CORPORATE OWNERSHIP & CONTROL

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EDITORIAL

Dear readers!

The recent issue of the journal Corporate Ownership and Control pays attention to issues of corporate ownership and control and board practices. Company performance, managerial compensation, corporate governance in banks, national peculiarities of corporate governance in South Africa are also under the scope of researches. More detailed issues are given below.

Silvio Bianchi Martini, *Antonio Corvino* and *Alessandra Rigolini* investigate the relationship between the board diversity and the investments in innovation in a sample of companies listed on the Italian Stock Exchange and operating in the consumer goods and in the consumer services industry. *Ali Yaftian*, *Victoria Wise*, *Kathie Cooper*, *Soheila Mirshekary* examines corporate social reporting (CSR) in the annual reports of companies listed on the Tehran Stock Exchange (TSE) in Iran. *Paolo Di Toma* in his paper employs a case-study approach to address linkages between corporate governance and a firm's strategic dynamics. *Shadi Farshadfar* investigates whether the direct method of presenting cash flows from operations is superior to the indirect method in its ability to forecast future cash flows. The study, which uses a sample of Australian firms, finds that both the direct and indirect methods improve the forecast of future cash flows. *Gerry Gallery*, *Jodie Nelson*, *Chan Guo* review the literature on the impact of litigation risk (a form of external governance) on corporate prospective disclosure decisions as reflected in management earnings forecasts. *Giovanna Mariani*, *Delio Panaro* in their work carried out an empirical research on a panel of companies in turnaround SMEs, venture capital backed, with the objective of deepening the analysis. Their study can suggest the definition of Corporate Governance Index for SME in critical situations.

Franco Tutino, *Giuliana Birindelli*, *Paola Ferretti* state that the issues raised by Basel III, with specific reference to the introduction of more stringent capital requirements, are numerous and touch upon different aspects, such as cost and profitability-related problems and the repercussions concerning strategies implemented by banks. Their aim is to clarify the impact on Italian banks. *Sheilla Nyasha* and *NM Odhiambo* give an overview of the banking sector in Kenya. They highlight the reforms since the country's independence in 1963 and the challenges facing the banking sector in Kenya.

Sam Ngwenya, *Mahlomolo Khumalo* investigates the relationship between CEO compensation and performance of State Owned Enterprises (SOEs) in South Africa, using data for the period 2009 to 2011. The results indicated that there exist no positive relationship between CEO compensation and SOEs performance as measured by return on assets. *Johan Hough*, *Andre Parker* and *Ernst Neuland* in their paper try to research the nature and the changing face of the Multinational Corporations (MNC), impact on globalization and Foreign Direct Investment (FDI), and some MNC strategies to enter foreign markets. *Nelson M Waweru* examines the corporate governance characteristics influencing the value of the value of the firm in South Africa (SA). Using panel data of 247-firm years obtained from the annual reports of the 50 largest companies listed on the JSE Securities Exchange of SA, his study found that block shareholding and the proportion of NEDS as the main corporate governance characteristics influencing the value of the firm in SA. *M.D.Gibson* and *J. Young* in their paper state that operational risk has become an increasingly important topic within financial institutions resulting in an increased spend on operational risk management solutions. Their research has highlighted that a series of defined critical success factors could reduce the risk of implementation failure.

We hope that you will enjoy reading the journal and in future we will receive new papers, outlining the most important issues and best practices of corporate governance!

CORPORATE OWNERSHIP & CONTROL

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CONTENTS

Governance Index for SME in critical situations. This study offers some ideas about the opportunity of stimulating the SME to introduce the Corporate Governance System spread to listed companies.

SECTION 2. CORPORATE GOVERNANCE IN BANKS

The issues raised by Basel III, with specific reference to the introduction of more stringent capital requirements, are numerous and touch upon different aspects, such as cost and profitability-related problems and the repercussions concerning strategies implemented by banks. Our aim is to clarify the impact on Italian banks. We will first present some general considerations addressing the main implications for bank management, before illustrating the results of a survey aimed at detecting possible fears and doubts, on the part of banks, with reference to the extent to which some of the capitalisation proposals included in the reform can actually be pursued.

This paper gives an overview of the banking sector in Kenya; it highlights the reforms since the country's independence in 1963; it tracks the growth of the banking sector in response to the reforms implemented over the past four decades; and finally, it highlights the challenges facing the banking sector in Kenya. The country's banking sector consists of more than 40 commercial banks, with the Central Bank of Kenya, which is the country's central bank, at the apex. Since the 1980s, the Kenyan government has implemented a number of banking sector reforms – in order to safeguard and improve the banking sector. The response to these reforms by the banking sector has been varied. As a result of these reforms, there has been a shift in the dominance from the State-owned banks to the private commercial banks. There has also been an improvement in the Central Bank's oversight of the financial institutions, and an enforcement of the banks' capital-adequacy requirements. By the standards of African countries, Kenya currently has one of the most developed banking systems in Africa. The country has enjoyed a substantial bank-based financial sector development over the years, and its institutional framework has also grown stronger. However, like many other developing countries' financial systems, the Kenyan banking system still faces wide-ranging challenges, such as high interest rate spreads and financial inclusion challenges.

SECTION 3. CORPORATE GOVERNANCE IN SOUTH AFRICA

The study investigates the relationship between CEO compensation and performance of State Owned Enterprises (SOEs) in South Africa, using data for the period 2009 to 2011. The results indicated that there exist no positive relationship between CEO compensation and SOEs performance as measured by return on assets. The results also indicated a positive relationship between CEO compensation (base salary) and the size of SOEs as measured by total revenue and number of employees. The results suggest that board members of SOEs in South Africa should hold CEOs accountable for the performance of SOEs, and should not pay huge salaries and bonuses to non performing CEOs.

РАЗДЕЛ 1
НАУЧНЫЕ ИССЛЕДОВАНИЯ И КОНЦЕПЦИИ

SECTION 1
ACADEMIC INVESTIGATIONS & CONCEPTS

BOARD DIVERSITY AND STRUCTURE: WHAT IMPLICATIONS FOR INVESTMENTS IN INNOVATION? EMPIRICAL EVIDENCE FROM ITALIAN CONTEXT

Silvio Bianchi Martini*, Antonio Corvino**, Alessandra Rigolini*

Abstract

The aim of this paper is to investigate the relationship between the board diversity and the investments in innovation in a sample of companies listed on the Italian Stock Exchange (named Borsa Italiana) and operating in the consumer goods and in the consumer services industry. This sample covers the period from 2006 to 2010 and contains 345 observations. Drawing on the literature review, we pinpointed six hypotheses related to the impact on the investments in innovation of the following independent variables: 1. presence of outside directors; 2. average number of the other positions held by the members of the board; 3. minority shareholder representatives on the board; 4. presence of women on the board of directors; 5. number of committees; 6. frequency of board meetings. Furthermore, on the basis of the previous empirical studies, to measure the investments in innovation (the dependent variable), we chose these accounting ratios: total intangible assets divided by total assets and total R&D costs divided by total sales. From the methodology standpoint, we used both the bivariate statistic (i.e. Pearson Correlations and Anova one way) and the multivariate one (i.e. OLS regression analysis with robust standard errors calculated by the Newey-West, HAC method). Our findings confirm the previous studies and show that, also for the Italian listed companies operating in the industries mentioned earlier, the outsiders as well as the frequency of meetings held by the Strategy Committee assume a relevant role in supporting the investments in innovation. Conversely, the other independent variables concerning board diversity (i.e. women, minority shareholder representatives etc.) are not statistically significant and, as a result, do not influence the investments in innovation.

Keywords: Corporate Governance, Corporate Entrepreneurship, Innovation, Italy

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Although this paper is the outcome of joint work of the three authors, Silvio Bianchi Martini wrote section 5; Antonio Corvino wrote sections 3 and 4; Alessandra Rigolini wrote sections 1 and 2. Paper presented at the International Conference *"Corporate governance & regulation: outlining new horizons for theory and practice"*, Pisa, Italy, September 19, 2012.

1. Introduction

Studies in management of innovation have increasingly focused their attention on the role, if any, of corporate governance mechanism, structures and practices in influencing innovation (Lee and O'Neil, 2003; Munari *et al*., 2010). A key issue in this stream of research is related to board of directors contribution in promoting investment in innovation (Zahra *et al*., 2009). Despite the high number of researches on this topic, the results are still conflicting and work shave produced partial results by focusing only on the monitoring and control of board functions, based on the agency theory (Fama and Jensen, 1983). Actually, the role of the board in sustaining innovation investment can be also investigated either looking at its the strategic role (Zahra and Pearce, 1989)or considering it as a portfolio of resources and competences that firm can use in order to explore and exploit innovative opportunities (Pfeffer, 1972).

We try to address this gap in our research investigating whether the board composition and structure can influence investments in innovation, building on a resource based perspective. In particular, we focus our attention not only on the presence of outside directors but also on the presence of women, the presence of directors that represent the minority shareholders, the number of other positions held by the directors in other corporate boards, the number and type of committees and the frequency of board and committees meetings.

The rest of the paper is organized as follows. In Section 2 we present the theoretical model and our hypotheses, discussing whether board composition and structure influence the decision to invest in innovative activities. Section 3 describes the data set and the variables. In the Section 4we present the methods adopted in the econometric analysis and its results and implications, while Section5 illustrates our discussions, conclusions and significant issues for future research.

2. Theoretical framework and hypotheses

Corporate innovation strategies are important for firm's profitability, success, and growth (Kor, 2006; Stopford and Baden-Fuller, 1994; Lumpkin and Dess, 1996; Zona *et al*., 2006). Innovation has become one of the most important strategies that can improve firm efforts in gaining competitive advantage, expanding market share, increasing firm performance and creating new wealth (Morbey, 1988; Franko, 1989; Hitt et al., 1996; Miller and del Carmen Triana, 2009). Given its potential contributions, scholars have identified various factors that promote innovative activities within the firm. Among them, one of the most relevant are corporate governance mechanisms that firm adopts (Baysinger *et al*., 1991; Hansen and Hill, 1991; Hill and Snell, 1988; Hitt et al., 1996; Zahra, 1996; Zahra *et al*., 2000, 2009; Miller and del Carmen Triana, 2009). In particular, studies in this field have concentrated their attention on the role of board of directors in promoting and encouraging corporate innovation strategy within the firm (Baysinger *et al*., 1991, Rindova, 1999; Zona *et al*., 2006; Pugliese *et al*., 2009).

Innovation activities are often time consuming, expensive and risky (Zahra and Covin, 1995). Hence, some managers may not have the sufficient motivation to support investments in innovation activities, due their risk aversion and the focus on short term value creation (Jacob, 1991; Zahra, 1996). Based on these assumptions, scholars focused on agency theory suggested that promoting innovation initiatives requires a strong and independent board that monitors, evaluates and challenges top management team (Zahra *et al*., 2000). Thus, researchers have focused mainly on the monitoring role of the board, considering the board of directors as a formal body for stakeholders or principals to control managerial behavior (Fama and Jensen 1983; Gabrielsson and Winlund, 2000). From an agency theory perspective, the board can be used as a monitoring tool for shareholder interests to safeguard their investments (Fama and Jensen 1983) and the board of directors can be considered an important information system for stakeholders to monitor executives behavior, ensure their focus on long term value creation and increase firm performance (Eisenhardt 1989; Zahra 1996; Gabrielsson and Winlund, 2000). Moreover, the board can be considered responsible for ensuring legal and ethical conduct by the corporation and its employees (Lorsch 1995, Conger et al, 1998).

Actually, researches on the board's role have highlighted other important functions that board can perform to promote and increase innovation activities as well as to support the management and the firm (Zahra and Pearce, 1989; Mintzberg 1983; Zona *et al*., 2006). We refer to the strategic role of the board that can be related to the resource based theory (Pfeffer, 1972; 1973; Barney, 1991). According to this perspective, the board of directors is considered a portfolio of resources and competences that can help firm in exploring and exploiting strategic innovative activities. Hence, the directors' knowledge, skills and experiences, can support and complement the management of the firm and, if properly organized, can contribute to increase firm performance. Moreover, directors can help firm in the formation of strategic networks, can provide advice on strategic issues and can give authority to the firm (Mintzberg 1983; Zahra and Pearce, 1989; Borch and Huse 1993; Gabrielsson and Winlund, 2000). In other words, from a

resource-based perspective (Barney, 1991; Barney *et al*., 2001) the board is a potential provider of resources used to promote innovation within the firm and create new wealth (Pfeffer, 1972; Zald, 1969; Gabrielsson and Winlund, 2000; Filatotchev and Wright, 2005; Zahra *et al*., 2009). It can provide knowledge and resources that enable executives to pursue opportunities that, in the years ahead, could turn into benefits for shareholders through the improvement of firm performance (Keasy and Wright, 1993; Zahra *et al*., 2009). The board can identify viable opportunities for growth by giving attention to innovation activities that allow the company to create new wealth; it is also a potential source of creative thinking about new opportunities for growth and innovative ideas. The board can share useful information for making effective strategic choices and can ensure that members of the top management team have the knowledge, skills, and abilities to help the company growth (Hillman and Dalziel, 2003; Zahra *et al*., 2009; Tuggle *et al*., 2010).Finally, the board can align the interests of managers and the firm, thereby encouraging wealth creation and innovation activities by providing resources (Huse, 2007). The board's provision of resources involves a variety of specific activities, including providing legitimacy to the corporate image (Selznick, 1949), providing expertise (Baysinger and Hoskisson, 1990), administering advice and counsel (Lorsch and Maclver, 1989; Mintzberg, 1983), linking the firm to important stakeholders or other important entities (Hillman *et al*., 2001), facilitating access to resources, such as capital (Mizruchi and Stearns, 1988), building external relations, diffusing innovation (Haunschild and Beckman, 1998) and aiding in the formulation of strategy and other important firm decisions (Judge and Zeithaml, 1992; Lorsch and Maclver, 1989).

Building on this last perspective, in this paper we propose to investigate the relationship between board attributes, in terms of composition and structure, and the propensity for investments in innovation.

Board composition

Looking at the board composition, we concentrate our attention on the mix of director types and the minority representation. Type refers to the widely recognized dichotomy between inside and outside directors. Outsiders are not members of the top management team, their associates, or families; are not employees of the firm or its subsidiaries; and are not members of the immediate past top management group (Jones and Goldberg, 1982). They also have contacts outside a firm and typically bring a broader range of experience because of their contacts with different companies and industries (Kesner, 1988). Insiders are board members who are current or former employees of a firm or who are otherwise closely affiliated with the firm (Judge and Zeithaml, 1992). Minority representation refers to the presence of directors in the board room that are expression of the minority shareholders (Anderson and Reeb, 2004; Loderer and Waelchli, 2010) and to the representation of females on the board (Rosener, 1995; Vieito, 2012).

