (2009). Pengaruh Kepemilikan Institusional Terhadap Kinerja Keuangan Perusahaan, Artikel, Available on-line at <http://hana.wordpress/2009/05/17/pengaruh-kepemilikan-institusional-terhadap-kinerja-keuangan-perusahaan/>. (accessed on December 15, 2012).
 61. Yulianto, Erwin. (2011). Manajemen Laba, Baik atau Buruk?, Artikel, Available on-line at <http://estehmanishangatnggakpakegula.blogspot.com/2011/03/manajemen-laba-baik-atau-buruk-1.html>. (accessed on November 25, 2012).

OWNERSHIP STRUCTURE AND FINANCIAL PERFORMANCE OF SMALL FIRMS IN SPAIN

Ntoug A. T. Liou*, Carlos Ferro Soto*, Ben C. Outman*

*University of Vigo, Pontevedra, Spain

Abstract

Ownership structure in companies are key to the performance, however, gaps still exist in the knowledge about the characteristics of ownership with financial performance. This study provides empirical evidence of the characteristics of ownership structure on firm's performance. It examines 254 small and unlisted firms from the SABI database over the period 2000 to 2014. Using panel regression, the findings show that companies with family having majority ownership are more profitable and the market value such companies. The findings indicates that over performance of most firms depends on certain characteristics of their ownership. Companies with active founders perform better companies with passive founders. No significant relationship was found with respect to CEO or Chairman as founders. The presence of another block holder of ownership less than 5% is positive and significantly associated with the firm's performance.

Keywords: Ownership Structure, Active and Passive Founder, Financial Performance

1. INTRODUCTION

The importance of family businesses in the economy is unquestionable. According to the most conservative estimates, between 65% and 80% of companies worldwide are owned by one or more families, or directed by them (Miller et al. 2007; Villalonga and Amit 2009). They estimate that about 70%-90% of GDP and 50-80% of jobs, annually, are created by family ownership (IEF, 2015). Moreover, 85% of start-up companies worldwide have a family background origin. Thus, understanding the peculiarity surrounding the characteristic of family ownership lay the foundation for the changing economy phenomenon cause by family firms around the globe. Recent studies on the family ownership literature have compared the characteristics and performance of family firms to those of non-family firms due to the classical agency problem.

Other studies contribute to the existing body of knowledge by illustrating that a large number of listed firms do not have a widely dispersed ownership structure in most financial markets. And that these firms have in general individual or collective ownership that can be classify as families, other industrial or financial companies or the states. Related to this view, family firms tend to be more dominant ownership among the other type of ownership. According to Demsetz (1983) and Himmelberg et al (1999) and Demsetz and Villalonga (2001) companies' choice on the level of ownership are based on minimizing agency cost rather than the influencing the firm value. Thus, this perspective on ownership structure provokes a critical analysis on the impact of family ownership structure on corporate performance.

Some empirical authors argue that families that have a strong ties to the firms, the firm is managed with a much longer time horizon, are more profitable and have a higher market value than non-family companies. Jensen and Meckling (1976) claim that the family ownership might be a way to resolve

the issue of agency problem arising between shareholder and their managers, because, the controlling shareholder who is the founder monitor work better (and managers worker harder) as the fractional stake increase when they get to keep more of the fruits of their labor. The presence of the controlling shareholder minimizes the possibility of classical conflict of interest between the founder and the managers, and thus reduces agency costs. As oppose to non-family firm or widely held firm which are entitled to a manager with the interest to maximize his own private benefits. However, as ownership becomes more concentrated, controlling shareholder may engage in undesirable behavior at the expense of the minority shareholders. This attitude of controlling shareholder can leads to agency cost of type II.

In most cases, investors will prefer taking minority ownership in countries where shareholders' rights are protected, contrary to a country where the legal framework fail to provide sufficient shareholders' protection, investors will prefer to act as a controlling shareholders in the firms. With respect to the above mentioned, the setting of ownership structure remains uncertain as to whether a greater control right of the controlling shareholder to exhibit undesirable behavior at the expense of the minority shareholders or the manager's ability to maximize his own private utility at the expense of the shareholders is more preferable. Moreover, research evidence over the years using sale growth, productivity and profitability as common measures for performance in both family and non-family ownership have demonstrated very different results. Specifically, non-family ownership has higher performance than family business in term of sales growth and productivity, contrary in term of profitability (Binder and Hamlyn 1994). Similarly, Westhead and Cowling (1997) used the same variables and they found no statistical significant relationship with performance, meanwhile, very little statistical significant

difference was found between performance and sale growth.

Furthermore, prior studies have provided evidence that the agency perspective affect the performance of a company (Jensen and Meckling, 1976; Morck et al. 1988; Denis et al. 1997; Ang et al. 2000). These studies argued that the different forms of ownership control of the shares, and its connection with the management of the company are factors that influence the performance of the company. However, other authors used financial derivative to conclude that the degree of profitability and growth of most family businesses depends on their financial strategies (Binder and Hamlyn, 1994; Westhead and Cowling, 1997; Ganderrio 2002; Anderson and Reeb, 2003).

Empirically, prior studies conducted in Spain provides evidence of effects in performance of family firms. The Spanish family business is of great interest, since the largest family businesses in some of the major sectors of the economy are Spanish, as reflected in the Top 500 global family companies with higher income, according to the index developed by the Centre for Family Business at the University of St.Gallen. In Spain, approximately 90% of the Spanish companies are considered family business, which contributed approximately 60% of the GDP of the country and two-third of the total employment. These percentages differ depending on the size of companies, being remarkable the lower weight of family businesses in the segment of the largest. Also, the work force employed by these family companies represent 70% of the total private employment (IEF, 2015).

This study provides empirical evidence of the characteristics of ownership structure on financial performance. It examines 254 small and unlisted firms from the SABI database over the period 2000 to 2014. Based on the some specific characteristic of Spanish firms, we incorporate the influence of the degree of concentration of ownership. We further consider the presence of generational succession and incentive policy relating to the performance of family business.

The Spanish sample reveals some properties of continental European country, as a consequence its formation is different from the Anglo Saxon with relating studies. We collected data from the SABI database over the period 2002 to 2014. The findings show that companies with family having majority ownership are more profitable and the market value such companies. The findings indicate that over performance of most firms depends on certain characteristics of their ownership. Companies with active founders perform better companies with passive founders. No significant relationship was found with respect to CEO or Chairman as founders. The presence of another blockholder of ownership less than 5% is positive and significantly associated with the financial performance. Our findings are consistent with Daily and Dollinger (1992), Sraer and Thesmar (2007), Anderson and Reeb (2003).

This article is structured as follows: in the first section we review the literature of about family business performance, ownership structure in family business, in listed and no listed companies, and impact in performance of incentive policy, as the same time as some testable hypotheses are formulated. Third section provides information

about the sample and discusses the methodology used in this article. In the fourth section the empirical results are presented. In the five section, we present conclusions of the research study.

2. LITERATURE REVIEW

Empirical studies on the field of ownership structure have attained a significant number of articles in which performance of family firms is compared with those of non-family. The focus of most studies measured performance by using ratios such as Tobin's Q, return on assets, productive and return on equity; whereas ownership structure of firms are based on the percentages of voting rights of the various parties, founders or descendants being active in the firm, the presence of other blockholder in the family and whether the founder or descendants are CEO or Chairman of the firm. The genesis of ownership structure can be traced back to Jensen and Meckling (1976).

Jensen and Meckling (1976) claim that separation between ownership and control can incur important costs and problems to shareholders. Their classical agency problem suggests that one way to resolve the conflict of interest between shareholders and managers is to increase the proportion of share in the hand of the controlling shareholder. In the light of the above, minority shareholders are victimised as ownership becomes more concentrated, controlling shareholders tend to engage in undesirable behaviours. In a similar way, Schulze et al. (2001) examine the consequences of altruism concept and pay of incentives by controlling shareholder, and their influence in the level family firm's performance. They affirm that family firms with concentrated ownership are more exposed to agency danger. Chrisman et al. (2004) conclude that agency cost affect performance of family business. Researches in Austria, Italy and Portugal show a positive and significant relationship between incentive and performance (Bryson et al 2011).

Demsetz (1983) use a sample of 50 US listed firms from the Fortune 500 over the period 193 and 1974 conclude that companies' choice of ownership concentration is to minimize the agency cost and that concentration ownership does not have an influence on firm value. La Porta et al (1998) add that the mean ownership of the controlling shareholder is approximately 46% over the sample of 49 countries. Meanwhile, over the sample of 27 world richest countries at 10% cut-off ownership rate, 52% of medium firms are owned by individual or families (as opposed to 10% dispersed ownership). Also, Anderson and Reeb (2003) provide evidence that the ownership of firms in the S&P 500 are predominantly family of approximately 35% of dispersed ownership as opposed to the widely accepted view of other researchers. They conclude that family business in first generation in the hands of the founder is most efficient due to the fact higher profit and higher market value is common characteristics of such company unlike the case for non-family.

Villalonga and Amit (2006) extend the research done by Anderson and Reeb (2003) and theirs results suggest that firms with active founder as CEO or Chairman outperform family firms with

descendants as CEO or Chairman. They claim that firms' performances are mostly affected negatively by ownership and control mechanisms such as cross-holdings, pyramidal structure or dual-class share. Finally, their findings suggest that these characteristics of family firms do influence their performance. In Europe, Barontini and Caprio (2006) provide similar evidence to those of Villalonga and Amit. According to them, family firms with founder or descendants as CEO or Chairman outperform other firms; however, family firms with founder as CEO outperform family firms with descendants as CEO. Also, if no member of the family is involved in the management (passive), and then the firms perform worse.

Corresponding to Sraer and Thesmar (2007), two third of the firms in the French stock exchange over the period 1994 to 2000 are family held. Using ROA, ROE and growth in sales as accounting measure of performance they conclude that family firms outperform non-family firms. They argue that the over-performance of the family firms over all the various management is due to fact that founders simply have larger productivity. Binder and Hamlyn (1994) analysed the sale growth, productivity and profitability as common measures for performance in both family and non-family business. Specifically, their results shows that non-family firms have higher performance than non-family firms in term of sales growth and productivity, however, in term of profitability, result show no significant effect on performance for both family and non-family business. With respect to the size of the firms, using small size firms,

Daily and Dollinger (1992) conclude that small family businesses have better performance to small non-family businesses, in term of sales growth and profitability. Meanwhile, Leach and Leahy (1991) apply similar study on large firms and found that a greater degree of control by the family has a positive effect on performance. Thus, larger companies with greater proportion of ownership by the family have better financial ratios, particularly with regard to sales growth, asset growth, profits as well as the rate of return to shareholders. Ganderrio (2002) contrasts the hypothesis of a better long-term performance of family businesses using financial ratios such as return on equity (ROE), thus, obtaining higher equity / debt ratio, and lower equity to assets ratio, meaning that these results stem from the fact that non-family businesses more easily access the market.

In Spain, approximately 90% of the Spanish companies are considered family business, which contributed approximately 60% of the GDP of the country and two-third of the total employment. These percentages differ depending on the size of companies, being remarkable the lower weight of family businesses in the segment. Also, the work force employed by these family companies represents 70% of the total private employment (Instituto de la Empresa Familiar 2015). Lastly, we argue that Spanish family firms are of great interest, due to the fact that very little empirical evidence have been provide about the ownership structure and performance of family firms. Therefore it is the aim of this study to provide an empirical analysis on how family ownership affects the market and accounting performance of Spanish listed Firms over the period 2008 to 2014.

2.1. Hypotheses formulation

It is the aim of this study to provide an empirical analysis on how ownership structure affects corporate performance of Spanish listed firms over the period 2000 to 2014. This leads to the *first hypothesis* which state:

H₁: Ownership of firm significantly enhance financial performance.

Following the premise of *hypotheses 1* our analysis will bias if we no further consider that the over performance firms may be due to some ownership characteristics, especially their involvement in the day to day management of the company. That is, it enable us to investigate if the family members themselves are responsible for the over performance of the firms. This leads to the *second hypothesis* which state:

H₂: Ownership characteristic have a positive and significant association with financial performance.

We can conclude that the ownership characteristics business do add value to companies, thus reducing the agency cost of type I. However, as ownership structure get more concentrated, controlling shareholder may involves in undesirable behaviour at the expense of other minority shareholder, thus enhancing the agency cost of type II. The controlling shareholder can extract private benefits from his company at the expense of other because he has absolute power over the company and the minority cannot easily defence themselves. An effective way to reduce agency cost of type II is by examine the second large shareholder to equalize some of the power of the controlling shareholder and prevent the undesirable behaviour of private interests. *This leads to the third hypothesis which state:*

H₃: The presence of another blockholder is positive and significantly associated with financial performance.

3. METHODOLOGY

3.1. Empirical model

To examine the relationship between firm performance (Tobin's Q and ROA-EBIT, ROA-EBITDA) and ownership structure control, we apply a two-fixed effect model with each industry and each year is considered as dummy. The regression equation is illustrated as follows:

$$\text{Firm performance} = \alpha_0 + \alpha_1 (\text{Ownership structure}) + \alpha_2 (\text{control variable}) + \alpha_3 (\text{year dummy}) + \alpha_4 (\text{CNAE 2009 industry code}) + \varepsilon \quad (1)$$

Where firm performance = Tobin's Q and return on asset with EBIT and EBITDA as numerators; family firm takes dummy equals 1 when a firm is a family firm or zero otherwise; control variable refers to size (logarithm of total assets), leverage (total book value of debt/common shareholders' equity), investment intensity (capex/PPE), age (logarithm of the date of establishment), and return volatility (standard deviation of monthly returns), growth opportunities (increase in one-year sales); industry dummy: equaling 1 as dummy for each CNAE 2009 classification code; year dummy equals 1 for each year considered in the analysis.

Furthermore, to correct the presence of heteroskedasticity and serial correlation in the data, we employ the Huber-White Sandwich estimator for variance. One important observation concerning the Tobin's Q is that sometime the value are extremely high which might cause our dependent variable possess some features of outliers. To correct this, we considered the logarithm of Tobin's Q.

3.2. Data

In this section we examine the ownership structure and market and accounting performance of unlisted family business using data constructed based on the Iberian Balance sheet Analysis System (SABI) of the Bureau Van Dijk, containing detailed financial information on more than 2000,000 Spanish businesses. Next, we employ the CNAE 2009 classification code excluded all financial and utilities firms using the industry classification CNAE 64-66; CNAE 84; CNAE 94; CNAE 97-99. The reason for the exclusion of firms in these industries is due to the fact that firms are strongly regulated and influence by the government. We also excluded all firms with incomplete accounting information. Complete ownership and financial statement information was available for 490 of the 534 companies. Using a criterion of total sales between 700.000 euros and 8.000.000 euros; total assets between 350.000 to 4.000.000 euros and finally, total number of employees ranging from 10 to 49, we found that 254 of the 534 companies could be classified as small and not listed. Our final sample consists of 254 firms and 3810 firm-year observations listed in the Madrid Stock Exchange over the period 2000 to 2014.

3.3. Variables measurement

3.3.1. Dependent variables - performance

Market performance is measured using the Tobin's Q, which is (market value of common equity plus book value of total assets minus book value of common equity) divided by book value of total assets. This is consistent with Anderson and Reeb (2003).

Accounting performance is measured using the return on assets. To calculate return on asset, we employ ROA (EBIT) as Earnings before Interest and Taxes divided by total assets as well as ROA (EBITDA) as Earnings Before Interest Taxes, Depreciation and Amortization divided by total assets. This is consistent with Sraer and Thesmar (2007), Villalonga and Amit (2006), Daily and Dollinger (1992), Binder and Hamlyn (1994).

3.3.2. Independent variables - ownership structure

The criteria used for the ownership structure of firms in Spain are based on Iberian Balance sheet Analysis System (SABI). These criterions focus on the holding of a shareholder ultimate voting rights across these firms which differs from the ultimate cash flow rights. In cases where information was available about the ownership structure of a company, we search this property directly on the company websites. Family firms in Spain were classified through the aid of the BvD independence indicator available in SABI. The BvD independence indicator has 5 levels such as "A", "B", "C", "D" and "U". According to SABI, Independent Indicator "A", denotes that a company is said to be independent if

the shareholder must be independent by itself (i.e no shareholder with more than 25% of ownership of ultimate voting rights); whereas Independent Indicator "B" is when no shareholder with more than 50% but exist one shareholder with voting rights between 25.1% to 50%. For a company to be classified with Independent Indicator "C", the company must have a recorded shareholder with a total or a calculated ownership of 50.1% or higher, whereas a company is classify with "D" when a recorded shareholder with a direct ownership of over 50% with branches and foreign companies.

Independent Indicator "U" is applied when a company does not fall into the categories "A", "B", "C" or "D". Based on the above features and prior studies, a company with a shareholder having more than 25% is classified as family while firms with no shareholder with more than 25% is classified as widely held firms. This threshold of 25% allow shareholder to have significant influence on the firm. Therefore firms categorized with "A" are widely held firms while firms in "B", "C", "D" are family firms. Our next criteria for family is that in a family firm an individual or a family must be the largest shareholder and be categorized in "B", "C", and "D". Individual must be part of the founding family. If this is not the case, the controlling shareholder must have had the largest percentage of ultimate voting right over a long horizon.

We eliminated firms under the category "U". Also, we incorporate the information relating to family management. We check for the name of the CEO, Chairman, and board members, and if they are family member with a daily participation in the management of the family firm. This information is very important because it helps us to check the performance of family firm with active owners verse passive owners. We considered another type of blockholders such as widely held corporation and widely held financial shareholders. A miscellaneous category pools all firms with blockholders that don't represent any of the categories above meanwhile firms with government as shareholders were eliminated due to the limited number.

3.3.3. Independent variables - control variables

To control for certain industry and firm-specific characteristics, we employ variable such as firms size measured as the logarithm of total assets, leverage is measure as total book value of debt/common shareholders' equity, investment intensity is capex/PPE, age defined the logarithm of the date of establishment, industry is defined according CNAE 2009 classification code, return volatility is the standard deviation of monthly returns, growth opportunities as increase in one-year sales.

4. EMPIRICAL ANALYSIS

4.1. Descriptive statistics

Table 1 shows that 69.68% of firms are classified as family firms, of which 41.34% are managed by founder, 22.05% are managed by heirs and 0.06% by outside CEO. However, 47% of the observations are classified as non-family firms. Across industries, our findings show that on average family firms have an involvement of 71% of all industries that make up the Spanish economy.

Table 1. Number and percentage of firm-years observation for ownership type

CNAE 2009 Code	Industry description	All firms	Widely Held	Family Firm	Founder	Heir	Outside CEO	Family Firm in Industry (%)
6920	Accounting services	50	15	35	20	8	7	70%
7400	Air Transport	0	0	0	0	0	0	0%
3111	Casting, iron and steel manufacturing	0	0	0	0	0	0	0%
2420	Cement	0	0	0	0	0	0	0%
5014	Construction	28	11	17	10	5	2	61%
9212	Dustman	1	0	1	0	0	1	100%
5041	Television, radio and phone	13	0	13	8	5	0	100%
6400	Food, beverage, Tobacco	9	2	7	6	1	0	0%
2464	Glass fiber	4	2	2	1	1	0	50%
3111	Engineering Machinery	5	2	3	1	0	1	77%
6810	Hotel and model service	23	4	19	9	10	0	79%
5014	Medical equipment	3	2	1	1	0	0	33%
3299	Chemicals	3	3	0	0	0	0	0%
4239	Other Miscellaneous foods	2	1	1	1	0	1	50%
2542	Pharmaceutical product	29	10	19	11	8	0	65%
4251	Wine and grape	5	2	3	1	1	1	100%
9362	Medical Research	2	1	1	1	0	1	50%
4112	Oil and gas production	1	1	0	0	0	0	0%
5014	Other Service	52	14	38	28	10	0	73%
1515	Electricity	3	2	1	0	0	0	33%
4534	Outerwear	2	0	2	1	1	0	100%
4721	Paper and board	1	0	1	0	1	0	100%
3811	Railway and tramway	0	0	0	0	0	0	0%
8330	Real estate	15	4	11	8	4	2	63%
8494	Security services	0	0	0	0	0	0	100%
7112	Technical Engineer and architectural	0	0	0	0	0	0	50%
7600	Telecommunication	1	1	0	0	1	0	50%
4112	Olive oil production	1	0	1	0	0	0	100%
1515	Electricity	0	0	0	0	0	0	100%
5041	Electrical television and Phone	1	0	1	0	0	0	100%
	Total	254	77	177	105	56	16	53%

Note: family is defined as an individuals or families holding more than 25% of voting right. A 25% ownership level is also used for the remaining ownership types. Widely held firms do not have any shareholder holding 25% or more of voting rights (SABI of the Bureau Van Dijk). The overall sample contains 3810 firm-year observations taken from 254 listed firms for the period 2000 to 2014

Source: Authors elaboration

Table 2 summarizes the descriptive statistic for all the variable used in the study. Tobin's Q for the sample firms is 0,321 while return on assets with EBIT and EBITDA as numerators are 0,91% and 0,28% respectively. With respect to the control variables,

the average age of firms examines is 15 while firms have an average size of 1,532 million euros. For the ownership variables, on average 1,94 family firms have family Chairman while 2,45 have a family CEO and 4,89 have both a family CEO and Chairman.

Table 2. Descriptive statistics of the sample

	Minimum	Maximum	Mean	Standard Deviation
Tobin's Q	0,00	5,32	0,32	0,86
Return on assets (EBIT) (%)	2,31	12,40	0,91	51,92
Return on assets (EBITDA) (%)	4,68	0,95	0,28	0,21
Family firm	0,00	1,00	0,31	0,50
Non-family firm	0,00	1,00	0,21	0,50
Family Chairman	0,00	1,00	1,94	0,35
Family CEO	0,00	1,00	2,45	0,43
Family CEO and Chairman	0,00	1,00	4,89	0,30
Sale Growth (%)	6,38	37,29	11,21	72,13
Capital expenditure/PPE	13,23	98,,56	21,30	48,32
Total debt / shareholder's equity	2,36	29,71	8,15	13,59
volatility	0,00	0,00	0,00	0,00
Firm size (total assets 000 euros)	350,00	3981,71	1532,35	4321,05
Age (Years of Establishment)	10	48	15	31

Note: the variable for the analyzed sample of 254 firms and 3810 firm-year observations includes Tobin's Q, return on assets, capital expenditure/PPE, Sale growth, total debt/shareholder's equity, return volatility, firm size and age. Family firm denotes a dummy taking the value 1 if the firm has a family or individual with 25% or more voting rights, Family CEO, Family Chairman, and Family CEO and Chairman indicates a dummy equaling 1 if a family member is CEO, Chairman, CEO and Chairman, respectively in a family firm. According to SABI, Non-family are those with no shareholder has at least 25% of voting rights

Source: Authors elaboration

Table 3 shows that return on asset EBIT and EBITDA as numerator are highly significant for both family and non-family firms. However, the return on assets (EBIT) is highly significant for family meanwhile the difference of mean for return on assets (EBITDA) is relatively equal for both family and non-family. The difference of mean for Tobin's Q is found non-significant between family and non-

family firms. Family firms have significantly less volatile share prices and takes on less debt. Also family firms have significant lower investment propensity and maintain a long term outlook than non-family. Even though the difference of mean for size is not significant, our finding shows that family firms are smaller than their counterpart firms.

Table 3. Tests of difference of means between family and non-family firms

	<i>Family Firms</i>	<i>Non-Family Firms</i>	<i>t-stat</i>
Tobin's Q	1,23	0,156	0,063**
Return on assets (EBIT) (%)	1,07	0,293	0,839***
Return on assets (EBITDA) (%)	2,34	0,252	1,032**
Family_Chairman	0,136	0,000	0,912**
Family_CEO	0,729	0,000	0,563**
Family_CEO_Chairman	0,136	0,000	0,218**
Sale Growth (%)	66,048	56,382	0,811
Capital expenditure/PPE	-11,005	-9,892	0,015**
Total debt / shareholder's equity	149,557	274,703	0,061**
volatility	0,004	0,082	0,122
Firm size (total assets 000,000 euros)	2723,929	3475,724	0,297
Age (Years of Establishment)	54,553	49,756	0,000***
Firm-year observations	427	385	
Firms	177	77	

*Note: the variable for the analyzed sample of 254 firms and 3810 firm-year observations includes Tobin's Q, return on assets, capital expenditure/PPE, Sale growth, total debt/shareholder's equity, return volatility, firm size and age. Family firm denotes a dummy taking the value 1 if the firm has a family or individual with 25% or more voting rights, Family CEO, Family Chairman, and Family CEO and Chairman indicates a dummy equaling 1 if a family member is CEO, Chairman, CEO and Chairman, respectively in a family firm. According to SABI, Non-family are those with no shareholder has at least 25% of voting rights. ***, **, * illustrate the significance at the 1%, 5%, 10% level respectively*

Source: Authors elaboration

4.2. Regression results

4.2.1. Financial performance and ownership

Analyzing Table 4a shows that the corporate performance of family firms outperform non-family firms. Specifically, column 1, 3 and 5 shows that both the market measure (Tobin's Q) and accounting measure for performance EBIT and EBITDA as numerator are statistically significant at the 5% level. However, higher coefficients are associated with the accounting measures than market measure. This indicating that companies that family have total control are more profitable than those market favor firms that the family does not have total ownership. In addition, columns 2, 4, and 6 show the difference percentage of ownership of family firms are statistically significant at the 5% level. However, the Independent Indicator "C" significantly outperform the Independent Indicator "B" and "D" for ROA (EBIT) and ROA (EBITDA). This indicates that family firm with a total or a calculated ownership of 50.1% or higher are more profitable than those in which no shareholder with more than 50% but exist one shareholder with voting rights between 25.1% and 50%. Family firm with ownership structure categories under Independent Indicator "D" have significantly higher market value than family firms with independent indicator "B" and "C". For market

measure of performance, our results show "D" > "C" > "B" while for accounting performance "C" > "D" > "B". These results support hypothesis 1 that Ownership structure of firm significantly enhance financial performance.

We deduct the ownership structure of non-family firms into widely held corporation, widely held financial, miscellaneous and state categories. We eliminated the state category due to the limited number of firms. Table 4b illustrates the performance of family firm versus the difference categories of ownership of non-family firms. The findings shows that ownership type has a different influence on firm performance. The market seems to value family firms highest while all results of the types of category seem to have difference influence but the results are not statistically significant at the 5% level. With respect to the accounting measure of performance, the family firms seems to outperform all of the other categories of ownership structure of non-family firms for ROA with EBIT (0,451) and EBITDA (0,196) as numerator at the 10% and 5% levels. The result of this study is consistent with Andres (2008) on one hand that family firms significantly over perform non-family firms regarding the accounting performance and on the other hand the results are not consistent for the market valuation.

Table 4a. Financial performance and family ownership

	<i>Tobin's Q</i>		<i>ROA (EBIT)</i>		<i>ROA (EBITDA)</i>	
Intercept	2,645** (4,414)	2,807** (3,441)	1,334** (1,112)	1,833** (4,730)	-1,558* (-2,998)	-1,108 (-0,754)
Family	2,984** (2,446)		3,002** (3,152)		2,995*** (3,328)	
B		1,310** (2,101)		2,761** (2,869)		2,692** (2,991)
C		1,517** (1,990)		3,813** (2,448)		4,116*** (3,987)
D		2,735** (2,376)		3,214** (3,168)		3,635*** (3,901)
Leverage	-0,132** (-2,343)	-0,360*** (-4,350)	-0,161** (-2,720)	-0,297*** (-3,985)	-0,191*** (-3,405)	-0,370 (-5,655)
Sale growth	-0,165** (-2,939)	-0,120* (-1,828)	-0,229** (-3,524)	-0,195** (-3,063)	-0,062 (-1,108)	-0,189* (-0,358)
Volatility	-0,061 (-0,577)	0,001 (0,008)	-0,175 (-1,427)	-0,131** (-1,087)	-0,036** (-1,343)	-0,535 (-2,054)
Investment	0,011 (0,175)	-0,057 (-0,757)	-0,034 (-0,433)	-0,062** (1,514)	-0,020** (-0,311)	-0,035** (-0,580)
Ln(age)	0,220** (4,921)	0,188 (0,658)	0,199** (2,686)	0,444 (-0,817)	0,325* (1,362)	0,573** (2,533)
Ln(Total Assets)	0,542** (1,460)	0,044 (0,305)	0,108** (1,854)	0,020 (0,156)	0,545* (1,751)	0,129 (1,166)
R square	0,114**	0,192**	0,198**	0,274***	0,142***	0,281***
Durbin Watson	2,001	1,859	1,715	1,734	1,934	1,917
Total firms-observation	3810	3810	3810	3810	3810	3810

Note: the variable for the analyzed sample of 254 firms and 3810 firm-year observations includes Tobin's Q, return on assets with EBIT and EBITDA as numerator, capital expenditure/PPE, Sale growth, total debt/shareholder's equity, return volatility, firm size and age. Family firm, B denotes a dummy taking the value 1 if the firm has a family or individual with 25-50% of voting rights or C for ultimate family owning 50.01% or higher or D for family company with an unknown direct shareholder with 50.01% or higher. Also family firms denotes a dummy variable 1 if the founder actively involves in the decision making and the company must be above 30 years. Heir designates a dummy with the value 1 if the heir actively involves in the decision making and the company must be above 30 years (SABI of the Bureau Van Dijk). ***, **, * illustrate the significance at the 1%, 5%, 10% level respectively

Source: Authors elaboration

4.2.2. Financial performance and ownership characteristics

motivated by incentive which enhance the gain of the firm.

4.2.2.1. Financial performance and management involvement

Hypothesis 2 posits that the ownership characteristic of firms enhances the financial performance of firms. Evidence from Table 5 shows that financial performance of firms with founder or heir who held active position in the management. Family firms with active founders perform better whereas those with active heirs significantly outperform compared to family firms with passive owners at the 5% level. According to market measure of performance, family firms with active founders significantly outperform family firms with active heirs. However, when the accounting measure of performance is considered, family firms with active descendants do better, meanwhile family firms with active founders significantly outperform passive owners at the 5% level. This indicates that the knowledge of the family is important in running a company. We suggest that the reason of active descendant outperform the others is due to that fact that descendants have superior skills and are

4.2.2.2. Financial performance and Founder, heir CEO and Chairman

Next, we argue that the different in family firm performance and active management displayed in Table 7 can be further simplified base on their levels responsibilities in the company (i.e., distinction between CEO and Chairman). Table 5b shows that family firms with descendant as CEO perform better meanwhile family firms with founder as CEO outperform family firms with Outside CEO for accounting measure performance. However, the results were not statistically significant at the 5% level. With respect the market measure performance, none of the categories was significant at the 1% level. Profitability equally augment for family firms with descendants as CEO than with founder as CEO. For both the market and accounting measure of performance, analyzing Chairman shows that family firms with founder and descendant as Chairman does better than those with Outsider Chairman even though the result are statistically significant at the 5% level.

Table 4b. Financial performance and widely held ownership

	<i>Tobin's Q</i>	<i>ROA (EBIT)</i>	<i>ROA (EBITDA)</i>
Intercept	-2,102** (-4,056)	1,519* (1,894)	2,597** (1,937)
Family	0,762** (1,306)	0,451* (2,345)	0,196** (3,372)
Miscellaneous	-0,286* (-3,726)	-0,187 (-1,154)	-0,081 (-2,154)
Widely held Corporation	0,653 (-0,527)	0,324 (0,000)	0,000 (0,000)
Widely Held Financial	-0,613 (-0,493)	0,000 (0,000)	-0,141* (0,797)
Leverage	-0,240*** (-2,267)	-0,159** (-2,635)	-0,692** (-2,635)
Sale growth	-0,148** (-2,386)	-0,232** (-3,465)	-0,101*** (-3,465)
Volatility	-0,677** (-3,534)	-0,169** (-1,298)	-0,073 (-1,298)
Investment	-0,830** (1,185)	-0,035 (-0,448)	-0,015 (-0,448)
Ln(age)	0,954* (0,820)	0,201** (1,856)	0,087 (0,691)
Ln(Total Assets)	1,117 (-0,008)	0,109 (0,691)	0,047 (0,856)
R square	0,153***	0,198***	0,198
Durbin Watson	2,001	1,910	1,710
Total firms-observation	3810	3810	3810

Note: the variable for the analyzed sample of 254 firms and 3810 firm-year observations includes Tobin's Q, return on assets with EBIT and EBITDA as numerator, capital expenditure/PPE, Sale growth, total debt/shareholder's equity, return volatility, firm size and age. Family firm denotes a dummy taking the value 1 if the firm has a family or individual with 25% or more voting rights. A firm is assigned a dummy with value 1 if the firm is a non-family (when there is no individual or collective shareholder with more than 25% direct or total ownership). Also widely held corporation and widely held financial denote a dummy variable 1 if the largest ultimate shareholder owns more than 25% of the shares in one of the categories. (SABI of the Bureau Van Dijk). ***, **, * illustrate the significance at the 1%, 5%, 10% level respectively

Source: Authors elaboration

Table 5a. Financial performance and management involvement

	<i>Tobin's Q</i>	<i>ROA (EBIT)</i>	<i>ROA (EBITDA)</i>
Intercept	-0,809** (-2,865)	3,683** (2,969)	-1,018** (-2,493)
Founder active	0,271*** (3,546)	2,075*** (5,276)	1,097** (2,565)
Passive owner	-1,623 (-0,720)	0,0437 (0,254)	0,000 (-1,609)
Descendant active	0,049** (2,565)	10,198* (1,912)	10,214** (21,954)
Leverage	0,005 (0,073)	-0,024 (-0,531)	-0,017 (-0,554)
Sale growth	-0,118* (-2,062)	-0,160*** (-3,820)	0,004 (0,169)
Volatility	0,010 (0,083)	-0,200** (-2,541)	0,343** (1,661)
Investment	-0,088** (-1,382)	-0,094* (0,388)	0,015 (0,516)
Ln(age)	-0,022 (-0,133)	0,049 (0,086)	0,240** (3,325)
Ln(Total Assets)	0,231** (1,381)	0,007 (0,000)	0,053 (0,971)
R square	0,344***	0,677***	0,646***
Durbin Watson	2,005	1,922	1,834
Total firms-observation	3810	3810	3810

Note: the variable for the analyzed sample of 254 firms and 3810 firm-year observations includes Tobin's Q, return on assets with EBIT and EBITDA as numerator, capital expenditure/PPE, Sale growth, total debt/shareholder's equity, return volatility, firm size and age. Founder active and descendant active indicate a dummy equaling 1 if the founder or a descendant is actively managing the company as Chairman or CEO. Passive owner indicates that the family only holds shares in the company without taking an active position in it. (SABI of the Bureau Van Dijk). ***, **, * illustrate the significance at the 1%, 5%, 10% level respectively

Source: Authors elaboration

4.2.3. Multiple blockholders and performance of family firms

One suitable approach to hypothesis 3 which state that the presence of another blockholder is positive and significantly associated with financial performance, is by examining the ownership % of second blockholder across various intervals. We create five categories of second blockholder denoting a dummy equaling 1 if a second large blockholder exists in a family firm and controls voting right in one of the given intervals (<5%, 5%, 10-20%, and >20%). Results from Table 6 shows that family firm with a second shareholder having 5% ultimate voting rights is significantly for both the market and accounting measure of performance at the 1% level.

This indicates that the market rate family firms with second shareholder having 5% ultimate voting rights of the company. All the other intervals were not significant for both the market and the accounting performance. One reason for that is due to the fact that family firm with no second shareholder owning strictly less than 5% in the company do not perform better than non-family firm. Also, those with second shareholder owning above 20% neither perform better than non-family firms. Too small will not be sufficient to equalize the family blockholder whereas too large will resolve to a war which might negatively affect the good functioning of the family firm. Thus, 5% ownership of the second shareholder is positive and significantly associated with financial performance.

Table 5b. Financial performance and founder, heir CEO/Chairman

	<i>Tobin's Q</i>		<i>ROA (EBIT)</i>		<i>ROA (EBITDA)</i>	
Intercept	0,891** (2,071)	2,002** (2,159)	3,273** (4,314)	-2,198** (-2,205)	0,404*** (11,334)	0,414*** (11,990)
Founder CEO	1,138 (-1,007)		0,191 (-2,324)		0,010 (3,474)	
Outsider CEO	-0,076 (-0,911)		0,101 (4,917)		0,101 (0,091)	
Descendant CEO	0,120 (-0,527)		0,250 (3,373)		0,233 (2,086)	
Founder Chairman		0,432 (1,551)		0,517 (1,838)		0,778 (-0,518)
Outsider Chairman		-0,150 (-2,465)		0,41 (2,136)		-0,563 (0,679)
Descendant Chairman		0,136 (1,125)		0,465 (1,235)		0,000 (3,819)
Leverage	-0,713*** (-2,798)	-0,152** (-2,595)	-0,171** (-3,048)	-0,203** (-3,170)	0,232 (1,007)	0,156** (0,643)
Sale growth	-0,922** (-3,186)	-0,196** (-3,001)	-0,173 (-1,309)	-0,131** (-2,048)	0,527*** (2,295)	0,445** (1,865)
Volatility	-0,841** (-1,542)	-0,162 (-1,296)	-0,180** (-3,753)	-0,452** (-2,347)	0,822*** (18,807)	0,801* (17,864)
Investment	-0,274** (-2,817)	-0,077** (-1,044)	-0,239** (-2,612)	-0,783 (-1,074)	0,002 (0,930)	0,374*** (1,373)
Ln(age)	0,002 (-1,253)	-0,005 (-1,312)	-0,040** (-1,134)	-0,003 (-0,669)	0,321*** (1,519)	-0,021*** (0,600)
Ln(Total Assets)	0,046 (0,683)	0,069 (0,509)	0,182** (1,275)	0,042 (0,304)	0,000 (-3,897)	0,890*** (-4,093)
R square	0,197***		0,140**	0,160***	0,494***	0,324***
Durbin Watson	1,744		2,021	2,001	2,090	2,039
Total firms-observation	3810	3810	3810	3810	3810	3810

Note: the variable for the analyzed sample of 254 firms and 3810 firm-year observations includes Tobin's Q, return on assets with EBIT and EBITDA as numerator, capital expenditure/PPE, Sale growth, total debt/shareholder's equity, return volatility, firm size and age. The Founder CEO (Chairman), descendant CEO (Chairman) and Outsider CEO (Chairman), indicate a dummy equaling 1 if respectively the founder, descendant or an outsider holds the CEO (Chairman) position in the family company (SABI of the Bureau Van Dijk). T-statistic are presented in the parentheses ***, **, * illustrate the significance at the 1%, 5%, 10% level respectively

Source: Authors elaboration

5. CONCLUSION

Ownership structure have been debated by prior research that it enhance the performance. Some classical research argue that ownership structure in widely held firm create opportunities for the conflict of interest between managers and shareholders. This can reduce the value of the firm since managers of such firms are more concerned about the maximization of private benefits at the expense of

the owner of the firms (Agency Cost of Type I). Other school of thought claim that the most suitable instrument to correct the action of such sulphurous management behaviour is through concentrated ownership. However, as ownership get more concentrated the corporate governance strategy of resolving Agency cost of type I rises to a type II. Agency cost of type II is when controlling shareholder can engage in undesired behaviour at

the expense of the minority shareholders. The extraction of private benefits by the majority shareholder can negatively affect the value of the firms. Thus, introducing a second blockholder with majority share is thought as an important corporate governance strategy to counterbalance the agency cost of type II. However if the percentage of

ownership of the second blockholder is too small, the power will not be able to counterbalance the family blockholder, too large will resolve to a war which might negatively affect the good functioning of the family firm. We considered that the presence of a second blockholder and the characteristics of family member in the firms.

Table 6. Financial performance and multiple blockholder

	<i>Tobin's Q</i>		<i>ROA (EBITDA)</i>	
Intercept	2,696** (5,137)		2,056** (4,899)	
Family Firms	0,298** (2,459)		0,213** (1,796)	
Second Blockholder <5%		0,102 (0,365)		0,051 (0,086)
Second Blockholder 5%		1,172** (2,931)		1,324** (3,148)
Second Blockholder 10-20%		0,473 (0,935)		0,033 (0,925)
Second Blockholder 20% or more		0,001 (0,000)		0,078 (0,057)
Leverage	-0,157** (-4,256)	-0,042*** (-4,962)	-0,110** (-4,999)	-0,099*** (-4,167)
Sale growth	-0,060** (-1,244)	-0,028* (-1,460)	-0,023*** (-5,476)	-0,055** (-2,692)
Volatility	-0,076 (-0,936)	0,007 (0,798)	-0,053 (-0,068)	-0,053** (-2,068)
Investment	0,451 (0,195)	-0,017 (-0,029)	-0,037 (-0,092)	-0,046* (-1,196)
Ln(age)	0,342** (1,235)	0,382 (0,063)	0,059** (1,459)	0,353 (0,872)
Ln(Total Assets)	0,322** (1,460)	0,032 (1,502)	0,048** (3,594)	0,067 (0,046)
R square	0,182***	0,214**	0,179***	0,199***
Durbin Watson	2,001	1,859	1,715	1,734
Total firms-observation	3810	3810	3810	3810

*Note: The variable for the analyzed sample of 254 firms and 3810 firm-year observations includes Tobin's Q, return on assets with EBIT and EBITDA as numerator, capital expenditure/PPE, Sale growth, total debt/shareholder's equity, return volatility, firm size and age. The different second blockholder variable take a dummy equaling 1 if a second large blockholder exists in a family firm and controls voting right in one of the given intervals (SABI of the Bureau Van Dijk). T-statistic are presented in the parentheses ***, **, * illustrate the significance at the 1%, 5%, 10% level respectively*

Source: Authors elaboration

Specifically, as a code law country, the Spanish economy provide a peculiar case for understanding the presence of ownership structure in family firms on performance. On average 69.68% of firms are classified as family firms, of which 41.34% are managed by founder, 22.05% are managed by heirs and 0.06% by outside CEO. However, 47% of the observations are classified as non-family firms. Across industries, our findings show that on average family firms have an involvement of 71% of all industries that make up the Spanish economy. Using a panel data of 254 small and unlisted firms over the period 2000 to 2014, the main findings of this study are illustrated as follows:

First, firms with family ownership structure over perform non-family in term financial performance. This result support the hypothesis 1, Ownership of firm significantly enhance financial performance. This indicates that companies that family have total control are profitable and the market rate such firms higher than the counterpart firms. The statistical results are in line with the

family business theory which have been debated that ownership structure enhance the performance family business. And that, family ownership structure is one of the possibility that exists resolving the conflicts of interest between shareholders and managers. Even though other authors believe that as ownership get more concentrated the corporate governance strategy of resolving Agency cost of type I rises to a type II. Therefore, this extraction of private benefits by the majority shareholder can negatively affect the value of the firms.

Second, the high financial performance is due to the ownership characteristic of firms. The findings are consistent with hypotheses 2, thus family firms with active founders perform better whereas those with active heirs significantly outperform compared to family firms with passive. This indicates that the knowledge of the family is important in running a company. We suggest that the reason of active descendant outperform the others is due to that fact that descendants have

superior skills and are motivated by incentive which enhance the gain of the firm. Also, no statistical significant coefficients was found for family members in the company as CEO or Chairman.

Third, the presence of another blockholder with ownership of 5% is positive and significantly associated with financial performance. This means that the presence of a second blockholder who owns between 5% of the voting right enhance the financial performance of the firms as it counterbalance the controlling shareholder from unnecessary behaviors. Therefore investors and other users will value family firm more than their counterpart firms. Further research can be carry out examining the second largest shareholders and how it ownership position can influence the performance of family firms.

REFERENCES

1. Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. *The Journal of finance*, 58(3), 1301-1328.
2. Barontini, R., & Caprio, L. (2006). The effect of family control on firm value and performance: Evidence from continental Europe. *European Financial Management*, 12(5), 689-723.
3. Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence. *Entrepreneurship Theory and practice*, 28(4), 335-354.
4. Daily, C. M., & Dollinger, M. J. (1992). An empirical examination of ownership structure in family and professionally managed firms. *Family business review*, 5(2), 117-136.
5. Demsetz, H. (1983). The structure of ownership and the theory of the firm. *The Journal of law & economics*, 26(2), 375-390.
6. Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93, 1155-1177.
7. Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of corporate finance*, 7(3), 209-233.
8. European Family Businesses (June 2012), Family Business Statistics. Consulted in www.europeanfamilybusinesses.eu/uploads/Modules/Publications/family-business-statistics.pdf
9. Ganderrio, B. (1999). Financial performance of family and nonfamily businesses. Paper University of Central Arkansas, Small Business Advancement National Center Unites States.
10. Hamlyn, B. (1994). *The quest for growth: a survey of UK private companies*. Londres: Binder Hamlyn.
11. Jensen, M. C. (1986). Agency cost of free cash flow, corporate finance, and takeovers. *Corporate Finance, and Takeovers. American Economic Review*, 76(2).
12. Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3 (4), 305-360.
13. La Porta, Lopez de Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world, *The Journal of Finance*, 54 (2), 471-517.
14. Leech, D., & Leahy, J. (1991). Ownership structure, control type classifications and the performance of large British companies. *The Economic Journal*, 101(409), 1418-1437.
15. Miller, D., Le Breton-Miller, I., Lester, R., & Canella Jr., A. (2007). Are family firms really superior performers?, *The Journal of Corporate Finance*, 13 (5), 829-858.
16. Regojo, P., Gallo, M., & Silva, J. (1998). Factores críticos para a continuidade e sucesso da empresa familiar. *Revista PME do IAPMEI*, 3(23), Janeiro, 19-24.
17. Schulze, W. S., Lubatkin, M. H., Dino, R. N. and Buchholtz, A. K. (2001). 'Agency relationships in family firms: theory and evidence'. *Organization Science*, 12, 99-116.
18. Sraer, D., & Thesmar, D. (2007). Performance and behaviour of family firms: Evidence from the French stock market. *Journal of the European economic Association*, 5(4), 709-751.
19. Villalonga, B., & Amit, R. (2009). How are U.S. family firms controlled? *Review of Financial Studies*, 22 (8), 3047-3091.
20. Villalonga, B., R. Amit, (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80, 385-417.
21. Westhead, P., Cowling, M., & Storey, D. (1988). *The management and performance of family businesses in the UK*. Stoy Centre for Family Business, London.

DETERMINANTS OF PROFIT ABILITY IN BANKING: AN INTERNATIONAL COMPARATIVE STUDY OF ISLAMIC, CONVENTIONAL AND SOCIALLY RESPONSIBLE BANKS

Majed Alharthi*

*Assistant Professor in Finance, Department of Finance, King Abdul Aziz University, Saudi Arabia, Rabigh, majed.alharthi2@gmail.com

Abstract

This study aims to find the determinants of profitability in Islamic, conventional, socially responsible banks covering the period 2005-2012. This paper applies profitability's indicators as the return on assets (ROA), return on equities (ROE) and net interest margin (NIM) ratios. The statistical approach to find factors of profitability is OLS. The highest ROA and ROE were attained by conventional banks, whereas, SRBs scored the lowest ROA and ROE. By contrast, the SRBs scored the highest NIM measures, while conventional banks have the minimum NIM ratios. Based on Islamic banks' results, Islamic banking was affected positively by size and z-score while, capital ratio, GDP and inflation decreased earnings significantly. Also, conventional banks were more profitable with higher size, capitalisation, loans and z-score. Finally, SRBs earnings have positive and significant relationships with z-score and market capitalisation growth. On the other side, foreign, domestic and public ownerships impacted the profits badly. According to industry-specific variables, market capitalisation development supported the profitability ratios whereas, GDP growth reduced the profits. This study helps managers and policy makers in banking sector to increase the profits with lower risks by concentrating on positive factors.

Keywords: Islamic Banks, Conventional Banks, Socially Responsible Banks, Bank's Profitability, Return on Assets, Return on Equity, Net Interest Margin

1. INTRODUCTION

Studying the profitability allows the policy makers to determine the financial performance. According to the recent literature review, most researchers have calculated the profitability through return on assets (ROA) or return on equities (ROE) or using both indicators such as Beck et al. (2013). However, banks' profits are attained through charging fees on their services and through interest. As a result, more profitable banks are more efficient, competitive and stable (Apergis, 2014). In fact, determinants of profitability can be internal (bank-specific variables) and external (macroeconomic variables). However, focusing on determinants of profitability simplifies knowing the reasons behind any loss or profits which lets the senior managements in banks to find alternative plans if there is any drop in returns. In case of rising in profits, banks are able to make more earnings by focusing on variables that increase profits. According to the literature review, there is no study concentrated on profitability's determinants comparing Islamic, conventional and socially responsible banks. This study finds the relationship between the profitability indicators (ROA and ROE which can be dependent variables) and the internal and external variables (determinants of profitability which can be independent variables) in the banking sector. However, the following section explains a brief about Islamic banking system.

There are two resources of the Sharia law according to Islamic Development Bank (2015) as follows:

1. The primary sources: these sources must be the holy Quran and Sunnah.

2. The secondary sources: these are the interpretations (Ijtihad). Islamic banks have to follow the rules of the above sources.

The operations in Islamic banks are based on Islamic law (Sharia). Chong and Liu (2009) concluded that Islamic banks can be defined banks as similar to conventional banks, but there are four principles that Islamic banks follow:

1. The prohibition of uncertainty (Gharar).
2. The prohibition of interest (Riba).
3. Money is not a commodity.
4. The prevalence of justice.

In fact, conventional banks do not follow all of the above principles.

To know more about Islamic banking, Islamic banking divided into ten forms based on New Horizon Magazine (published by the Institute of Islamic Banking and Insurance, 2015) as follows:

1. Mudharabah (profit sharing): this operation happens when a bank gives whole funds to the investors and shares the resulting profit and one partner (bank or customer) can be responsible for any potential losses. There is a fixed percentage to the bank written in the contract between the investor and the bank.

2. Mousharaka (joint venture): this operation happens when a bank represents a shareholder and the losses and profits can be shared between the borrower and the bank depends on the amount of equity of the company's assets.

3. Mourabaha (commercial funding with profit margin): this operation happens when a bank buys

certain merchandise to a customer then the bank can achieve a fixed margin profit determined in the contract or the bank can share the losses and profits with the client based on the investment. The payment can be in the future whether paying as instalments or paying the whole amount of money at once. The time of payment and goods have to be determined.

4. *Ijar* (rent): is a lease contract that allows customers of banks using bank's fixed assets or services for an agreed specific price and period under Sharia law conditions.

5. *Wade'aa* (safe keeping): this occurs when a customer deposit amount of money in Islamic bank for safe keeping. There is no interest on this deposit operation.

6. *Gardh Hassan* (interest-free loans): this is a completely an interest-free loan. In this case, Islamic bank charge a certain amount of money called loan processing fees.

7. *Bai muajjal*: is a contract between bank and customer that required goods or services to be specified and following Sharia'a law. The payment is in advance and the goods or services can be reached in the future.

8. *Ijar* (leasing) that end with ownership: As an example of this case, when bank and customer sharing in buying a house, but bank pays the majority of money. Then, the customer pays rent to the bank for using the house. In this situation, the customer's share (equity) increase and the bank's share decrease. This process happen until the customer owns the property.

9. *Sukuk* (Islamic bonds): these are financial certificates that prove that the customer is involved in Islamic banking operations to save customers' rights and equity (operations mentioned above).

10. General loans: Islamic law prohibits that money can be borrowed and returned as money. So in this case, banks buy house or car for example to a customer under bank's ownership. The customer then pays to the bank instalments until paying the last amount of money to own the property by customer. In case customer is unable to pay, bank can invest or sell the item.

In conclusion, the Islamic banks operate with interest free rate compared to other types of banks. However, the majority of recent studies on profitability have been on conventional banks due to availability of information compared to the Islamic banks industry which is completely new with little data available. It will be observable that the commercial banks are more than Islamic banks in the sample analysed in this study. In fact, in any country with those two types of banks, the majority are always commercial banks rather than Islamic banks (Bankscope, 2015).

According to SRBs, there are many different names for SRBs: alternative, civic, sustainable, and socially responsible banks. The main concerns regarding socially responsible banks are related to social or environmental (green banks) issues. The following are some examples of the activities of socially responsible banks: to sponsor community events, provide local scholarships, encourage literacy, provide valuable prices for houses, and care about the environment (Global Alliance for Banking on Values, 2015). Many banks have recently followed the approaches adopted by socially responsible banks, so it is very important to focus on this type of bank. Kansal et al. (2014) concludes the corporate social responsibilities (CSR) in six main topics. First

topic, corporate concerns community development such as summer or part-time employment for students, mass marriage programs, adopting old age homes. Second, human resources issues e.g. employee loan facilities, employee welfare fund, information about support. Third, product, services, safety and innovation like providing information about the safety of a firm's products. Fourth issue, corporate care about the environment through using recycled items or using environment friendly materials. Fifth, firms try to save energy saving; this can be employed through utilising the alternative resources of energy. Sixth, organisations reduce the emissions of carbon and harmful gases by setting Carbon emission targets. However, referring to socially responsible banks (SRBs) databases on the internet, we can summarise the responsibilities of SRBs as follows:

1. Sponsoring community events.
2. Providing local scholarships.
3. Encouraging literacy.
4. Providing valuable prices for houses.
5. Looking for energy saving.
6. Applying green building strategy.
7. Reducing pollution.
8. Supporting recycling.
9. Defending the human rights and dignity.
10. Launching green funds.

The SRBs characteristics can be as follows:

1. Caring about the environment such as reducing CO₂ emissions and paper consumption.
2. First priority is socially responsible investments; the second priority is profitability.
3. Informing the customers of the results of investments based on transparency.
4. Encouraging the organic agriculture.
5. Focusing on cultural and social issues.

This study displays the relationship between the profitability and its determinants, which was examined first by (Short, 1979). The statistical approach to find the factors of profitability is ordinary least square (OLS) model. In fact, this study makes several contributions to the current literature. Firstly, it is the first study that concerns socially responsible banking system. Secondly, this study contributes in methodology by comparing (foreign, domestic and public) ownership in banking sector, which is very limited in recent studies. Thirdly, according to macroeconomic variables, the global financial crisis's impact on profitability is rarely addressed in the previous researches. Fourthly, comparing Islamic, conventional and socially responsible banks is a contribution to the literature.

The study is organised as follows. Section 2 reviews the previous literature and hypotheses' formulation. Section 3 presents the data and methodology. Section 4 shows and discusses the empirical results. Finally, Section 5 concludes the study.

2. LITERATURE REVIEW AND HYPOTHESES' FORMULATION

2.1. Literature review

Historically, Short (1979) is the pioneer of examining the performance determinants in the banking sector. Short (1979) analysed the association between the banking profitability and banking concentration using a dataset of 12 countries through the period 1972-1974. The result suggests that greater

concentration leads to higher profit rates. Afterwards, Bourke (1989) conducted a study to find the internal and external determination of profitability in Europe, North America, and Australia over the period 1972-1981. Bourke (1989) concludes that a higher degree of market power increases profits.

There are comprehensive studies on financial performance in commercial banks but few comparing Islamic and commercial banks and no study comparing Islamic, conventional and socially responsible banks. There are three main performance indicators used by researchers: return of assets (ROA) used by Apergis (2014) on the US banking sector, return on equities which is utilised by Lee & Kim (2013) on commercial banks in Korea and net interest margin (NIM) employed by Tan & Floros (2012) that focused on the commercial banking sector in China. Some studies used ROA, ROE and NIM such as Liang et al. (2013) on European banking sector. Most studies found the determinants of profitability using statistical models such as OLS (Olson & Zoubi, 2011), fixed effect dummy (Sufian & Habibullah, 2010). This division is arranged as a literature review on profitability in commercial banks and literature review on profitability in Islamic and conventional banks, and then determinants of profitability (ratios) are explained. Based on the researcher knowledge, there is not any study focused on determinants of profitability in socially responsible banking sector hence, this thesis can cover this gap.

Olson and Zoubi (2011) analysed the performance of 83 Islamic and conventional banks in the Middle East and North Africa (MENA) region covering 10 countries. The period is from 2000 to 2008 using ROA and ROE as dependent variables. The statistical relationship between the profitability and its determinants has been found after running random effect regression. The results of the study show that loans intensity, capital ratio, credit risk and inflation impact the ROA. On the other side, the inefficiency ratio calculated as operating expenses to gross income was found to be affecting the ROA negatively. This study contributed that loans intensity and inflation raise the ROE, whereas inefficiency ratio, capital ratio and credit risk are reducing the ROE during the period in the examined MENA banks. Furthermore, foreign banks were found to be achieving more profits than government banks.

Beck et al. (2013) identify size decrease of ROA and ROE in 510 Islamic and conventional banks across 22 countries for the period 1995-2009. In other words, small banks achieve more profits referring to the significant and negative relationship between the size and ROA/ROE over the period. In contrast, the results suggest that an increase in fixed assets leads to a decline in ROE only. In general, the researchers proved that Islamic banks are affected less by financial crisis than conventional banks; also, Islamic banks financially performed and capitalised better than conventional banks during the period. In order to make this study more effective, more determinants could be covered in this study.

Ghosh (2015) examined the determinants of profitability using ROA and NIM as explained variables in 12 MENA countries through the period 2000-2012. The advantage of this study is that the researcher included the Arab Spring (revelations periods). The results confirmed that Arab spring affected ROA and NIM negatively. Regarding to

ROA's results, capital ratio impacted ROA positively and significantly while, liquidity had a negative relationship with ROA. The other independent variables (size, capital ratio, ratio of liquid asset to total asset and diversification) were not important to the NIM in MENA countries. The competitive advantage of s Ghosh's (2015) study is including the Arab (revelations) spring, which contributes to the literature strongly. But, neglecting ROE (as a profitability indicator) and industry-specific factors can be disadvantages of this study.

2.2. Hypotheses' formulation

Based on the literature review on profitability, this study examines the determinants of profitability using the highest beneficial internal variables as bank size, capital ratio, loan intensity, credit risk, deposit ratio, age, z-score, foreign, domestic and public ownerships. On the other side, GDP, inflation, market capitalisation and global financial crisis can be examined as external variables.

2.2.1. Internal variables

1. Bank size. Most studies examined size of bank (total assets) as an indicator of profitability such as Petria et al. (2015) who examined the effect of size on performance in 27 European countries over the period 2004-2011. The results suggest that size impacts the ROA positively and significantly. This concludes that banks with higher total assets achieved better profits. The reason for this result could be due to larger banks being more likely to gain profits from economies of scale than smaller banks, with a higher degree of production differentiation and loan diversification. Many studies proposed that size of the bank influences the ROA positively (e.g., Chronopoulos et al., 2015; Guillén et al., 2014; Bertay et al., 2013), also based on NIM, Liang et al. (2013) and Sufian and Habibullah (2009) found that more assets supported the interest revenues. On the other side, some studies suggested the opposite finding which is smaller sized banks were more profitable (see Căpraru & Ihnatov, 2014; Haan & Poghosyan, 2012; Barry et al., 2011). However, the size of the bank could be unimportant to the financial performance (Ghosh, 2015; Mollah & Zaman, 2015; Al-Musali & Ismail, 2014; Shah & Jan, 2014; Ćurak et al., 2012; Delis et al., 2012; Tan & Floros, 2012; Olson & Zoubi, 2011; Athanasoglou et al. 2008). Therefore, based on these arguments, the first hypothesis is:

H1. There is a significant relationship between bank size and profitability.

2. Capital ratio. A comprehensive number of studies have focused on the relationship between profitability in banking and capitalisation. As an example, Căpraru and Ihnatov (2014) examined the impact of capitalisation in 143 commercial banks for the period 2004-2011 in Romania, Hungary, Poland, Czech Republic and Bulgaria. The results show that the correlation between profitability ratios (ROA and ROE) is positive and significant. Banks with greater capital can invest effectively more than lower capital banks which leads to achieving better profits. This finding is supported by a large number of studies in the banking area (e.g. Ghosh, 2015; Mamatzakis et al., 2015; Apergis, 2014; Shehzad et al., 2013). In contrast, Chronopoulos, et al. (2015) pointed out that capitalisation influences the profitability

negatively and significantly in the US banking sector for more than 17,500 commercial banks over the period 1984-2010. In fact, a few articles found that lower capitalised banks are more profitable than higher capitalised banks (Mollah & Zaman, 2015). According to NIM, most studies went with the idea of higher capitalised banks were able to invest in interests (see, Căpraru & Ilnatov, 2014; Heffernan & Fu, 2010; Sufian & Habibullah, 2009; Claeyns & Vennet, 2008; Lanine & Vennet, 2007) while, few studies disagreed with this concept and underlined that increasing capital forced banks to pay more interest expenses (Zhou & Wong, 2008). Based on the recent studies, the second hypothesis can be:

H2. There is a significant relationship between capitalisation and profitability.