The proportions of insider/outsider representation ona board are the most studied variables in the corporate governance literature (Judge and Zeithaml, 1992). Prior researchers have found that insider representation is positively associated with the innovativeness of strategies (Hill and Snell, 1988) and with the level of corporate R&D spending (Baysinger *et al*, 1991). They bring firm-specific knowledge and familiarity with the firm's markets and established networks (Tuggle *et al*., 2010). They have the useful information about the firm, its history, its strategy and its management style. Opposite, studies focused on agency theory have suggested that outside directors may play an important monitoring function on the top management team (Clarysse *et al*., 2007). Outsiders can ensure the pursuit of long term wealth creation by monitoring executives and encouraging innovation activities. From a resource based prospective, outsiders can be seen as providerof access to scarce or strategic resources (Lynall *et al*., 2003, Tuggle *et al*., 2010). They can also bring awareness of innovations and new opportunities from their own industries into a firm's boardroom (Hillman and Dalziel, 2003; Tuggle *et al*., 2010). Thus, we can maintain that outsiders can positively influence the level of the firm's investment in innovation, as they can provide the resources useful to exploit innovation activities, offer different perspectives about investments ininnovation and suggest new growth opportunities for the firm.

In quality of outsiders, these types of directors have also the possibility to have executive and/or non-executive positions also in the board of other different firms.Tuggle et al. (2010:553) maintain that "boards whose members have heterogeneous functional backgrounds can bring a greater breadth of knowledge and different approaches to problem solving, which in turn can make them more likely to" increase the quality of decisions and more inclined to discuss about new ideas and innovation opportunities. From a resource based perspective, we can sustain that board characterized by directors with a high number of positions in other corporate boards can better provide new resources, perspectives and opportunities and thus facilitate innovation activities.

So our hypotheses are:

Hp 1a. The investments in innovation are positively related to the presence of outside directors in the board room.

Hp 1b. The investments in innovation are positively related to the average number of positions in other board of directors.

Concerning the minority representation in the board room, literature asserts that boards have an important role in protecting minority shareholders (Anderson and Reeb, 2004). Recently, Italian law (art. 147-*ter*, T.U.F. and Consob Regulation n. 11971/99) has introduced a voting list mechanism in order to ensure that the board composition is actually an expression of the whole social structure, including minority shareholders. However, independent directors remain one of the primary tools of defense that minority shareholders can employ in protecting their rights against the influence and power of large, controlling shareholders (Anderson and Reeb, 2004). Outside directors, who represent the minority shareholders, can potentially prevent large shareholder from directly expropriating firms' resources via excessive compensation, special dividends, or unwarranted perquisites. They can also verify the competence of the CEO, attend to the executive investment decisions and protect shareholders' wealth (Shieifer and Vishny, 1990). From a resource based perspective, we can assert that directors who represent the minority shareholders can be a source of administrative and strategic control. However, their control role and the focusing of attention on the wealth protection for shareholders can hinder the willingness of the board in innovation activities and investments that are characterized by a high level of uncertainty. Thus, our hypothesis is:

Hp 2. The investments in innovation are negatively related to the minority shareholder representatives in the board room.

Gender diversity, i.e. the presence of women on corporate boards of directors, is a highly debated corporate governance topic, since it is considered an instrument to improve board variety and thus discussion (Anastasopoulos *et al*., 2002). Rosener (1995 in Vieito, 2012) stresses the role of females in top management, maintaining that they are "more flexible and better able to deal with ambiguity than males and these abilities to motivate team building and be flexible are essential factors for the success of any modern business that is conducted in an uncertain context". Some scholars have found that women are more likely to be represented in the top management positions of larger organizations characterized by high public visibility, and consumer-goods businesses, such as pharmaceuticals or cosmetics (Harrigan, 1981). According to the resource based perspective, women are frequently felt to bring marketing expertise to the board and a consumer or community orientation that is particularly valuable in certain industries and service businesses (Harrison, 1986; Fryxell and Lemer, 1989). As innovation activities require a high level of flexibility and high motivation, we can retain that the presence of women in the board of directors can support the investments in innovation within the firm.

So our hypothesis is:

Hp 3. The investments in innovation are positively related to the presence of women in the board of directors.

Board structure

Board structure concerns a board's organization (Zahra and Pearce, 1989) and involves the rules that exist to make the board more efficiently (Huse, 1995; Gabrielsson and Winlund, 2000). In to analyze this dimension, we concentrate our attention on the number and types of committees as well as the frequency of committee meeting (Zahra and Pearce, 1989; Demb and Neubauer 1992; Huse 1995).

Board committees work toward the more effective operations of the board (Van Den Berghe and Levrau, 2004). Committees are important tools to monitor corporate activities and play a valuable role in the protection of shareholders wealth (Kesner, 1988). Klein (1995) evaluated the effects of the committee structure of boards and directors' roles within these committees on board effectiveness. She proposed a committee structure with specialized roles to enhance board performance in productivity and monitoring. Thus, she identified two different categories of committee: productivity and monitoring committee. Here, productivity can be assimilated to the strategic role of the board and includes board involvement in decision-making processes about strategic and innovative issues and the decisions that affect the creation of new wealth for shareholders.

Monitoring refers to board involvement in the evaluation and control of the activity of senior management, particularly in ensuring that senior management is engaged in the pursuit of innovative activities, even if these are risky activities. Thus, each board committee should be specialized in either innovative or monitoring issues and these committees should be staffed by the board members most likely to achieve these goals. Thus, boards should use committee structures to facilitate, evaluate, and confirm long-term investment decisions and to monitor the performance of senior management.

Given these considerations, we can hypothesize a strong relationship between the presence of committees and the level of investments in innovation within a firm. In particular, from an agency perspective, board committees can allow directors to better perform their control role. The specialization of committees and the large amount of information that directors can share during

meetings increase the potential to monitor executives and protect shareholders wealth. Furthermore, from a resource-based perspective, some board committees can enhance the involvement of directors in innovation activities (Harrison, 1987). Directors must be well prepared to participate in committees (Huse, 1995; Gabrielsson and Winlund, 2000), so they can better inform the whole board about the resources they can provide for the firm growth. They can also suggest to the top management team how to utilize the resources to exploit new innovation opportunities, create new wealth for shareholders and enhance R&D investments.

Thus, we can hypothesize that the number of board committee is positively associated with board's ability to promote and enhance innovation within the firm. In particular, monitoring committees (audit, compensation and nomination) (Klein, 1995) can have a positive effect on promoting innovative investments, while productivity ones (Klein, 1995) (finance, investment and strategic) can have a positive effect on enhancing innovative activities within the firm.

So, our hypothesis is:

Hp 4. The investments in innovation are positively related to the presence of productivity and monitoring committees.

Board and committees meetings are the key tool for informing and involving directors (Tuggle et al., 2010). They represent the place where directors can discuss firm's opportunities and valuate management's operations with more details. The frequency of board and committees meetings is recognized as important for the board to have any possibility of performing its control and strategic role (Demb and Neubauer 1992, Huse 1995). The board cannot be expected to monitor firm performance and suggest innovative initiatives, if they are not given the opportunity to do these (Demb and Neubauer 1992, Huse 1995). From an agency perspective frequent meetings allow board to better control management activities in order to protect shareholders value (Gabrielsson and Winlud, 2000). From a resource based perspective, frequent meetings consent outsider director to interact with insider and to be well informed about firm activities. This can stimulate the entrepreneurial thinking of outsider. Therefore, they can better direct the resource provided in order to exploit new opportunities and enhance investments in innovation.

So, our hypothesis is:

Hp 5. The investments in innovation are positively related to the frequency of board meetings.

3. Data description and variables

The sample has been constructed combining several sources of data. Firstly, we employed the Borsa Italiana's web-site in order to select the firms operating in the industries we intend to investigate, that are the "consumer goods" and the "consumer services". We chose these industries as it is interesting to analyze the relationship between board attributes and innovation investments in generally mature scopes. We decide to focus our attention on these mature industries as, according to literature, in this kind of competitive arena the innovation is a consequence of a good strategy, a climate and organizational culture and of any efforts to develop a big ideas that can be consider as a breakthroughs (Cooper, 2011). Further, since Italian financial context is characterized by a huge recourse to the bank loans, it is worthwhile to examine whether the corporate governance approach, adopted as a consequence of the listing, affects on propensity for innovation of the listed companies chosen. To this end, we hope for empirical evidence statistically significant, so that the Italian Stock Exchange could represent an attractive alternative of funding for other national companies or international investors (Pagano *et al*., 1998; Pagano, Roell, 1998; Corvin, Harris, 2001; Corvino *et al*., 2010). At the same time, it could increase her role in the global financial environment. Table 1 indicates the sample.

Table 1. Description of the sample

Industry	# firms	% firms
Consumer Goods	42	61%
Consumer Services	27	39%
Total	69	100%

The data collection process covers the period from 2006 until 2010 in which, as is known, there has been one of the huger spike in economic downturn. From this standpoint, we also attempt to examine whether in these years the board attributes concurred in backing the investments in innovation.

After having pinpointed the name of the listed firms from the Borsa Italiana's web-site, we collected both corporate governance data and accounting ones. In particular, in each corporate web-site, we downloaded the annual reports on corporate governance. Thanks to these reports, we collected the necessary data for testing the

foregoing hypotheses. Relatively to corporate governance data, the sample represents the 98.5 per cent of the population, as only in one case we did not find any information.

Afterwards, from the AIDA database (Bureau Van Dijk), we selected some accounting data related to the total sales, total intangible assets and total assets. This database contains information on Italian companies forced to file financial statements. To gather the data concerning the research and development (henceforth R&D) costs, from the corporate web-site, we moreover downloaded the annual financial statements or, whereas available, the consolidated one. For each of them, we conducted a content analysis for deducing the investments in R&D. With regards to the accounting data, the sample represents the full population relatively to the total assets, the total sales, the total number of employees and to the ratio: total intangible assets divided by total assets. Considering the other ratio employed in our analysis, i.e. total R&D costs divided by the total sales, the sample represents the 97 per cent of the population. Overall, the number of observations is 345 that derives from the multiplication between 69, the amount of the listed companies (see Appendix A), and the time frame analyzed that is equal to five years.

Focusing the attention on corporate governance data, Table 2 highlights the features of the sample companies. In particular, the average board size is 10 while the average number of committees amounts to 2. The number of outsiders ranges between 10% and 95% while the number of insiders ranges between 5% and 100%. The number of women in the board of directors is encompassed between zero and 5 while the number of minority shareholder representatives ranges between zero and 4. In some cases, hence, there is a total absence respectively of women and minority shareholder representatives in the board of directors.

Table 2. Descriptive Statistics

Variables	N	Min	Max	Mean	SD
Board Size	329	4	21	10	3,192
Number of Insiders	329	1	10	4	2,205
Percentage of Insiders	329	5%	100%	45%	23,038%
Number of Outsiders	329	1	20	5	3,354
Percentage of Outsiders	329	10%	95%	55%	23,026%
Number of Women on the Board of Directors	329	0	5	1	,870
Percentage of Women on the Board of Directors	329	0%	50%	8%	10,027%
Number of Minority Shareholder Representatives on the Board of Directors	315	0	4	,33	,814
Number of Committees	327	0	5	2	,953
Average Number of other positions held by the members of the Board of Directors	310	0	10	3	1,903
Age of the Firm	343	1	133	33	29,050
Valid (listwise)	298				

As shown in Table 2, the average number of other positions held by the members of the Board of Directors is 3. Furthermore, the firms analyzed are on average 33 years old.

We explore the research question mentioned earlier using as dependent variables the following accounting ratios: total intangible assets divided by total assets and total R&D costs divided by total sales. These ratios are widely adopted in empirical analyses as a proxy of innovation activities and, in general, of corporate entrepreneurship (Zahra, 1995; Manigart, Baeyens, 2006). In our study, we included several independent variables in order to measure the board diversity. They are reported in Table 3.

Table 3. Variables Description

Variables	Code	Source
Dependent Variables:		
Total Intangible Assets / Total Assets	IA_TA	AIDA
Total R&D Costs / Total Sales	R&D_Sales	AIDA, Annual Financial Statements, Annual Consolidated Financial Statements
Independent Variables:		
Board Size	Board_Size	Annual Report on Corporate Governance
Number of Insiders on the Board of Directors	N_Insiders_BofDs	Annual Report on Corporate Governance
Percentage of Insiders on the Board of Directors	Percentage_Insiders	Annual Report on Corporate Governance
Number of Outsiders on the Board of Directors	N_Outsiders_BofDs	Annual Report on Corporate Governance
Percentage of Outsiders on the Board of Directors	Percentage_Outsiders_BofDs	Annual Report on Corporate Governance
Number of Women in the Board of Directors	N_Women_BofDs	Annual Report on Corporate Governance
Percentage of Women in the Board of Directors	Percentage_Women_BofDs	Annual Report on Corporate Governance
Number of Minority Shareholder Representatives on the Board of Directors	N_Minority_Sharehholder_Repr_BofDs	Annual Report on Corporate Governance
Percentage of Minority Shareholder Representatives on the Board of Directors	Percentage_Minority_Sharehholder_Repr_BofDs	Annual Report on Corporate Governance
Number of the Committees	N_Committees	Annual Report on Corporate Governance
Average Number of Other Positions held by the Members of the Board of Directors	Average_N_OP_Members_BofDs	Annual Report on Corporate Governance
Presence of the Nomination Committee (dummy variable)	Presence_Nomination_Committee	Annual Report on Corporate Governance
Presence of the Remuneration Committee (dummy variable)	Presence_Remuneration_Committee	Annual Report on Corporate Governance
Presence of the Audit Committee (dummy variable)	Presence_Audit_Committee	Annual Report on Corporate Governance
Presence of the Strategy Committee (dummy variable)	Presence_Strategies_Committee	Annual Report on Corporate Governance
Number of the Meetings of the Board of Directors	N_Meetings_BofDs	Annual Report on Corporate Governance
Number of the Meetings of the Nomination Committee	Number_Meetings_Nomination_Committee	Annual Report on Corporate Governance
Number of the Meetings of the Remuneration Committee	Number_Meetings_Remuneration_Committee	Annual Report on Corporate Governance
Number of the Meetings of the Audit Committee	Number_Meetings_Audit_Committee	Annual Report on Corporate Governance
Number of the Meetings of the Strategy committee	Number_Meetings_ Strategies_Committee	Annual Report on Corporate Governance
Control Variables:		
Natural Logarithm of the Total Sales	Ln_Sales	AIDA, Annual Financial Statements, Annual Consolidated Financial Statements
Natural Logarithm of the Total Assets	Ln_TA	AIDA, Annual Financial Statements, Annual Consolidated Financial Statements
Natural Logarithm of the Number of Employees	Ln_NE	AIDA, Annual Financial Statements, Annual Consolidated Financial Statements
Age of the Firm	Age_Firm	AIDA, firms' website

We take into account these independent variables, as they allow to investigate specific features of the board diversity, such as: the number of the women, insiders, outsiders, minority shareholder representatives in the Board of Directors or the institution of the Strategy committee (Zahra and Pearce, 1989; Huse, 1995;

Baysinger *et al*., 1991; Zahra, 1996; Zahra *et al*., 2000; 2009).