3. Loan intensity. Lin and Zhang (2009) investigated the loans impact on financial performance examining 322 Chinese banks through the period 1997-2004. The statistical results indicate that providing more loans leads to higher profits. On the other side, Manlagnit (2011) recommended banks to reduce loans due to increasing profits in Philippines for the period 1990 to 2006. Chronopoulos et al. (2015) agreed with this point of view. Referring to the NIM determinants, not many studies considered loan intensity as a determinant, Sufian and Habibullah (2009), Claeyns and Vennet (2008) and Lanine and Vennet (2007) mentioned that involving in lending activities supported the net interest margin positively and significantly. This result occurred due to providing more loans can raise the lending interests (earnings) from clients. Consistent to the majority, the third hypothesis can be formulated as:

H3. There is a significant relationship between lending activities and profitability.

4. Credit risk. Chitan (2012) considered loans to deposits ratio as a negative sign to the ROE ratio for Romanian commercial banks during the period 2004-2011. This means that the growth in lending leads to better ROE ratios (similar to Altunbas & Marques, 2008). In this case banks could find strategies that can link between deposits and loans such as providing more loans with higher interest rates due to intensifying the earnings. Liang et al. (2013) concluded the opposite relationship between NIM and credit risk after examine 194 European commercial banks for the period 2000-2007. In this case, banks had to reduce loans due to achieving better NIM. According to the debate above, the fourth hypothesis can be conducted as:

H4. There is a significant relationship between credit risk and profitability.

5. Deposit ratio: This variable allows policy makers in the banking sector to accept more or fewer deposits. A few studies examined deposit ratio as an independent variable to the profitability such as García-Herrero et al. (2009) who investigated the impact of deposits in China. This study examined 87 commercial banks for the period 1997-2004. The statistical empirical results proposed that deposits intensity could increase the profitability significantly. This result is in line with Claeyns and Vennet (2008) who encouraged accepting more deposits due to strengthen the NIM. The banks can provide more deposit interests to attract clients in this case. By contrast, Barry et al. (2011) confirmed that deposits affected the earnings negatively and significantly in the 16 West European countries in the period 1999-2005 for the commercial banking

sector. After the discussion above, the fifth hypothesis is:

H5. There is a significant relationship between deposits and profitability.

6. Age of bank. Mirzaei et al. (2013) examined the correlation between age profits for 1929 banks over 1999-2008. They divided their sample into emerging and advanced economies including 40 countries. The fixed effects model underlines that old banks attained more returns in countries with emerging economies. This could be due to older banks having more experience in banking operations than new banks; also, time could allow banks to generate more capitalization which leads to profits. In comparison, new banks had better profitability in advanced economies countries (negative relationship between profitability ratios and age which is consistent with Beck et al., 2005 study). Dietrich and Wanzenried (2011) focused on the Swiss banking sector using data of 372 commercial banks. This study used age as a dummy variable and found that older banks were more profitable (ROA and NIM) than new banks. According to new banks, they increased the return on assets significantly. According to return on equity ratio, older banks (insignificant with ROE) were also found to be more profitable than new banks (significantly increase the ROE). However, Dedu and Chitan (2013) found no impact of age on profitability in Romania for the period 2004-2011. Depending on the arguments above, the sixth hypothesis can be examined as:

H6. There is a significant relationship between age of bank and profitability.

7. Z-score. Mollah and Zaman (2015) consider the Islamic and commercial banking sector in their study examining the determinants of profitability including z-score in 25 countries including 172 banks (86 Islamic and 86 commercial banks) for the period 2005-2011. The association between profitability and z-score was positive and significant in Islamic and commercial banks (similar to Mamatzakis et al., 2015 outcome). This demonstrates that more stability and less default risk encourage banks to achieve more returns. Thus, banks seek to increase capitalisation and profits simultaneously. So, the seventh hypothesis is:

H7. There is a significant relationship between stability of bank and profitability.

8. Foreign ownership. Focusing on foreign ownership, Lin and Zhang (2009), Micco et al. (2007) and Demircuc-Kunt and Huizinga (1999) confirmed that foreign banking concentration improves profits in their studies. On the other side, Dedu and Chitan (2013), Lee and Kim (2013), Dietrich and Wanzenried (2011) and Manlagnit (2011) pointed out that the relationship between profitability ratios and foreign ownership was negative and significant. However, Mirzaei et al. (2013) had a mixed point of view which confirms that foreign ownership could increase (in emerging economies) and decrease (in advanced economies) profits. The ninth hypothesis can be concluded as:

H8. There is a significant relationship between foreign ownership and profitability.

9. Domestic ownership. Regarding domestic ownership, some studies conclude that domestic banks increase the profitability such as Athanasoglou et al. (2008). This contradicts with Flamini et al. (2009) who estimated that domestic ownership decreases the earnings. Hence, the eighth hypothesis can be tested as:

H9. There is a significant relationship between domestic ownership and profitability.

10. Public ownership. Mirzaei et al. (2013) had a mixed point of view which confirms that foreign ownership could increase (in emerging economies) and decrease (in advanced economies) profits. Concerning public ownership, Rumler and Waschiczek (2014) proved that public ownership increases the profitability of Austrian commercial banks for the period 1995-2010. Lee and Kim (2013) and Olson and Zoubi (2011) disagree with this point of view (negative relationship between profitability and public ownership). In general, the relationship between ownership and profitability can encourage or discourage banks' shareholders to invest more or less in banking such as buying or selling shares. In addition, shareholders can operate more branches locally or abroad based on the relationship between ownership and profitability. Based on the recent studies above, the tenth hypothesis summarised as:

H10. There is a significant relationship between public ownership and profitability.

2.2.2. External variables

1. Gross Domestic Production (GDP). Mostly all banks focus on countries with developed economies to achieve economies of scale and scope. Recent studies have underlined that GDP growth enhances ROA/ROE (e.g., Chronopoulos et al., 2015; Guillén et al., 2014; Rumler & Waschiczek, 2014; Bertay et al., 2013; Dedu & Chitan, 2013; Lee & Kim, 2013; Mirzaei et al., 2013; Chitan, 2012; Kutan et al., 2012; Dietrich & Wanzenried, 2011; Houston et al., 2010; Flamini et al. 2009; Pasiouras & Kosmidou, 2007; Boubakri et al., 2005). A few studies have the opposite point of view that GDP development reduces ROA/ROE (see Bertay et al., 2013; Shehzad et al., 2013; Delis et al., 2012; Sufian & Habibullah, 2010; Boubakri et al., 2005). However, Ewijk and Arnold (2014), Houston et al. (2010) and Claey and Vennet (2008) supported that investing in interests is better in countries with higher GDP growth as the relationship between NIM and GDP were significant and positive. Hence, the eleventh hypothesis is:

H11. There is a significant relationship between GDP and profitability.

2. Inflation. In the literature, many studies indicate that banks in countries with higher inflation rates financially perform better than banks in countries with lower inflation rates as the relationship between inflation and profitability ratios were positive and significant. Examples that support this point of view include the studies of Căpraru and Ilnatov (2014), Rumler and Waschiczek (2014), Bertay et al. (2013) who considered ROA and ROE. Dietrich and Wanzenried (2014), Hussain (2014) and Tan and Floros (2012) found also that countries with higher inflation rates have better environment for interests investment (positive relationship with NIM). However, a few studies went against this result in terms of ROA and ROE such as Lee and Kim (2013), Mirzaei et al. (2013), Shehzad et al. (2013) and Kanas et al. (2012) who found that higher inflation rates led to lower earnings. Considering NIM, Liang et al. (2013) and Sufian and Habibullah (2009) found a negative and significant correlation between NIM and inflation. This point of view is more logical due to inflation causing decrement in an individual's wealth (purchasing power or cash flow) which negatively affects the

deposits of banks. As a result of reduction in deposits, loans reduce which leads to less profit. Although inflation is a very important variable to the economy, Petria et al. (2015) and Mirzaei et al. (2013) could not find any evidence of inflation impact on profitability in their studies. Based on the debate above, the twelfth hypothesis can be formed as:

H12. There is a significant relationship between inflation and profitability.

3. Market capitalisation. Pasiouras and Kosmidou (2007) investigated the determinants of profitability in 15 European countries using data of 584 banks over the period 1995-2001. The stock market expansion was found to be very important for banks to maximise their profits as the relationship between market capitalisation and profitability was highly correlated at the 1% level. However, Demircuc-Kunt and Huizinga (1999) found that stock market index was insignificant in their study over the period 1988-1995. Dietrich and Wanzenried (2014) found that stock market growth did not affect NIM in their study. As a result, hypothesis thirteenth is:

H13. There is a significant relationship between stock market development and profitability.

4. Global financial crisis (GFC). Al-Musali and Ismail (2014) proved that the profits of Saudi commercial banks were increased in the period of the global financial crisis. Apergis (2014) found the same result on American commercial and investment banks. By contrast, Haan and Poghosyan (2012) confirmed that global financial crisis affected the financial performance of the American commercial, savings and cooperative banks. Dietrich and Wanzenried (2014) underlined that the global financial crisis badly decreased the net interest margins and banks at that time suffered from high costs (expenses). The fourteenth and final hypothesis is:

H14. There is a significant relationship between GFC and profitability.

According to the literature, recent studies ignored the social activities that can be provided by banks. In addition, ownership and financial crisis found to be rarely analysed in the recent studies. This limitation can be filled by including socially responsible banks and compare it with Islamic and conventional banking sector to find which type of banks perform better and considering the ownership and global financial crisis. As a result, this study is following the recent studies on determinants of profitability in banking sector but with new contributions.

3. METHODOLOGY

3.1. Data of the study

The data in this study was extracted from two main sources: Bankscope and World Bank databases. For Bankscope, the data was extracted from balance sheets and income statements of 323 banks being 43 Islamic banks (13.31% of used banks), 242 conventional banks (74.92%), and 38 socially responsible banks (11.76%) across the world covering 37 countries available in the Bankscope and World Bank databases from 2005 -2012. The data has been gathered from Middle Eastern and North African (MENA) regions including Islamic, conventional and socially responsible banks. Regarding the banks, data has been collected from

20 countries namely, Algeria, Egypt, Iran, Iraq, Lebanon, Libya, Malta, Morocco, Israel, Jordan, Palestine, Syria, Tunisia and Yemen, as well as the Gulf Cooperation Council (GCC) countries, which are considered to be oil exporter countries in the Middle Eastern region namely, Bahrain, Kuwait, Oman, Qatar, the kingdom of Saudi Arabia and United Arab Emirates which include Islamic and conventional banks in this study (Bankscope, 2015). Furthermore, we have banks from the United Kingdom, which is one of the strongest industrial countries in the world according to World Banks records. In addition, the UK has several Islamic banks such as the Islamic Bank of Britain (IBB), which was the first Islamic bank in the UK (it was established in 2004) (Islamic Bank of Britain, 2014). Currently, the name of IBB is Al Rayan Bank which formally changed its name in December 2014. Actually, Al Rayan Bank in the UK is owned by Qatari Maraf Al Rayan Bank. According to Al Rayan Bank, the bank is following a socially responsible banking scheme under an Islamic, socially responsible finance programme (Al Rayan Bank, 2015). Therefore, this study compares banks

in the MENA region and the UK, as they both have Islamic, conventional and socially responsible banks and due to availability of data in Bankscope. In addition, there are some socially responsible banks in the UK (e.g. Charity Bank and Cooperative Banks) that can link to this study, which can lead to the comparison of Islamic, conventional, and socially responsible banks from completely different regions. However, socially responsible banks spread globally, so we gathered them from some MENA countries and 17 different countries around the world ordered alphabetically: Australia, Austria, Bangladesh, Bolivia, Canada, Denmark, France, Germany, Mongolia, Nepal, Netherlands, New Zealand, Norway, Spain, Switzerland, the United Kingdom and the United States of America. According to data gathered from World Bank database, macroeconomic variables e.g. inflation rates have been collected for the 20 countries. In fact, all data has a unified currency of US Dollars in millions. In Table 1, we conclude the number of banks in each country based on the GDP ranking.

Table 1. Number of banks in each country

<i>N</i>	<i>Countries</i>	<i>GDP (million US\$) in 2014</i>	<i>World Rank</i>	<i>SRBs</i>	<i>Conventional Bank</i>	<i>Islamic Banks</i>	<i>Total</i>
1	USA	17,416,253	1	1	0	0	1
2	Germany	3,820,464	4	3	0	0	3
3	UK	3,002.95	5	6	74	3	84
4	France	2,935.36	6	1	0	0	1
5	Canada	1,793,797	11	1	0	0	1
6	Australia	1,482,539	12	1	0	0	1
7	Spain	1,400,483	14	1	0	0	1
8	Netherlands	880,394	17	2	0	0	2
9	Saudi Arabia	777,870	20	0	9	3	12
10	Switzerland	679,028	21	1	0	0	1
11	Norway	511,602	26	1	0	0	1
12	Austria	436,069	27	1	0	0	1
13	UAE	402,340	28	0	17	6	23
14	Iran	367,098	31	1	0	7	8
15	Denmark	330,614	33	5	0	0	5
16	Israel	290,643	36	0	8	0	8
17	Egypt	271,427	39	0	21	2	23
18	Iraq	229,327	45	0	2	0	2
19	Algeria	212,453	48	3	9	1	13
20	Qatar	202,450	49	0	6	3	9
21	New Zealand	181,574	53	1	0	0	1
22	Kuwait	175,787	55	0	6	2	8
23	Bangladesh	161,763	57	1	0	0	1
24	Morocco	103,824	60	1	8	0	9
25	Oman	77,116	63	0	7	0	7
26	Syria	71,998	65	0	5	0	5
27	Libya	65,516	69	0	5	0	5
28	Tunisia	46,995	82	2	8	1	11
29	Lebanon	45,019	85	0	28	0	28
30	Yemen	40,415	89	0	1	4	5
31	Jordan	33,858	90	0	7	1	8
32	Bahrain	32,791	92	0	15	9	24
33	Bolivia	30,824	95	2	0	0	2
34	Nepal	19,341	106	1	0	0	1
35	Mongolia	11,516	128	1	0	0	1
36	Malta	9,545	135	1	4	0	5
37	Palestine (Gaza)	6,641	148	0	2	1	3
Total				38	242	43	323

Source: International Monetary Fund (2015)

3.2. Independent variables

The bank-specific variables in this study are size of banks, loan intensity, capital ratio, credit risk, deposit ratio, age of banks, z-score, domestic, foreign and public ownerships. On the other side, four main country indicators are examined as GDP, inflation, market capitalisation and global financial crisis. In Table 2, we can conclude the descriptive statistics for the independent variables for socially responsible, conventional and Islamic banks for the period 2005-2012.

3.3. Dependent variables

This study uses ratios of return on assets (ROA), return on equities (ROE) and net interest margin (NIM) as explained variables to represent profitability. Table 2 explains the data statistics of explained factors. Based on Table 2 results, we can conclude that the conventional banks were found to be the most profitable banks. This could be due to charging more interest than Islamic and socially responsible banks. The calculation of ROA is net income over total assets and ROA represents a dependant variable following Apergis' (2014) approach. According to ROE, return on equity ratio is calculated as net income to total shareholders' equity. The ROE is also dealt with as a dependent variable in different equations (Lee and Kim, 2013).

The mean ROA for conventional banks is equal to 1%, whereas the average ROE is 7%. However, Islamic banks achieved moderate profitability ratios (mean ROA = 0.90% and mean ROE = 5.80%). Furthermore, socially responsible banks scored the lowest average ROA (0.50%) and ROE (2.50%) over the period 2005-2012 as Flammer (2005) states that socially responsible corporations seek to support social issues more than profitability. According to NIM ratios in Table 6.1 above, Islamic banks attained the highest NIM (3.862) due to generating their income by not pay interest expenses and through interest-free investment. Following by socially responsible banks which they scored mean NIM equal to 3.484. After that, conventional banks found to be the least profitable in terms of NIM (2.789), which can be explained as conventional banks anticipated to pay the greatest interest expenses compared to Islamic and socially responsible banks or conventional banks could gain less interest income than Islamic and socially responsible banks.

3.3.1. ROA

ROA is an indicator that shows how efficiently the resources (total assets) of firms are used by the management to generate profits (Short, 1979). This ratio can be measured as follows:

$$ROA = \text{Net Income} / \text{Total Assets} \quad (1)$$

Table 2. Variable definitions and summary statistics

Variables	Definition	Islamic Banks			Conventional Banks			Socially Responsible Banks			All Banks		
		Obs	Mean	S.D.	Obs	Mean	S.D.	Obs	Mean	S.D.	Obs	Mean	S.D.
Dependent variables													
ROA	Return on assets = net income/total assets	312	0.009	0.15	1827	0.01	0.035	284	0.005	0.011	2423	0.008	0.062
ROE	Return on assets = net income/Equity	312	0.058	0.172	1827	0.070	0.309	284	0.025	0.682	2423	0.051	0.361
NIM	Net interest income / total earning assets	312	3.862	6.511	1827	2.789	1.845	284	3.484	3.063	2423	2.994	2.953
Independent variables													
Bank-specific variables													
Size	Log (total assets)	312	7.732	1.843	1827	8.161	2.119	284	7.858	2.251	2423	8.07	2.107
Capital ratio	Capital/total assets	312	0.249	0.309	1827	0.14	0.18	284	0.305	0.326	2423	0.173	0.229
Loan intensity	Loans/total assets	312	0.469	0.27	1827	0.439	0.352	284	0.424	0.286	2423	0.441	0.336
Credit risk	Loans/deposits	312	2.559	23.805	1827	0.937	12.2	284	0.748	0.264	2423	1.124	13.6
Deposit ratio	Deposits/total assets	312	0.667	0.327	1827	0.8	0.473	284	0.823	0.191	2423	0.786	0.434
Age	Log (years since establishment)	312	3.053	0.628	1827	3.717	0.724	284	3.613	0.808	2423	3.619	0.756
Z-score	Log (z-score), where z-score = (ROA + capital ratio)/S.D. (ROA)	312	2.648	1.002	1827	2.982	1.085	284	3.897	1.165	2423	3.176	1.134
Foreign ownership	Dummy = 1 if a bank owned by foreign, else zero	312	0.321	0.467	1827	0.467	0.499	284	0.271	0.445	2423	0.426	0.495
Domestic ownership	Dummy = 1 if a bank owned by local, else zero	312	0.426	0.495	1827	0.4	0.49	284	0.588	0.493	2423	0.426	0.495
Government ownership	Dummy = 1 if a bank owned by government, else zero	312	0.253	0.436	1827	0.137	0.344	284	0.225	0.419	2423	0.162	0.369
Country-specific variables													
GDP	Log (GDP)	312	25.426	1.442	1827	26.098	1.831	284	26.589	1.879	2423	26.069	1.815
Inflation	Inflation rates	312	0.099	0.099	1827	0.057	0.086	284	1.266	3.449	2423	0.204	1.243
Market capitalisation	Market capitalisation to GDP	312	0.613	0.515	1827	0.891	1.908	284	0.554	0.565	2423	0.816	1.684
Global Financial Crisis	Dummy = 1 for the period 2007-2009, otherwise zero	312	0.397	0.49	1827	0.391	0.488	284	0.387	0.487	2423	0.392	0.488

3.3.2. ROE

The ROE reflects the abilities of management to use the shareholders' funds effectively. On the other words, more ROE means that the management in utilising the shareholders capital is efficient (Guillén et al., 2014). The ROE ratio can be calculated as:

$$ROE = \text{Net Income} / \text{Total Equity} \quad (2)$$

3.3.3. NIM

This ratio represents the effectiveness of interests' investment. Higher NIM ratio means that the interest revenue is better and the investment is valuable (Demirguc-Kunt & Huizinga, 1999).

$$NIM = \text{Net Interest Income} / \text{Total Earning Assets} \quad (3)$$

3.4. Main model

The main model of the study that obtained from OLS (through STATA 14) can be as follows:

$$Pro_{it} = \alpha + \beta_1 LTA_{it} + \beta_2 EQTA_{it} + \beta_3 LOANSTA_{it} + \beta_4 LOANSDEPO_{it} + \beta_5 DEPOSITSTA_{it} + \beta_6 LAGE_{it} + \beta_7 LOGZ_{it} + \beta_8 FORE_{it} + \beta_9 DOM_{it} + \beta_{10} GOV_{it} + \beta_{11} LGDP_{it} + \beta_{12} INFLATION_{it} + \beta_{13} MCAP_{it} + \beta_{14} GFC_{it} + \varepsilon_{it} \quad (4)$$

$i = 1 \dots n; t = 1 \dots n$

Where: *Pro* represents the dependent variables of profitability ratios (ROA, ROE and NIM); α denotes the constant; β is the regression coefficient; *LTA* is the natural logarithm of total assets (proxy of size); *EQTA* is the capital ratio (leverage intensity);

LOANSTA is a measure of a bank's loan intensity; *LOANSDEPO* indicates credit risk; *DEPOSITSTA* measures deposit ratio; *LAGE* is the natural logarithm of age (time since establishment); *LOGZ* represents the natural logarithm of z-score; *FORE*, *DOM*, and *GOV* represent foreign, domestic and public ownerships, respectively; *LGDP* denotes log (GDP); *INFLATION* is the percentage of inflation that was announced from the various countries; *MCAP* is the market capitalisation over GDP ratio; *GFC* is the global financial crisis; ε_{it} is the error term; *i* denotes banks; *t* represents time.

However, before examining the relationship between the dependent and independent variables, we need to conduct a correlation matrix to insure that there is no multicollinearity. As a result, Table 3 indicates that the maximum amount is 0.649 (the correlation between deposit ratio and loan intensity) which is less than 80% (Studenmund, 2005). This means that there is no potential multicollinearity problem existed.

4. DATA ANALYSIS AND RESULTS

The OLS results can be shown in Table 4 below. The findings suggest that the hypotheses which support profitability in Islamic banks are *H1*, *H2*, *H3*, *H5*, *H7*, *H11*, *H12* and *H13*. According to conventional banks, *H1*, *H2*, *H3*, *H4*, *H5*, *H7*, *H11* and *H13* found to be significant. Regarding the socially responsible banks, *H1*, *H2*, *H4*, *H5*, *H7*, *H8*, *H9*, *H10*, *H11* and *H13* confirmed a significant relationship with earnings.

Table 3. Correlation matrix for variables

	Bank size	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Capital ratio	-0.180												
(2) Loan intensity	0.141	0.171											
(3) Credit risk	-0.022	0.122	-0.004										
(4) Deposit ratio	-0.019	0.240	0.649	-0.071									
(5) Age	0.374	-0.240	0.085	-0.049	0.112								
(6) Z-score	-0.034	0.153	-0.026	0.010	0.048	0.044							
(7) Foreign ownership	-0.153	0.095	-0.132	-0.003	-0.073	-0.205	-0.075						
(8) Domestic ownership	0.025	-0.175	0.023	-0.028	0.002	0.180	0.030	-0.691					
(9) Public ownership	0.182	0.166	0.125	0.041	0.092	0.041	0.074	-0.324	-0.361				
(10) GDP	0.174	-0.153	0.069	-0.021	0.037	0.162	-0.147	-0.015	0.059	-0.078			
(11) Inflation	-0.134	-0.010	0.042	0.000	0.033	0.027	0.006	-0.043	-0.044	0.112	0.012		
(12) Market capitalisation	-0.042	-0.029	0.047	0.002	-0.003	0.067	-0.093	-0.026	0.098	-0.103	0.199	-0.023	
Global financial crisis	-0.010	-0.004	-0.009	-0.016	-0.005	-0.010	-0.019	0.020	-0.004	-0.023	0.002	-0.001	-0.007

H1. In Islamic banks, the larger sized banks are more profitable (ROE) than smaller sized banks over the period. The reason of this result could be due to larger banks are more likely to gain profits from economies of scale than smaller banks, which it may have a higher degree of production differentiation and loan diversification. Many studies proposed that size of banks influence the profitability (e.g., Chronopoulos et al., 2015; Guillén et al., 2014). On the other side, some studies suggested the opposite finding which is smaller sized banks were more profitable (see Căpraru & Ihnatov, 2014). Based on the NIM's results, due to the prohibition in dealing with interests in Islamic banking systems, the ratio of NIM can be calculated as investment (such as trade in stock market) over total earning assets. According to NIM determinants, as expected, larger sized banks attained more effective investment than smaller sized banks. Liang et al. (2013) and Sufian

and Habibullah (2009) agreed that banks needed to have huge amount of assets to build interest earnings. The size of bank also supports conventional bank profitability positively (ROA). The NIM found to be affected significantly and negatively in conventional and socially responsible banks.

H2. The empirical findings confirm that capital ratio impacts the ROA in Islamic banks negatively at a 0.1% level, which means lowering capitalisation leads to an increase in profitability. These results are linked to the arguments of a few articles (Chronopoulos et al., 2015; Mollah & Zaman, 2015; Shehzad et al., 2013) but the majority goes to confirm that higher capital strengthen financial performance (see Ghosh, 2015; Mamatzakis et al., 2015; Apergis, 2014; ; Mirzaei et al., 2013). The association between the capitalisation and NIM in Islamic banking sector is significant and positive at level of 5% as predicted. Higher capital allows banks

to invest more in stock market. This finding is consistent with several studies (e.g., Căpraru & Ilnatov, 2014; Dietrich & Wanzenried, 2014; Ewijk & Arnold, 2014). Few studies explained the negative correlation between NIM and capital ratio (Zhou & Wong, 2008). Focusing on conventional banking sector, the findings encourage banks to increase equity to maximise profits. However, the coefficient of ROE in socially responsible banks underline that greater capitalisation led to reduce earnings. On the other side, capital supported the net interest margin positively and significantly.

H3. The loan intensity has a negative sign and is statistically significant at a 5% level with ROA referring to the OLS model. This proves that providing more loans that are generated from total assets could raise the risk of lowering ROA. This strongly linked to Chronopoulos et al. (2015) finding on US commercial banking system. The result is in contrast with Olson and Zoubi (2011) who claimed that providing loans maximises the profits of the MENA banking sector. However, based on

conventional banks' findings, the loans raise the ROA ratio referring to loan intensity coefficients which are highly and positively. Apergis (2014) estimated the same results in the US banking sector. In addition, loan intensity found to be improving the NIM. In this case, banks achieved their incomes through lending interests which motivated conventional banks to supply more loans. Hence, covering the interest costs could be easier for banks. This outcome is in line with Sufian and Habibullah (2009).

H4. According to credit risk ratio in conventional banking sector, achieving more returns decrease the risk of credit which means that the growth in lending leads to score better ROA ratio. Referring to the literature review, Chitan (2012) and Altunbas and Marques (2008) found the same finding in their studies. The results encourage the SRBs to reduce the lending activities due to the correlation between the NIM and the credit risk (positive sign).

Table 4. Determinants of profitability - OLS results

<i>Banking</i>	<i>Islamic banks</i>			<i>Conventional banks</i>			<i>Socially responsible banks</i>			<i>All banks</i>		
<i>Profitability</i>	<i>ROA</i>	<i>ROE</i>	<i>NIM</i>	<i>ROA</i>	<i>ROE</i>	<i>NIM</i>	<i>ROA</i>	<i>ROE</i>	<i>NIM</i>	<i>ROA</i>	<i>ROE</i>	<i>NIM</i>
<i>Bank-specific variables</i>												
(H1)	-0.0018	0.0273***	0.890**	0.00219***	0.00606	-0.335***	0.00038	0.0196	-0.296***	0.00135*	0.00653	-0.192***
LTA	(-0.27)	-3.95	-2.64	-6.36	-1.52	(-15.13)	-1.04	-0.8	(-3.96)	-2	-1.66	(-6.01)
(H2)	-0.141***	-0.0318	8.611*	0.0833***	-0.0251	-0.332	-0.0047	-0.668*	1.406**	0.0026	-0.103**	0.533***
EQTA	(-4.04)	(-0.90)	-2.58	-20.09	(-0.52)	(-1.24)	(-1.04)	(-2.15)	-3.07	-0.43	(-2.89)	-3.86
(H3)	-0.0891*	-0.0043	-3.162	0.0108***	0.0441	3.107***	-0.0095	-0.494	-0.0287	0.0169***	0.0587*	0.00451
LOANSTA	(-2.15)	(-0.10)	(-1.33)	-4.12	-1.46	-16.78	(-1.91)	(-1.45)	(-1.72)	-3.4	-2.02	-0.16
(H4)	-6E-05	0.00029	0.00442	-0.00011*	-0.0004	-0.0001	0.00601	0.291	1.408**	-0.0001	-0.0001	0.00482
LOANSDEPO	(-0.17)	-0.82	-0.28	(-2.38)	(-0.74)	(-0.05)	-1.45	-1.04	-3.19	(-1.35)	(-0.26)	-1.16
(H5)	-0.0638*	0.00189	-1.262	0.0183***	-0.0064	-1.559***	-0.0044	0.114	-1.392***	0.0176***	-0.0047	-0.524***
DEPOSITSTA	(-2.12)	-0.06	(-0.51)	-9.83	(-0.30)	(-12.35)	(-0.94)	-0.36	(-3.04)	-4.56	(-0.21)	(-3.78)
(H6)	-0.009	0.0248	-0.0106	0.0007	0.00572	-0.0013	-0.0004	-0.0229	0.0138	-0.0022	-0.0038	-0.266**
LAGE	(-0.49)	-1.34	(-0.01)	-0.74	-0.52	(-0.02)	(-0.40)	(-0.34)	-0.08	(-1.21)	(-0.35)	(-3.01)
(H7)	0.0266**	0.0496***	0.383	0.00477***	0.0716***	0.182***	0.0007	0.0558	-0.291*	0.00677***	0.0596***	0.114*
LOGZ	-2.92	-5.39	-0.73	-8.25	-10.73	-4.88	-0.96	-1.13	(-2.29)	-6.09	-9.21	-2.13
(H8)				-0.007	-0.135	-0.845	-0.0055	-0.420*	-1.657**	-0.0167	-0.480***	-1.968***
FORE				(-0.74)	(-1.24)	(-1.43)	(-1.87)	(-2.08)	(-3.15)	(-1.46)	(-7.24)	(-3.34)
(H9)	-0.0159	-0.0079	0.216	-0.0068	-0.111	-0.701	-0.00817*	-0.484	-1.639*	-0.0188	-0.455***	-1.720**
DOM	(-0.78)	(-0.38)	-0.21	(-0.73)	(-1.03)	(-1.20)	(-2.08)	(-1.81)	(-2.42)	(-1.64)	(-6.81)	(-2.89)
(H10)	-0.0109	-0.041	-1.772	-0.0049	-0.0904	-0.412	-0.012***	-0.555**	-3.568***	-0.0128	-0.451***	-1.637**
GOV	(-0.38)	(-1.42)	(-1.27)	(-0.52)	(-0.85)	(-0.71)	(-4.43)	(-2.84)	(-6.32)	(-1.16)	(-7.00)	(-2.86)
<i>Macroeconomic variables</i>												
(H11)	0.0147*	-0.0147*	-0.492	-0.0013***	-0.0078	-0.0700***	-0.00126*	-0.0285	-0.417***	-0.0011	-0.0114**	-0.121***
LGDP	-2.1	(-2.08)	(-1.39)	(-3.65)	(-1.84)	(-3.89)	(-2.14)	(-0.71)	(-4.13)	(-1.58)	(-2.74)	(-4.30)
(H12)	-0.239**	-0.487***	-7.001	0.00601	0.0734	0.0702	0.0004	0.00932	0.0199	-0.001	-0.0033	0.0205
INFLATION	(-2.69)	(-5.40)	(-1.63)	-0.64	-0.68	-0.12	-1.45	-0.5	-0.43	(-1.03)	(-0.57)	-0.44
(H13)	0.0275	0.016	-2.735**	-3E-05	4.8E-05	-0.0908***	0.00189	0.0481	-0.905***	0.00051	0.00312	-0.0692*
MCAP	-1.48	-0.85	(-2.95)	(-0.06)	-0.01	(-3.48)	-1.38	-0.52	(-3.83)	-0.68	-0.71	(-2.01)
(H14)	-0.0044	0.0111	0.2	-0.0023	-0.023	0.152	-0.0014	0.0729	-0.008	-0.004	-0.0086	0.0326
GFC	(-0.27)	-0.67	-0.25	(-1.84)	(-1.61)	-1.9	(-1.18)	-0.89	(-0.04)	(-1.60)	(-0.59)	-0.27
Sigma	-0.252	0.0744	11.25	-0.0129	0.103	7.496***	0.0471*	1.052	19.79***	0.0125	0.608***	10.43***
_cons	(-1.40)	-0.41	-1.3	(-0.90)	-0.62	-9.24	-2.51	-0.82	-6.98	-0.56	-4.65	-10.74
R ²	0.1745	0.3565	0.124	0.4594	0.0791	0.2495	0.184	0.0819	0.7266	0.0643	0.0683	0.1284
No. of banks	43	43	37	242	242	229	38	38	35	323	323	301
Obs	312	312	255	1827	1827	1700	284	284	260	2423	2423	2215

Notes: LTA: bank size, EQTA: capital ratio, LOANSTA: loans intensity, LOANSDEPO: credit risk, DEPOSITSTA: deposit ratio, LAGE: bank age, LOGZ: z-score, FORE: dummy equal 1 if foreign bank and 0 otherwise, DOM: dummy equal 1 if domestic bank and 0 otherwise, GOV: dummy equal 1 if government bank and 0 otherwise, LGDP: gross domestic production, INFLATION: inflation rate, MCAP: market capitalisation to GDP, GFC: Global financial crisis; dummy equal 1 if the study period falls within year 2007-2009 and 0 otherwise. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, t statistics in parentheses.

H5. Deposits ratio impacted the ROA in Islamic banking system significantly and negatively in this study which is in line with Barry et al. (2011) finding. By the contrary, Garcia-Herrero et al. (2009) employed the deposit ratio as an explanatory variable and he found the opposite (positive) relationship between deposit ratio and profitability ratio (ROA) in the Chinese banking sector. In conventional banks, more deposits improved ROA but reduced NIM. In socially responsible banks, NIM has a negative and significant association with deposits.

H7. The z-score was found to be highly correlated with profitability ratios (ROA and ROE) in Islamic banking at a 0.1% level. This demonstrates that profits increase the stability and reduce the risk of bankruptcy (similar to Mamatzakis et al., 2015; Mollah & Zaman, 2015). Concentrating on conventional banks' findings, all profitability indicators (ROA, ROE and NIM) are strongly supporting the financial stability. Conversely, NIM exposed SRBs to face more default risks over the period.

H8. The relationship between profitability ratios (ROE and NIM) in SRBs found to be negative and significant. This discourages foreign banks to invest more and force banks to reduce their operations and branches. Referring to literature, Dedu and Chitan (2013), Lee and Kim (2013), Dietrich and Wanzenried (2011) and Manlagnit (2011) have the same conclusion. In contrast, Lin and Zhang (2009), Micco et al. (2007) and Demircug-Kunt and Huizinga (1999) confirmed that foreign banking concentration improves profits in their studies.

H9. In SRBs, the concentration of domestic banks led to impact the profits (ROA and NIM) negatively and significantly. This result is in line with Flamini et al. (2009) who estimated that domestic ownership decreases the earnings. Some studies conclude that domestic banks increase the profitability such as Athanasoglou et al. (2008).

H10. The public ownership influenced all profitability ratios (ROA, ROE and NIM) badly. This could be due to public sector always engage in providing services to nationals rather than seeking for profits. This finding can be seen in Lee and Kim's (2013) and Olson and Zoubi's (2011) studies. But, Rumler and Waschiczek (2014) proved that public ownership increases the profitability of Austrian commercial banks for the period 1995-2010.

H11. The Islamic banks in developed economic countries achieved more ROA but less ROE. Chronopoulos et al. (2015) and Guillén et al. (2014) Rumler and Waschiczek (2014) claim that GDP enhances earnings while, Bertay et al. (2013) Shehzad et al. (2013) go against this point of view. Based on conventional and socially responsible banks, banks in growing economic countries found hurdles to attain ROA and NIM over the period.

H12. Inflation warned Islamic banking sector as coefficients of ROA, ROE and NIM found to be negative. Shehzad's et al. (2013) results suggest the same conclusion. On the other side, Rumler and Waschiczek (2014) claim that greater inflation rates led to higher profitability in the Austrian banking sector.

H13. An inverse and significant correlation attained between NIM and stock market growth in Islamic, conventional and socially responsible banks. Pasiouras and Kosmidou (2007) investigated that the development in stock market was very important for

banks to maximise their earnings. However, Demircug-Kunt and Huizinga (1999) and Dietrich and Wanzenried (2014) found insignificant association between market capitalisation and profits in banking sector.

According to bank-specific factors, age of banks found to be insignificant with profitability for all type of banking. Furthermore, the global financial crisis did not impact the banks significantly.

To provide a robust test, we can analyse the data through fixed effects model (FEM) as in Table 5 below. For Islamic banks, it can be seen that few main differences occurred compared to OLS findings. The relationship between size of banks and ROA became positive and significant (in line with Petria et al., 2015). Furthermore, FEM analysis approved that lower capitalised Islamic banks could efficiently invest their equities (Mollah & Zaman, 2015). With regards to deposits, FEM confirmed that accepting more deposits allowed Islamic banks to attain better ROE (Saghi-Zedek & Tarazi, 2015). Finally, the Islamic banks in wealthier banks achieved less profitability (ROA, ROE and NIM). For Islamic banks, Table 5 shows that R^2 values improved efficiently, which means that FEM can be more effective than OLS.

Focusing on conventional banks, there are some differences between OLS's and FEM's outcomes such as, FEM estimates that larger conventional banks have greater ROE ratios compared to OLS, which has insignificant correlation between size of banks and ROE. Moreover, FEM model pointed that conventional banks in countries with higher growth of financial markets have better ROA and ROE (significant associations compared insignificant correlation of OLS model). However, the FEM suggests that the interest earnings of conventional banks are significantly increased over the global financial crisis period. Al-Musali and Ismail (2014) have approved the same outcome for Saudi Arabian conventional banks. Overall, OLS have more R^2 indicators than FEM, which means that the consistency between the independent and the dependent variables is better in OLS estimations.

Regarding the socially responsible banks, there are three main differences between OLS's and FEM's findings. First, FEM estimates that the association between the ROA and the financial stability found to be significant and positive compared to insignificant correlation between ROA and z-score in OLS. This result is consistent with Mamatzakis et al. (2015) Mollah and Zaman (2015) who approved also that stable banks could be more profitable than instable banks. Second, FEM reveals that financial markets' indices are highly important to socially responsible banks to operate better and then to attain more profits. The third and last difference can be seen in R^2 rates. The OLS model includes greater percentages compared to FEM.

5. CONCLUSION, LIMITATION AND FUTURE RESEARCH

This study aimed to find the determinants of profitability in Islamic, conventional, socially responsible banks covering the period 2005-2012 using ROA, ROE and NIM. In conclusion, for the whole sample, ROA was influenced positively and significantly by size of bank, loans, deposits and financial stability. Moreover, ROE was supported positively by loans and financial stability. In

contrast, inverse relationships found to be between ROE and capitalisation, ownerships and GDP. According to NIM, capitalisation and z-score significantly and positively impacted interest profits.

On the other side, size, deposits, age, (foreign, domestic and public) ownerships, GDP and market capitalisation significantly decreased the interest earnings over the period 2005-2012.

Table 5. Determinants of profitability - FEM results

<i>Banking</i>	<i>Islamic banks</i>			<i>Conventional banks</i>			<i>Socially responsible banks</i>			<i>All banks</i>		
<i>Profitability</i>	<i>ROA</i>	<i>ROE</i>	<i>NIM</i>	<i>ROA</i>	<i>ROE</i>	<i>NIM</i>	<i>ROA</i>	<i>ROE</i>	<i>NIM</i>	<i>ROA</i>	<i>ROE</i>	<i>NIM</i>
<i>Bank-specific variables</i>												
(H1) LTA	0.0617 [*] (3.03)	0.0700 ^{***} (3.12)	2.798 [*] (2.43)	0.0202 ^{***} (10.60)	0.0702 ^{***} (2.95)	-0.526 ^{***} (-8.08)	-0.00188 (-0.98)	0.00976 (-0.07)	-0.899 ^{***} (-3.03)	0.0366 ^{***} (9.30)	0.0741 ^{***} (3.06)	-0.377 ^{***} (-2.81)
(H2) EQTA	-0.46 ^{***} (-6.91)	-0.198 ^{***} (-2.70)	-15.42 (-1.61)	0.0941 ^{***} (15.12)	-0.0725 (-0.93)	-0.0234 (-0.09)	-0.0316 (-1.61)	-2.076 (-1.39)	0.103 (0.18)	-0.0263 [*] (-2.04)	-0.0872 (-1.10)	0.303 (1.07)
(H3) LOANSTA	0.0590 (1.01)	-0.111 (-1.72)	-3.506 (-1.06)	0.0178 ^{***} (3.83)	0.0868 (1.49)	0.705 [*] (2.49)	0.00145 (0.18)	0.172 (0.28)	-0.0200 (-1.37)	0.0171 (1.67)	0.0803 (1.28)	-0.0218 (-0.86)
(H4) LOANSDEPO	-0.0002 (-0.90)	0.0000434 (0.13)	-0.038 [*] (-2.54)	-0.000011 (-0.23)	-0.00006 (-0.11)	0.0000830 (0.04)	-0.00771 (-1.39)	-0.0273 (-0.06)	1.064 (1.79)	-0.00015 (-1.69)	-0.000183 (-0.32)	-0.0148 ^{***} (-4.08)
(H5) DEPOSITSTA	0.0232 (0.44)	0.178 ^{***} (3.04)	0.794 (0.20)	0.0209 ^{***} (5.47)	-0.0706 (-1.48)	-0.657 ^{***} (-3.34)	-0.0109 (-1.88)	0.138 (0.31)	-0.107 (-0.19)	0.0120 (1.43)	-0.0656 (-1.28)	-0.311 (-1.10)
(H6) LAGE												
(H7) LOGZ	0.328 ^{***} (14.13)	0.196 ^{***} (7.65)	6.698 ^{***} (3.98)	0.0142 ^{***} (7.18)	0.0986 ^{***} (3.98)	0.276 ^{***} (3.50)	0.0139 ^{***} (3.77)	0.218 (0.78)	-0.710 (-1.71)	0.0680 ^{***} (15.95)	0.113 ^{***} (4.32)	0.656 ^{***} (4.22)
(H8) FORE	-0.0099 (-0.13)	0.114 (1.41)				0.418 (1.55)				0.0113 (0.75)	0.129 (1.38)	
(H9) DOM	-0.0043 (-0.06)	0.0853 (1.14)	2.185 (0.97)	-0.00293 (-0.63)	0.00247 (0.04)	0.201 (0.88)				0.0108 (0.82)	0.134 (1.65)	0.0467 (0.12)
(H10) GOV			3.354 (0.76)	-0.00963 (-1.42)	-0.135 (-1.60)							-0.360 (-0.60)
<i>Macroeconomic variables</i>												
(H11) LGDP	-0.088 [*] (-2.37)	-0.145 ^{***} (-3.54)	-10.6 ^{***} (-5.36)	-0.018 ^{***} (-5.27)	-0.0406 (-0.95)	0.0100 (0.60)	0.00703 (1.44)	0.621 (1.68)	1.055 (1.42)	-0.049 ^{***} (-6.79)	-0.00678 (-0.15)	-0.0224 (-0.56)
(H12) INFLATION	-0.0480 (-0.61)	-0.371 ^{***} (-4.25)	3.587 (0.81)	0.00625 (0.65)	0.00290 (0.02)	-0.911 [*] (-2.35)	-0.0262 (-1.52)	-0.996 (-0.76)	-3.274 (-1.38)	-0.0535 ^{***} (-2.70)	-0.115 (-0.94)	-2.129 ^{***} (-2.68)
(H13) MCAP	-0.0211 (-0.74)	0.0146 (0.46)	-7.61 ^{***} (-5.06)	0.00847 ^{***} (3.38)	0.0802 [*] (2.56)	-0.386 ^{***} (-4.35)	0.00850 ^{***} (2.76)	0.552 [*] (2.36)	0.0827 (0.18)	-0.00480 (-0.89)	0.115 ^{***} (3.45)	-0.899 ^{***} (-4.67)
(H14) GFC	-0.0051 (-0.41)	0.00735 (0.53)	-0.0886 (-0.13)	-0.00156 (-1.40)	-0.0196 (-1.41)	0.157 ^{***} (3.44)	-0.00096 (-0.85)	0.103 (1.20)	0.183 (1.11)	-0.00173 (-0.74)	-0.00355 (-0.24)	0.0992 (1.03)
Sigma	1.043 (1.15)	2.651 ^{***} (2.66)	240.2 ^{***} (5.16)	0.231 ^{***} (2.84)	0.243 (0.24)	6.298 ^{***} (8.23)	-0.169 (-1.48)	-15.87 (-1.84)	-10.89 (-0.64)	0.796 ^{***} (4.54)	-0.853 (-0.79)	6.042 ^{***} (3.69)
_cons												
R ²	0.5340	0.3729	0.2489	0.4474	0.0757	0.1006	0.1600	0.0501	0.0859	0.1435	0.0421	0.0404
No. of banks	43	43	37	242	242	229	38	38	35	323	323	301
Obs	312	312	255	1827	1827	1700	284	284	260	2423	2423	2215

Notes: LTA: bank size, EQTA: capital ratio, LOANSTA: loans intensity, LOANSDEPO: credit risk, DEPOSITSTA: deposit ratio, LAGE: bank age, LOGZ: z-score, FORE: dummy equal 1 if foreign bank and 0 otherwise, DOM: dummy equal 1 if domestic bank and 0 otherwise, GOV: dummy equal 1 if government bank and 0 otherwise, LGDP: gross domestic production, INFLATION: inflation rate, MCAP: market capitalisation to GDP, GFC: Global financial crisis; dummy equal 1 if the study period falls within year 2007-2009 and 0 otherwise. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, t statistics in parentheses

One of the most important limitations is the availability of data, which force the researcher to reduce the sample of banks especially, in Islamic banking systems. Evermore, the contact with banks sometimes is hard to get more data.

The future research can cover more periods and can include the Arab spring period which potentially can add more to the literature review. Additionally, more regions can be covered such as South American area.

REFERENCES

- Al-Musali, M.A., Ismail, K.N.I., 2014. Intellectual capital and its effect on financial performance of banks: Evidence from Saudi Arabia. *Procedia - Social and Behavioral Sciences* 164, 201-207.
- AlRayan Bank (formerly, Islamic Bank of Britain), 2015. Available at: <http://www.alrayanbank.co.uk>.
- Altunbas, Y., Marques, D., 2008. Mergers and acquisitions and bank performance in Europe: The role of strategic similarities. *Journal of Economics and Business* 60 (3), 204-222.
- Apergis, N., 2014. The long-term role of non-traditional banking in profitability and risk profiles: Evidence from a panel of U.S. banking institutions. *Journal of International Money and Finance* 45, 61-73.
- Athanasoglou, P.P., Brissimis, S.N., Delis, M.D., 2008. Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money* 18, 121-136.

6. Bankscope Database, 2015. Bureau Van Dijk. Available at: <https://bankscope.bvdinfo.com>
7. Barry, T.A., Lepetit, L., Tarazi, A., 2011. Ownership structure and risk in publicly held and privately owned banks. *Journal of Banking and Finance* 35(5), 1327-1340.
8. Beck, T., Cull, R., Jerome, A., 2005. Bank privatization and performance: Empirical evidence from Nigeria. *Journal of Banking and Finance* 29, 2355-2379.
9. Beck, T., Demircuc-Kunt, A., Merrouche, O., 2013. Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking and Finance* 37, 433-447.
10. Bertay, A.C., Demircuc-Kunt, A., Huizinga, H., 2013. Do we need big banks? Evidence on performance, strategy and market discipline. *Journal of Financial Intermediation* 22 (4), 532-558.
11. Boubakri, N., Cosset, J.-C., Fischer, K., 2005. Privatization and bank performance in developing countries. *Journal of Banking & Finance* 29, 2015-2041.
12. Bourke, P., 1989. Concentration and other determinants of bank profitability in Europe, North America and Australia. *Journal of Banking and Finance* 13 (1), 65-79.
13. Căpraru, B., Ihnatov, I., 2014. Banks' Profitability in Selected Central and Eastern European Countries. *Procedia Economics and Finance* 16, 587-591.
14. Chitan, G., 2012. Corporate governance and bank performance in the Romanian banking sector. *Procedia Economics and Finance* 3, 549-554.
15. Chronopoulos, D.K., Liu, H., McMillan, F.J., Wilson, J.O.S., 2015. The dynamics of US bank profitability. *The European Journal of Finance* 21(5), 426-443.
16. Claeys, S., Vennet, R.V., 2008. Determinants of bank interest margins in Central and Eastern Europe: A comparison with the West. *Economic Systems* 32(2), 197-216.
17. Ćurak, M., Poposki, K., Pepur, S., 2012. Profitability Determinants of the Macedonian Banking Sector in Changing Environment. *Procedia - Social and Behavioral Sciences* 44, 406-416.
18. Dedu, V., Chitan, G., 2013. The influence of internal corporate governance on bank performance - an empirical analysis for Romania. *Procedia - Social and Behavioral Sciences* 99, 1114-1123.
19. Delis, M.D., Tran, K.C., Tsionas, E.G., 2012. Quantifying and explaining parameter heterogeneity in the capital regulation-bank risk nexus. *Journal of Financial Stability* 8, 57-68.
20. Demircuc-Kunt, A., Huizinga, H., 1999. Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence. *The World Bank Economic Review* 13(2), 379-408.
21. Dietrich, A., Wanzenried, G., 2011. Determinants of bank profitability before and during the crisis: Evidence from Switzerland. *Journal of International Financial Markets, Institutions and Money* 21, 307-327.
22. Dietrich, A., Wanzenried, G., 2014. The determinants of commercial banking profitability in low, middle, and high-income countries. *The Quarterly Review of Economics and Finance* 54, 337-345.
23. Ewijk, S.E., Arnold, I.J., 2014. How bank business models drive interest margins: evidence from US bank-level data. *The European Journal of Finance* 20(10), 850-873.
24. Flamini, V., McDonald, C., Schumacher, L., 2009. The Determinants of Commercial Bank Profitability in Sub-Saharan Africa. *International Monetary Fund, Working Paper*, 1-30.
25. Flammer, C., 2015. Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach. *Management Science*, 1-20.
26. García-Herrero, A., Gavila, S., Santabarbara, D., 2009. What explains the low profitability of Chinese banks? *Journal of Banking and Finance* 33, 2080-2092.
27. Global Alliance for Banking on Values, 2015. Available at: <http://www.gabv.org>.
28. Ghosh, S., 2015. Political transition and bank performance: How important was the Arab Spring?. *Journal of Comparative Economics*.
29. Guillén, J., Rengifo, E. W., Ozsoz, E. 2014. Relative power and efficiency as a main determinant of banks' profitability in Latin America. *Borsa Istanbul Review* 14, 119-125.
30. Haan, J.D., Poghosyan, T., 2012. Bank size, market concentration, and bank earnings volatility in the US. *Journal of International Financial Markets, Institutions and Money* 22, 35-54.
31. Heffernan, S.A., Fu, X., 2010. Determinants of financial performance in Chinese banking. *Applied Financial Economics* 20(20), 1585-1600.
32. Houston, J.F., Lin, C., Lin, P., Ma, Y., 2010. Creditor rights, information sharing, and bank risk taking. *Journal of Financial Economics* 96, 485-512.
33. Hussain, I., 2014. Banking industry concentration and net interest margins (NIMs) in Pakistan. *Journal of Business Economics and Management* 15(2), 384-402.
34. International Monetary Fund, 2015. Available at: <http://www.imf.org>.
35. Islamic Development Bank, 2015. Available at: <http://www.isdb.org>.
36. Kanas, A., Vasiliou, D., Eriotis, N., 2012. Revisiting bank profitability: A semi-parametric approach. *Journal of International Financial Markets, Institutions and Money* 22, 990-1005.
37. Kansal, M., Joshi, M., Batra, G.S., 2014. Determinants of corporate social responsibility disclosures: Evidence from India. *Advances in Accounting* 30, 217-229.
38. Kutan, A.M., Ozsoz, E., Rengifo, E.W., 2012. Cross-sectional determinants of bank performance under deposit dollarization in emerging markets. *Emerging Markets Review* 13, 478-492.
39. Lanine, G., Vennet, R.V., 2007. Microeconomic determinants of acquisition of Eastern European banks by Western European banks. *Economics of Transition* 15(2), 285-308.
40. Lee, Y.J., Kim, D., 2013. Bank performance and its determinants in Korea. *Japan and the World Economy* 27, 83-94.
41. Liang, H.-Y., Ching, Y.P., Chan, K.C. 2013. Enhancing bank performance through branches or representative offices? Evidence from European banks. *International Business Review* 22, 495-508.
42. Lin, X., Zhang, Y., 2009. Bank ownership reform and bank performance in China. *Journal of Banking and Finance* 33, 20-29.
43. Mamatzakis, E., Matousek, R., Vu, A.N., 2015. What is the impact of bankrupt and restructured loans on Japanese bank efficiency? *Journal of Banking and Finance*.
44. Manlagnit, M.C.V., 2011. The economic effects of foreign bank presence: Evidence from the Philippines. *Journal of International Money and Finance* 30, 1180-1194.

45. Micco, A., Panizza, U., Yanez, M., 2007. Bank ownership and performance. Does politics matter?. *Journal of Banking and Finance* 31, 219-241.
46. Mirzaei, A., Moore, T., Liu, G., 2013. Does market structure matter on banks' profitability and stability? Emerging vs. advanced economies. *Journal of Banking and Finance* 37, 2920-2937.
47. Mollah, S., Zaman, M., 2015. Shari'ah supervision, corporate governance and performance: Conventional vs. Islamic banks. *Journal of Banking and Finance* 58, 418-435.
48. New Horizon Magazine, 2015. Available at: <http://www.islamic-banking.com>.
49. Olson, D., Zoubi, T., 2011. Efficiency and Bank Profitability in MENA Countries. *Emerging Markets Review* 12(2), 94-110.
50. Pasiouras, F., Kosmidou, K., 2007. Factors influencing the profitability of domestic and foreign commercial banks in the European Union. *Research in International Business and Finance* 21, 222-237.
51. Petria, N., Capraru, B., Ihnatov, I., 2015. Determinants of banks' profitability: evidence from EU 27 banking systems. *Procedia Economics and Finance* 20, 518-524.
52. Rumler, F., Waschiczek, W., 2014. Have changes in the financial structure affected bank profitability? Evidence for Austria. *The European Journal of Finance*, 1-22.
53. Shah, S.Q., Jan, R., 2014. Analysis of Financial Performance of Private Banks in Pakistan. *Procedia - Social and Behavioral Sciences* 109, 1021-1025.
54. Saghi-Zedek, N., Tarazi, A., 2015. Excess control rights, financial crisis and bank profitability and risk. *Journal of Banking and Finance* 55, 361-379.
55. Shehzad, C.T., De Haan, J., Scholtens, B., 2013. The relationship between size, growth and profitability of commercial banks. *Applied Economics* 45, 1751-1765.
56. Short, B.K., 1979. The relation between commercial bank profit rates and banking concentration in Canada, Western Europe, and Japan. *Journal of Banking and Finance* 3, 209-219.
57. Studenmund, A.H., 2005. *Using Econometrics: A Practical Guide* (5th edition) Boston: Addison-Wesley.
58. Sufian, F., Habibullah, M.S., 2009. Determinants of bank profitability in a developing economy: Empirical evidence from Bangladesh. *Journal of Business Economics and Management* 10(3), 207-217.
59. Sufian, F., Habibullah, M.S., 2010. Does economic freedom fosters banks' performance? Panel evidence from Malaysia. *Journal of Contemporary Accounting and Economics* 6, 77-91.
60. Tan, Y., Floros, C., 2012. Bank profitability and inflation: the case of China. *Journal of Economic Studies* 39(6), 675-696.
61. Zhou, K., Wong, M.C., 2008. The Determinants of Net Interest Margins of Commercial Banks in Mainland China. *Emerging Markets Finance and Trade* 44(5), 41-53.

SMES AND SOCIAL MEDIA OPPORTUNITIES: AN ORGANIZATIONAL OUTLOOK

Louise van Scheers*

*Department Marketing and Retail Management, CEMS, University of South Africa., South Africa

Abstract

Social media usage in SMEs and the impact thereof is viewed as an essential part of modern day organisational operations for SMEs to promote their business both domestically and globally. Social media is interactive and consumer-generated media, new media or citizen media, while conventional media is company generated media which flows in one direction. The research design chosen for this research is descriptive research in conjunction with a quantitative approach. The population will include all SMEs in Gauteng. The sample for the study encompassed of 400 SME owners who currently manage the small businesses in the Gauteng area. The respondents all agree that a large audience can be reached via social media, followed by the ability to create product/service awareness. The conducted research recommends that social media can be cost effective if the SMEs make use of their social networks (professional and personal) and use best practises that enable them to get their adverts or posts shared across social networks. The respondents report a sales, product awareness, consumer support and overall productivity increase. There seems to be an effect of age on the percentage increase in sales, product awareness, consumer support and overall productivity. Although the results show that most SMEs have access to internet only 54.8 % of the respondents use social media to promote their businesses. The research established that that the largest proportion of respondents are new to using social media to create awareness for their products.

Keywords: SMEs, Social Media Opportunities, Create Product Awareness, Social Media

1. INTRODUCTION

Strategic importance of SMEs is acknowledged globally for a variety of reasons such as creating employment, enhancing living standards and reducing poverty. Chong (in Justin, 2011) observes that South Africa is following a trend of developing the SME sector. Significant contribution of SMEs to national economic development has led to policy changes of developing countries including South Africa (ILO,2011). The Department of Trade and Industry (2012) confirms that small business represent 98 percent of the total number of firms in South Africa, employ 55 per cent of the country's labour force, contribute approximately 42 per cent to total remuneration and contribute 35 per cent towards South Africa's GDP. Despite the significant and importance of SMEs and their contribution to the economic growth of SA, SMEs are still faced with numerous challenges that inhibit growth. Apart from SME funding and limited access to finance, the Global Entrepreneurship Monitor (GEM) Reports (2001-2010) noted that South Africa's' SMEs also suffer from poor management and marketing skills which are a result of a lack of adequate training and education. South Africa has one of the highest SMEs failure rates in the world due to these factors.

Successful marketing will generates the crucial sales for sustainable SMEs. Pearce & Byars (2012) reveal that 40 percent of new business ventures fail in their first year, 60 percent in their second year, and 90 percent in their first 10 years of their existence. Unfortunately, very little marketing is actually undertaken by SMEs due to the high costs of sustaining a business. Marketing is crucial for

getting market coverage and market penetration. The costs of the market investment to the return on market investment are crucial to SMEs with very limited marketing budgets. Both domestic and global sales are dependent on the targeting of specific groups which usually evolves the use of Internet search engine and display companies providing advertising and routing to your companies sales page or contact details. There are five main issues with traditional Internet advertising using search engine and display networks, namely:

- The first is the cost and the difficulty is targeting specific groups according to your sales funnel.
- Understanding and applying keyword search methodology and SEO (Search Engine Optimization) most SME do not have the knowledge or the time to gain this knowledge to apply keyword and SEO successfully.
- Most sites set up by SMEs do not provide adequate customer or consumer experience to ensure high conversion.
- Most SME owners do not understand how to approach Internet marketing and Internet Customer interaction technologies.
- Even SMEs that do have budgets to source out the building of a web site, they usually do not get the service and technology to enable them to fully service both the desktop, tablet and mobile market.