In our analysis, there are the following dummy variables: presence of the Nomination Committee, presence of the Remuneration Committee, presence of the Audit Committee, presence of the Strategy committee and industry. The first three variables take the value of 1 if the company has instituted the relative committee and zero otherwise. The latest variable takes the value of 1 if the company operates in the "consumer goods" industry and zero if it operates in the "consumer services" one. Further, we include four control variables. More specifically, we consider the age of the firm since previous empirical studies pointed out the negative association with the innovation (Acs and Audretsche, 1988). We calculated the age from the inception date of the firm until 2010. The remaining control variables pertain the company size, as SMEs are more innovative than the larger competitors (Scherer, 1980; Kamien, Schwartz, 1982). Company size is measured using the Total Assets, the Total Sales or the Total Number of Employees. To improve on regression analysis, we calculated their natural logarithmic.

4. Methodology and results

From the methodology standpoint, we carried out bivariate analyses adopting the Pearson coefficient (well-known as "r") and the Anova (one way). Firstly, we calculated the correlations between the innovation (the dependent variable) and some independent variables used for deepening the impact of board diversity on innovation. To this end, Pearson coefficient shows a positive association between the innovation and the number of the outsiders, so that hypothesis n. 1a is supported. In other words, we can argue that an increase in the number of the outsiders entails an increase, though slight (r = 0,16), of the investments in innovation. Differently from hypothesis n. 3, our results highlight that there is no correlation between the number of the women and the innovation, since the Pearson coefficient is not statistically significant. In line with hypothesis n. 2, the minority shareholder representatives do not influence innovation.

Conversely, the average number of the other positions held by the members of the board exhibits a positive correlation with innovation. Indeed, because of an increase of this average number, the companies investigated are more prone to boost investments in R&D and in intangible assets. Therefore, this finding corroborates hypothesis n. 1b. Hypothesis n. 4, likewise, is supported since we found a positive correlation between the number of the committees and the innovation, measured by the accounting ratio: total intangible assets divided by total assets. Thus, an increase in the number of the committees backs the innovation investments.

Hypothesis 5 is fully supported, since the Pearson correlations show a statistically significant relationship between the investments in innovation and the frequency of committees meetings. In particular, Table 5 highlights a positive association between the accounting ratio, total intangible assets divided by total assets, and the number of the meetings of the followings committees: Audit and Strategy.

The number of the meetings of Remuneration committee is positively correlated even to both accounting ratios selected in our analysis, i.e. total intangible assets divided by total assets and total R&D costs divided by total sales. Unlike these findings, the number of the meetings of Nomination committee exhibits a negative association with the accounting ratio: total R&D costs divided by the total sales. Hence, an increase of this independent variable implies a slight reduction of investments in innovation.

Furthermore, it should be noted that the number of the meetings held by the board of directors does not influence either the innovation or the committees' efficiency. Lastly, all the committees investigated point out a relationship with the company growth, as the Pearson coefficient is always positive, relatively to the control variables that are the total sales, the total assets and the total number of employees.

Continuing in the bivariate statistics scope, we also used the Anova (one way) for digging deeper and possibly for finding other relationships between the board diversity and the investments in innovation. We chose this statistic as, taking into account the size of the sample investigated, the dependent variable distribution can be assimilated to the normal one. So, one of the assumptions requested for using the Anova can be considered satisfied.

Therefore, as is known, in the Anova calculation each independent variable is divided in at least three sub-groups. Thanks to the descriptive statistics, for each independent variable tested, we built an ordinal scale dialed by at least three sub-groups. After having ascertained a statistically significant difference between the average values attained by the dependent variable on the basis of the sub-groups of the independent variable above mentioned, we adopted the "Post Hoc" method in order to pick out those sub-groups to which the foregoing difference is amenable. In this analysis the dependent variable is the amount of investments in innovation that is measured by the accounting ratio: total intangible assets divided by total assets.

Table 4. Board diversity and Innovation

		1. IA_TA	2. RD_Sales	3. Ln_Sales	4. Ln_TA	5. Ln_NE	6. Board Size	7. Number of Outsiders	8. Number of Women in the Board of Directors	9. Number of Minority Shareholders Representatives in the Board of Directors	10. Number of the Committees	11. Average Number of Other Positions held by the Members of the Board of Directors
1. IA_TA	Pearson Correlation	1	,260**	,276**	,259**	,036	,218**	,288**	-,027	-,073	,235**	,144*
	Sig. (2-tailed)		,000	,000	,000	,505	,000	,000	,630	,197	,000	,011
	N	345	335	345	344	345	329	329	329	315	327	310
2. RD_Sales	Pearson Correlation	,260**	1	,071	,143**	,132*	,252**	,160**	-,005	-,008	,094	,168**
	Sig. (2-tailed)	,000		,193	,009	,016	,000	,004	,927	,888	,095	,004
	N	335	335	335	334	335	320	320	320	306	318	301
3. Ln_Sales	Pearson Correlation	,276**	,071	1	,799**	,737**	,608**	,474**	,160**	,064	,424**	,255**
	Sig. (2-tailed)	,000	,193		,000	,000	,000	,000	,004	,257	,000	,000
	N	345	335	345	344	345	329	329	329	315	327	310
4. Ln_TA	Pearson Correlation	,259**	,143**	,799**	1	,886**	,675**	,521**	-,025	,099	,423**	,425**
	Sig. (2-tailed)	,000	,009	,000		,000	,000	,000	,657	,081	,000	,000
	N	344	334	344	344	344	328	328	328	314	326	309
5. Ln_NE	Pearson Correlation	,036	,132*	,737**	,886**	1	,585**	,369**	-,058	,099	,357**	,432**
	Sig. (2-tailed)	,505	,016	,000	,000		,000	,000	,295	,079	,000	,000
	N	345	335	345	344	345	329	329	329	315	327	310
6.Board Size	Pearson Correlation	,218**	,252**	,608**	,675**	,585**	1	,766**	,140*	,250**	,386**	,263**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,011	,000	,000	,000
	N	329	320	329	328	329	329	329	329	315	327	310
7. Number of Outsiders	Pearson Correlation	,288**	,160**	,474**	,521**	,369**	,766**	1	,115*	,190**	,311**	,112*
	Sig. (2-tailed)	,000	,004	,000	,000	,000	,000		,037	,001	,000	,049
	N	329	320	329	328	329	329	329	329	315	327	310
8. Number of Women in the Board of Directors	Pearson Correlation	-,027	-,005	,160**	-,025	-,058	,140*	,115*	1	-,066	-,019	-,123*
	Sig. (2-tailed)	,630	,927	,004	,657	,295	,011	,037		,240	,737	,030
	N	329	320	329	328	329	329	329	329	315	327	310
9. Number of Minority Shareholders Representatives in the Board of Directors	Pearson Correlation	-,073	-,008	,064	,099	,099	,250**	,190**	-,066	1	-,110	,095
	Sig. (2-tailed)	,197	,888	,257	,081	,079	,000	,001	,240		,051	,099
	N	315	306	315	314	315	315	315	315	315	313	301
10. Number of the Committees	Pearson Correlation	,235**	,094	,424**	,423**	,357**	,386**	,311**	-,019	-,110	1	,280**
	Sig. (2-tailed)	,000	,095	,000	,000	,000	,000	,000	,737	,051		,000
	N	327	318	327	326	327	327	327	327	313	327	309
11. Average Number of Other Positions held by the Members of the Board of Directors	Pearson Correlation	,144*	,168**	,255**	,425**	,432**	,263**	,112*	-,123*	,095	,280**	1
	Sig. (2-tailed)	,011	,004	,000	,000	,000	,000	,049	,030	,099	,000	
	N	310	301	310	309	310	310	310	310	301	309	310

Significance Level: * $p < 0,05$;** $p < 0,01$;

Table 5. Board's Efficiency and Innovation

		1. IA_TA	2. RD_Sales	3. Ln_Sales	4. Ln_TA	5. Ln_NE	6. Number of the Meetings of the Board of Directors	7. Number of the Meetings of the Nomination Committee	8. Number of the Meetings of the Remuneration Committee	9. Number of the Meetings of the Audit Committee	10. Number of the Meetings of the Strategy Committee
1. IA_TA	Pearson Correlation	1	,260**	,276**	,259**	,036	,034	,017	,195**	,115*	,226**
	Sig. (2-tailed)		,000	,000	,000	,505	,552	,757	,001	,042	,000
	N	345	335	345	344	345	313	317	307	311	318
2. RD_Sales	Pearson Correlation	,260**	1	,071	,143**	,132*	-,037	-,120*	,252**	,111	,036
	Sig. (2-tailed)	,000		,193	,009	,016	,521	,036	,000	,055	,524
	N	335	335	335	334	335	304	308	298	302	309
3. Ln_Sales	Pearson Correlation	,276**	,071	1	,799**	,737**	,055	,141*	,339**	,459**	,207**
	Sig. (2-tailed)	,000	,193		,000	,000	,333	,012	,000	,000	,000
	N	345	335	345	344	345	313	317	307	311	318
4. Ln_TA	Pearson Correlation	,259**	,143**	,799**	1	,886**	-,070	,212**	,413**	,501**	,283**
	Sig. (2-tailed)	,000	,009	,000		,000	,218	,000	,000	,000	,000
	N	344	334	344	344	344	312	316	306	310	317
5. Ln_NE	Pearson Correlation	,036	,132*	,737**	,886**	1	-,109	,128*	,414**	,507**	,131*
	Sig. (2-tailed)	,505	,016	,000	,000		,053	,023	,000	,000	,020
	N	345	335	345	344	345	313	317	307	311	318
6. Number of the Meetings of the Board of Directors	Pearson Correlation	,034	-,037	,055	-,070	-,109	1	,064	-,015	,079	-,011
	Sig. (2-tailed)	,552	,521	,333	,218	,053		,263	,797	,164	,853
	N	313	304	313	312	313	313	309	302	309	310
7. Number of the Meetings of the Nomination Committee	Pearson Correlation	,017	-,120*	,141*	,212**	,128*	,064	1	,085	,247**	,059
	Sig. (2-tailed)	,757	,036	,012	,000	,023	,263		,138	,000	,295
	N	317	308	317	316	317	309	317	304	307	317
8. Number of the Meetings of the Remuneration Committee	Pearson Correlation	,195**	,252**	,339**	,413**	,414**	-,015	,085	1	,352**	,197**
	Sig. (2-tailed)	,001	,000	,000	,000	,000	,797	,138		,000	,001
	N	307	298	307	306	307	302	304	307	303	304
9. Number of the Meetings of the Audit Committee	Pearson Correlation	,115*	,111	,459**	,501**	,507**	,079	,247**	,352**	1	,219**
	Sig. (2-tailed)	,042	,055	,000	,000	,000	,164	,000	,000		,000
	N	311	302	311	310	311	309	307	303	311	308
10. Number of the Meetings of the Strategy Committee	Pearson Correlation	,226**	,036	,207**	,283**	,131*	-,011	,059	,197**	,219**	1
	Sig. (2-tailed)	,000	,524	,000	,000	,020	,853	,295	,001	,000	
	N	318	309	318	317	318	310	317	304	308	318

Significance Level: * p < 0,05; ** p < 0,01;

Table 6 shows that the independent variables, like the percentage of outsiders, of women as well as the number of committees and the annual number of meetings of the Strategy committee, achieve positive results.

More specifically, in line with hypothesis 1a, innovation is influenced by the percentage of outsiders on the board of directors. This moreover confirms the result ensuing from Pearson correlation. Furthermore, thanks to the adoption of the Post Hoc method, we pinpointed that the following sub-groups: "26% - 50%" and "76% - 100%" are significantly different between them, in terms of average values of investments in innovation. Thus, a percentage of outsiders within 50% or over 76% implies that the company is more prone to innovation. This finding is indeed interesting if we consider some distinctive features of the ownership structure in the Italian economic environment (La Porta and Lopez, 1999;Barcaand Becht, 2001).

The independent variable, named percentage of women, exhibits a statistically significant difference due to the following sub-groups: "0 – 20%" and "21 – 40%". So this analysis suggests that, in line with hypothesis 3, in the board up to a percentage of 40%, the women affect the innovation in the sample companies investigated.

As reported in Table 6, the percentage of the minority shareholder representatives shows a negative result. Hence, hypothesis 2 is supported. Moreover, in line with the relative Pearson correlation, this independent variable has no impact on fostering investments in innovation.

Unlike the previous independent variables, average number of other positions held by the members of the board of directors attains a different result compared with one related to the Pearson correlation. Thus, we cannot confirm what mentioned earlier. More specifically, for this independent variable, a not significant value derives from Anova analysis, so that hypothesis 1b is not supported. This finding highlights that there is no causal link between innovation and average number of other positions held by the members of the board of directors.

With reference to hypothesis 4, the sub-groups of the independent variable, named "number of the committees", that point out a positive result, are: "0 – 1" and "2 – 3". Thus, the institution of more than three committees does not facilitate innovation. By examining, in a cross manner, the results ensuing from the adoption of Pearson coefficient and those deriving from the Anova (one way), it is possible to deduce a further confirmation about the role of this variable in influencing innovation, provided that the committees are less than three.