Secondary research conducted (Lacho & Marinello, 2010:128; Scott, 2011:38) indicates that social marketing may offer a solution to this problem. However it seems that the small business sector has been slow to enter the social media world. A possible reason for this is may be limited

resources to mastering this new marketing tool. Social media platforms can provide SMEs with an opportunity to communicate to customers directly which is an added strategic function that search engine and display networks cannot provide. SMEs therefore have the ability to understand their customer's needs. This is in my opinion essential for sustainable business. World Wide Worx (2012) indicates that 210,000 SMEs in South Africa have a website. The research shows that SMEs with a website are far more likely to be highly profitable. However, limited research was conducted concerning usage of social media of SMEs in South Africa. It is well known that SMEs mainly focus on the challenges from the funding perspective. Small businesses often fail to utilise marketing tools available for marketing purposes. The affordability and research that indicates the benefits of social media seems to be ignored by most SMEs. Social media challenges prevent SME owners to use this tool effectively.

The purpose of this paper is to determine whether SMEs are aware of social media opportunities to interact with customers. By using social media SMEs have a platform from which to establish their customers' needs. A SME survey conducted in 2012 shows (World Wide Worx) that 410 000 SMEs in South Africa have a website, representing only 63 percent of active and formal SMEs. This research shows that SMEs with a website are far more likely to be highly profitable than those without. However, limited research was conducted and it seems that there is a gap in the literature exists and therefore in this research aims to determine whether SMEs are aware of social media opportunities to interact with customers. The research design chosen for this research is descriptive research in conjunction with a

quantitative approach. The population will include all SMEs in Gauteng. The sample for the study encompassed of 400 SME owners who currently manage the small businesses in the Gauteng area.

2. LITERATURE REVIEW

2.1. Defining the SME

SMEs are defined in different ways, with reference to the number of employees or to turnover bands (as in the National Small Business Act 1996, which also allows for variations according to industry sector). In South Africa, a 'small business' is official defined in Section 1 of the National Small Business Act of 1996 as amended by the National Small Business Amendment Acts of 2003 and 2004 (NSB Act) as a separate and distinct business entity, including co-operative enterprises and nongovernmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub-sector of the economy (National Small Business Act of 1996). The NSB Act also categories small businesses in SA into distinct groups, namely; survivalist, micro, very small, small and medium, hence the use of the term "SMME" for small, medium and micro-enterprises. However, the terms 'SMME' and 'SME' are used interchangeably in SA. The SME definition uses the number of employees (the most common mode of definition) per enterprise size category combined with the annual turnover categories, the gross assets excluding fixed property. The National Small Business Act (Act 102 of 1996) provides definitions for various SMME categories as identified in Table 1.

Table 1. Definitions of SMEs given in the National Small Business Act

Enterprise Size	Number of employees	Annual turnover	Gross assets, excluding fixed property
Medium	Fewer than 100 to 200, depending on industry	Less than R4 million to R50 million, depending upon industry	Less than R2 million to R18 million, depending on industry
Small	Fewer than 50	Less than R2 million to R25 million, depending on industry	Less than R2 million to R4,5 million, depending on industry
Very small	Fewer than 10 to 20, depending on industry	Less than R200 000 to R500 000, depending on Industry	Less than R150 000 to R500 000, depending on industry
Micro	Fewer than 5	Less than R150 000	Less than R100 000

Source: Dockel, J. A. and Ligthelm, A. A. (2012) *Factors that contribute to small business survival*. Article submitted for publication. Pretoria: Unisa.

The most widely used framework in South Africa is the definition of the National Small Business Act, which defines five categories of business as follows:

Survivalist enterprise

The income generated is less than the minimum income standard or the poverty line. This category is considered pre entrepreneurial, and includes hawkers, vendors and subsistence farmers. (In practice, survivalist enterprises are often categorised as part of the micro-enterprise sector.)

Micro enterprise

The turnover is less than the VAT registration limit (that is, R150 000 per year). These enterprises usually lack formality in terms of

registration. They include, for example, spaza shops, minibus taxis and household industries. They employ no more than five people.

Very small enterprise

These are enterprises employing fewer than 10 paid employees, except mining, electricity, manufacturing and construction sectors, in which the figure is 20 employees. These enterprises operate in the formal market and have access to technology.

Small enterprise

The upper limit is 50 employees. Small enterprises are generally more established than very small enterprises and exhibit more complex business practices.

Medium enterprise

The maximum number of employees is 100, or 200 for the mining, electricity, manufacturing and construction sectors. These enterprises are often characterised by the decentralisation of power to an additional management layer.

The promotion and development of SMEs in South Africa is currently the focus of much attention in a wide variety of fields because it is regarded as a major key to economic development and wealth creation, thereby contributing towards social prosperity and upward mobility. The demand for an entrepreneurial - driven economy in South Africa is increasing particularly because of the employment creation benefits it offers. The SME sector is globally regarded as the driving force in economic growth and job creation (Lunsche and Barron, 2010).

2.2. Social Media Opportunities

Effective use of social media can bring great marketing opportunities for the SME. Moving with fast-paced developments in online technology and interaction tools can help to enhance product branding, boost business profile and create new business. Social media enable social networking by means of media such as blogs, podcasts, message boards, video blogging, wikis and Twitter (Scott, 2011:38; Witzig, Spencer & Galvin, 2012:113). Social networking is a convergence of individuals on a social media site to discuss a matter of interest amongst the group (Lacho & Marinello, 2010:128). The business community has taken note of the customisation of individual's pages by adopting and incorporating the customisation into their own social networking pages where an organisation is able to share information, pictures, videos, and advertising (Lacho & Marinello, 2010:128; Scott, 2011:38). By customising social media page thereby attracting customers and engaging with customers, customer loyalty can be fostered. Customer loyalty can also be fostered and maintained by means of social media, due to interactions and engagement with the business in question, profitable customers are inclined to be increasingly loyal, accompanied by a requisite to be loyal (Witzig et al., 2012:114). Additionally, social media have a number of functions that can serve the business community well; functions of social media include (Lacho & Marinello, 2010:129; Witzig et al., 2012:114):

- Managing information that is publicly available about your professional profile
- Locate and become acquainted with potential customers. Service providers and recommended experts in your field
- Create and collaborate on organisational projects, gather data, share files and provide solutions
- Be visible and indicate availability of potential business opportunities and partnerships
- Gain insights into an interested field in discussions with likeminded professionals
- Make beneficial connections that may enable business deals
- Advertise job opportunities to find excellent human capital for the organisation

2.3. Is Social Media Crucial for Small Businesses to Create Product Awareness

Social media is ideal for SMEs as SMEs more so than larger organisations, focus on drawing the attention of customers and create product awareness. The aim of this paper is to determine whether social media provide SMEs with an opportunity to interact with customers and create product awareness. Carter (2011:20) observes that social media fosters drawing customers towards SMEs as deeper audience engagement is possible. Parsons (2010:6) indicates that half of all SMEs in the United Kingdom are using social media websites as a business tool. In other parts of the world, SMEs have been slower to adopt social media as a marketing tool (Bakeman & Hanson, 2012:106). Theunissen (in Property Points South Africa, 2012) suggests that organisations should implement a basic yet effective social media strategy involving Facebook, Twitter, a blog and an updated and user friendly website. The social media strategy variables can be used to create brand awareness, promote offerings, provide information, and provide interaction opportunities with consumers and a means to engage with customers. It seems that social media is crucial for small businesses to create product awareness.

Creating an attractive website does not guarantee individuals visiting a website, rather regular updates and marketing is the key to drawing individuals to visiting a SMEs website. Theunissen in (in Property Points South Africa, 2012) posits that "The vital part of any social media activity for SMEs is that it enables entrepreneurs to have one-on-one discussions with people who actively express an interest in their companies. As such, if they're managed properly, they can act as a 'call centre' for their operations."

3. RESEARCH FINDINGS

3.1. SME Awareness of Using Social Media

In questionnaire the question was asked: Do you use social media for marketing your business? The results are reflected in figure 1.

Figure 1. SME awareness of using social media

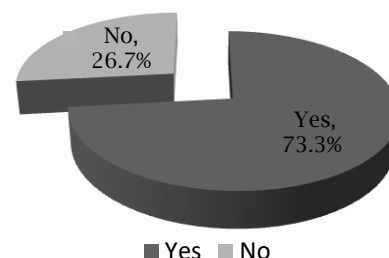


Figure 1 shows that the majority (73.3%, n=22) of the respondents reported that they do use social media for marketing their businesses. On the question which social media websites the respondents are aware of the results were the follow below (Figure 2).

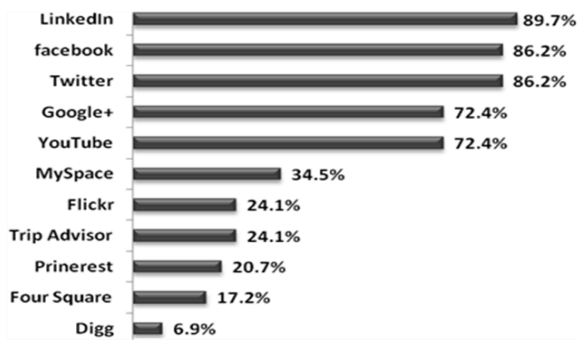
Figure 2. SME awareness to use Social Media platforms

Figure 2 reflects that LinkedIn is the website known to the largest proportion (89.7%) of respondents, followed by Facebook, Twitter, Google+ and YouTube, with all of them known to more than 70% of the respondents. Digg is the social web site that is known by the least number (6.9%) of respondents.

3.2. Social Media Usage for Marketing and Creating Product Awareness

Figure 3 refer. The respondents were consulted social media platforms use for the marketing of the SME business and creating product awareness, as well as the weekly time spent on each on platform.

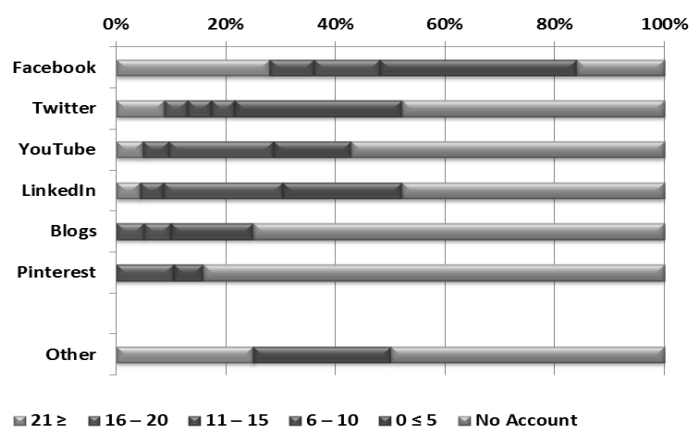
Figure 3. Social Media usage for marketing and creating product awareness

Figure 3 confirms that Facebook is the social media platform on which the largest proportion (28%) of respondents spend more than 21 hours per week, followed by other unnamed social media platforms (25%). In the case of each of these social media platforms, there are respondents that do not have an account for it, with Pinterest being the platform for which the largest proportion of

respondents does not have an account. WhatsApp and Google was also mentioned by the respondents but no indication of how many hours per week is spent on them, was provided.

On the question: How long have you been using social media for marketing? The result is below (Figure 4.)

Figure 4. Years of Social Media usage for marketing

Figure 4 reveals that the largest proportion of respondents are new to using social media for marketing with 29.0% (n=9) of them having used it for less than one year while on quarter (25.8%) have been using it for more than 3 years. Twenty two (22.6%) do not use social media for marketing at all.

Access to SME's social media pages

The next question wanted to establish whether the respondents have daily access to their SME's social media pages and the results is shown in Figure 5.

Social media usage - frequency

The next question wanted to establish the frequency of social media usage and the results is depicted in Figure 6.

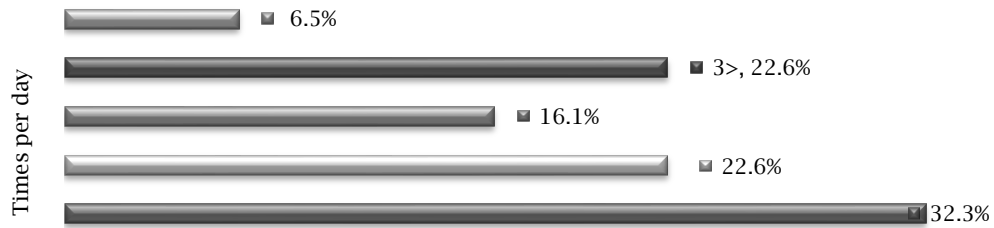
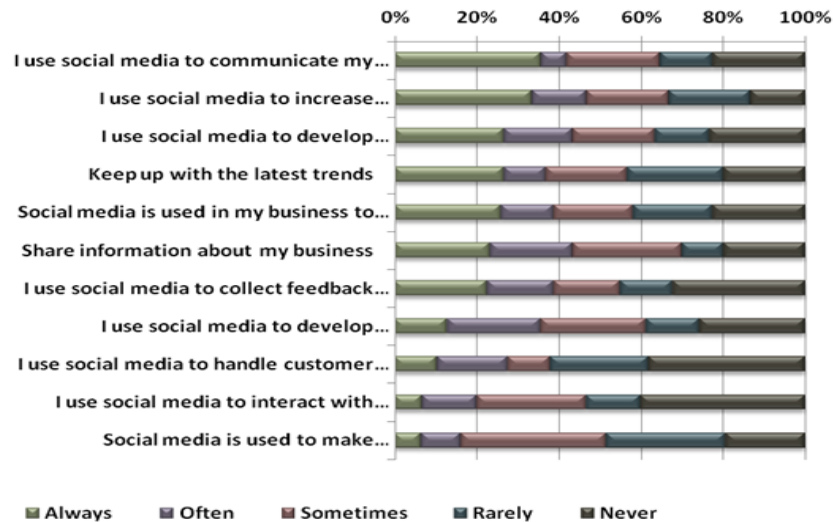
Figure 5. Years of Social Media usage for marketing**Figure 6.** Social Media usage frequency

Figure 6 reflects that the largest proportion of respondents who always use social media do so to communicate their brand online, followed by those who use social media to increase the awareness of my business.

Is the use of social media marketing successful in your business?

This question was asked and the results are reflected in Figure 7.

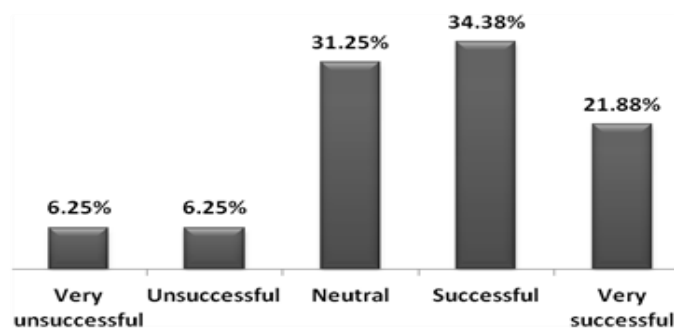
Figure 7. Is the use of social media marketing successful in your business

Figure 7 show that the largest proportion (56.26%) of respondents considers the use of social media for marketing to be either successful or very successful in their businesses. Almost one third (31.25%) is undecided about its success and the remaining 12.5% consider it either unsuccessful or very unsuccessful.

3.3. Benefits related to social media

The last question consulted the respondents on what they believe to be the benefits related to social media (Figure 8).

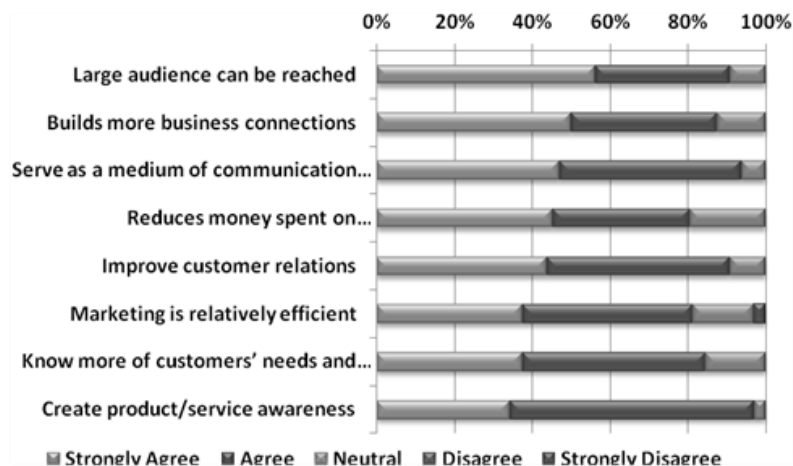
Figure 8. Benefits related to social media

Figure 8 reflects that the biggest agreement among the respondents is that a large audience can be reached via social media, followed by the ability to create product/service awareness.

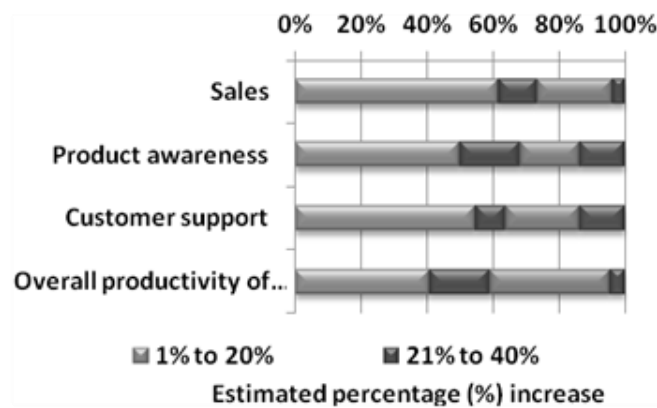
Figure 9. Increase in business productivity as a result of social media

Figure 9 give an idea about the increase in business productivity as a result of internet marketing. The respondents report a 1% to 20% increase in all four of the listed areas range from 40.9% (n=9) for overall productivity to 61.5% (n=16) for sales. Larger proportions of respondents reported a 41% to 60% increase in all four of the listed areas than those who reported 21% to 40% increase in the four listed areas. Some respondents also reported a 61% and above increase in all four listed areas. These results are indications of the success with which SME's employ the Internet to market their businesses. Multivariate results of the data point out in Figure 10.

Figure 10 illustrates that the respondents report a sales, product awareness, consumer support and overall productivity increase. There seems to be an effect of age on the percentage increase in sales, product awareness, consumer support and overall productivity. In the case of sales and customer support, larger proportions of the

respondents that are 40 years or younger reported increases of 40% or less while larger proportions of the respondents older than 40 years reported increases of more than 40%. In the case of product awareness and overall productivity, larger proportions of the respondents older than 40 reported increases of 40% or less while larger proportions of the respondents that are 40 years or younger reported increases of more than 40%.

Thus, on average it seems that older respondents are more successful in stimulating better sales and customer support through their internet marketing communication efforts than younger respondents while younger respondents are more successful in increasing product awareness and overall productivity of their SME than older respondents. The data is analysed according to gender to indicate, sales awareness, customer support and productivity after social usage in Figure 11.

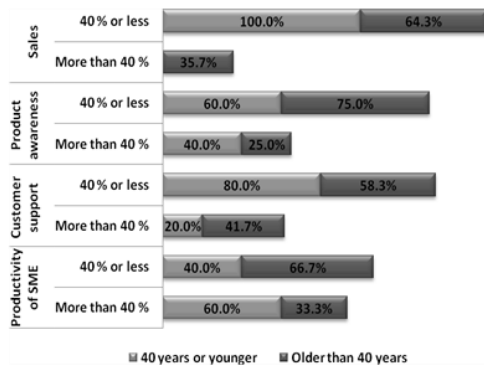
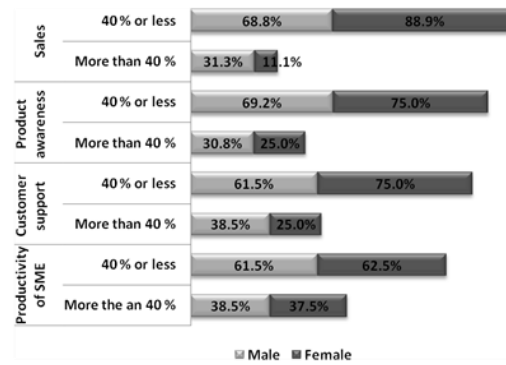
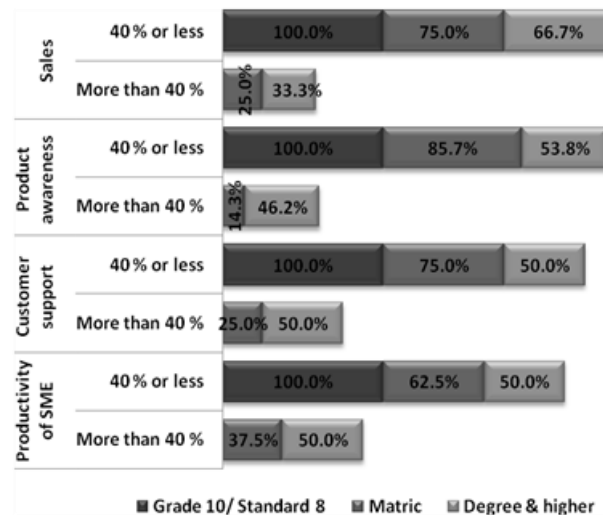
Figure 10. Increase in business productivity as a result of social media**Figure 11.** Increase in business productivity as a result of social media

Figure 11 shows that on average that female respondents are more successful in increasing sales, product awareness and consumer support with up to 40% due to their internet marketing communications while males seem to be able to effect increases of over 40% in sales, product awareness and consumer support. Both males and females seem to be equally successful in increasing overall productivity of the SME in both the 40% and lower and the over 40% category. Multivariate analysis of comparing the education level of respondents and internet usages and the results is reflected in figure 4.10 below.

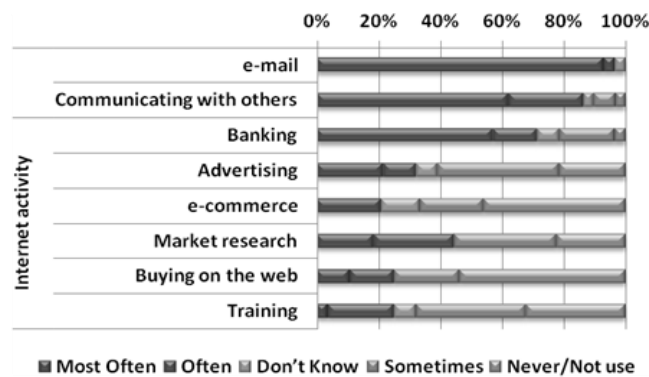
It seems that on average, educational level has an effect on how successful the respondents are to

increase their sales, product awareness, consumer support and overall productivity through their Internet marketing communications. More specifically, the proportions of respondents that increase their sales, product awareness, consumer support and overall productivity by 40% or less decrease as the level of education increases and the inverse is true for the respondents who increase their sales, product awareness, consumer support and overall productivity by more than 40%. In fact, none of the Grade 10 / Standard 8 respondents increased their sales, product awareness, consumer support and overall productivity by more than 40%. Figure 12 shows it graphically.

Figure 12. Multivariate analysis of comparing the education level of respondents and social media usages

3.4. Social media activities - frequency

The next question inquiries to social media activities, frequency and tools that SME are using. The results are shown in Figure 13.

Figure 13. Social media activities, frequency and tools

It is clear from figure 13 that E-mail is the activity that is most often used by almost all (92.9%, n=26) respondents, followed by communicating with others (62.1%, n=18) and banking (57.1%, n=16). E-mail is also the one activity for which none of the respondents reported that they never, or even sometimes, use it. Although some respondents only engage in all the other social media activities only 3.6% for use it for training and 21.4% for advertising.

The proportions of respondents who appear not to know enough of the social to know what they are doing are small and for market research and buying on the web, nobody reported that they do not know. Buying on the web (53.6%) and e-commerce (45.8%) are the activities for which the largest proportions of respondents reported that they never engage in them.

4. CONCLUSION

The aim of this paper was to determine whether SMEs are aware of social media opportunities to interact with customers. Social media usage in SMEs and the impact thereof is viewed as an essential part of modern day organisational operations for SMEs to promote their business both domestically and globally. Social media is interactive and consumer-generated media, new media or citizen media, while conventional media is company generated media which flows in one direction.

The majority of the respondents reported that they do use social media for marketing their businesses. The conducted results reflect that LinkedIn is the website known to the largest proportion (89.7%) of respondents, followed by Facebook, Twitter, Google+ and YouTube, with all of them known to more than 70% of the respondents. Digg is the social web site that is known by the least number (6.9%) of respondents.

The conducted results confirm that Facebook is the social media platform on which the largest proportion of respondents spends more than 21 hours per week, followed by other unnamed social media platforms. In the case of each of these social media platforms, there are respondents that do not have an account for it, with Pinterest being the platform for which the largest proportion of respondents does not have an account. WhatsApp and Google were also mentioned by the respondents but no indication of how many hours per week is spent on them, was provided.

The results further reveal that the largest proportion of respondents is new to using social media for marketing their products. It is also

concerning to discover that only 6.5% of the respondents are using social media pages to promote their businesses for longer than 5 years. 32.3 percent of the respondents do not use social media pages for their businesses. It shows that the largest proportion of respondents who always use social media do so to communicate their brand online, followed by those who use social media to increase the awareness of my business.

The respondents all agree that a large audience can be reached via social media, followed by the ability to create product/service awareness. The conducted research recommends that social media can be cost effective if the SMEs make use of their social networks (professional and personal) and use best practises that enable them to get their adverts or posts shared across social networks.

The conducted research recommends that SME owners utilize YouTube channels to educate and train themselves on effective usage of Internet Marketing instruments, specifically the marketing use of Facebook and YouTube. Especially, when they are using social media to promote and create product awareness. Social media advertising instruments can be utilized effectively for marketing and customer interaction without spending large amounts of resources. Social media operators do provide paid marketing opportunities, but with the right approach to advertising using Social media a SME could advertise without spending additional marketing costs.

The conducted research recommends that SMEs rather use unpaid advertising on Social media networks entails posting and sharing of posts by network members, not targeted at the a specific SME target market but free exposure to general social networks. The conducted research also recommends the following strategy to utilize social media networks without paid social media advertisement. SMEs operating a wedding hair and makeup service model in the Tshwane area could utilize the following two social media networks in the following manner. The owners targets brides between the ages of 21 and 40 and utilize Facebook network and YouTube channel to promote business services. The owners create posts with portfolios of their products and services on Facebook, which then shares with her network. Their networks consist of both personal and customer contacts, if liked or shared by their personal or customer contacts the posts will then be exposed to an even larger network of social contacts. Customers who add the SMEs to their social network will then automatically see their posts each time on their Facebook news feed. On

their YouTube channel they promote their services by weekly adding video footage of new products, services or reviews of the latest hair and makeup products available. Potential customers searching for makeup or hair for weddings will be able to select and view their videos on YouTube. These potential customers can then like or leave a comment which will help SMEs gain popularity of their channel of videos. The higher popularity, the higher in the list of videos for their services and products entries (videos) which will show up when a potential customer searches on YouTube for hair and makeup for Weddings in the area. The approach taken here does not make use of the paid marketing services of the social media network. The approach though will result in exposure to a general market. Using paid marketing services the SME owner can target a specific group of the market segment – which is not possible with all social media tools.

The respondents report a sales, product awareness, consumer support and overall productivity increase. There seems to be an effect of age on the percentage increase in sales, product awareness, consumer support and overall productivity. Although the results show that most SMEs have access to internet only 54.8 % of the respondents use social media to promote their businesses. The research established that that the largest proportion of respondents are new to using social media to create awareness for their products.

REFERENCES

1. Accenture. 2003. e-Government leadership: Engaging the customer. Accenture report. [Online]. Available from: http://nstore.accenture.com/_acn_com/PDF/Engaging_the_Customer.pdf. [Accessed: 2014-02-23].
2. Ary, D., Jacobs, L.C., Sorensen, C.K. & Walker, D. 2013. Introduction to research in education. 9th ed. Belmont: Cengage Learning.
3. Babbie, E.R. & Rubin, A. 2013. Research methods for social work. 8th ed. Belmont: Cengage Learning.
4. Bakeman, M.M. & Hanson, L. 2012. Bringing social media to small business: A role for employees and students in technology diffusion. *Business Education Innovation Journal*, 4(2):106.
5. Bowler, A., Dawood, M.S. & Page, S. 2010. Entrepreneurship and small business management. Pretoria: Juta.
6. Bryman, A. 2011. Social research methods. Oxford: Oxford University Press.
7. Bryman, A. & Bell, E. 2011. Business research methods. Oxford: Oxford University Press.
8. Department of Trade and Industry. 2012. Accessed on date at www.thedti.gov.za (12/ 03/ 2015).
9. Dockel, J. A. & Ligthelm, A. A. 2012. *Factors that contribute to small business survival*. Pretoria: Unisa.
10. Carter, M. 2011. Small but nimble. SME marketing. Vol. 3 Iss: 2, pp.33 – 48
11. Global Entrepreneurship Monitor (Gem) GEM reports 2001 - 2012. www.gem.org.za. [Accessed: 2015-12-01].
12. International Labour Office, 2011. Making markets work for jobs. http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_166021.pdf. [Accessed: 2015-12-06].
13. Johnson, L. 2010 in the Horizon Report. <http://eric.ed.gov/?id=ED510220>.
14. Kula, V. and Tatoglu, E. (2003) "An exploratory study of Internet adoption by SMEs in an emerging market economy", *European Business Review*, Vol. 15 Iss: 5, pp.324 – 333.
15. Lunsche, E. & Barron, M. 2010. Marketing Management. In Kotler, P. & Armstrong, G: *Marketing: An introduction*. London: Pearson Prentice-Hall.
16. Murphy, M. 2006. *Small business management*. London: Financial Times and Pitman Publishing.
17. Lacho, K. J. & Marinello, C. 2010. Overcoming social media barriers to small business. *The Entrepreneurial Executive*, 15:127-133. [Online]. Available from: http://issuu.com/hofstra/docs/hofhrz_spring13/7 [Accessed: 2015-09-01].
18. Pearce, J. and Byars, D. 2012. The Tenuous Link Between Formal Strategic Planning and Financial Performance. *Academy of Management*. <http://amr.aom.org/content/12/4/658.short>.
19. Phakisa, J. in Van Scheers, L. 2011 SMEs' marketing skills challenges in South Africa. <http://uir.unisa.ac.za/handle/10500/6526>. [Accessed: 2015-05-14].
20. Scott, W.G. 2011 in P Kotler - *Journal of Marketing*, 2011 - journals.ama.org.
21. Spencer, J and Galvin M. 2012. Organizations' Use of LinkedIn: Small Businesses Outpace Nonprofits and Large Corporations. <http://www.cscanada.net/index.php/ibm/article/view/3241/0>. [Accessed: 2015-02-14].
22. Strydom, J. W. 2013. Retail patronage of Sowetan consumers after 1994. *African Journal of Business Management*, 7(29): 2863-2871. [Online]. Available from: http://www.academicjournals.org/article/article1380631730_Strydom.pdf. [Accessed: 2015-02-14].
23. South Africa. 1996. National Small Business Act no. 102 of 1996. Pretoria: Government Printer.
24. Tan, K., Chong, S.C., Lin, B. & Eze, U. C. 2010. Internet-based ICT adoption among SMEs demographic versus benefits, barriers, and adoption intention. *Journal of Enterprise Information Management*, 23(1):27-55.
25. Tan, M. & Teo, T.S.H. 2000. Factors influencing the adaptation of Internet banking. *Journal of the AIS*, 1(1). [Online]. Available from: <http://dl.acm.org/citation.cfm?id=374134>. [Accessed: 2015-05-12].
26. Theunissen, S. 2012. *Social Media: Unlocking new opportunities for SMEs*. Property Points South Africa. [Online]. Available from: <https://propertypointssouthafrica.wordpress.com/2012/08/29/social-media-unlocking-new-opportunities-for-smes/#more-68>. [Accessed: 2015-04-12].
27. Tshwane. 2013: 1-101. Sandspruit works association. Annual report 2013-2014 http://www.tshwane.gov.za/sites/about_tshwane/CityManagement/Office%20of%20The%20City%20Manager/Pages/Annual-Report-2013-14.aspx. [Accessed: 2015-03-12].
28. Van Scheers, L. 2011. SME marketing skills challenges in South Africa. *African Journal of Business Management*, 2011-07.
29. Witzig, L., Spencer, M. & Galvin, D. 2012b. A profile of social media use by fortune 500 and Inc. 500 corporations. in www.actacommerci.co.za/index. [Accessed: 2015-02-02].
30. World Wide Worx. 2012. Broadband in SA doubles in two years. [Online]. Available from: <http://www.worldwideworx.com/broadband201/>. [Accessed: 2015-02-02].