A positive result amenable to the number of the meetings of the strategy committee is what we would have expected. But, at first glance, the value of the Levene test is not statistically significant. Nevertheless, we employed the Brown-Forsythe statistic, in order to further test the assumption related to the homoskedasticity. Since this statistic amounts to 0,000, the independent variable analyzed can be considered statistically significant. Furthermore, the Post Hoc method pointed out that the following sub-groups: "0 – 3" and "over 6"differ substantially from the other ones, in terms of average investments in innovation. In other words, innovation implies a constant commitment mainly every four-month period or even monthly. Hence, hypothesis 5 is partly supported with reference to the number of meetings of strategy committee. Differently from the result above mentioned, there are no statistically significant differences, if we consider the annual number of the meetings of the board, of the nomination committee, of the remuneration committee and of the audit committee. In these cases, hypothesis 5 is partly not supported.

Table 6. Anova (one way) Board diversity and Investments in Innovation Dependent variable: IA_TA

Independent Variables	Levene Test Sig.	F	Sig.	Brown-Forsythe Statistic
Percentage of Outsiders on the Board of Directors	,499	4,879	,002***	,002***
Percentage of Women on the Board of Directors	,172	3,655	,027**	,029**
Percentage of Minority Shareholder Representatives on the Board of Directors	,136	2,542	,08	,04*
Average Number of Other Positions held by the Members of the Board of Directors	,011	,116	,891	,872
Number of the Committees	,147	7,426	,001***	,004***
Number of the Meetings of the Board of Directors	,280	,598	,551	,696
Number of the Meetings of the Nomination Committee	,085	,446	,641	,558
Number of the Meetings of the Remuneration Committee	,307	,1,188	,306	,681
Number of the Meetings of the Audit Committee	,886	1,329	,266	---
Number of the Meetings of the Strategy Committee	,000	8,535	,000	,000***

Significance Level: ** p < 0,05; *** p < 0,01;

We also tested the foregoing hypotheses in the perspective of multivariate analysis. More specifically, we run OLS multivariate regression analysis into which the dependent variable is the innovation, measured by the accounting ratio: total intangible assets divided by total assets, while the independent ones pertain some features of the board diversity, such as the number of women, of insiders, of outsiders, of minority shareholder representatives, the presence of committees, the number of their meetings as well as the average number of other positions held by the members of board of directors. In our analysis, there are also three control variables related to the size (i.e. natural logarithms of total sales and total of number of employees) and the age of the sample companies.

As our dataset covers the period from 2006 to 2010, we tackled the problems concerning the violation of some linear regression assumptions, in particular the heteroskedasticity and the residuals autocorrelation. To this end, we calculated the robust standard errors by using the Newey-West (HAC) method (Wooldridge, 2009). Even if in Table 7 the Durbin-Watson statistic is poor, the Newey-West method calculates robust standard

errors that safeguard the reliability of the linear regression analysis. Our findings indicate that, in terms of board diversity, only the number of outsiders and the number of meetings held by the strategy committee affect the investments in innovation. Therefore, hypotheses 1a and 5, limited to the number of the meetings held by the strategy committee, are supported. R-Square highlights that the model, tested in this analysis, is reasonable fit for illustrating the variability of the investments in innovation of the sample companies.

As expected, furthermore, for the number of outsiders and the meetings of strategy committee, the coefficient is positive. Furthermore, only for to these independent variables, the multivariate analysis results validate the previous ones, ensuing from the adoption of the Pearson correlations and the Anova (one way).

On the contrary, neither the presence of the committees (i.e. nomination, remuneration, audit and strategy) nor the average numbers of other positions held by the members of the board of directors influence the dependent variable. Hence, hypotheses 4 and 1b are not supported. In the same way, the number of minority shareholder representatives and the number of women do not point out statistically significant coefficients. So, hypotheses 2 and 3 are not confirmed.

Table 7. OLS Regression Board Diversity and Innovation

Dependent Variable: IA_TA
Included observations: 288 after adjustments
Newey-West HAC Standard Errors & Covariance (lag truncation=5)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
N_Women_BofDs	-0.018981	0.026945	-0.704436	0.4818
N_Outsiders_BofDs	0.015702*	0.009239	1.699669	0.0903
N_Minority_Shareholder_Repr_BofDs	0.009369	0.026920	0.348037	0.7281
Presence_Nomination_Committee (dummy variable)	0.054045	0.077587	0.696573	0.4867
Presence_Remuneration_Committee (dummy variable)	-0.089852	0.084309	-1.065755	0.2875
Presence_Audit_Committee (dummy variable)	-0.057224	0.096523	-0.592858	0.5538
Presence_Strategies_Committee (dummy variable)	0.062006	0.102287	0.606196	0.5449
N_Meetings_BofDs	-0.006602	0.007230	-0.913152	0.3620
Number_Meetings_Nomination_Committee	-0.020482	0.038532	-0.531562	0.5955
Number_Meetings_Remuneration_Committee	0.026263	0.021282	1.234048	0.2183
Number_Meetings_Audit_Committee	-0.086111	0.069491	-1.239165	0.2164
Number_Meetings_Strategy_Committee	0.067625*	0.039557	1.709565	0.0885
Average_N_OP_Members_BofDs	-0.002674	0.081669	-0.032742	0.9739
Ln_NE	-0.040725**	0.016651	-2.445854	0.0151
Ln_Sales	0.087061**	0.016674	5.221467	0.0000
Age_Firm	-0.004596***	0.000826	-5.566278	0.0000
C	-0.747487	0.295249	-2.531717	0.0119

R-squared	0.420158	Mean dependent var	0.452238
Adjusted R-squared	0.385923	S.D. dependent var	0.289173
S.E. of regression	0.226605	Akaike info criterion	-0.074004
Sum squared resid	13.91579	Schwarz criterion	0.142212
Log likelihood	27.65657	Hannan-Quinn criter.	0.012643
F-statistic	12.27303	Durbin-Watson stat	0.530656
Prob(F-statistic)	0.000000		

Significance Level: * p < 0,10; ** p < 0,05;*** p < 0,01;

Unless for the strategy committee, the number of meetings related to other committees attains a negative result in terms of statistical significance, so that hypothesis 5 is partly not validate. Lastly, it should be noted that, according to previous empirical evidence (Acs and Audretsche, 1988; Megginson *et al*. 1991, Lerner 1999), the control variables show a high statistical significance.

5. Discussion and conclusion

Our study intends to investigate the relationship between board attributes, in terms of composition

and structure, and the propensity for investments in innovation. In other words, we hope for fostering the stream into which, in a resource-based perspective, the board is a provider of resources and know-how for improving firm performance and creating new wealth (Pfeffer, 1972; Zald, 1969; Gabrielsson and Winlund, 2000; Filatotchev and Wright, 2005; Zahra *et al*., 2009).To this end, we deepen the consumer goods industry and the consumer services one that, in general, can be considered mature from the innovation standpoint. We decide to focus our attention on these mature industries as, according to literature, in this kind of competitive arena, the innovation is a consequence of a good strategy, a climate and organizational culture and of any efforts to develop a big ideas that can be consider as a breakthroughs (Cooper, 2011). Thus, we can maintain that, in the mature industries, innovation can be consider a consequence of the quality of the innovative thinking of the firm's actors, more than the opportunities that the market can offer. Another distinctive element concerns the focus on the companies listed in the Italian Stock Exchange, named Borsa Italiana. In the corporate governance perspective, Italian environment is interesting since the ownership structure is usually highly concentrated (La Porta and Lopez F., 1999;Barcaand Becht, 2001).

In particular, we tried to examine whether some features of the board affect the investments in innovation. These features have been pinpointed on the basis of the gaps explained in the previous empirical evidence. With reference to the board, we selected the presence of outsiders, of minority shareholder representatives, of women, of committees as well as the frequency of meetings. Then, we built the dataset that cover the period from 2006 to 2010 and overall contains 345 observations. After having identified the foregoing hypotheses, we employed the bivariate (i.e. Pearson coefficients and Anova one way) and multivariate statistics (i.e. OLS regression analysis with robust standard errors).

By examining, in a cross manner, the results ensuing from the adoption of the Pearson coefficients and the Anova (one way) with the ones deriving from the multivariate analysis, we can argue that only the number of outsiders and the number of meetings of strategy committee always influence the investments in innovation. Consistent with other studies (Demb and Neubauer 1992; Huse 1995; Hillman and Dalziel, 2003; Lynall et al., 2003; Tuggle et al., 2010), our findings confirm that, also for the Italian listed companies operating in the industries mentioned earlier, the outsiders as well as the frequency of committees meetings assume a relevant role in supporting the investments in innovation. With specific regards to the number of meetings of strategy committee, the results attained reflect what we would have expected, in terms of sign and statistical significance. Therefore, our findings can inspire further research focused, for instance, on other economic contexts for carrying out a spatial comparison with Italian one. In this stream, in our opinion, another scope to investigate concerns the choice of different proxies for measuring the propensity for innovation of a firm (i.e. the number of new products, of patents etc.). An open question that remains to be investigated is the understanding of the source of the innovative ideas. In other words, we retain interested realize if the main sources of innovation strategies are the directors of the firm or top management team. Future researches can address this open question with a survey method or using case studies, in order to better understand the ideas generation process within the firm and the relationship, if any, with corporate governance mechanisms.

Moreover, future researches could also consider a dynamic econometric framework. The adoption of this method allows to consider an eventual time-effect on board decisions and investments in innovation. Indeed, the decisions about opportunities for innovation may take time before transforming into real investment (i.e. time required to inform the whole organization and create commitment, or the bureaucratic time to request a new bank credit).

Lastly, these empirical evidences are also interesting for entrepreneurs, since we document that the mere institution of a strategy committee, that have the purpose of develop, evaluate, and propose to the board strategic options for the firm, is not enough for stimulating innovation in a company. In the first place, this can be considered an important decision for improving the corporate image. But, afterwards, the strategy committee must operate in order to strengthen the generation process of new strategic and operational ideas. In this regard, we suggest that innovation implies a constant commitment for the members of the strategy committee mainly every four-month period or even monthly.

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APPENDIX A

	LISTED COMPANIES	*INDUSTRY*
1	AEFFE	CONSUMER GOODS
2	ENERVIT	CONSUMER GOODS
3	ANTICHI PELLETTIERI	CONSUMER GOODS
4	ARENA	CONSUMER GOODS
5	B&C SPEAKERS	CONSUMER GOODS
6	BASIC NET	CONSUMER GOODS
7	BENETTON GROUP	CONSUMER GOODS
8	BIALETTI INDUSTRIE	CONSUMER GOODS
9	BONIFICHE FERRARESI	CONSUMER GOODS
10	BREMBO	CONSUMER GOODS
11	CALEFFI	CONSUMER GOODS
12	COBRA AUTOMOTIVE	CONSUMER GOODS
13	CRESPI	CONSUMER GOODS
14	CSP INTERNATIONAL	CONSUMER GOODS
15	CAMPARI	CONSUMER GOODS
16	DE LONGHI	CONSUMER GOODS
17	DIGITAL BROS	CONSUMER GOODS
18	ELICA	CONSUMER GOODS
19	EMAK	CONSUMER GOODS
20	FIAT	CONSUMER GOODS
21	GEOX	CONSUMER GOODS
22	IMMSI	CONSUMER GOODS
23	INDESIT COMPANY	CONSUMER GOODS
24	LA DORIA	CONSUMER GOODS
25	LANDI RENZO	CONSUMER GOODS
26	LUXOTTICA	CONSUMER GOODS
27	MARCOLIN	CONSUMER GOODS
28	PARMALAT	CONSUMER GOODS
29	PIAGGIO & C.	CONSUMER GOODS
30	PININFARINA	CONSUMER GOODS
31	PIQUADRO	CONSUMER GOODS
32	PIRELLI & C.	CONSUMER GOODS
33	POLTRONA FRAU	CONSUMER GOODS
34	RATTI	CONSUMER GOODS
35	RICHARD-GINORI	CONSUMER GOODS
36	ROSSS	CONSUMER GOODS
37	SAFILO GROUP	CONSUMER GOODS
38	SALVATORE FERRAGAMO ITALIA	CONSUMER GOODS
39	SOGEFI	CONSUMER GOODS
40	STEFANEL	CONSUMER GOODS
41	TOD'S	CONSUMER GOODS
42	ZUCCHI	CONSUMER SERVICES
43	A.S. ROMA	CONSUMER SERVICES
44	ARNOLDO MONDADORI	CONSUMER SERVICES
45	AUTOGRILL	CONSUMER SERVICES
46	CAIRO COMMUNICATION	CONSUMER SERVICES
47	CALTAGIRONE	CONSUMER SERVICES
48	CASA DAMIANI	CONSUMER SERVICES
49	CHL	CONSUMER SERVICES
50	CLASS EDITORI	CONSUMER SERVICES
51	DMAIL GROUP	CONSUMER SERVICES
52	FNM	CONSUMER SERVICES
53	GRUPPO EDITORIALE L ESPRESSO	CONSUMER SERVICES
54	I GRANDI VIAGGI	CONSUMER SERVICES
55	IL SOLE 24 ORE	CONSUMER SERVICES
56	JUVENTUS F.C.	CONSUMER SERVICES
57	S.S. LAZIO	CONSUMER SERVICES
58	LOTTOMATICA	CONSUMER SERVICES
59	MARR	CONSUMER SERVICES

60	MEDIACONTECH	CONSUMER SERVICES
61	MEDIASET	CONSUMER SERVICES
62	MERIDIANA FLY	CONSUMER SERVICES
63	MONDO TV	CONSUMER SERVICES
64	MONRIF	CONSUMER SERVICES
65	RCS MEDIAGROUP	CONSUMER SERVICES
66	SEAT PAGINE GIALLE	CONSUMER SERVICES
67	SNAI	CONSUMER SERVICES
68	TELECOM ITALIA MEDIA	CONSUMER SERVICES
69	YOOX	CONSUMER SERVICES

SOCIAL REPORTING IN THE ANNUAL REPORTS OF IRANIAN LISTED COMPANIES

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Abstract

This paper examines corporate social reporting (CSR) in the annual reports of companies listed on the Tehran Stock Exchange (TSE) in Iran. Descriptive analysis and multiple linear regression techniques are used to analyse the extent of CSR disclosure and to test hypotheses regarding the relationships between CSR disclosure and four company characteristics namely size, profitability, financial leverage and industry type. Among five important themes of social disclosure (human resources, environmental performance and policies, community activities, energy consumption, and customer satisfaction and product quality) the human resources theme was found to be the most common type of disclosure made. Only the size of the disclosing company was found to be significantly related to the level of overall CSR disclosure.