REVISITING THE CONTRACTUAL EFFECT OF THE COMPANY'S CONSTITUTION IN CORPORATE OPERATIONS

Anthony O. Nwafor*

* Professor of Law, School of Law, University of Venda, South Africa

Abstract

The extent to which a company's constitution defines the relationships between the company, its members and officers as such have been a subject of debate. A number of varying judicial decisions and academic opinions have been expressed on these issues. The controversies are embedded in the manner of drafting of the relevant provisions of the regulating instruments with the attendant difficulties in interpretation. In recent times the parliament in some jurisdictions have intervened by enacting laws intended to introduce some level of clarity into the debated issues. The paper examines, by a comparative analysis, the provisions in the Companies Acts of the United Kingdom, Nigeria and South Africa. While a significant improvement seems to have been made in those jurisdictions in redefining the contractual effects of the companies' constitution in their respective extant companies' legislation, the gale of controversy on the enforcement of those contracts are far from settled.

Keywords: Company's Constitution, Contract, Effect, Enforcement, Debate

1. INTRODUCTION

The company as an entity constituted by persons who are its members and officers ordinarily needs regulations to guide its activities. Such regulations are generally referred to as the company's constitution.¹⁷ The company's constitution regulates, among others, the relationships between the company, its members and officers. It bears the status of a contract which does not necessarily arise from the actual consensus of the members.¹⁸ It is a contract created by law and binds persons who are not necessarily parties to it. No member can recile from the provisions of the constitution by relying on any of those general defences such as mistake, misrepresentation, duress or undue influence, that would vitiate the consensus required to constitute ordinary contract. The contract could be altered by a special majority of the members even against the

wishes of the minority of the contracting members, and cannot be rectified on ground of mistake.¹⁹

The consideration of the effect which the contents of the company's constitution, as public document, would have on third parties who are not privy to the making of the constitution, seemingly informs the judicial approach in dealing with this subject matter. In *Evans v Chapman*²⁰ the court was requested to rectify the constitution to correct clerical error, Joyce J in declining to exercise that judicial power, said:

I do not see my way to make the order asked for. No doubt a blunder was made in drafting the articles, but that can be rectified under the provisions of the Companies Act, 1862, s. 50, and is the proper way of doing it [that is, by passing a special resolution to alter the articles]. With reference to the jurisdiction to rectify such a document,... on the materials before me and as at present advised, I am of opinion that the general jurisdiction of the court to rectify instruments has no application to a document of this kind, which has only a statutory effect, and can only be rectified by statutory authority.

This decision received a unanimous approval of the UK Court of Appeal in *Scott v Frank F. Scott*,²¹ where Luxmore LJ drawing a distinction between the rectification of a private contract and the company's constitution, said:

It is quite true that, in the case of the rectification of a document, such as a deed *inter partes*, or a deed poll, the order for rectification does not order an alteration of the document, but merely directs that it be made to accord with the

17 Section 17 of the United Kingdom Companies Act 2006 (UK CA) defines company's constitution as including the company's articles, and any resolutions and agreements to which Chapter 3 applies. The company's constitution is used here specifically as synonymous with the articles. In South Africa, company's constitution is presently referred to as Memorandum of Incorporation, see s 15 of the South African Companies Act 71, 2008 (SA CA). In Nigeria company's constitution is a combination of the memorandum and articles of association, see ss 27 and 33 of the Companies and Allied Matters Act 1990 (CAMA).

18 See Derek French, Stephen W. Mayson and Christopher L. Ryan, Mayson, French and Ryan on Company Law 32 ed (2015) at 81 who described the nature of the contract as 'rational contract' characterised by longevity and incompleteness as it does not specify what is to happen in every possible situation, but merely lays procedural rules for deciding on each question that arises in those relationships as and when it arises. Robin Hollington QC Shareholders' Rights 6 ed (2010) at 20 stated that articles have distinctive features as a result of their status as the basic public constitution of a company to which the members automatically adhere. See also Paul L. Davies QC, Sarah Worthington and Eva Micheler, Gower and Davies Principles of Modern Company Law 9 ed (2012) at 70 on judicial attitude towards the company's constitution.

19 See Bratton Seymour Service Co Ltd v Oxborough [1992] BCLC 693 at 698 CA. *Scott v Frank F Scott (London) Ltd* [1940] 3 All ER 508 (CA).

20 [1902] 86 LT 381 at 382.

21 [1940] 3 All ER 508 at 516.

form in which it ought originally to have been executed. This cannot be the case with regard to the memorandum and articles of association of a company, for it is the document in its actual form which is delivered to the registrar and is retained and registered by him, and it is that form, and no other, which constitutes the charter of the company and becomes binding on it and its members.

The essence of this statutory contract is to bridge the gap arising from the transition from companies created by the deed of settlement (which was usually endorsed by all the members) to those created by mere registration which was first witnessed under the UK Joint Stock Companies Act of 1844.²² New members could join companies created by registration by obtaining the company's shares either by a transfer from existing members or from the company itself. Those new members who would not have signed the registered contract contained in the deed of settlement must also be bound by the terms of the contract. This could only be attained by the force of legislation.

Company's constitution featured for the first time as statutory document in the UK Joint Stock Companies Act of 1856. The 1856 Act created two of such documents known as the memorandum and articles of association respectively. Successive UK Companies legislation has continued to adopt that trend until recently when the memorandum started witnessing a diminishing status.²³ South Africa has merged both constitutional documents under the old law and presently refers to them simply as the Memorandum of Incorporation.²⁴ However, in Nigeria, both the memorandum and the articles still enjoy equal importance.²⁵

The determination of the scope and enforceability of the contract contained in the constitution have continued to witness discombobulated judicial and academic opinions. The legislative interventions in the respective jurisdictions have seemingly resulted in a significant shift, bordering on clarity, from the complex and economically worded provisions of the earlier statutes. This might lead to the abatement of some aspects of the debated issues, but the inherent inadequacies in some of the provisions may not guarantee any level of consistency in dealing with some of the issues in the near future.

2. EFFECT OF THE COMPANY'S CONSTITUTION

The legislation on company's constitution in different jurisdictions have consistently, but differently, embodied provisions reflecting the

various relationships among persons involved in the conduct of the company's affairs such as members/shareholders, directors/officers and the company itself. Those relationships are usually generally depicted contractually without laying down rules of enforcement. Thus the debate on the contractual effect of the company's constitution has continued to revolve around the extent and the enforceability of the contract created by the constitution. Successive companies' legislation in jurisdictions under consideration have attempted to narrow down the level of disagreement by introducing different words and phrases to ensure some level of clarity and certainty on the legislative intent. The extent of those innovations or improvements could be appreciated by comparing the expressions employed in the extant provisions with those they immediately replaced. For instance, s 14(1) of the UK Companies Act of 1985 provides as follows:

Subject to the provisions of this Act, the ... articles, when registered, bind the company and its members to the same extent as if they respectively had been *signed and sealed by each member, and contained covenant on the part of each member to observe all the provisions of ... the articles.*²⁶

The first controversy raised by this provision relates to the parties to the contract contained in the constitution. The law says that the articles bind the company and its members, but is silent on the signing and sealing of the articles by the company in the same manner as the members are deemed to have done. This would naturally raise the question as to why the company, a juristic person, should be bound by a contract which it is not deemed to have signed and sealed in the same manner as the members. Hence Mellish LJ in *Re Tavarone Mining Co, Pritchard's case*,²⁷ while pronouncing on the scope of the contract created by the earlier version of that provision as contained in the Joint Stock Companies Act of 1856, stated that "the articles of association are simply a contract as between the shareholders *inter se* in respect of their rights as shareholders." But there is also every reason to doubt whether that is what is intended by the legislature. The constitution is the document of the company and the company is the only constant figure in the making and implementation of the constitution. It would as such be absurd to exclude the company from the effect arising from the application of the constitution. Thus, the courts have, after that initial prevarications, by sheer exhibition of pragmatism, filled the gap in that provision. This was evident in the judgment of Stirling J in *Wood v Odessa Waterworks Co*²⁸ where the judge held that "the articles of association constitute a contract not merely between the shareholders and the company, but between each individual shareholder and every other." Farwell LJ

22 Alan Dignam and John Lowry, *Company Law* 8th ed (2014) at 160.

23 See for instance, ss 6 and 7 UK CA 1948, ss 7 and 10 UK CA 1985, cf ss 8 and 18 UK CA 2006. Sealy and Worthington described the 2006 UK Companies Act provision on memorandum of association as nothing more than a statement from the first members that they intend to form a legal entity, while all the company's constitutional provisions are contained in the articles. See Len Sealy and Sarah Worthington QC, *Sealy's Cases and Materials in Company Law* 9 ed (2010) at 24.

24 See ss 52 and 59 of the SA CA 61 of 1973, cf s 15 of the SA CA 71 of 2008 which bears only one document referred to as the 'Memorandum of Incorporation' a term defined in s 1 of the Act as a document that sets out rights, duties and responsibilities of shareholders and directors and others within and in relation to the company, and contains other matters contemplated in s 15 of the Act.

25 Sections 2 and 8 of the Nigerian Companies Act No 51 of 1968 recognised the memorandum and articles of association as the company's constitution. Similar provisions are now contained in ss 27 and 33 of the Companies and Allied Matters Act 1990 (CAMA).

26 Emphasis supplied. This provision reproduced the much criticised earlier version contained in s 20 of the UK CA 1948. Similar provisions are embodied in s 65(2) of the SA CA 1973 and s 16(1) of the Nigerian CA 1968.

27 (1873) LR 8 Ch App 956 at 960(CA).

28 (1889) 42 ChD 636 at 642(Ch). The same judge, however, adopted a more restrictive approach in *Baring- Gould v Sharpinton Combined Pick and Shovel Syndicate* [1899] 2 Ch 80, 68 LJ Ch 429 where he held that the contract created by that provision was between the company and its members only.

in *Quin and Axtens Ltd v Salmon*²⁹ approved of Stirling J's expatiation of the contractual scope of the constitution as the true statement of the law.³⁰ This aspect of the debate is now fairly addressed under s 33(1) of the UK Companies Act 2006 which provides as follows:

The provisions of a company's constitution bind the company and its members to the same extent as if there were *covenants on the part of the company and of each member* to observe those provisions.³¹

The provision, which enjoys the qualities of precision and brevity, captures the scope of the contract contained in the constitution. It is a contract between the company and its members, and contract between the members *inter se*. The concise statutory restatement of the law eases the burden which the courts have borne over the years in searching for an ideal interpretation of the successive provisions in this regard. The reform in the United Kingdom company's legislation is attributed to the initiative of Lord Wedderburn of Charlton³² whose writings on, and criticisms of, the old law have rattled the judiciary and sparked quality discussions in the academic circle.³³

The UK Companies Act reform did not address other arms of the controversy relating to the capacity in which a member could enforce the contractual rights in the constitution, and the ancillary question as to whether a member *qua* member can enforce every provision of the constitution.³⁴ The courts have in the majority of the cases construed the contractual provisions of the constitution as restricted to those relating to the relationships of members in their capacity as members.³⁵ Any rights conferred on a member in any

other capacity other than that of a member is seen by the courts as 'outsider' rights. Such 'outsider' rights are not enforceable under the statutory contract contained in the constitution. This judicial approach was precisely captured by Astbury J in *Hickman v Kent or Romney Marsh Sheep-Breeders Association*³⁶ as follows:

An outsider to whom rights purport to be given by the articles in his capacity as such outsider, whether he is or subsequently becomes a member, cannot sue on those articles treating them as contract between himself and the company to enforce those rights. Those rights are not part of the general regulations of the company applicable alike to all shareholders and can only exist by virtue of some contract between such person and the company, and the subsequent allotment of shares to an outsider in whose favour such an article is inserted does not enable him to sue the company on such an article.³⁷

Lord Wedderburn expressed doubts on the accuracy of some aspects of these decisions. He buttressed his stance with the House of Lords decision in *Quin and Axtens Ltd v Salmon*³⁸ in which Salmon sued as a member to enforce a provision in the constitution of the company which conferred right on him as a director. The House of Lords affirmed the decision of the Court of Appeal granting an injunction against the company and its directors preventing them from acting contrary to the provisions of the constitution. Wedderburn, drawing an inference from that decision, said:

The proposition is that a member can compel the company not to depart from the contract with him under the articles, *even if that means indirectly the enforcement of "outsider" rights vested either in third parties or himself, so long as, but only so long as, he sues qua member and not qua "outsider"*.³⁹

Wedderburn's proposition is at least clear on the fact that a member's right of action lies in his capacity as a member and not as an 'outsider'. This lies in his observation that "Salmon sued as a shareholder to protect a right personal to him, but common to all the members. Hence the representative action."⁴⁰ It is not in dispute that the primary purpose of Salmon's action in that case was not to enforce his 'outsider' right (a right conferred on him as a director) the enforcement of which was merely incidental ('indirectly' as stated by Wedderburn) to the primary cause of action which is the breach of the provisions of the company's

29 [1909] 1 Ch 311 at 318 (CA). See *Hickman v Kent or Romney Marsh Sheep-Breeders' Association* [1915] 1 Ch 881 at 897 per Astbury J who stated that "articles regulating the rights and obligations of the members generally as such do create rights and obligations between them and the company respectively."

30 Cf *Borland's Trustee v Steel Brothers & Co Ltd* [1901] 1 Ch 279 per Farewell J at 288.

31 Emphasis supplied. A similar reform appears in s 41(1) of the Nigerian CAMA 1990. See also s 15(6) of the SA CA 2008 for the South African version.

32 See French, Mayson & Ryan op cit note 2 at 81.

33 See KW Wedderburn "Shareholders' Rights and the Rule in Foss v Harbottle" (1957) Cambridge Law Journal 194, KW Wedderburn "Contractual Rights under Articles of Association – An Overlooked Principle Illustrated" (1965) 28 The Modern Law Review 347. Some of the writers that responded to the opinions advanced by Lord Wedderburn include Professor Gower whose views have continued to be reechoed by those who have taken up the baton after him. See LCB Gower, *The Principles of Modern Company Law* 2 ed (1957) at 252. See the most recent edition of that book by Davies, Worthington & Micheler op cit note 2 at 68-77. Other writers who have contributed to this debate include GD Goldberg "The Controversy on the Section 20 Contract Revisited" (1985) 48 The Modern Law Review 158, Roger Gregory "The Section 20 Contract" (1981) 44 The Modern Law Review 526, GN Prentice "The Enforcement of 'Outsider Rights'" (1980) *The Company Lawyer* 179.

34 Hannigan observed that it was emphasised in the UK parliamentary debate that the only purpose of the amended wording of the UK Companies Act provision is to state that the company is a party to the constitution as well as the members. See Branda Hannigan, *Company Law* 4th ed (2016) 112.

35 In *Bisgood v Henderson's Transvaal Estates Ltd* [1908] 1 Ch 743 at 759 (CA) Buckley LJ stated that the purpose of the articles is to define the position of the shareholder as shareholder, and not to bind him in his capacity as an individual. Similarly, in *Beattie v E and F Beattie Ltd* [1938] Ch 708 at 721 Greene MR held that the "contractual force given to the articles of association by the section is limited to such provisions of the articles as apply to the relationship of the members in their capacity as members." In *Browne v La Trinidad* [1887] 37 ChD 1 (CA) the action failed because the relief was sought as director and not as member. In *De Villiers v Jacobsdal Saltworks* (Michaelis and De Villiers) (Pty) Ltd 1959 (3) SA 873(O) the plaintiff was appointed a director for life, alteration of the articles to subject him to election

like other directors was held not a breach of contract as terms of the article do not constitute a contract between plaintiff and the company. In *Eley v Positive Government Security Life Assurance Co Ltd* (1876) 1 Ex D 88 a claim as solicitor also failed. See also *Gohlke and Schneider and Another v Westies Minerale (Edm) Bpk. And Another* 1970 (2) SA 685 (AD). In *Rayfield v Hands* [1960] Ch 1 the court had to construe the obligation imposed on directors in a quasi-partnership company as an obligation imposed on members who are directors in order to give effect to the provisions of the articles. Similarly, in *Caratti Holding Co Pty Ltd v Zampatti* (1975) 1 ACLR 87 (Western Australian SC) the court construed a provision in the articles of a small company giving powers to life governors as though it was a power given to the class of members who are life governors in order to give contractual effect to the provision as binding between members.

36 [1915] 1 Ch 881 at 897.

37 See also *Globalink Telecommunications Ltd v Wilmbury Ltd* [2002] All ER (D) 158; [2002] EWHC 1988 where Stanley Burnton J held that an article providing for the indemnity of director for liability in the performance of duties is not binding on the company.

38 [1909] 1 Ch 311(CA), affirmed [1909] AC 442 (HL).

39 Wedderburn op cit note 17 at 212-213. Emphasis supplied.

40 Ibid at 212.

constitution. But whether a member can, in the light of the modern statutory provisions strengthening the company's right of action and only concessionarily creating room for members through the device of derivative action, successfully maintain such an action is doubtful. An injury which is common to all the members and arising from a breach of the company's constitution, is an injury to the company which only the company could seek redress or a member through the procedure of derivative action.⁴¹

Lord Wedderburn did not, however, address the issue as to the propriety or otherwise of treating the directors as outsiders to a contract statutorily created by the company's constitution. Professor Gower believes that this is an anomaly as in most cases the law treats the directors as "insiders" which members as such are not.⁴² The directors, both individually and collectively, navigate the corporate ship in the exercise of their powers of corporate governance. A good number of them know the company from its origin and played different roles in bringing the company into existence. Some of them were involved as promoters in the preparation of the company's constitution and as such familiar with the company's operation from inception. They are trustees of the company's assets and powers, hence the law imposes on them fiduciary duties and duties of care and skill demanding from them the exhibition of due diligence in the conduct of the company's affairs. Individual members of the company, in their capacity as such, are mere investors whose interests are mostly financial bordering on the expected returns on their investments. They rarely get involved in the company's operations and sparingly attend company's meetings. There is thus a strong case for the directors to be treated as insiders to the statutory contracts. Although there are a few instances in which the courts have alluded to the existence of, and upheld the contractual relationships between the company and the directors under the constitution,⁴³ the fact that the majority of the cases have treated the directors as outsiders is inconsistent with the preeminent position of the directors in the corporate scheme. While the UK parliament failed to address this issue in 2006 Companies Act, Nigeria and South Africa have commendably done so.⁴⁴ The Nigerian Companies and Allied Matters Act 1990 (CAMA) provides in s 41(1) as follows:

Subject to the provisions of this Act, the ... articles, when registered, shall have the effect of a contract under seal between the company and its members and officers and between the members and officers themselves whereby they agree to observe and perform the provisions of the ... articles, as altered from time to time in so far as

they relate to the company, members, or officers as such.

The South African Companies Act of 2008 moved a step further in bringing in more contracting parties within the provision. Section 15(6) of the Act provides as follows:

A company's Memorandum of Incorporation, and any rules of the company, are binding -

- (a) between the company and each shareholder;
- (b) between or among the shareholders of the company; and
- (c) between the company and -
 - (i) each director or prescribed officer of the company; or

(ii) any other person serving the company as a member of the audit committee or as a member of a committee of the board, in the exercise of their respective functions within the company.

The explicitness of the South African provision has not, however, spared it from criticism. The argument is that the absence of the word 'contract' in describing the relationships between the parties as set down in the provision could create some doubts as to the nature of the relationships envisaged by the statute.⁴⁵ Although the inclusion of the word 'contract' would have guaranteed greater clarity of the parliamentary intention, the absence of such word does not, however, seem to have done any harm to the provision. The words 'binding' and 'between' as used in the provision significantly point to the parliamentary intention which is the creation of contractual obligation.

In both Nigeria and South Africa, directors are no longer 'outsiders' to the contract contained in the company's constitution. Thus, they could in their capacity as directors enforce the provisions of the constitution conferring rights on them in that capacity in the same manner as any obligations imposed on them by the constitution could be enforced by the company against them. The reference to 'officer'⁴⁶ in the provisions of both jurisdictions respectively takes the capacity of the contracting parties beyond that of the directors and could include the managers, secretary and even solicitors of the company.⁴⁷ Cases such as *Eley v Positive Government Security Life Assurance Co Ltd*⁴⁸ and *Browne v La Trinidad*⁴⁹ which failed under the old English statute (and are very likely to attain the same result under the present UK Companies Act) because the actions were respectively initiated in capacities other than that of member, would most certainly be decided differently under the present laws of Nigeria and South Africa respectively.

The realisation that the statutory contract embodied in the company's constitution is, among others, a contract between members *inter se*, ordinarily suggests that a member could in that

41 See s 263 UK CA 2006, s 165 SA CA 2008 and s 303 Nigerian CAMA 1990.

42 That view expressed in the second edition of his book and repeated in the successive editions is now re-echoed by Davies, Worthington & Micheler op cit note 17 at 72. See also Hollington QC op cit note 2 at 24.

43 See *Imperial Hydropathic Hotel Co., Blackpool v Hampson* (1882) 23 ChD 1 (CA), *Re Richmond Gate Property Co Ltd* [1965] 1 WLR 335 (ChD). In *Pulbrook v Richmond Consolidated Mining Co.* (1878) 9 ChD 610 at 612(CA) Jessel MR held that a director "has a right by constitution of the company to take part in its management, to be present, and to vote at the meetings of the directors."

44 See s 33(1) of the UK CA of 2006.

45 Maleka Femida Cassim 'Formation of Companies and the Company Constitution' in Farouk HI Cassim, Maleka Femida Cassim, Rehana Cassim, Richard Jooste, Joanne Shev and Jacqueline Yeats (eds) *Contemporary Company Law* 2nd ed (2012) at 142.

46 Section 650(1) of the Nigerian CAMA defines "officer" as including a director, manager or secretary. The use of the word 'includes' in that definition suggests that other persons not specifically mentioned but who occupy positions of responsibility in the company could also be regarded as officers.

47 See the dictionary definition of 'officer' as "a person who is in a position of authority in government or a large organisation". AS Hornby, Oxford Advanced Learner's Dictionary of Current English 8th ed (2010) at 1019.

48 (1876) 1 Ex D 88.

49 [1887] 37 ChD 1 (CA).

capacity sue every other member to compel compliance with the provisions of the constitution. The judicial position, however, suggests that the right of action by a member should be exercised through the company. Lord Herschell in *Welton v Saffery*⁵⁰ emphasised that the right conferred on a member by the constitution can only be enforced through the company or through the liquidator representing the company. In *Rayfield v Hands*⁵¹ Vaisey J was disposed to allowing a direct personal action by a shareholder against the others but not without a caution where he said:

I am encouraged, not I hope unreasonably, to find in this case a contract similarly formed between a member and member-directors in relation to their holdings of the company's shares in its articles. The conclusion to which I have come may not be of so general an application as to extend to the articles of association of every company, for it is, I think, material to remember that this private company is one of that class of companies which bears a close analogy to a partnership.

The decision was influenced by the size of the company and the perceived personal relationships that prevailed among the members of the company which invokes the intervention of equity where the conduct of some members is seen as being unfair to others. It is thus an exceptional situation restricted to the peculiarities of the case, and may not be applied in a general commercial relationship among members of a company. This judicial approach to the enforcement of the statutory contract by shareholders is rooted in the unwillingness of the courts to interfere in matters of internal management of the company. James LJ in *MacDougall v Gardiner*⁵² said:

Nothing connected with internal disputes between shareholders is to be made the subject of a bill by some one shareholder on behalf of himself and others, unless there be something illegal, oppressive, or fraudulent- unless there is something *ultra vires* on the part of the company *qua* company, or on the part of the majority of the company, so that they are not fit persons to determine it, but that every litigation must be in the name of the company, if the company really desire it.

There is substance in classifying shareholders dispute as internal dispute, but to suggest that such disputes, where they arise, cannot be subject of litigation between shareholders *inter se* defeats the essence of the statutory contract as embodied in the company's constitution. Any dispute between shareholders that borders on illegality, oppression, fraud or *ultra vires* should rightly be litigated through the company, as in those circumstances the company as a juristic person is directly affected. But it is not every dispute between shareholders that bear such characteristics. *Rayfield v Hands*⁵³ is a good example where the dispute borders on the refusal of the directors/members to take a transfer of shares from a member as provided in the company's constitution. There was no illegality, oppression, fraud or *ultra vires* in the refusal to take a transfer of shares but a simple breach of contract. It would be absurd in such an instance to insist that

the right of an aggrieved member could only be vindicated through the company.⁵⁴ In *Union Music Ltd v Watson*⁵⁵ Peter Gibson LJ suggested that the statutory contract which is binding between members *inter se* cannot be treated differently from the shareholders' agreement where he said:

In this context it is to be borne in mind that by section 14(1) of the Act [1985 Companies Act], the memorandum and articles bind the company and its members to the same extent as if they respectively had been signed and sealed by each member, and contained covenants on the part of each member to observe all the provisions of the memorandum and articles. For my part, I have difficulty in seeing how an agreement constituted by the statutory deeming provision is to be treated in any way differently from an express agreement, such as a shareholders' agreement, containing a quorum provision. Both have effect as contractual agreements as between the shareholders.

Lord Davey had in *Welton v Saffery*⁵⁶ accepted that individual shareholders may deal with their own interests by contract in such a way as they may think fit, and that "such contracts, whether made by all or some only of the shareholders, would create personal obligations, *exceptio personalis* against themselves only." In *Russell v Northern Bank Development Corp Ltd and Others*⁵⁷ Lord Jauncey of Tullichettle explained Lord Davey's decision as an acceptance that shareholders may lawfully agree *inter se* to exercise their voting rights in a manner which, if it were dictated by the articles, and were thereby binding on the company, would be unlawful. His Lordship, while according judicial validity to the shareholders' agreement in that case, said: "this agreement is purely personal to the shareholders who executed it and as I have already remarked does not purport to bind future shareholders. It is, in my view, just such a private agreement as was envisaged by Lord Davey in *Welton v Saffery*".⁵⁸

The point made here is that the courts duly recognise the similarity between the shareholders contract as contained in the company's constitution and the shareholders' agreement. They also uphold the enforceability of the latter as between shareholders. Why not accord the same judicial force to the former? The House of Lords' decision in *Russell* indicates that the inclusion of the company in the shareholders' agreement could render such an agreement unenforceable. Insisting therefore that the contract between shareholders *inter se* as contained in the constitution can only be enforced by the shareholders through the company is prejudicial to the shareholders.

3. EXTENT OF A MEMBER'S RIGHT TO ENFORCE THE CONSTITUTION

Lord Wedderburn had in his analysis of the House of Lords decision in *Salmon's case*⁵⁹ suggested that every member of the company can enforce all the

50 [1897] AC 299 at 315.

51 [1958] 2 All ER 194 at 199.

52 (1875) 1 ChD 13 at 21-22.

53 [1958] 2 All ER 194.

54 Davies, Worthington & Micheler op cit note 26 at 69 observed that for the law to insist on action through the company in such circumstances would be merely to promote multiplicity of actions and involve the company in unnecessary litigation.

55 [2003] EWCA Civ 180 para 34.

56 [1897] AC 299 at 331.

57 [1992] 3 All ER 161.

58 Ibid at 167.

59 [1909] 1 Ch 311(CA), affirmed [1909] AC 442 [HL].

provisions of the company's constitution so long as the member sues in his capacity as a member. This is borne by the following observation made by Wedderburn:

Salmon sued as a shareholder to protect a right personal to him, but common to all the members. Hence the representative action. What was that right? It could not be a right vested in him *qua* managing director. In such a capacity (as an "outsider") he could not enforce the contract arising from the articles. It is, therefore, obvious that Salmon enforced the right of a member *to have the articles observed* by the company.⁶⁰

Wedderburn strengthened this proposition with the statement of Greene MR in *Beattie v E & F Beattie Ltd*⁶¹ where his Lordship, though finding against Beattie for asserting his membership right under the constitution in a claim brought against him in his capacity as a director, illustrated the nature of a member's rights under the company's constitution as follows:

Let me assume that this article on its true construction entitles any member of the company to say to the company, when it is in dispute with a director: "You, the company, are bound by your contract with me in the articles to refer this dispute to arbitration, and I call upon you so to do." That is the right, and the only right in this respect, which is common to all the members, under this article. If that were the right which the appellant was seeking to exercise, there might be something to be said for that argument.