Keywords: Corporate Social Responsibility, CSR in Developing Countries, Iran, Sustainability Reporting

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Introduction

In the last few decades, Corporate Social Responsibility (CSR) disclosure has become an important research topic and a number of scholars around the world have investigated different aspects of CSR (Deegan, 2002). Most studies have examined CSR in developed countries; relatively few studies have been undertaken in developing countries. Accordingly Tsang (1998) argues that it is unacceptable to extend and generalise the results of CSR studies in developed countries and compare these results with less developed ones as the level of economic development is likely to be an important factor affecting CSR practices. Moreover, other societal factors such as cultural and national differences are also likely to affect corporate disclosure practices in general and CSR in particular even in countries with similar economic rank (Mathews, 1993; Perera& Mathews, 1990).An acknowledged shortage of CSR research in Iran provides justification for the investigation of this issue in Iran. As a result, the analysis provided in this paper is a step forward enabling Iran to participate more in the global community as far as corporate social commitments and good corporate governance ideas are concerned.

The balance of this paper is organized as follows. In the next section a brief discussion on the concept and definition of CSR is provided. In section three an overview of the literature which has examined CSR is presented. The research methodology is described in section four where a discussion of the data source and the measurement of the dependent variables is provided. This is followed with a discussion of the results of the survey undertaken to collect the data for the study. The paper is concluded with a summary of the implications, study limitations and future research directions.

The Concept and Definition of Corporate Social Reporting

The fundamental problem in the field of CSR has been that there is no generally accepted theory or meaning of CSR that provides a framework or model for the systematic collection, organization and analysis of data relating to this important concept(Clarkson, 1995). Definitions of CSR include "the provision of financial and non-

financial information relating to an organization's interaction with its physical and social environment, as stated in corporate annual reports or separate social reports" (Hackston& Milne 1996, p.78).Gray, Owen, and Adam (1996) argue that though CSR considers a wide range of activities and audiences, it cannot be an open ended agenda for reporting. They also believe that the social accounting literature tends to assume that the reports are prepared about certain areas of activities – typically those that affect the physical environment, human resources, communities and consumers and products.

In this study the perspective adopted is that all CSR disclosures are about corporate activities in relation to human resources, environmental performance and policies, community activities, energy consumption, and customer satisfaction and product quality. The overall CSR disclosures are examined with no distinction between mandatory and voluntary disclosure. Secondly, the assumptions of legitimacy theory and stakeholder theory provide the theoretical framework for the study.

The targeted social disclosures are the five themes adopted from the Trotman and Bradley (1981) study which are defined broadly as follows:

- *Human resources:* disclosures about corporate activities which ensure the well-being of employees, such as health and safety; the number of disabled employees, and employees' education and training.
- *Environmental performance and policies*: disclosures about corporate activities that impact the environment such as air, water and soil pollution; engagement in of anti-litter and conservation campaigns and the utilization of recycling systems.
- *Community activities*: disclosures about corporate activities for the benefit of the community including charitable donations; the sponsorship of social, cultural and sporting activities, and aid for victims of natural disasters.
- *Energy consumption:* disclosures of corporate activities for the efficient and effective use of energy and including efforts to reduce consumption.
- *Customer satisfaction and product quality:* disclosures of corporate activities that enhance customer satisfaction or product quality such as achieving International Standardization Organization (ISO) qualification.

Overview of Previous Studies

Most empirical studies of CSR practice have focused on developed countries, particularly English-speaking countries such as the United States (USA), the United Kingdom (UK), Canada, New Zealand and Australia(see for example, Deegan, Rankin & Tobin, 2002; Gray, Kouhy & Lavers, 1995_b; Guthrie & Parker, 1989; Hackston & Milne, 1996; O'Dwyer, Unerman&Bradly, 2005; Trotman & Bradley,1981; andZeghal& Ahmad, 1990). By comparison, little work has been done on this issue with a focus on less-developed countries such as Iran.

Social reporting research embraces a wide agenda. The definitions of CSR in the previous section imply that this phenomenon may be explained by the interaction of a number of broad socio-political and economic variables which may include some corporate characteristics. Although many studies have been conducted to evaluate the extent of CSR disclosure in corporate annual reports and which have examined the association between a number of company characteristics and the level of CSR disclosure the results are mixed(see for example, Gray, Kouhy&Lavers, 1995; Haniffa&Cooke, 2005; Purushothaman et al., 2000). Also although almost all studies have used large companies as samples, their number, size and industry type has differed from study to study. In this study, the Trotmanand Bradley (1981) model is adopted as it examines all determinants concerned in Gray, Kouhy and Lavers' (1995_b) with the exclusion of the 'country of origin' factor which is irrelevant for this study. Additionally, financial leverage is included as another corporate characteristic.

Research Method

Data source, dependent variable, themes, measurement unit, reliability.

Theoretically, any form of documentation that provides information about a company can be considered as possibly containing CSR information and could therefore be reviewed in this type of research (Gray, Kouhy& Lavers, 1995_a). Past studies indicate that approaching all of these sources, is practically impossible because of practical limitations to the application of this approach (Zeghal& Ahmad, 1990). However, corporate annual reports have been shown to be the preferred place for reporting as they are produced on a regular basis, are required by legislation and are produced by all companies thus making comparisons relatively easy(Tilt, 2001). For these reasons, the annual reports of companies have been used as the source of data for this study.

The term 'CSR' as it is used in this study includes monetary information and non-monetary information. This information is found in different sections of annual reports including directors' reports and financial statements. Data regarding the CSR disclosures occurring in all components of the annual reports of Iranian listed companies' have

been collected as they provide readily available information in a usable form.

The Research, Development and Islamic Studies (RDIS)[1] website is one of the main public resource centers for access to electronic PDF files of annual reports of listed companies. The TSE is a relatively small stock exchange with 430 listed companies at the date of the data collection (2008).Using a stratified sampling technique 103 companies (24 per cent of the total number of listed companies) were chosen as the sample population.

Content analysis is used in this study to measure the dependent variable (quantity of CSR information presented in annual reports) as it is the research method that is most commonly used to investigate the social and environmental disclosures made by organizations(Milne & Adler, 1999).The target social disclosures are the five themes adopted from the Trotmanand Bradley (1981) study as these are items that are of common interest and have been included in previous studies(see for example Belkaoui&Karpik, 1989; Deegan, Rankin & Tobin, 2002; Gray, Kouhy, & Lavers, 1995_b; Hackston& Milne, 1996; Purushothaman et al., 2000; Tsang, 1998; Zeghal& Ahmad, 1990;).The unit applied to analysing and measuring the contents of CSR information is varied. It can consist of words(Deegan& Rankin, 1996), sentences (Hackston& Milne, 1996),or issues(Purushothaman et al, 2000). Consistent with recommendations for this type of research (Zeghal& Ahmad 1990),words are used as a unit of measurement of CSR because they represent detailed description. In regard to voluntary and mandatory disclosures, it is believed that when the level of mandatory disclosure is very low, such distinction is unhelpful(Adams, Hill & Roberts, 1998). In Iran there are very few CSR disclosure requirements of any kind. Therefore in this study of overall CSR reporting no distinction is made between voluntary and mandatory disclosures.

Previous studies reveal various levels of attempts to test the reliability of collected data. While in some studies there is no sign of conducting reliability tests, in others, the procedures and results of reliability tests have been disclosed to varying degrees(Deegan, Rankin & Tobin, 2002; Tilt, 2001; Deegan& Rankin, 1996; Gary, Kouhy& Lavers, 1995_a). Both stability (the ability of a coder to code data over time) and reproducibility tests (using two coders' results) have been used, and the reliability of the data was approved by using Krippendorff's (1980) alpha. In this study the Deegan, Rankin and Tobin (2002) procedures have been followed.

[1]The Research, Development and Islamic Studies (RDIS) is a division of the Iranian Securities and Exchange Organisation (SEO). Under the Security Act, SEO was introduced and created as the regulator of Iran capital market.

Independent (explanatory) variables.

Independent variables have been defined as "[t]he cause variable, or the one that identifies forces or conditions that act on something else" and "[t]he independent variable is independent of prior cause that act on it"(Neuman, 2003, p.149). In this study four commonly used (in previous studies) independent variables have been adopted. These variables and bases of their measurement are as follows:

- Company size - Company size is one of the most commonly identified independent variables in prior studies. While association between company size and CSR has been supported in a number of empirical studies(see, for example, Belkaoui&Karpik, 1989; Haniffa& Cook, 2005; Trotman& Bradley, 1981) other researchers have suggested that the relative size of a company alone is not a sufficient indicator of disclosure amount(see, for example, Hackston& Milne, 1996). As there is no apparent theoretical reason for using a single measure of size (Hackston& Milne, 1996) it has been measured using different bases such as sales volume, total asset value, number of stockholders or an index rank. In this study, both sales and total assets are used as bases for measuring the size of companies. The following specific hypothesis has been formulated to test the size factor.
  H1: There is a positive relation between size and the level of CSR disclosure.
- Company profitability –The relationship between CSR and corporate profitability has been postulated to reflect the view that social responsiveness requires the same managerial style as that necessary to make a firm profitable (Bowman &Haire, 1976). CSR reflects an adaptive management approach to dealing with a dynamic, multi-dimensional environment, and an ability to meet social pressure and to respond to social needs. Previous empirical research on the relationship between profitability and CSR practices has produced conflicting results (see for example Bowman and Haire (1976), Haniffa and Cook (2005) and Roberts (1992) results versus Purushothaman et al. (2000) and Patten (1991)).In this study, profitability is measured using return on assets which is viewed as the relevant technique based on its application in other relevant studies involving CSR (Belkaoui&Karpik, 1989; Hackston& Milne, 1996; Purushothaman et al., 2000).In regard to profitability, the following specific hypothesis is formulated to test the factor.

H2: There is a positive relation between company profitability and the level of CSR disclosure.

- Financial leverage –It has been argued that financial leverage is an appropriate variable because creditors of a corporation control access to financial resources that may be essential for the continued existence of the business and so creditors are important stakeholders whose influence should be managed (Roberts, 1992). Although stakeholder theory postulates that there is a positive relationship between financial leverage and the level of corporate disclosure, there is no consistency in results of studies concerning the relationship between financial leverage and CSR practice (see for example Roberts (1992) versus Hossain, Tan & Adams (1994)). In regard to the 'no significant relationship' conclusions it is argued that the reason for such results could be that the companies with high gearing ratios may have a closer relationship with their lenders. Therefore, these lenders are able to access the information needs through other ways rather than through the annual reports (Zarzeski, 1996). In previous studies, financial leverage has been measured based on the gearing ratio which is calculated as the ratio of long term debt-to-equity (Haniffa& Cook, 2005; Purushothaman et al., 2000; Robert, 1992). The debt-to-equity ratio seems to be a measure of creditor stakeholder power because it captures the importance of creditors as stakeholders relative to equity investors and it is used in this study to measure the financial leverage of a company. In regard to financial leverage, the following specific hypothesis is formulated to test the factor.

  H3: There is a positive relation between financial leverage and the level of CSR disclosure.

- **Industry type** –The amount of disclosure of information and CSR practice may not be identical throughout all sectors of the economy(Cook, 1989).Prior empirical studies have found different relationships and associations between this corporate characteristic and CSR practice (see for example Patten (1991) versus Purushothaman et al. (2000)).As there is no apparent overarching theoretical foundation in the measuring of industry type, in this study the Global Industry Classification Standard (GICS)model is adopted as a practical method to classify industries. The TSE has 37 types of industries and many of these groups have less than 10 companies in their lists. With such a distribution it is not possible to have enough samples for each category to run all necessary statistical tests. Therefore, by using the sector classification model of the GICS the collected samples have been grouped in four sectors:[2](1) energy and materials; (2) industrials and consumer discretionary; (3) consumer staple and health care and (4) financials, IT & telecommunications. In regard to type of industry, the following specific hypothesis is formulated to test the factor.

  H4: There is a positive relationship between type of industry and the level of CSR disclosure, that is companies with greater environmental impacts, would have greater disclosures

Results and Discussions

Data reliability analysis results

The stability test was conducted through two rounds of coding of the CSR information of the sample companies' annual reports. The alpha rate between the two counts of CSR information is 0.9848 which is well over the 0.80 acceptable level of consistency (Tilt, 2001). Therefore, it has been concluded that the coding of the disclosure by the researchers is statistically reliable.

Aggregated descriptive analyses of CSR information

A statistical descriptive survey of the content analysis is the first step towards exploring CSR practice by Iranian listed companies. The aggregated results of analyses of the CSR measures are presented in Table 1. Presented in this table are various items of information such as the number of disclosing companies, percentage of the disclosing companies to the total sample, number of disclosed words (or equivalent) and disclosed words as a percentage of all disclosed words for each theme. The two right-hand columns in the table provide the CSR disclosure mean and standard deviation for each disclosure item.

[2]The GICS classifies sub-industries into five sectors. These sectors are the four sectors used in this study plus 'Telecommunication Services' sector. Due to the fact that there is just one telecommunication firm listed on the TSE and this is not among the sample, therefore, there are just four sectors in this study.

Table 1. Aggregated measures of CSR disclosure

Theme	Number of companies had disclosure	% of disclosing companies to the total sample	*CSR disclosure measured by number of words*	*% of disclosure theme to the total CSR disclosure*	*CSR disclosure mean*	*Standard Deviation*
Human resources	103	100	*74592*	*67.2*	*724.19*	*661.58*
Environmental performance and policies	27	26.2	*6,446*	*5.8*	*238.74*	*206.12*
Community activities	25	24.3	4,331	3.9	173.24	185.20
Energy consumption	13	12.6	2,312	2.1	177.85	142.91
Customer satisfaction & product quality	62	60.2	23,368	21.0	376.90	544.02
			111,049	**100**		

The results summarised in Table 1 indicate that human resources information is reported by 100 per cent of the companies; this is over 67 per cent of the total CSR disclosures observed in the annual reports. This is not surprising given that the current Iranian accounting regulations mandate disclosure of some items of human resources issues. As a result the human resources theme was by far the most frequently disclosed CSR item. The overall significance of the disclosure of this type of CSR information is consistent with the results of most similar studies for both developed and developing countries see for example, Andrew et al. (1989, Malaysia and Singapore); Belal (2001, Bangladesh); Guthrie & Mathews (1985, Australia); Gray, Kouhy& Lavers (1995_b, UK); Hackston& Milne (1996, New Zealand); Guthrie & Parker (1990, USA, UK and Australia); and Ratanajoinkol et al. (2006, Thailand).The relevant literature does not provide a conclusive explanation for this phenomenon(disclosure of the human resources theme) however, it may be that the reporting corporation might consciously or unconsciously develop a series of subsystems of social disclosures to match the perceived importance of constituents and their relationships(Guthrie & Parker, 1990). Human resources disclosure can also be explained from the perspective of legitimacy theory considering that human resources are perceived as an important community resource. Legitimacy theory suggests that for an organization to maintain its 'license to operate' then it must comply with the expectations of the community in which it operates (Islam, 2009).