Wedderburn concluded on the strength of these judicial authorities that every member can call upon (compel) the company to observe the provisions of the constitution even if that amounts to an indirect enforcement of outsider right or a right vested in third parties or himself "so long as, but only so long as, he sues *qua* member and not *qua* "outsider".⁶²

Prior to the House of Lords decision in *Salmon's case*, there was *Eley v Positive Government Security Life Assurance Co Ltd*⁶³ where Lord Cairns observed that the constitution constitutes "an agreement *inter socios* and . . . it becomes a covenant between the parties to it that they will employ the plaintiff... a matter between the directors and shareholders and not between them and the plaintiff." That statement bears the impression that every member of the company (including Eley in his capacity as a member) had membership right to prevent the directors from appointing anyone else as solicitor except Eley.⁶⁴ But Lord Cairns himself had described that manner of construction of the contractual effect of the constitution in that case as being against 'public policy'.⁶⁵ Although the judgment did not expatiate on the concept of 'public policy', that concept could be viewed from both narrow and broad perspectives in the context of that case. The narrow meaning is the restrictive impact which the enforcement of the constitution would have on the power of the company in making a choice as to who should be its solicitor at any time. The broad meaning focuses on the essence of

allowing every member of the company to enforce every provision of the company's constitution against the company under the statutory contract.

Gower disagreed with Wedderburn's suggestion that every provision of the constitution has contractual effect and enforceable by every member. He stated that the "articles have no direct contractual effect in so far as they purport to confer rights or obligations on a member otherwise than in his capacity of a member."⁶⁶ In simple terms, the enforceable contractual provisions in the constitution relate to membership rights and matters dealing with the conduct of the company's affairs.⁶⁷ In *Bratton Seymour Service Co Ltd v Oxborough*⁶⁸ Steyn LJ observed that "if the provisions [of the constitution] are not truly referable to the rights and obligations of members as such, it does not operate as a contract." Milne J, presiding over a South African High Court, in *Rosslare Pty Ltd and another v Registrar of Companies*⁶⁹ explained the legal implication of the expression; 'member in his capacity as such' where he said:

A member of a company has, of course, no separate legal personality "in his capacity as a member" which is distinct from him "in his private capacity." It seems clear, however, that what is meant by a contract with a member "in his capacity as such", is a contract between him and the company which is connected with the holding of shares *and* which confers rights which are "part of the general regulations of the company applicable alike to all share-holders.

This explanation offers some justification to the UK Court Appeal decision in *London Sack & Bag Co Ltd v Dixon & Lugton Ltd*⁷⁰ where Scott LJ held that the statutory contract between members does not confer a right of action on a contract created entirely outside the company relationship, such as transactions between members. "[I]t does not in the least follow that the rule applies to extrinsic purposes such as individual trading."⁷¹

The company's constitution sets out the rights, duties and responsibilities of the shareholders, directors and others within and in relation to the company. A shareholder subscribes to the terms of the constitution and is deemed to be a contracting party within the provisions of the constitution by virtue of his shareholding and membership of the company. The reasonable expectation of every contracting party within the context of the constitution should ordinarily relate to the acquiring of rights and incurring of obligations that fall within the scope of the company's affairs. Extraneous obligations and relationships should not therefore fall within the contractual relationships created by the constitution.⁷²

66 Gower op cit note 17 at 252.

67 Davies, Worthington & Micheler op cit note 17 at 69.

68 [1992] BCC 471 at 475 (CA).

69 [1972] 2 All SA 354 (D) at 359.

70 [1943] 2 All ER 763.

71 Ibid at 766.

72 See Paul L. Davies & DD Prentice, *Gower's Principles of Modern Company Law* 6 ed (1997) at 118 fn 55 where the authors suggested that if the solicitor had slipped into the constitution, to which he and his wife were the subscribers, a provision to the effect that he and his wife should no longer be bound to cohabit, it would be absurd if this were treated as a deed of separation.

60 Wedderburn op cit note 23 at 212.

61 [1938] 3 All ER 214 at 218-219(CA).

62 Wedderburn op cit note 44 at 213.

63 (1876) 1 Ex D 88 (CA) at 90.

64 See French, Mayson & Ryan op cit note 16 at 88.

65 Ibid at 89.

The other arm of the debate lies in the suggestion that a member could enforce a right conferred on another member (third party) under the statutory contract in which all the members are parties. Wedderburn in making that proposition relied again on *Quin & Axtens v Salmon*.⁷³ It is doubtful whether the facts of that case could have supported such an extensive inference. Salmon and Axtens had a veto power conferred on them by the constitution as directors which they could exercise in relation to certain property transactions decided upon by the board of directors. Salmon had exercised the veto in that occasion but was overruled by the vote of a simple majority of the members at an extraordinary general meeting called by other members of the board that supported the transaction. The power exercised by the general meeting amounts to usurping of the power of the board and is contrary to the company's constitution which requires special resolution for the amendment of company's articles. Given these facts, Salmon has an interest to protect, both as a member and as a director in ensuring that the company observes the provisions of its constitution. Although Salmon's capacity as director was not strongly canvassed in that suit, it was not lost on the House of Lords decision. Lord Loreburn LC, in a brief judgment representing a unanimous decision of the court, said:

My Lords, I do not see any solid ground for complaining against the judgment of the Court of Appeal. The bargain made between the shareholders is contained in articles 75 and 80 of the articles of association, and it amounts for the purpose in hand to this, that the directors should manage the business; and the company, therefore, are not to manage the business unless there is provision to that effect. Further the directors cannot manage it in a particular way – that is to say, they cannot do certain things if Mr Salmon or Mr Axtens objects. Now I cannot agree with Mr Upjohn in his contention that the failure of the directors upon the objection of Mr Salmon to grant these leases of itself remitted the matter to the discretion of the company in general meeting. They could still manage the business, but not altogether in the way they desired.⁷⁴

Farwell LJ had at the Court of Appeal in the same case described the company's conduct as "an attempt to alter the terms of the contract between the parties by a simple resolution instead of by a special resolution"⁷⁵ and to this it could be added, which affected Salmon as a member and as a director of the company.⁷⁶ This is what establishes Salmon's interest to maintain the action. Without such interest as is apparent on the face of the pronouncement of the House of Lords, and latent in the decision of Farwell LJ at the Court of Appeal, it is doubtful whether Salmon would have approached the court, and if he did, he would have had to contend with the issue of establishing his *locus standi* to maintain the action. Salmon's action succeeded based on the court's finding that his right

was infringed by the procedure adopted by the majority of the shareholders which deprived him and Axtens of their veto powers. It would be tenuous to pursue the argument that every member of the company could, relying on *Salmon's case*, enforce every provision of the company's constitution, even those bordering on a third party's right.⁷⁷ Any member who adopts such measure would always have the issue of *locus standi* to contend with.

In South Africa, s 15(6) of the Companies Act does not define the extent of a shareholder's right to enforce the provisions of the constitution. Section 161 of the Act could however be of assistance in this regard to the extent that it confers power on the shareholders to approach the court to determine and protect their rights as contained in the constitution. Implicit in that provision is that a shareholder can only enforce those provisions of the constitution the breach of which affects him as a member or in any other capacity within the contemplation of s 15(6) of the Act.

Although the Nigerian Companies Act provision similarly leaves a vacuum in this regard, the Supreme Court of Nigeria has provided a lead in such matters by recognising that the issue of *locus standi* could be a decisive factor in asserting a member's right to enforce the provisions of the company's constitution. In *Globe Fishing Industries Ltd v Coker*⁷⁸ Olatawura JSC adopted the opinion expressed in Pennington's Company Law⁷⁹ that:

The dividing line between personal and corporate rights is very hard to draw, and perhaps the most that can be said is that the court will incline to treat a provision in the Memorandum or Articles as conferring a personal right on a member only if he has interest in its observance distinct from the general interest which every member has in the company adhering to the terms of its Constitution.

A member who is unable to establish, not just that the company's conduct constitutes an infringement of his membership right, but that such an infringement has subjected him to some detriment (injury) over and above that suffered by other members may not be able to maintain a personal action on the strength of the contractual provisions in the constitution. Such a wrong, when it affects the members as a whole, is a wrong done to the company for which only the company could seek redress.

Gower and Wedderburn share a similar view on the power of the majority to ratify matters of internal irregularities.⁸⁰ They agreed that this could constrain a member from enforcing the contractual rights contained in the constitution.⁸¹ Ratification is

77 Hannigan op cit note 18 at 112 stated that not even the new provision under s 171 of the UK Companies Act would guarantee members a right to enforce every provision of the constitution.

78 [1990] 7 NWLR (pt 162) 265 at 280, [1990] NILR 23 para 13(SC).

79 Robert R Pennington Pennington's Company Law 4 ed (1979) at 588.

80 Mellish LJ recognised this power of the company in *MacDougall v Gardner* (1875) 1 Ch D 13 at 25 (CA) where he said: "In my opinion, if the thing complained of is a thing which in substance the majority of the company are entitled to do, or if something has been done irregularly which the majority of the company are entitled to do regularly, or if something has been done illegally which the majority of the company are entitled to do legally, there can be no use in having litigation about it, the ultimate end of which is that a meeting has to be called, and then the majority ultimately gets its wishes." See also *Burland v Earle* [1902] AC 94(PC).

81 See Wedderburn op cit note 46 at 215. See also KW Wedderburn "Contractual Rights Under the Articles of Association – An Overlooked Principle Illustrated" (1965) Vol 28 The Modern Law Review 347 at 350 where the writer reiterated the same position.

73 [1909] AC 442 (HL).

74 Ibid at 443.

75 *Quin & Axtens v Salmon* [1909] 1 Ch 311 at 319(CA).

76 French, Mayson and Ryan stated that Salmon succeeded because he sued as a member of the company to prevent the company acting on a decision which was taken unconstitutionally. Mayson, French and Ryan on Company Law op cit note 48 at 89.

an equitable principle evolved at common law to curtail avoidable litigations relating to matters of non-compliance with procedure and formalities in the conduct of the company's affairs. It was reasoned by the courts that where only a mere informality or irregularity is alleged to invalidate management decision, action by a member would not be allowed if it is clear that on going through the right procedure, the decision would be approved or adopted by the majority of the members.⁸² Successive common law courts' decisions have consistently adopted this approach which was restated by Cotton LJ in *Browne v La Trinidad*⁸³ to the effect that "a court of equity refuses to interfere where an irregularity has been committed, if it is within the power of persons who have committed it to at once to correct it by calling a fresh meeting and dealing with the matter with all due formalities".

Statutory interventions in the jurisdictions under consideration have, however, considerably watered down the effectiveness of this principle as a defence to an action by a member to seek redress for wrong done to the company. In the UK, for instance, the possibility of ratification would not prevent an action, but could be taken into consideration by the court in an application by a shareholder seeking leave to commence a derivative action to redress a wrong done to the company.⁸⁴ In Nigeria and South Africa the emphasis is now on actual ratification or approval of the wrongful act and not on mere possibility of the act being ratified by the majority of the members. Such actual ratification would not prevent an action but could be a material consideration by the court in arriving at its judgment or making an order.⁸⁵ Actual ratification however forecloses the right of action under the UK Companies Act provision.⁸⁶

4. CONCLUSION

The statutory provision on the effect of the company's constitution under the UK Companies Act of 2006⁸⁷ has now, in line with the trend in Nigeria,⁸⁸ and lately South Africa,⁸⁹ cleared up the doubt relating to the parties to the contract contained in the company's constitution. This is now explicit – the contract is created between the members *inter se*, and between the members and the company. The UK Companies Act, however, failed in a material respect in this reform in that the Act still treats the directors as 'outsiders' to the contract contained in the constitution. Thus, under the existing provision in the UK statute, the directors are still constrained; they cannot enforce any provisions in the constitution giving them rights in their capacity as directors in the same manner as members could enforce such provisions. The important position occupied by the directors in the corporate operations contradicts the position of the law in treating them as outsiders. On the other, hand the

law recognises the vital role of the directors by imposing on them fiduciary duties and demanding of them extra diligence in the discharge of their responsibilities to the company. Members as such, are investors, interested mainly on the returns on their investments. Their actions in most cases are informed by individual interests. While not suggesting that there is anything wrong in the law that protects members' rights of membership in the company, the exclusion of the directors from enjoying similar protection in the corporate scheme is hard to justify. Nigeria and South Africa have now extended both the benefits and obligations arising from the statutory contracts contained in the constitution to the directors and other officers of the company.⁹⁰

The judicial position which insists that a member can only enforce the contractual rights under the constitution through the company is not in tandem with the members' freedom of contract. The recognition by Peter Gibson LJ in *Union Music Ltd v Watson*⁹¹ that the constitutional contract between members *inter se* bears similarity with the shareholders' agreement, raises the issue as to why the latter should be enforceable by the members *inter se* and not the former. The justification for this judicial attitude which is hinged on the powers of the majority of the shareholders to ratify matters of internal irregularity ought to be restricted to matters affecting the company as a legal entity. Vaisey J's decision in *Rayfield v Hands*⁹² demonstrates that the company is not always equally affected by disputes between members. The caution expressed in that decision by Vaisey J should not have been as members ought to enjoy the right to enforce the provisions of the constitution that affect them as members *inter se* and in the same manner as they could enforce the terms of the shareholders' agreement.

Wedderburn's suggestion that every member of the company could enforce every provision of the company's constitution, even those affecting the rights of a third party, 'so long and only so long as he sues *qua* member',⁹³ stretches the effect of the statutory contract beyond the limits of its elasticity. This suggestion, apart from being unrealistic in the sense that no reasonable member of the company would seek to enforce a contractual obligation which does not affect him in some manner,⁹⁴ is confronted by the judicially established concept of *locus standi* in civil litigation.

The Nigerian Supreme Court has recognised that a shareholder's right to enforce a particular breach of the constitution is predicated on the interest which such shareholder has in the observance of that provision over and above the interest of other shareholders of the company.⁹⁵ Where such overriding interest cannot be established by the shareholder, the wrong could at best be seen as a wrong done to the company which

82 See *Bagshaw v Eastern Union Railway Co* (1849) 7 Hare 114 at 130 per Wigram VC (VC), *Davidson v Tulloch* (1860) 3 Macq 783 at 792 per Lord Campbell LC (HL), *Edwards v Halliwell* [1950] 2 All ER 1064 (CA).

83 (1887) 37 ChD 1 at 10 (CA).

84 See s 263(3)(c)(d) of the UK CA 2006.

85 See s 305 of Nigerian CAMA and s 165(14) of the SA CA 2008.

86 See s 263(2)(c)(ii).

87 See s 33(1) UK CA 2006.

88 See s 41(1) Nigerian CAMA 1990.

89 See s 15(6) SA CA 2008.

90 See s 41(1) Nigerian CAMA 1990, s 15(6) SA CA 2008.

91 [2003] EWCA Civ 180 para 34.

92 [1958] 2 All ER 194.

93 Wedderburn op cit note 46 at 215.

94 Except perhaps those described by Mellish LJ in *MacDougall v Gardner* (1875) 1 ChD 13 at 15 (CA) as 'cantankerous members' who would contest every decision of the company.

95 *Globe Fishing Industries Ltd v Coker* [1990] 7 NWLR (pt 162) 265 at 280, [1990] NILR 23 para 13(SC) per Olatawura JSC.

a member could enforce by a derivative, as opposed to a personal, action.

Section 15(6) of the South African Companies Act of 2008, though distinctively recognises the various parties to the contract created by the constitution, does not show the extent of a member's right to enforce such contract as it affects a member. However, a close reading of s 161(1) of the Act which confers power on the shareholders to apply to court for an order determining any rights of the shareholder in terms of the company's constitution, suggests that a member can only in that capacity approach the court to enforce those provisions of the constitution that confer rights on the member. The law does not authorize a member to seek redress for every wrong done to the company as the company remains the proper plaintiff in such cases.

REFERENCES

1. Derek French, Stephen W. Mayson and Christopher L. Ryan, *Mayson, French and Ryan on Company Law* 32^{ed} (2015) at 81.
2. Robin Hollington QC *Shareholders' Rights* 6^{ed} (2010) at 20.
3. Paul L. Davies QC, Sarah Worthington and Eva Micheler, *Gower and Davies Principles of Modern Company Law* 9^{ed} (2012) at 70.
4. Alan Dignam and John Lowry, *Company Law* 8th ed (2014) at 160.
5. Len Sealy and Sarah Worthington QC, *Sealy's Cases and Materials in Company Law* 9^{ed} (2010) at 24.
6. KW Wedderburn "Shareholders' Rights and the Rule in Foss v Harbottle" (1957) *Cambridge Law Journal* 194.
7. KW Wedderburn "Contractual Rights under Articles of Association - An Overlooked Principle Illustrated" (1965) 28 *The Modern Law Review* 347.
8. LCB Gower, *The Principles of Modern Company Law* 2^{ed} (1957) at 252.
9. GD Goldberg "The Controversy on the Section 20 Contract Revisited" (1985) 48 *The Modern Law Review* 158.
10. Roger Gregory "The Section 20 Contract" (1981) 44 *The Modern Law Review* 526.
11. GN Prentice "The Enforcement of 'Outsider Rights'" (1980) *The Company Lawyer* 179.
12. Brenda Hannigan, *Company Law* 4th ed (2016) at 112.
13. Farouk HI Cassim, Maleka Femida Cassim, Rehana Cassim, Richard Jooste, Joanne Shev and Jacqueline Yeats (eds) *Contemporary Company Law* 2nd ed (2012) at 142.
14. AS Hornby, *Oxford Advanced Learner's Dictionary of Current English* 8th ed (2010) at 1019.
15. Paul L. Davies & DD Prentice, *Gower's Principles of Modern Company Law* 6^{ed} (1997) at 118 fn 55.
16. Robert R Pennington *Pennington's Company Law* 4^{ed} (1979) at 588.

A METHODOLOGICAL CONTRIBUTION TO THE REPRESENTATION OF THE FUNCTION OF LEADERSHIP AND ITS IMPACT ON ORGANIZATIONAL COOPERATION AND COMPANY RESULTS

Stefania Zanda*

* Sapienza University, Italy

Abstract

The objective of this work is to offer a contribution to conceptual clarity on the nature of leadership and the elements that compose it. It also develops a model that systematically represents the relationship between leadership styles, the quality of the management process and business results. The following approach is interdisciplinary but based on the classical theory of management in order to maintain realism and concreteness.

Keywords: Company's Performance; Evaluation Performance; Growth; Profitability; Financial Debt's Repayment; Stakeholders; Small-Medium Enterprises

1. INTRODUCTION

1.1. Foreword

The company is a socio-economic system whose results and value are closely connected to the quality of the human element. In reality, it is often found that two manufacturing organizations of the same size operating in the same economic sector, with the same technology, with similar financial structure and with the same equipment achieve different results in terms of production, sales and profit because the quality of the "human system" that characterizes them is different. Of course, the company that obtains most success is worth more.

In particular, other external and internal conditions being equal, the quality of the human organization and company value are closely linked to the quality of management processes that govern the company system.

In essence, the management models concretely adopted by managers at the strategic, tactical and operational levels appear fundamental for the survival, development and sustainable success of companies. In fact, according to the model chosen, different influences are produced on people's attitudes, motivation, satisfaction and performance as well as on economic and financial results.

In summary, the adopted management model - using a concept of Likert (1967) - is a causal variable that profoundly affects the health of the organization (intervening variable) and its results end result variables: it is an element that can promote or depress innovation, creativity, imagination, dedication, satisfaction and personnel cooperation (Zanda, 2015).

1.2. Aims and Outline of the Present Work

The aim of this work is to provide a methodological

contribution to systematically clarify the essence of leadership, its influence on management models adopted and its impact on the development of a cooperative organization and on the level of operating results. More particularly the objective is to:

- specify the essence of the function of leadership and its relations with the management process;
- specify, in a systematic way, the components of leadership;
- illustrate how leadership models influences the overall management process at strategic, tactical and operational level;
- highlight how leadership can develop a power of attraction and cooperative attitudes in the members of an organization, on the one hand, and conditions of organizational structure and operational functioning that affect operating results, on the other;
- create a model that represents the relationship between leadership styles, management models and business results.

This research is characterized by a qualitative methodology based on analysis of the bibliography. Our model is based on the concept of the system. The application of this concept leads to an interdisciplinary approach that creates a framework that welcomes the contributions of scholars from different scientific fields and is unified by the theory of management process, which, in our view, is essential when investigating phenomena regarding the structure, behavior and management/guidance of real productive organizations.

The paper is structured in the following way.

After the introduction there is a brief review of the literature (section 2); it is followed by an outline of the methodological approach (section 3); then the research results (section 4): distinction between the management process and leadership; the essence of the function of leadership and its components; the influence of leadership on other functions of

management and its ability to attract/motivate/inspire people and to arouse feelings of community and cooperation. In the final part (section 5) the results of the research are summarized and a model to represent systematically the relationship between leadership styles, the quality of the management process and operating results is outlined. Finally, the limits of this study and suggestions for future research are indicated.

2. LITERATURE REVIEW

A large number of articles and books have been written about leadership and its components. The contributions can be of an academic nature or have an operational focus. They belong to various interdisciplinary fields: economics, business organization, business behavior, sociology, psychology, anthropology, etc. It is difficult to create a synthesis without omission. Our research and, more generally, our studies have offered information in order to summarize the analysis of leadership and other management functions in the following main areas considered in chronological order:

- studies and research on the "scientific organization of work": Taylor (1911) and his followers;
- the "theory of 'administrative organization of work': Fayol (1956), Gulick (1937) Graicunas (1937), Urwick (1933);
- contributions of the "behaviorist school": Parker Follett (1951), Mayo (1933, 1945), Barnard (1938);
- studies and research on the functions and process of management. These contributions were started by Fayol and Barnard and continued with the work of many authors among which we highlight Davis (1951), Terry (1955), Fox (1963), Pfiffner and Sherwood (1960), Longenecker (1964), Koontz and O'Donnell (1968);
- studies and research on "organizational behavior", on management models aimed at creating conditions for the improvement of productivity and employee satisfaction. The various authors include Argyris (1953, 1957), Bakke (1953), (Bakke and Argyris 1954), Barnard (1938), Likert (1961), Maslow (1943, 1954), McGregor (1960, 1966), Simon (1958);
- studies and research on decision making. The many scholars include: Ansoff (1965), Chandler (1962), Cyert and March (1963), (March and Simon 1958), Simon (1958);
- studies and research on the philosophy of management, the responsibilities of executives and on the "utility function" that guides the conduct of managers (Drucker 1954, 1955, 1964, 1985);
- specific studies and research on leadership concerning in particular:
 - a. the essence of the function of leadership and the elements that compose it; the works referred to include Gardner (1990); Goleman, Boyatzis and McKee (2002); Hackman (2002); Kotter (1996); Nye (2008); Rosen (1996); Scott, Jaffe and Tobe (1993);
 - b. the distinction between managers and leaders: see the works of Kotter (2001); Landsberg (2003); Quaglino and Ghisleri (2004); Zaleznik (1977);
 - c. personal qualities and leadership: for all of them see: Arvey, Rotundo, Johnson, Zhang and MacGue (2006); Bryman (2011); Stogdill (1948); Zaccaro (2007);
 - d. types of leadership and their influence on company results: the contributions referred to are those of Argyris (1953), Kellerman (2004), McGregor (1960), Likert (1961), Nye (2008);

e. models of leadership based on the "contingency theory", in particular the models of Fiedler (1977, 1971, 1978), Vroom and Yetton (1973); Yukl (1971, 1989), Hersey and Blanchard (1969);

f. ethics and quality of leadership; authors include: Ciulla (2004), Messick and Barzeman (1966), Messick and Tenbrunsel (1996);

g. leadership principles derived from the conduct of great men; the many works including: Adair (1997), Carlyle (1840), Kurke (2004), MacArthur (2013).

The works mentioned above are undoubtedly very interesting and enlightening. However, in our opinion, taken individually, they do not permit a single (and widely accepted) definition of the function of leadership or to systematically represent the leadership phenomenon and its influence on the management process, on the structure and behavior of the organizational system and on company results. Therefore also today it is true what was asserted by Rost more than twenty years ago, according to which theoretical and practical types tend to attribute to the concept of leadership the meaning that each wants. In addition, the theory of leadership, in the part where affects on structure, on operation and on company results are examined, needs some clarification.

3. RESEARCH APPROACH

As mentioned, the methodology used in the research is qualitative; it is based on analysis and organization of the selected literature; it includes development, in a deductive and/creative way, of a unified/single concept of leadership and a model that outlines the relationships between leadership, management process, structure and organizational behavior and business results. In other words in order to provide a realistic and systematic overview, we would like to propose a representation of leadership based on a systematic-interdisciplinary approach inspired by the theory of management.

On the first point, it should be noted that the concept of the system is central to the general theory of organizations and, in particular, of leadership. Its application leads to the development of broader theories and to the exploitation of interdisciplinary approaches (Boulding, 1956), (Ackoff, 1960), (Johnson, Kast, Rosenzweig, 1964), (Von Bertalanffy, 1962), (Von Bertalanffy, A. Rapoport, 1959), (Von Bertalanffy, 1971), (Beer, 1967), (Emery, 2007) that go beyond the traditional ones, whether economic, sociological, psychological, legal, organizational, etc., which alone do not permit the leadership phenomenon to be studied in a unified manner. The elements that compose leadership are multiple and, therefore, the use of a systemic approach permits analysis as an integrated whole.

With regard to the inspiration behind the theory of management, it should be stated that the methodology adopted requires that the various interdisciplinary contributions are integrated, unified and set in a framework derived from management process theory. The latter is, in essence the reference point, the limiting perimeter, the element of inspiration, and ultimately, the basis on which the conceptual framework of leadership is built. This approach, in our opinion, would be very useful to promote realism and concreteness in this area and to help reciprocal integration of the contributions of other disciplines that converge on this topic.

4. FINDING OF THE RESEARCH

4.1. The Management Process and the Function of Leadership

The studies and the researches on management process are the real "hard core" of management; they were started, as we said, by Fayol, and Barnard and continued with the work of many authors among which we have highlight Davis, Terry, Fox, Pfiffner and Sherwood, Longenecker, Koontz and O'Donnell. Among the scholars cited, despite the variety of terminology used, there is considerable consensus on the substance of the content of the management process: it is divided into the following "organic functions":

- programming: system of strategic, tactical and operational decisions tending to determine the general objectives of a company and those of its sub-systems; the strategies and policies to be followed to achieve objectives;
- organization: determines the organizational structure, which is the set of roles and lines of influence between the various roles; creates the information system; prepares procedures and rules that affect the functioning of the production system;
- control: regulates the conduct of the company system and its sub-systems, developing corrective action to maintain organizational variables and results at the
- desired levels through feedback and feedforward;
- leadership: with this function, the manager develops a vision of the company mission and of the management path that will be followed to achieve it; he tends to look for participants and to bring them into a collaborative relationship; he durably maintains cohesion of the cooperative system, neutralizing disorder, the tendency towards disintegration and positive entropy; he constantly injects new "vital energy" into the organization.

The management process is circular: starting from the construction of an organizational system (people, financial and technical resources), it identifies the company mission and objectives to be achieved, it specifies managerial strategies to realize them and continually adjusts the system to keep it oriented towards the desired goals; guidance, coordination, impulse and organization momentum are developed by leadership: it is a special strategic management function, prior to the programming, organization and control processes, which models them, in the sense that their structure and content are influenced by the style of leadership of executives.

4.2. The Essence of The Function of Leadership and its Components

The creation and maintenance of an effective and efficient business system requires the ability to suitably adapt management to the evolution of the external environment and to develop a coordinated, collaborative human organization with high productivity, in which the company's interests and those of employees are integrated and made consistent. This task is complex and difficult, especially in large companies operating in a dynamic environment.

First, to research and develop appropriate management strategies requires that executives have a

significant capacity to envision a clear mission and to identify original management strategies (business models) that are hard to imitate. It also implies willingness to take risks, technical ability to intercept, analyse and exploit the constraints and opportunities presented by environmental change, making original choices of market, products and services to sell, technologies to be adopted, competitive factors to be used, and methods and policies to manage human, material and financial resources in the best way (Hofer, Schendel, 1978).

Secondly, the concrete application of the adopted strategies and policies requires the presence of a collaborative group, a coordinated, regulated and motivated organization. As a result, the problem arises of counteracting the potential tendency towards positive entropy: in fact, the "average person" in the organization has personal motivations, objectives and interests that are not automatically consistent with those of the organization (E.W. Bakke Argyris, 1954); he tends to interpret his role and to assess the state and trends of the internal and external environments in a personal way; he has the tendency to filter and distort the information that feeds the decision-making, execution and control processes (J.C. Longenecker, 1964); often he has specialist knowledge of an exclusive nature and therefore his conduct is not perfectly controllable by the managerial layers of the organization. These situations are faced and managed by the management process and especially by the leadership function.

In our view, there are four pillars on which leadership is based:

- the system of general moral codes of the executive (Barnard, 1938);
- assumptions that determine the executive management philosophy; these are codes of conduct that can be summarized in the following categories:
 - assumptions on the socio-economic mission of the enterprise (general purpose) and on the related role of the executive;
 - assumptions on employee behavior at work, on their capacities and the consequent role to be played in order to develop collaboration and govern the organization;
 - executive capacity to produce creative change in order to develop an original vision of the company mission, to be shared in the organization and realized concretely, specifying the managerial strategy (business model) to follow and creating an effective, economical and lasting cooperative system;
 - personal qualities of the leader.

These elements, combined in various ways, generate leadership styles. Clearly, the quality of the individual elements and that of the integrated system (the leadership style) affect the quality of the management process and its results.

The four pillars on which leadership depends will be briefly described (par.4.2.1, 4.2.2, 4.2.3, and 4.2.4). Then the influences of leadership on the other management functions (par.4.3) and the creation of collaborative feelings (par. 4.4) will be outlined. Finally, relations between these variables and the results of the organization (par. 5) will be considered.

4.2.1. The executive general codes system

The personality of an executive is characterized by a "moral state", a system of moral codes that inspire his behavior.

For the sake of clarity, we exclude from this

system the codes of conduct concerning the governance of companies, which are discussed in paragraph 4.2.2.1.