Customer satisfaction and product quality represent the second most important theme (disclosed by over60 per cent; and representing 21 per cent of the total CSR disclosure in the annual reports). These figures indicate a relatively high attention to this theme and are consistent with other studies(see for example Hackston& Milne (1996, New Zealand)and Purushothaman et al. (2000, Singapore)).This outcome can be explained from a stakeholder perspective wherein an organization responds to the needs and expectations of their powerful stakeholders such as customer as their needs have a strategic role in the on-going survival of the corporation in a globalised economy. Despite all political challenges between Iran and Western countries over nuclear and political issues and the consequences of sanction, Iran's economy still is heavily involved in trade with the rest of the world including the West. Therefore all companies, particularly manufacturing companies, are exposed to tight competition and have to try hard to secure their market share.

Table 1 also provides descriptive statistics on the environmental performance and policies, community activities and energy consumption themes (26.2, 24.3, 12.6 per cent respectively).The respective amounts of CSR information are 5.8, 3.9, and 2.1 per cent of the total disclosed CSR information. The degree of significance of descriptive figures for these themes varies in different studies. Haniffa and Cooke (2005, Malaysia); Purushothaman et al. (2000, Singapore); Hackston& Milne (1996, New Zealand); and Deegan and Gordon (1996, Australia) observed that 17 per cent; 11.7 Per cent; 23 per cent and 36 per cent of their samples respectively disclosed information dealing with this theme while Gibson and Guthrie (1995, Australia) found that 53 per cent of their sample companies reported environmental issues. While sample size and size of the firm have been offered (Deegan& Rankin, 1999) as reasons for differences in environmental disclosure results, it is quite likely that this is also related to the country of origin of the research. In regard to energy consumption, this study (consistent with some other studies such as Purushothaman et al.,

2000, Singapore; Hackston& Milne, 1996, New Zealand; and Guthrie & Parker, 1990, UK and Australia) shows it is the theme about which the least information is provided. In contrast, some studies such as Ernst & Ernst (1978), in the USA reported the amount of information related to this theme ranked highest rank for CSR disclosure.

As the literature suggests, there are many factors that influence the amount of disclosure on a particular theme, the extent and style of CSR information. The possible effects of some commonly identified explanatory variables in the literature such as type of industry, profitability, size and financial leverage of the reporting entity on CSR information are measured and discussed in the next section.

Multiple regression analyses

Before continuing on to any further multiple regression analysis in this section, it is necessary to check the independent variables for multicollinearity cases. Pearson correlation results indicated a high correlation ratio between 'total assets' and 'total sales' above the suggested limit (Walden, 1993; Williams, 1998). Both these independent variables were used as the measures of company size. As a result, based on the above suggestion, only 'total assets' were retained as an independent variable for this test. The analyses indicated that there were no significant variations in the results if the 'total sales' variable had been used instead of the 'total assets' in the tests.

To avoid the dummy variable trap, one of the dummy variables representing industry type must be excluded from the model. To achieve the strongest test of industry type, an industry type at one extreme of the effects was excluded. As a result of this adjustment, the following equation was drawn:

CSR = a + b1GR_EMA + b2GR_CSH + b3GR_FIT + b4Tot_Assets + b5ROA + b6Gearing

Where:

CSR = dependent variable measured by number of CSR disclosures in words
a = the constant measure
b = the estimated coefficient
GR_EMA = industry type _ dummy variable - Energy & materials
GR_CSH = industry type _ dummy variable - Consumer staple and health carer
GR_FIT = industry type _ dummy variable - Financial, IT and telecommunications
Tot _Assets = total assets value reported in the balance sheet
RAO = rate of return on total assets
Gearing = gearing ratio

Reported distribution of CSR disclosures as shown in Table 2 reveals the existence of differences in the extent and type of disclosure observed. In this study four hypotheses namely *H_1 Size*, *H_2 Profitability*, *H_3 Financial Leverage and*, *H_4 Industry type* were used to test the factors affecting differences in disclosure of CSR information. In Table 2 the regression results based on the testable equation (which examines the determinants of CSR disclosures) are provided.

Table 2. Regression estimates - Determinants of CSR disclosures (all themes)

Explanatory Variables	Coefficients	'T' values
(Constant)	1215.216***	6.609
GR_EMA	-156.520	-.610
GR_CSH	-328.812	-1.070
GR_FIT	-458.471	-1.216
Tot_Assets	2.250E-5**	2.535
ROA	544.281	1.504
Gearing	-49.916	-1.131
R^2	0.116	
Adjusted R^2	0.060	
'F' Statistics	2.094	

[''***' indicates significant coefficients' under 1% confidence level, '**' indicates significant coefficients' under 5% confidence level,'*' indicates significant coefficients' under 10% confidence level]

According to the recorded R^2 value, the model is able to explain the dependent variable up to the 11.6% level of the overall CSR disclosure. This indicates that there may be some other factors which can affect the overall level of CSR disclosure. Among the independent variables used in this model, the only variable which represented a statistically significant relationship was company size. This relationship is consistent with the legitimacy theory concept as within the legitimacy

theory framework the size of a company is a proxy for public visibility (Patten (1991). Therefore, the larger the company the more scrutiny by the public and as a result more CSR information would be disclosed in order to legitimises or maintains legitimacy of its operations. All other recorded coefficient values are statistically insignificant. Confirming the predicted relationship in H_1, the size shows a statistically significant positive relationship with the dependent variable. This result is consistent with results found in a number of other studies (see for example Belkaoui&Karpik, 1989;Hackston& Milne, 1996; Haniffa& Cooke, 2005; Patten, 1991; Purushothaman et al., 2000; and Trotman& Bradley, 1981).

Implications, Limitations and Future Research Directions

The findings presented in this paper expand the existing knowledge about CSR practices in developing countries, in particular, in the case of Iran. For example, the analysis demonstrates, with the exception of human resources disclosures, only a small percentage of Iranian companies disclose CSR information. There is also a low level of disclosure on the part of companies that are making CSR disclosures. Improving the extent of CSR disclosure may be achieved by government mandate and this is perceived by some Iranian stakeholder groups as socially and environmentally crucial for the long term welfare and sustainability of society and the natural environment. Determining the perceived CSR information needs of Iranian stakeholder groups is an important area for further research.

Studies of this type have certain limitations that should be considered when interpreting the results. In this particular study the data were gathered using the content analysis method which involves reading and interpretation of the content of annual reports. The inherent subjectivity of judgments is a limitation of this type of research. However, procedures were utilized to reduce such risk including clearly defining categories of CSR disclosures and decision rules; and recoding of a test sample of annual reports by a second experienced coder.

This study was devoted to an assessment of the extent of CSR disclosures in annual reports of Iranian companies and the relationships between such disclosure and four specified corporate characteristics. The low R^2 resulting from the regression analysis provides an opportunity to extend the examination undertaken in this study. Future research could consider other variables which may affect the level of CSR disclosures by Iranian listed companies, for example the legal status of corporate ownership. While the focus of this study was to investigate CSR practice in Iran, an international comparative study across countries such as Iran, Turkey, Pakistan and Arab countries around the Persian Gulf in the Middle East region may provide the focus of future studies.

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STRATEGIC DYNAMICS AND CORPORATE GOVERNANCE EFFECTIVENESS IN A FAMILY FIRM

Paolo Di Toma*

Abstract

This paper employs a case-study approach to address linkages between corporate governance and a firm's strategic dynamics. It investigates a family firm which moved from a state of crisis to a renewed growth and profitability stage to analyze how establishing appropriate governance practices may contribute to strategic renewal and value creation. Creating an effective system of corporate governance is a crucial task for all firms, requiring an appropriate balance between accountability and entrepreneurial dimensions to carry out the firm's strategies. Data reveal how corporate governance variations over time may help a family firm to move through its organizational life cycle, by creating an appropriate fit with the evolving strategic needs.

Keywords: Corporate Governance, Strategic Dynamics, Family Firm, Value Creation

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1. Introduction

Although corporate governance is increasingly recognized as a critical organizational factor influencing the firm's performance and long term survival, the corporate governance debate, over the last few decades, has been distinguished by the prevalence of the agency perspective with a main focus on the accountability dimension (Filatotchev, 2007; Ingley and Van Der Valt, 2005). Much attention has been devoted to mechanisms ensuring monitoring and control to protect owners from managerial opportunism, but resources and knowledge roles have been underestimated. Nevertheless, the enterprise dimension of corporate governance may become relevant for increasing strategic flexibility and promoting long term growth through differing stages of a firm's life cycle (Filatotchev and Toms, 2003). Substantial efforts have been directed towards large and mature public companies, mainly consistent with the U.S. experience, concentrating on a static theorising of the principal-agent perspective (Filatotchev *et al*., 2006), while little attention is given to family firms, even if they are largely represented around the world (Westhead *et al*., 2001). Family firms share some dimensions common to non-family firms (Sharma, 2004), but their governance issues may become potentially more complex than in non-family firms, given the interwoven systems of ownership, management and family (Westhead *et al*. 2001; Chua *et al*. 2003).

Many family firms deal with several challenges to their long term value creation efforts and the establishment of an effective corporate governance system is a crucial task they face (Steier, 2001). The organizational value creating attributes are embedded in the firms' system of corporate governance on the basis of differing incentives, authority structures and norms of accountability (Carney, 2005). Investigating how family members exert their governance role to influence the practice of strategy may provide useful explanation on the topic of value creation over time in a family firm (Sharma *et al*., 1997).

This paper addresses the effectiveness of the corporate governance practices in terms of fit with the emerging strategic needs. On the basis of a case-study approach, it explores key contingencies affecting the integration between the firm's strategic dynamics and the corporate governance practices along the firm's organizational life cycle. It investigates the case of a family firm which shifted, over the last years, from a state of crisis to growth and then went public, while still remaining controlled by a small number of families. It represents interesting evidence of a strategic transition and its reciprocal interplay with the corporate governance system.

We extend previous research by examining how corporate governance mechanisms work and interact, then providing support or obstacles to the firm's strategic behaviour. Addressing the topic, this study seeks to identify which variables are relevant to explain how the corporate governance practices and strategic dynamics were integrated, providing an effective support to the strategic transition of the firm examined.

This paper aims to extend previous research providing several contributions. First, responding to criticisms to well established, but universal perspectives on corporate governance, it contextualizes the analysis to a family firm, trying to bridge corporate governance literature with family business research specificities. Second, it addresses, in an integrated view, emerging changes in corporate governance practices according to the firm's strategic dynamics to develop a dynamic and process perspective. In this way, it contributes to better understanding conditions influencing the effectiveness of corporate governance. Third, it focuses how the corporate governance mechanisms may be differently managed to fit with the strategic needs arising from the firm's organizational life cycle. In a dynamic view, it will investigate how a family firm may overcome strategic transitions by appropriately rebalancing its corporate governance system.The study is structured as follows. The following section will shortly introduce the study's main theoretical constructs and some missing links in explaining relationships between corporate governance effectiveness and strategic dynamics in a family firm. Then, the study's longitudinal research design, data collection and data analysis will be described. In the following sections, after a brief description of the case study, a specific statement will be delineated on the basis of the case analysis linking it to the results of previous studies. Finally, in the discussion section, the broader implications of this study will be outlined.

2. Theoretical framework

The entrepreneurial dimension of corporate governance and value creation.

Corporate governance effectiveness stems from an appropriate fit with the firm's strategic requirements, balancing accountability and enterprise dimensions to carry out the firm's strategies (Filatotchev *et al*., 2006). Firms commonly vary their strategic orientation passing through different stages of their life cycle and these changes may require appropriate adaptations in corporate governance established practices (Zahra and Filatotchev, 2004; Gedajlovic *et al*, 2004; Huse and Zattoni, 2008).

Differing perspectives have addressed how family firms deal with strategic challenges, hence attaining value creation or failing to do so. Agency theorists emphasize that due to retaining both ownership and control, and because of their intra-familial altruistic relationships, family firms are exempt from agency costs (Fama and Jensen, 1983). Goal congruence among family members and informal control pressures will reduce the need to monitor behaviour or outcomes, making formal governance arrangements unnecessary or counterproductive (Jensen and Meckling, 1976). In contrast, other studies in the agency tradition have emphasized several potential inefficiencies which may lead to value reduction in the context of family firms (Schulze *et al*., 2001).

Well established approaches focusing the accountability dimension of corporate governance, mainly rooted in the agency perspective, are increasingly subjected to criticism (Keasey and Wright, 1993; Huse, 2005; Filatotchev, 2007). Agency theory has shortcomings when considering entrepreneurial firms pursuing growth which emphasizes crucial requirements of knowledge and resources. Even if accountability has been the main focus in corporate governance research, along the firm's life cycle the value creation dimension may become relevant, in accordance with the firm's strategic dynamics (Zahra and Filatotchev, 2004; Filatotchev, *et al*., 2006).

Corporate entrepreneurship involves the activities referring to corporate venturing, strategic renewal and innovation (Sharma and Chrisman, 1999), providing potential means for revitalizing established companies and developing value creation. Corporate governance may sustain value creation by influencing the organization-environment interdependences (Filatotchev and Nakajima, 2010). Value creation refers both to opportunities recognition in the external environment and to their exploitation by the development of sustainable competitive advantages (Adner and Helfat, 2003). Identifying opportunities is a key value creation activity, but firms subsequently incapable of exploiting them may waste their potential. However, firms not engaged in seeking new opportunities, even if this has competitive advantages, may risk a reduction over time of their value creation or of their current wealth, depending on changes in their environment (Alvarez and Barney, 2004). Thus, the effectiveness of corporate governance stems from how managers and directors strategically choose corporate governance practices to deal with environmental pressures (Aguilera *et al*., 2008) Competitive advantages are built upon the possession of valuable, rare, imperfectly imitable and non replaceable resources idiosyncratic to the firm (Barney, 1991) and well known drivers may be new products or new processes creating performance differences among firms (Danneels, 2002). Absorptive capacity is recognized as a key resource to develop value creation resulting from relationships with external entities that can promote access to and control of resources and assimilation of knowledge. Among the firm's resources, knowledge is the most likely to lead to enduring success because it is socially complex and difficult to imitate (Barney, 1991). Entrepreneurial strategies may then pursue value creation by leveraging the

existing knowledge base, recombining and extending existing knowledge and importing new knowledge (Kazanjian *et al*., 2002). However, required knowledge could be obtained changing the composition or decision making processes of board of directors (Zahra *et al*., 2009:249). Knowledge is most critical in technology-based firms, because generating and exploiting knowledge requires that knowledge to be continually replenished. Given that the acquisition and exploitation of knowledge are mainly an outcome of social processes, absorptive capacity may become a critical antecedent for the long term survival and profitability of technology based firms. However a neglected topic in previous research refers to how family related social interactions may influence the family firm's capability to develop a dynamic strategic adaptation (Salvato and Melin, 2008, Sirmon and Hitt, 2003).

Absorptive capacity is a dynamic capability, referring to knowledge creation and utilization, which increases a firm's ability to gain and sustain a competitive advantage (Zahra and George, 2002). The ability to access and absorb knowledge influences the firm's effort to value creation, but the level of prior related knowledge characterizing a firm moderates its potential identification and utilization of external knowledge (Cohen and Levinthal, 1990). It has relevant implications, even if neglected in previous research, for firms going through a transition from a start-up phase to a more professional management stage along their organizational life cycle which requires the building and the development of differing capabilities (Zahra *et al*., 2009). An appropriate identification of knowledge residing outside the firm and the capacity to absorb it into new processes develops innovation and opportunities recognition, (Cohen and Levinthal, 1990; Zahra and George, 2002) and the ability to successfully employ such knowledge for market purposes promotes opportunities exploitation (Tsai, 2001).

Furthermore, in addition to the firm's resource base, organizational and strategic processes are also relevant to promote the manipulation of resources into value creating strategies (Salvato and Melin, 2008). Individuals holding power positions, such as senior managers or board members, can play a role in the development of capabilities by undertaking specific initiatives and establishing organizational routines. Dynamic capabilities allow firms to renew competencies and to strategically arrange and bundle organizational resources, skills and routines required to develop value creation facing the evolving competitive conditions. They have been the focus of an increasing body of research, but few cases of analysis have addressed the processes inside organization and how corporate governance practices may influence their development.

3. Methodology

3.1 Research Design

We followed a case-study research strategy (Yin, 1994) to identify contingencies affecting relationships between changes in the strategic orientation and corporate governance practices in the context of a family firm. In selecting research sites, the goal is to identify available cases that are likely to replicate or extend theory, rather than randomize (Eisenhardt, 1989), and that are promising to provide rich empirical data on the investigated phenomenon, based on a plurality of data sources (Yin, 1994). Accordingly, the case of RCF was selected because it provides a meaningful experience of a strategic transition from crisis to renewed growth and a radical change in the corporate governance practices. Furthermore, it is controlled by a dominant coalition of three families where two members from each family serve on the board or have a managerial position at a higher level. Thus this case is appropriate for exploring the mutual interplay between strategic dynamics and the potential adaptation of corporate governance structures and processes in a family firm. This design enabled to identify salient constructs and their constituent components (Yin, 1994).

3.2 Data Collection

Data were collected through personal interviews and secondary sources (newspapers, articles from magazines, internal company documents, annual reports, notes and letters to the investors, company press releases, the company website and so forth). Aiming to investigate the research topic in depth, the case study was conducted relying on interviews with several people in the organization to represent different perspectives (Myers, 2009). Interviews were the primary source of data and informants at different levels of the corporate governance system were met to yield a more accurate analysis (Yin, 1994). Semi-structured interviews were conducted separately with individuals representing ownership, board members and managers.

At first, the key informants were identified, as individuals having the most information about our specific topics of interest in the organization and with decision making authority or influence in the corporate governance and strategy topics. The key people were both initiators of the firm's process of change and are currently involved in the boardroom and/or in managerial roles. Interviews were also extended to all individuals proved as having significant information because of their lead positions in the organization or in the change process under analysis (Myers, 2009).

Interviews were conducted during several formal and informal meetings having an average length of two and half hours. The interviews were audio-recorded and transcribed after each meeting.

Interviews were organized in two parts. Initially respondents told their story on the evolution of the firm's strategies and on the characteristics and functioning of the corporate governance system along the years considered. The research focused on the threshold from crisis to growth, but further data regarding the previous history of the firm were acquired for a better interpretation and contextualization of events and roles of the people involved holding key positions. Open-ended questions were asked (i.e. overview of the family business' history, crucial events referring to the firm's strategic behaviour and changes, information about the corporate governance practices and their variations over time, the involvement of families members) without specifying to the interviewee the constructs of interest in the research project, with the aim of avoiding influencing their answers.

During the interviews, probing questions were asked to obtain more details on the topics discussed and to triangulate the data acquired (Yin, 1994). In the second part of the interviews, structured questions were asked in order to investigate the role played over time by specific corporate governance practices (i.e. ownership identity, board composition, board tasks), their interplay and potential complementarities or substitution effects. The aim was to investigate the outcome of the established governance arrangements as a whole and the following degree of effectiveness in supporting the firm's strategic needs throughout different stages of its life cycle. Secondary sources allowed to build longitudinal accounts both of the firm's strategic dynamics and of intervening variations in the corporate governance structure. They allowed to identify critical events, potential links and contribute to build up a description of the organization and of its history (Bryman and Bell, 2007).

3.3 Data Analysis

Data analysis was guided by theoretical concepts regarding the entrepreneurial dimensions of corporate governance and an iterative cycle of analytic induction and deduction was employed (Eisenhardt, 1989). Data were triangulated among respondents and from secondary sources, such as published and unpublished documents. The data collected were stored in a data base specifically designed for the task of structuring and clarifying information and then was carried out a recursive iteration between data and theoretical constructs (Bryman and Bell, 2007). In a first phase, each construct was addressed separately and then were explored emerging relationships among the identified constructs. Interview transcripts, observations and secondary data were carefully read to identify and refine patterns. During the data analysis memos were generated and then matched to refine theoretical understanding (Yin, 1994). The emerging theoretical constructs developed by the memos were compared to the evidence for evaluating their fit with data in an iterative process (Yin, 1994; Eisenhardt, 1989), often generating new and more fine grained memos which became the basis for the presentation of the research findings.

To check the credibility of the interpretation of data, confirmation was asked from respondents on an ongoing basis. Then findings were presented to peers to ensure the validity of the analysis and theory building during several informal and formal meetings.

4. Case description

RCF was founded in 1949 in Northern Italy, by three technicians who left their former employment as a result of post-war restructuring. It made its mark in the public sound and professional audio system market thanks to the quality and technological sophistication of its products. The company manufactured and sold professional microphones, amplifiers and loudspeakers. Yet, despite its growing reputation, RCF suffered from a chronic lack of capital that, in times of crisis, put the company under extreme pressure and led to frequent changes to its governance structure.

In 1982, as a consequence of the financial difficulties the company had been experiencing for a number of years, one of its suppliers purchased a majority share in a far-reaching organisational shift which saw one of its own managers take over an operational role in RCF with the task of overhauling its commercial division. At the same time, Mr. Macchiaverna, a consultant with the new buyer, took on a consultancy role at RCF too.

The company in the early 90s branched out into the loudspeaker market. Until then, the store of know-how built up in the fields of amplifiers and loudspeakers had never been applied to in-house products, serving instead in the supply of components for finished product manufacturers. In 1995, the company was at a standstill again because of an awkwardly high number of partners and their lack of cohesion, which made it impossible to define a clear strategy and led to stalemate and decisional inconsistency.

That year, in a bid to overcome the managerial problems the company was facing, the majority coalition offered a 22% share to Mr. Arturo Vicari, an engineer with a proven track-record in sound systems and the owner of a company involved in high frequency electronic design for the music

market, named A&B . Mr.Vicari became the new CEO, but he came into the company on the condition that he would have free rein in the running of operations. Despite having a share of only 22%, he demanded, and obtained, a shareholder's agreement that would protect him from interference by the other partners on the board of directors.

He provided the leadership the company needed by defining clear goals and strategies and he quickly gained superior performance. By 1998, the company had reached a turnover of around 80 billion lire, where in 1995, the figure at the close of the year was around the 45 billion mark.

Mr. Vicari believed that in order to consolidate its success, the company needed to expand the group internationally through M&A operations, but the other partners did not agree. Thus, Mr.Vicari started looking round for a buyer for the company.

A potential buyer was found a few months later, in the new year, in the shape of a company which was a world leader in mixer design. Its success was founded on a philosophy similar to that of RCF, namely producing innovative high quality products at affordable prices and not exclusively for the specialist market.

The purchase was completed by June 1998 and Mr.Vicari kept his position as CEO for a few months longer in order to ease the transition.

Yet, what should have been a successful merger failed to yield the desired results, and, after an auspicious start, the company' profitability began to drop, until, in 2003, it collapsed entirely.

There were many reasons for the failure, but they were mainly connected with the unbridgeable divide between an almost entirely American governance and top management on the one hand, and the rest of the company, particularly the board of directors, on the other.

In their efforts to amalgamate the company into the rest of the group, the new owner lost sight of the potential that was specific to RCF, particularly its trademark. Indeed, most RCF products were sold under the new owner trade name, with the result that the name of RCF gradually disappeared from the market.

R&D was experiencing problems, too. Although there was no lack of resources and skills, there was no guiding hand to direct the work of technicians and researchers.

The company's finances continued to deteriorated, until, during the course of 2003, the management of the group gradually came to the realisation that production in Italy had become unviable. On 6 December 2003, the company was put into liquidation and the judicial arrangement with creditors followed soon thereafter.

At that point, Mr.Morlini, one of the majority shareholders of the pre-Mackie era who had stayed on throughout the intervening years, called upon Mr.Vicari and Mr.Macchiaverna to take part in a re-purchasing operation.

At the start of 2004, with the completion of a complex operation to repurchase RCF, Mr.Vicari, Mr.Macchiaverna and Mr.Morlini were ready to start rebuilding the company. The ownership was divided in the following way: Vicari 50%, Macchiaverna 30% and Morlini 20%. The board of directors consisted of Mr.Macchiaverna as President, Mr.Vicari as CEO and Mr.Morlini as CFO. Although they were all members of the board of directors, each had clearly defined tasks and areas of responsibility in which they enjoyed full autonomy and the complete trust of the other members: Mr.Vicari was to take care of management, Morlini of administration and finance and Mr.Macchiaverna of tax and M&A matters.

The company's revival was sustained by the people working in RCF. The return of the previous CEO, the averted threat of redundancy, the challenge of rebuilding a company from scratch sparked immediate commitment in the workers who had been selected to stay on for this new adventure. Mr. Vicari had continued to work in the sector and had never taken his eye off the strategic moves of RCF, and therefore held a clear vision about why things had gone wrong and how to resolve them. His strategy was to upgrade the brand name by developing superior quality products. The R&D work carried out by Mr.Vicari's company over the previous years contributed considerably to making this possible. A&B had invested heavily on electronics applied to sound, digital technology in particular. Nevertheless, the operation was not so straightforward, as rather than simply taking an A&B product and applying to it the RCF brand name, it involved developing a new RCF product using A&B technology. The capacity of RCF's technical department to adapt quickly to new technological solutions was vital in creating new products at extremely short notice.

Success was immediate; the company started working in January and by March it already had a turnover of 2,000,000 euro, a trend it maintained for the entire year, closing the year with revenues to the tune of approximately 24,000,000 euro. On the wave of the success of its new digital products, the company's growth rate remained steady throughout the subsequent two years, reaching a total growth of 40%.

Alongside innovative products and a well-known brand name, RCF's revival owed much to the reputation and network relationships of its new owners, who were able to rally all the company's stakeholders in the effort to relaunch the business.

One final element in the revival of RCF was the speed at which the top management made the decisions that enabled the organisation to re-orient itself along the lines set out by its leader and achieve results within a time-frame that until that

moment had been not predictable. The trust that existed between the partners was fundamental and allowed each one of them to commit fully to the task in hand without fear of interference from the others.

In 2006, encouraged by growing sales and excellent profitability, the company decided to make another quality leap and float itself on the Italian stock market. Mr.Vicari revived his intention of expanding rapidly by making acquisitions, but this time he received the full backing of the other members of the board. The stock market seemed to be the most effective way of putting together the necessary capital and giving the group solidity and continuity.

RCF's listing reflected the management philosophy of its owners-directors. A new company was set up to purchase RCF and A&B shares and make a public offering. The decision to float the group leader and to leave the bulk of production to the subordinate companies made it possible to adopt an extremely agile management model for the operative companies.

5. Propositions

Collected data provide evidence on the integration between the established corporate governance structure and the firm's strategic dynamics going through its organizational life cycle. The threshold from the state of crisis was characterized by a radical change in the corporate governance structure and processes, which became the starting point for a strategic renewal. After a few years as a subsidiary of a large U.S. company, RCF reverted to a family owned structure in 2005. Initiators of the throwing again were Mr. Macchiaverna, Mr. Vicari and Mr.Morlini and they represent the dominant coalition of families holding the ownership of the firm. They started to run the business in 2003 when the U.S. company controlling RCF declared its failure and began insolvency proceedings. They rented the firm through an agreement outlined in a court authorization which gave them the option to buy the firm within three years, but enabled them to run the business forthwith, without interference from the U.S. company. They became owners in 2005, but they had acted as de facto owners-managers since 2003. The new owners decided to be directly involved in running the business, serving as members of a completely renewed board of directors. Top management team from the U.S. company was substituted by selecting and appointing young, but experienced internal managers with a long tenure in RCF. The aim was to shape a cohesive and proactive team, with high managerial skills, able to address new strategies for overcoming crises by exploiting organizational, but previously neglected resources. These changes underlie a substantial redesign of the corporate governance structure in RCF which allowed the pursuit of new strategies by reconfiguring the resource base and the RCF's strategic positioning to develop value creation. Furthermore, data referring to previous events in the firm's history show that the firm went through recursive stages of crisis and growth, associated with changes in established governance practices which provided help or obstacles to the firm's strategic orientation. Thus, case data led to the following proposition.