«Morals are personal forces or propensities of a general and stable character in individuals which tend to inhibit, control, or modify inconsistent immediate specific desires, impulses, or interests, and to intensify those which are consistent with such propensities». More particularly, the moral system originates from various sources; some principles «derive from the social environment, including general, political, religious and economic environments; some of them arise from experience of the physical environment, and from biological properties and phylogenetic history; some from technological practice or habit. Many moral forces are inculcated in the individual by education and training; and many of them accrue through absorption, as it were, from the environment - by imitation or emulation» (Barnard, 1938:pp. 261-262).

Each manager has, therefore, different moral codes pertaining to different areas of reality. There are many codes: religious, patriotic, political, citizenship, family, related to the respect for the individual, loyalty, respect for duties to the organization, on the use of coercion, etc. These codes of conduct and the way they combine create a more or less complex "moral state" that affects the behavior of the manager.

The system of moral codes is one of the bases from which the responsibility and reliability of managers are derived; responsibility is the ability of the manager to respect the moral codes to which he is committed, even in the presence of strong impulses and desires to do the contrary; the higher the respect for moral codes, the greater the reliability perceived by third parties. The larger and more complex the moral system, the greater the risk of conflict between codes. This can create inner moral dilemmas. The effective manager must therefore have a strategy (a super code) to dominate situations of conflict and to preserve consistency of behavior that consolidates his reliability.

Naturally, the quality of the "moral system" has a significant influence on the management of the company, on the development of feelings of collaboration and on the quality of life of the organization and its economic and financial results.

4.2.2. Assumptions on the executive's management philosophy, on the socio-economic mission of the enterprise (general purpose) and the consistent role adopted by the executive who is inspired by them.

As noted previously, these assumptions fall into two categories. Here we will begin to outline the first.

There are various assumptions about the general purpose of for-profit and non-profit companies.

Limiting ourselves to considering companies, it should be noted that these assumptions have undergone adaptations and modifications throughout the history of socio-economic systems. In fact, the "utility function" of the executives at the top of the organization, which is related to the objectives assigned to the enterprise, has adapted to environmental conditions and to the motivations of those who have managed businesses.

Tracing the evolution of capitalism, one can observe the following periods:

- period of entrepreneurial capitalism (end of the 18th century to the first decades of the 20th century): the innovator entrepreneur considered the enterprise

as a means to make profit; profitability was the measure of his success;

- period of managerial capitalism (1930s to late 1960s): the most advanced economies were characterized by the presence of large companies where there was a separation between ownership and control; executives who held the power assigned to the company, above all, the objective of achieving high dimensional growth rates with the limit of a satisfactory profit level;

- period of the irresponsible company (last decades of the twentieth century): there is an increased tendency towards maximization of profit and stock value, even with illegal conduct, not corresponding to ethical principles or respecting the environment;

- period of the knowledge-based economy in which the company's primary objective is the production and sale of goods and services required by customers, in conditions of congruous and lasting economic equilibrium and adequately satisfying the "expectations" of the various stakeholders connected with the company. The orientation in question is based on the theories of Barnard (1938) and Davis (1951), but was adopted in business practice only at the beginning of this century. The phenomenon advances slowly, finding great obstacles; however, it is assumed by many (Martin, 2010) that orientation to customer needs will constitute the premise for successful business strategies in future.

If you analyse the current reality of the market economy system, it may be noted that there are firms characterized by one of the types of strategic orientation referred to above or a combination of them. Obviously, executives can also be found who share the cited strategic orientations, connected with their "utility functions".

It should be noted that the orientations of the general objectives of the company and the consequent roles that are played by executives can be traced back to two main theories on the nature of the enterprise operating in a market economy.

On the one hand, there is the "enterprise contract theory" (which characterizes, in particular, the first, the third and the fourth orientation previously indicated). It sees the "company system" as a network of contacts between the owners and other stakeholders. Its governance has as its sole objective the maximization of income and, in more recent versions of the theory, to maximize share value (model of shareholder value). The company system is organized, regulated and monitored in order to increase the value of the economic capital. To this end, mergers, spin-offs, break-ups and various financial transactions of a speculative nature, distant from the core business, are put in place, which are often at odds with the going concern principle.

On the other hand, there is the "coalitions theory" (based on the stakeholder value model). The business system is regarded as a coalition of interest groups whose objectives are regulated, reconciled and mediated by the action of management. The orientation of the management to the satisfaction of customer needs is the pole star that guides the conduct of executives. They have a "multi-dimensional" utility function (connected with the objectives of the various stakeholders but with the priority of customer satisfaction) and take on an "organizational personality" which is connected with the responsibility of acting as trustees of the various interest groups.

4.2.2.1. Assumptions regarding the behavior of employees at work, their capacity and the consequent role played by the executive

As D. McGregor (1960) teaches, the government of productive organizations can be inspired by a broad range of different management philosophies that has at its extremes two typical and distinct philosophies. The first is based on authority and control; the second on participation and self-control.

The first philosophy, called by McGregor "Theory X", is based on the following assumptions on the behavior of employees in their work: the "average man" in an organization does not love his work; he has the instinctive tendency to pretend to work; the content of the work is not generally motivating; the average man is not ambitious; he does not aspire to take responsibility; he is hostile to change; intelligence, imagination and creativity are not widespread among people. The executive who is inspired by these assumptions is induced to carry out his role by adopting the following measures: centralization of decision-making; detailed and standardized programming of the tasks of the employees through the use of rules and procedures; analytical monitoring of their conduct; use of authority as a fundamental instrument to induce subordinates to respond to requests from the organizational roles. The objective of this manager is, in the words of McGregor, to "make human nature docile", to direct and compel it to comply with tasks, orders and directives.

The second type of management philosophy, which McGregor called "Theory Y", is based, conversely, on participation, on control inspired by self-discipline and on motivation mainly realized through rewards intrinsic to work. It assumes that negative attitudes towards work manifested by employees are not inherent to human nature, but are mainly related to the climate and characteristics of company organization. The assumptions on which this theory is founded can be summarized thus: the "average man" in the organization loves his work; he is not insensitive to the interests of the company; he is capable, if the organizational situation is adequate, to take responsibility and to take initiative; work (the job) can be a motivating factor; intelligence, imagination and creativity are widespread among people and, in general, are not adequately applied and exploited in enterprises (McGregor, 1960).

The executive who has internalized the cited assumptions is inclined to adopt the following organization management strategies: development of participation by the creation of an integrated group decision-making process/structure; development of employee skills at work; sporadic use of authority; the manager replaces threats, fear and lack of trust towards employees with friendship, availability, trust, help and transparent communication; he also develops "supportive" behavior in relation to the various members of the organization (and in particular with subordinates) so that everyone considers the experience "supportive", therefore suitable to consolidate and preserve its values and personal importance; finally, the executive strives to set high performance targets; in the interests of the company and employees, who can better satisfy their motivation if the company's results are positive.

In conclusion, the executive guided by the above principles tends to realize the so-called "fusion process", which, in essence, consists of redesigning

organizational roles in order to create tasks that gratify both company and individual interests simultaneously.

4.2.3. *Aptitude of the executive to produce creative change and to develop an original vision of the company mission, to be shared in the organization and realized concretely*

The fundamental task of leaders is to produce change. The "caliber" of an executive is measured by the impact of the change he can produce. The importance of this phenomenon ranges from "adaptive change" (which produces an improvement of the existing situation) to "innovative change" (which achieves a break with the present and is a clear discontinuity with the past).

At the base of the change are, above all, creativity, imagination and deep knowledge of the operating environment. These elements generate genuine ideas that drive company governance.

Given the importance of creativity, the leader devotes time and energy to developing it; to this end he organizes his work, delegating the secondary aspects of his task and focusing on developing original visions able to "trigger" innovation. Research, creativity and innovation should also be pursued by the manager's staff (Amabile, Khaire, 2008).

It has been said that the leader must be imaginative and creative; in particular, he must give substance to the vision, the idea of how the company will become in future and which path will be followed to achieve this objective. This involves thinking about the socio-economic mission: about the business model that will be chosen to create value, about how the operating system will differ from the models used by competitors in order to create differential advantages and about how the strategic model adopted can become more exclusive, unique and hard for competitors to imitate (Zanda, 2015).

The leader must have a good dose of artistic sense to translate the vision into images and into a story about the destination of the company and the way to go. This story needs to be attractive, engaging and significant for the company and for the participants, consistent, credible to the listener and above all innovative in the sense that it gives a new perspective of success to the management (Landsberg, 2003): he develops a dream and shows he is able to transform it into reality.

The vision is more effective if it derives from collaborating with other people. Moreover, it is essential that it is properly communicated (Kaplan, 2007) and accepted by the members of the organization. To this end, the leader builds trust, identifying potential supporters and detractors, he involves people, gives and receives inputs, encourages initiative and stimulates a continuous drive towards the vision and the ideas underlying it.

Particular attention should also be paid to the definition of management strategies with which to realize the mission; they should be outlined clearly; it is good to convey that they are not final decisions and not adaptable but solutions that leave space for the equifinality principle: the possibility of an open system (the company) to reach a goal, starting from different initial conditions and using strategies and alternative processes to be identified in relation to the situation of the internal and external environment (Von Bertalanffy, 1971).

4.2.4. Personal qualities of the leader

It was previously said that the fourth pillar of leadership consists of personal qualities.

These are skills and personality attributes considered connected with the effectiveness and efficiency shown by the leader (Koontz, 1971) in the performance of his role that produce original ideas, creating around them cohesion and collaboration and maintaining in the organization continuous momentum towards their realization.

Research on the personal characteristics of the effective leader has involved considerable effort, from many scholars and in the field. On the whole, results have not been satisfactory, since very often analysis has not been connected with operational reality. What everyone is interested in is to know what successful managers do at work and the qualities they display in carrying out their role, rather than what they are like as people (Katz, 1974).

Research has nevertheless produced various sets of personal qualities of the ideal leader. These sets are numerous and their examination, even in part, goes beyond the scope of this work. Let us just remember what Barnard (Barnard 1970) thinks on this point. Being one of the founders of management and also top executive in large corporations, he was therefore able to evaluate the qualities shown at work of many successful executives. Here are the fundamental qualities that, according to the author, help to produce the capacity of leadership: vitality and resistance, decisiveness, persuasiveness, responsibility and intellectual capacities. To these, which are not exhaustive, the author also adds: honesty, courage and initiative. These qualities are complementary and interdependent and, in his opinion, one can suppose that different combinations of qualities determine different leadership styles. The ideal combination can vary according to the conditions in which you are operating.

It should be noted that much of the research on the subject highlights personal qualities very similar to those just mentioned, or related to a combination of them (Hollis, 1980).

4.3. Leadership is a Function that Shapes the Other Functions of the Management Process

The function of leadership is strategic: it influences and shapes the other executive functions (planning, control and organization); it also determines the power of attraction and motivation of the leader and the perception that others have of him, in particular, his subordinates.

The kind of leadership adopted shapes, above all, the planning and control functions. In fact, if the style of leadership changes, the decision and control processes also change. Therefore if an executive is inspired, for example, by a negative management philosophy about the conduct of employees at work, it is highly probable that the processes of deliberation and control will be based on the centralization of decisions, the analytical control of employee behavior, the use of authority and standard procedures and the continuous use of specialized control staff. All of this is in order to "make human nature docile" and induce it to conform to the interests of the company. Completely different results would be realized if the same leaders were oriented by a management philosophy based on positive assumptions about the behavior of employees in the workplace and their capacities of decision-making, self-direction and self-control (S. Zanda, 2015).

The type of leadership adopted produces relevant

effects on the organization process. If the moral codes, the assumptions about the role of the manager, on the capacities of employees and their conduct at work change, considerable changes can be expected also in the organizational structure and, in particular, in the content of roles, in the type of relationship to be established between the corporate bodies, in the use of delegation, in the freedom of decisional and operational discretion to be recognized, in the use of authority, in the use of procedures and the structure of the information system.

Finally, it should be noted that the quality of the style of leadership has considerable influence on the strategies used to create and maintain a cooperative system in the organization. In fact, depending on the style adopted, the way of developing cooperation varies, changing material and immaterial incentives and persuasion policies and processes aimed at integrating company interests with the personal interests of the various participants in the organization.

4.4. Power of Attraction and Motivation of the Leader

Leadership styles, it was said previously, in addition to "shaping" the content of the other management functions, have a direct influence on the power of attraction and motivation of the leader.

One of the fundamental problems that the executive has to solve is the alignment of employee's conduct towards the company's mission, the general and specific objectives and related strategies.

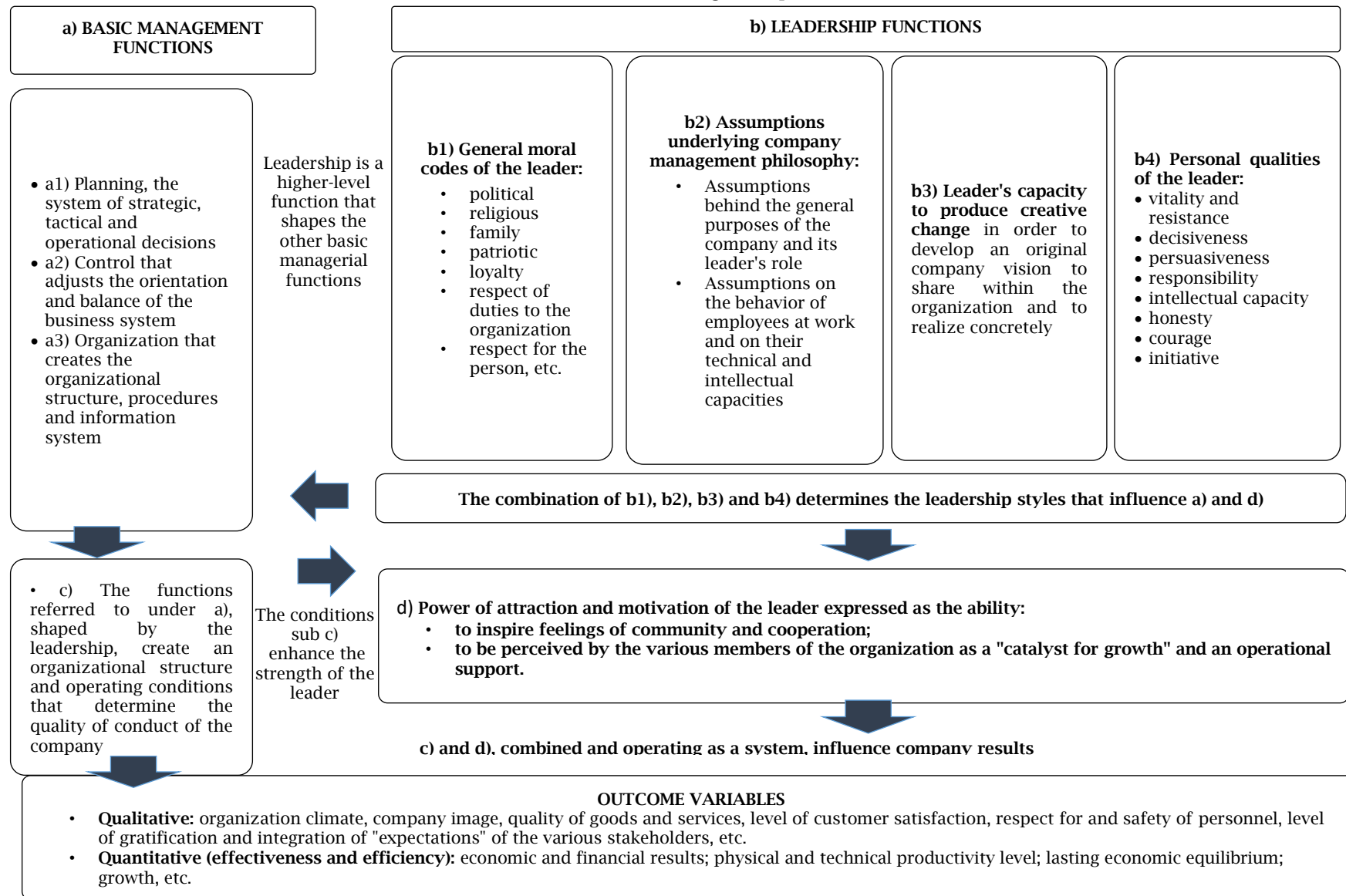
For this purpose, as has been seen, a wide range of leadership styles is available with two distinct philosophies at the extremes. The first is based on threats, fear, authority, control, sanctions and rewards extrinsic to work; in this case the power of attraction and motivation of the leader is problematic (it is based on his ability to induce people to respond to orders and directives). The second philosophy is based on "acceptance" of the manager by his subordinates, on the creation of pluralistic decision-making structures that permit participants in the organization to realize the intrinsic rewards of work tasks; on this hypothesis, the power of attraction and motivation of leaders is fundamental to guide and coordinate the behavior of employees; it is a powerful magnet that attracts people and makes them identify with their managers and with the roles assigned to them.

The leadership styles adopted, in relation to their particular characteristics, are potentially able to realize the above mentioned alignment, but with very different results in terms of conflict, satisfaction of the participants, effectiveness, efficiency, and economic and financial results.

The importance of the leader's power of attraction can be assessed using some indicators that can be summarized as: mutual trust within the organization; support for the personal values of participants; containment of the use of authority; space given to decentralized decision-making and self-control; recognition of professional skills; satisfaction of personal motivation, above all through rewards intrinsic to work; level of performance targets.

If these indicators are favorable, the leader is perceived by his subordinates and others as a catalyst who merges company and personal interests fairly and who, consequently, pursues the common good. He is also perceived as a "growth instrument", a safe source of operational support and satisfaction of personal needs.

Table 1. Management process



5. CONCLUSIONS AND FUTURE RESEARCH

In terms of leadership, the terminology used in theory and practice is not uniform and this creates disorientation. There is also major disagreement over the essence of the function of leadership, its relations with the management models and its impact on company results.

The aim of this study has been to make a contribution to conceptual clarity on the nature of leadership and the elements that compose it. A model has been developed to systematically represent the relationships between leadership styles, the process of management and business results.

Leadership is a management function with four pillars: 1) the system of general moral codes of the leader; 2) assumptions that condition the executive's management philosophy; 3) the leader's ability to produce creative change, developing an original vision of the company's mission, creating the conditions of its acceptance within the organizational context and to achieve it with success; 4) personal qualities of the leader.

These elements combined generate the leadership styles.

Leadership is a special type of strategic function, which, on the one hand, influences and shapes the other management functions (planning, control and organization) and, on the other, develops the power of attraction and motivation of the leader and the perception of reliability that others have of him and, in particular, his subordinates.

In turn, the management functions (modelled by the type of leadership adopted) and the power of attraction and motivation of the leader, variously combined, influence the qualitative and quantitative "end result variables" of the company.

The qualitative variables concern mainly the organizational climate, the company image, the quality of goods and services, the level of customer satisfaction, respect for and safety of people, respect for the environment and the extent to which the "expectations" of the various stakeholders involved in the management of the company are gratified and integrated.

The quantitative variables are related to the effectiveness and efficiency of management: economic and financial results; the level of physical and technical productivity; lasting economic equilibrium; company's expansion highlighted by sales revenue, market share and employment, etc.

The conceptual model described above is shown in the following diagram indicating the system of relationships between the various components of the management process (including leadership) and also their influence on company results.

In this paper we have not entered into the problem of identifying a range of possible leadership styles (configured on the basis of the concept and components of leadership proposed in this paper) and the evaluation of their effects on the "health" and results of the organization. This remains an important task; our purpose is merely to provide a methodological contribution to clarity, hoping to facilitate the work of researchers and managers who have to operate in a context where the terminology is uncertain and confused and the hypothesized relationships between leadership, management models and corporate results are often in conflict.

REFERENCES

1. Ackoff R.L., (1960) Systems, Organizations And Interdisciplinary Research, General System, Yearbook, Society For General Systems Research, Vol. 5.
2. Adair J., (1997) Effective Leadership Masterclass, Pan Books, London.
3. Amabile T.M, Khaire M., (2008), Creativity And The Role Of The Leader, Nov. Pp. 100-109.
4. Ansoff H.I., (1965) Corporate Strategy: An Analytic Approach To Business Policy For Growth And Expansion, Mcgraw-Hill Book Company, New York; Id., (1979) Strategic Management, Macmillan, London,.
5. Argyris C., (1953) Executive Leadership, Harper & Row Publishers Inc., New York;
6. Argyris C., (1957) Personality And Organization, Harper & Brothers, New York.
7. Arvey R.D., M. Rotundo, W. Johnson, Z. Zhang, M. Macgue, (2006) The Determinants Of Leadership Role Occupancy: Genetic And Personality Factors, In Leadership Quarterly, Xvii, N.1.
8. Bakke E.W., (1953) The Fusion Process, Labor And Management Center, Yale University, New Haven.
9. Bakke E.W., Argyris C., (1954) Organization Structure And Dynamics, Labor And Management Center, Yale University, New Haven.
10. Barnard C.I (1946) The Nature Of Leadership, In Hoslett S.D. (Ed.), Human Factors In Management, Parkville, Missouri, Park College Press.
11. Barnard C.I, (1938) The Functions Of The Executive, Harvard University Press, Cambridge, Mass.
12. Beer S., (1967) Cybernetics And Management, J. Wiley & Sons, New York.
13. Boulding K.E.,(1956) General Systems Theory, The Skeleton Of A Science, In Management Science, Vol. 2, N. 3.
14. Bryman A., (2011) Charisma And Leadership In Organization, Sage Publications Ltd., London.
15. Carlyle T., (1840) On Heroes. Hero-Workshop And The Heroic In History, Chapman & Hall, London.
16. Chandler A.D., (1962) Strategy And Structure. Chapters In The History Of The Industrial Enterprise, The Mit Press, Cambridge, Mass.
17. Ciulla J.B, (2004) Ethics.The Heart Of Leadership, Praeger Publishers, Westport, Connecticut.
18. Cyert R.M., J.G. March, (1963) A Behavioral Theory Of The Firm, Prentice-Hall Inc., New Jersey
19. Davis R.C, (1951) The Fundamentals Of Top Management, Harper&Brothers, New York.
20. Drucker P., (1954) The Practice Of Management, Harper&Brothers Publishers, New York, (Revised Edition Del 2007).
21. Drucker P., (1955) Management Science And The Manager, In Management Science, Vol. 1, N. 2, January.
22. Drucker P., (1964) Concept Of The Corporation, The J. Day Company Inc., New York.
23. Drucker P., (1985) Innovation And Entrepreneurship: Practice And Principles, Harper&Row, New York.
24. Emery F.E. (Edited), (2007) La Teoria Dei Sistemi, Angeli, Milano.
25. Fayol H., (1956) Administration Industrielle Et Générale, Dunod, Paris, 1956 (Extrait Du Bulletin De La Société De L'industrie Minérale, 1916).
26. Fielder F.E (1978) The Contingency Model And The Dynamics Of The Leadership Process, In L. Berkowitz (Ed.), Advances In Experimental Social Psychology, Academic Press, New York.
27. Fielder F.E., (1967) A Theory Of Leadership Effectiveness, Mcgaw-Hill Book Company Inc, New York.
28. Fielder F.E., (1971) Validation And Extension Of The Contingency Model Of Leadership

- Effectiveness: A Review Of Empirical Findings, In Psychological Bulletin, P. 128-148.
29. Fox W, (1963) The Management Process, R.D. Irwin Inc., Homewood, Illinois.
 30. Gardner J.W., (1990) On Leadership, The Free Press, New York.
 31. Goleman D., (2002) Boyatzis R.E., McKee A, Primal Leadership, Harvard Business School Press, Boston.
 32. Graicunas V.A., (1937) Relationship In Organization, In Papers On The Science Of Administration, Gulick L And Urwick L.F. (Edited) , Institute Of Public Administration, Columbia University, New York.
 33. Gulick L., (2002) Notes On The Theory Of Organization, In Papers On The Science Of Administration, Gulick L And Urwick L.F. (Edited), Institute Of Public Administration, Columbia University, New York.
 34. Hackman J.R., (2002) Leading Team: Setting The Stage For Great Performance, Harvard Business School Press, Boston.
 35. Hersey P., Blanchard K., (1969) Management Of Organizational Behaviour, Prentice-Hall, Englewood Cliffs, N.J.
 36. Hofer C. W., D. Schendel, (1978) Strategy Formulation: Analytical Concepts, West Publishing Co., St. Paul, Minnesota.
 37. Hollis W.S., (1980) On The Science Of Leadership, In Military Review - The Professional Journal Of The U.S. Army, September.
 38. Johnson R.A, F.E. Kast, J.E. Rosenzweig, (1964) Systems Theory And Management, In Management Science, Vol. 10, N. 2, January.
 39. Kaplan R.S. (2007), What To Ask The Person In The Mirror, January, Pp. 86-95.
 40. Katz R.L., (1974) Skills Of An Effective Administrator, In Harvard Business Review, September-October.
 41. Kellerman B, (2004) Bad Leadership: What It Is, How It Happens, Why It Matters, Harvard Business School Press, Boston.
 42. Koontz H, (1971), Appraising Managers As Managers, Mcgrow-Hill Book Company, New York.
 43. Koontz H., O'donnell C., (1968) Principles Of Management. An Analysis Of Managerial Functions, Mcgraw-Hill Book Co. Inc., New York.
 44. Kotter J.P., (1996) Leading Change, Harvard Business School Press, Boston.
 45. Kotter J.P., (2001) What Leaders Really Do, In Harvard Business Review, December.
 46. Kurke L.B., (2004) The Wisdom Of Alexander The Great. Enduring Leadership Lessons From The Man Who Created An Empire, Amacom, American Management Association, New York.
 47. Landsberg M., (2003) The Tools Of Leadership. Vision, Inspiration, Momentum, Profile Book Ltd., Hatton Garden, London.
 48. Likert R., (1961) New Patterns Of Management, Mcgraw-Hill Book Company, New York.
 49. Likert R., (1967) The Human Organization: Its Management And Value, Mcgraw-Hill Book, Company Inc., New York.
 50. Longenecker J.C, Principles Of Management And Organizational Behaviour, Cit., P.428
 51. Longenecker J.C., (1964) Principles Of Management And Organizational Behaviour, C.E. Merrill Books Inc., Columbus, Ohio.
 52. Mac Arthur B., (2013) The Penguin Book Of Historical Speeches, Penguin Books, London.
 53. March; J. G, Simon H.A. (1958), Organizations, J. Wiley & Sons, New York.
 54. Martin R., (2010) The Age Of Customer Capitalism, In Harvard Business Review, Jan.-Feb. Pp. 58-65.
 55. Maslow A.H (1954) Motivation And Personality, Harper & Row, New York.
 56. Maslow A.H., (1943) A Theory Of Human Motivation, In Psychological Review, Vol. L, July.
 57. Mayo E (1945) The Social Problems Of An Industrial Civilization, In Harvard Business Review Press, Boston.
 58. Mayo E., (1933) The Human Problems Of An Industrial Civilization, The Macmillan Co., New York
 59. McGregor D., (1960) The Human Side Of Enterprise, Macgraw-Hill Book Co.Inc, New York.
 60. McGregor D., (1960) The Human Side Of Enterprise, Macgraw-Hill Book Co.Inc, New York.; Id., (1966) Leadership And Motivation, The M.I.T Press Cambridge, Massachusetts.
 61. McGregor D., (1966) Leadership And Motivation, The M.I.T Press Cambridge, Massachusetts.
 62. Messick D.M., A.E. Tenbrunsel (Eds.), (1996) Codes Of Conduct: Behavioral Research In Business Ethics, Russel Sage Foundation, New York.
 63. Messick D.M., M.H. Bazerman, (1966) Ethical Leadership And The Psychology Of Decision Making, In Sloan Management Review, Winter.
 64. Nye J.S. Jr., (2008) The Powers To Lead, Oxford University Press, New York.
 65. Parker Follett M., (1951) Creative Experience, Peter Smith, New York, (Printed In 1924).
 66. Pfiffner J.M., F.P. Sherwood, (1960) Administrative Organization, Prentice-Hall Inc., Englewood Cliffs, N.J.
 67. Quaglino G.P., Ghisleri C., (2004) Avere Leadership, R. Cortina Editore, Milano.
 68. Rosen R.M., (1996) Leading People, Penguin Books, London.
 69. Scott C.D., Jaffe D.T., Tobe G.R., (1993) Organizational Vision, Values And Mission. Building The Organization Of Tomorrow, Crisp Publications Inc., Menlo Park, California.
 70. Simon H.A., (1958) Administrative Behavior, The Macmillan Company, New York.
 71. Stogdill R. M., (1948) Personal Factors Associated With Leadership: A Survey Of The Literature, In Journal Of Psychology, Xv.
 72. Taylor F.W., (1911) The Principles Of Scientific Management, Harper & Row Brothers, 1911; Id., (1911) Shop Management, Harper & Brothers, New York.
 73. Terry G.R. , (1955) Principles Of Management, R.D. Irwin Inc., Homewood, Illinois.
 74. Urwick L.F.(1933), Organization As A Technical Problem, In Papers On The Science Of Administration, Gulick L And Urwick L.F. (Edited) , Institute Of Public Administration, Columbia University, New York.
 75. Von Bertalanffy L., (1962) General Systems Theory - A Critical Review, In General System, The University Of Michigan, Ann Arbor.
 76. Von Bertalanffy L., (1971) General System Theory, Braziler, New York; S. Beer, (1967) Cybernetics And Management, J. Wiley & Sons, New York.
 77. Von Bertalanffy L., Rapoport A., (1959) Contributions To Organization Theory, In General Systems, The University Of Michigan, Ann Arbor;
 78. Vroom V.H., Yetton P.W., (1973) Leadership And Decision Making, University Of Pittsburg Press, Pittsburg.
 79. Yukl G.A., (1971) Toward A Behavioral Theory Of Leadership, In Organization Behavior And Human Performance, P.414-440.
 80. Yukl G.A., (1989) Leadership In Organizations, Prentice-Hall, Englewood Cliffs, N.J.
 81. Zaccaro S.J., (2007) Trait-Based Perspectives On Leadership, In American Psychologist, Lxii, N.1.
 82. Zaleznik A., (1977) Managers And Leaders: Are They Different?, In Harvard Business Review, Lv, N.3.
 83. Zanda S., (2015) La Qualità Dei Dirigenti, Giappichelli, Torino.