> *Proposition 1: Facing strategic thresholds, appropriate changes in the corporate governance structure may facilitate the firm's ability to pursue a strategic renewal and inadequate variations may obstacle its development and its survival.*

In the case we studied, changes in the RCF strategic dynamics were largely conditioned by previous variation in the firm's corporate governance established structure. A previous change in corporate governance allowed going through a crisis that in 2003 led to insolvency. Data show that, among the corporate governance mechanisms, ownership exerted a key role to help transition. The present owners identified key organizational and strategic limitations affecting RCF, then evaluating resources constraints and potential opportunities to recover the business. Furthermore, they addressed strategic goals and a consistent restructuring in corporate governance and organizational processes. They addressed the board functioning and composition, thus deciding to be directly involved in running the business, but clearly shaping specific tasks, with the aim of identifying their appropriate contribution to develop value creation. All of them had previous experience in RCF before the US company acquisition. Mr Macchiaverna as a consultant, Mr. Vicari and Mr. Morlini as owners and director or CEO, but only when the current ownership identity was established were they able to create conditions for such a relevant success. Mr Vicari previously became owner and served as a CEO, from 1995 to 1998, because the lack of shared strategic goals and conflicts regarding power allocation among the current owners required a discontinuity to overcome a strategic stalemate. He realized a fast growth with superior performance, but nonetheless the current owners opposed his further investments projects and strategies to further development. Following conflicts led to the U.S. company take over, and in a few years, to crisis. Data show how ownership, representing the ultimate decision maker, holds a crucial role in addressing the firm's strategic orientation, by its direct involvement or by legitimizing the board or the CEO behaviour. Family firm boards are typically dominated by

family directors (Voordeckers, Van Gils & Van den Heuvel, 2007), hence owners may further condition board activities and performance, providing a conclusive help or obstacles for going through organizational life cycle stages. These arguments support the following proposition.

Proposition 2: In a family firm, ownership is the main contingency affecting the firm's long term goals and strategic decision making, thus conditioning its going through organizational life cycle stages

Absorptive capacity exerted a key role in enabling RCF to overcome its crisis and then pursue value creation by developing dynamic capabilities. When the current dominant coalition took over RCF, its products were suffering from technological obsolescence and their market price was much too high, because of inefficiencies, especially arising from its excessive and unjustified size. Working in a sound transmission industry, technological obsolescence was a main concern, also because designing and developing innovation may require two years before realizing a new product. In the previous years, R&D in RCF was not effectively addressed by the U.S. company and even if it maintained high level competences on the electromechanical side, the electronics was inadequate, leading to badly working products. Mr. Vicari identified a key resource for addressing strategic change in digital technology applied to professional loudspeakers, but neither was it currently available in RCF, nor was the required knowledge consistent with internal competences. Hence, absorptive capacity bridged the gap by the acquisition of high technology in digital electronics from an small external company, named A&B and also owned by Mr. Vicari, but previously a rival of RCF. In previous years A&B had developed and realized many highly innovative projects, but it was unable to exploit their potential value, mainly because they lacked a brand name allowing market positioning. Therefore, acquiring some of these projects which provided highly specialized electronics then adapted to RCF loudspeakers, RCF was able realize highly innovative new product in a short time. Consequently, new high level electronic systems were not simply transferred to RCF products, but united with its existing resource base, RCF designed highly innovative products by a well performing adaptation of its specific knowledge in electro-mechanics and the specific knowledge provided from A&B in digital electronics. Designing and realizing its product as a whole, RCF obtained continuously radical innovations ensuring superior performance and competitive advantage. Indeed, with the exception of two players, all its competitors within industry hold internally just one out of two technologies, usually buying the other one, but designing their products on the basis of the internal one. Consequently, their products systematically under-perform if compared with RCF's. Furthermore, due to the well-established partnership with A&B, RCF gain new specific-knowledge, allowing a high rate of unique product innovation continuously sustaining competitive advantage. These arguments support the following proposition.

Proposition 3: In the transition from a state of crisis, absorptive capacity may accelerate changes in the firm's strategic positioning enabling value creation strategies.

When the current dominant coalition took over RCF, with the purpose of overcoming the state of crisis, a radical organizational restructuring was required. The firm's size became redundant when managed by the US company, mainly because of a lack of internal communication and coordination between the US top management and RCF. The brand name was neglected and almost disappeared from the market because RCF was substantially managed as an externalized unit of the holding company. In this way, even the efforts of the R&D activities were unclearly addressed, originating under performing products, but high production costs penalizing the firm's competitive positioning. On the other hand, the RCF management was well skilled and electro-acoustic technology maintained a high level of innovation. Then, when Mr. Vicari started to run the business as the new CEO he first carried out a robust downsizing which allowed resources selection to improve efficiency. Then, on the basis of his previous experience, he addressed commercial management efforts to rebuild access to the market and he directed R&D goals. Developing new, well functioning products was consistent with enhancing the RCF brand name, thus improving its market positioning. New managerial tools and techniques were introduced and increased internal communication allowed sharing knowledge and goals within the firm. New organizational routines were established, increasing both the firm's efficiency and its ability to identify and to exploit new market opportunities, then addressing the development of new products which obtained high success and sustained fast growth. Thus, our data reveal how discontinuity stemming from a new CEO initiated the development of new dynamic capabilities sustaining the firm's value creation. In formal terms:

Proposition 4: In the transition from the state of crisis, a new CEO may promote value creation strategies by renewing the firm's dynamic capabilities.

6. Discussion

The aim of this study was to investigate conditions influencing the effectiveness of the corporate governance practices, according to strategic challenges affecting a family firm when moving through its organizational life cycle. This research addressed the topic by applying corporate governance theories to the context of family firms and responding to recent calls for improved theoretical pluralism and for developing knowledge on contingencies affecting corporate governance mechanisms and processes (Huse, 2005; Filatotchev, 2007). In this way, this research also aimed to provide useful insight from family business research, suggesting extensions or elaborations enriching in return corporate governance theories (Zahra and Sharma, 2004:336).

Findings challenge well established universal perspectives, showing how corporate governance and the firm's strategic behaviour are interlinked, thus suggesting that corporate governance practices should be differently established to fit with the firm's strategic dynamics. The mutual interplay between corporate governance practices and the firm's strategic dynamics are most evident when considering transitions through the organizational life cycle. Changes in the firm's strategic needs enhance evidence on required adaptations in the corporate governance structure and mechanisms to improve conditions for the firm's survival and profitability. Focusing on the threshold from a state of crisis to a renewed growth, as in the case we studied, the necessary radical changes and their impact on the firm's strategic positioning and performance should be most evident.

A first insight emerging from this study is that variations in the established corporate governance practices may represent a powerful antecedent to address strategic change, but their impact depends on the effectiveness of the emergent system of corporate governance as a whole, more than on individual and specific mechanisms. The firm's system of governance refers to an established and reinforcing bundle of authority relations, norms of legitimacy and incentives (Gedajlovic *et al*., 2004) structuring decision making rules, rights and responsibilities among the key stakeholders involved, as well as their relationships. The resulting system may be appropriate or inadequate to fit with the firm's strategic requirements, but within it individual mechanisms are interdependent, thus originating potential complementarities, substitution effects or conflicts (Rediker and Seth, 1995; Brunninge *et al*., 2007). In a family firm, the effectiveness of the corporate governance practices may concern settling relationships among the dominant coalition of families holding the firm, as well as their involvement in governance and managerial roles. The case I studied emphasizes the crucial role of ownership when addressing the firm's strategic challenges and it sheds light on ownership as the ultimate decision maker (Carney, 2005), because of the owners preferences which may be consistent or contrasting with the firm's strategic dynamics. Mr. Vicari, as owner and serving as CEO, gets a decisive support to his strategic leadership from the current members of the ownership structure which usually validates his leadership. In his previous experience as owner and CEO in RCF, he also obtained high performance and growth, but because of differing and contrasting preferences among the past owners, he was induced to renounce developing further growth strategies. It may address not a matter of ownership structure, but it refers to ownership composition and its subsequent strategic goals, pointing out implications from the ownership identity on the firm's long term goals.

A further contribution of this study refers to how family specificities may influence those strategic activities enabling a family firm to sustain value creation over time (Salvato and Melin, 2008). The family members absorptive capacity was identified as a prominent source of the firm's competitive advantage, providing a certain resource heterogeneity the firm then developed into dynamic capabilities to realize its value creation strategies. Relationships between members of the dominant coalition of families controlling RCF and external clients and suppliers allowed a fast rebuilding of the firm's commercial network and provided decisive technologies to design high quality products in a short time. Knowledge acquired from clients and suppliers contributed to new products development which may require inputs of relevant complementary knowledge, such as market or design, often possessed by other firms (Danneels, 2002). Furthermore, owners' prior knowledge represented a source of potential absorptive capacity and enabled the firm to increase the depth of relation-specific knowledge, then increasing the potential for further innovative combinations (Zahra and George, 2002).

Absorptive capacity may enable firms facing strategic challenges to combine external knowledge with internal competences, and successfully exploiting them to perform value creation strategies (Hitt *et al*., 2001; Zahra and George, 2002; Zahra *et al*., 2009). This study points out how a relevant portion of absorptive capacity may reside in the family members' differing competences and relationships and, because of their involvement in corporate governance roles and processes, they may represent a considerable source or attribute of the competitive advantage embedded in a family firm (Carney, 2005). In the case I studied, as an example, the board, and especially the CEO,

addressed the firm's ability to learn how to develop and use new knowledge, creating routines and skills that generated dynamic capabilities, such as realizing continuous innovative products, and applied them quickly to develop value creation (Zahra and George, 2002). Therefore, the development of corporate governance processes and strategic flexibility required by value creation are interlinked, thus suggesting that corporate governance practices may be designed strategically. The development of dynamic capabilities relies on bundling the firm's resource base and linking them to appropriate firm-specific routines reflecting the unique organizational context in which they emerge. Flexibility needed to challenge strategic dynamics may require an appropriate degree of organizational learning, questioning the effectiveness of the corporate governance system to lead to changes necessary to the firm's repositioning. Key actors in the governance system provide differing knowledge and skills and these differences may influence managerial priorities, decision making and, finally, how the firm creates and leverages its capabilities to develop value creation.

7. Conclusions

In this study, I investigated relationships between corporate governance practices and strategic dynamics in the context of family firms. I analyzed the case of RCF, an Italian firm owned by a dominant coalition of families, which shifted over the last years, from crisis to a renewed growth. Its experience represents an interesting example showing how changes in its strategic orientation and in its corporate governance system are integrated, leading to a deeper evaluation of contingencies influencing the effectiveness of a corporate governance system. I identified relevant relationships between corporate governance mechanisms and strategic challenges that are supported by case data, then addressing a process view to challenge the investigated topic.

This study aims to develop knowledge at the intersection of corporate governance and family business research, considering the role of family specificities in the mutual interplay between corporate governance practices and strategic dynamics. This stream of research promises to advance knowledge in a contextual approach to corporate governance, but it also has implications for an appropriate design of corporate governance practices in family firms.

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THE USEFULNESS OF OPERATING CASH FLOW INFORMATION: DOES FORMAT MATTER?

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Abstract

This study investigates whether the direct method of presenting cash flows from operations is superior to the indirect method in its ability to forecast future cash flows. It also considers the effect of industry characteristics on the relative usefulness of direct and indirect methods of cash flow presentation. The study, which uses a sample of Australian firms, finds that both the direct and indirect methods improve the forecast of future cash flows. However, the indirect method of reporting cash flows from operations is more relevant than the direct method in predicting future cash flows. Evidence from the industry-level analysis overall reinforces the main results.

Keywords: Cash flows, Direct Method, Indirect Method, Predicting Future Cash Flows

JEL Classification: M41

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1. Introduction

The reporting of cash flows is of much interest to investors, analysts, accounting standard setters, and preparers of financial statements. However, given the two alternative methods of cash flow disclosures (direct and indirect methods), there is a constant concern about the presentation of cash flow statements. Accounting standard setters, in particular the International Accounting Standard Board (IASB) and the Financial Accounting Standard Board (FASB), allow firms to report cash flow statements using either the direct or indirect method, but they state a preference for the direct method. From their point of view, the direct method is beneficial in assessing a firm's future cash flows (FASB, 1987, para. 29; International Accounting Standard Committee, 1992, para. 18). Financial statement users (e.g., analysts, lenders, and investors) generally have the same opinion and advocate the mandatory use of the direct method (e.g., Jones and Widjaja, 1998; FASB, 1987, para. 111, CFA, 2009). However, in spite of this preference for the direct method, in practice, most firms adopt the indirect method. In effect, many preparers have expressed concern over the direct method disclosures. Their primary complaint is that the cost and complexity of preparing direct cash flow statements exceed the perceived benefits (e.g., FASB, 1987, para. 113; Wallace et al., 1997, Krishnan and Largay, 2000).

Despite the above arguments, current practice is about to enter a new phase, as the FASB and IASB are currently debating a joint project on financial statement presentation that also addresses the issue of the presentation of cash flow from operations. Accordingly, firms would be required to present direct cash flow statements and report the indirect cash flow components separately in the notes to the financial statement (IASB, 2008). This would be a significant departure from the current standards' position; the direct method is given a more important role, and the indirect method takes on an ancillary role, limiting the indirect cash flow disclosures to notes only. However, if the usefulness of the indirect method is higher than or even comparable with the direct method, restricting it to notes may reduce the overall usefulness of the cash flow statements. This is an empirical question, yet to be answered.

Accordingly, this study addresses the following research question: Does the direct method of presenting cash flows from operations have greater ability in predicting future cash than the indirect method?

Thus far, prior research on the relative usefulness of the direct and indirect methods of presenting cash flows from operations is scarce and has mostly provided evidence that direct method cash flow components have higher ability than aggregate cash flow from operations in predicting future cash flows and future earnings and explaining stock returns (Farshadfar and Monem,

2012a; Arthur et al., 2010; Cheng and Hollie, 2008; Clinch et al., 2002). Previous studies also address the *supplementary role* of indirect cash flow information in cash flow statements and document that indirect accrual components have incremental ability in explaining stock returns, earnings or future cash flows over and above the direct method cash flow components (e.g., Farshadfar and Monem, 2012b; Arthur et al., 2010; Cheng and Hollie, 2008; Orpurt and Zang, 2009; Clinch et al., 2002). Krishnan and Largay (2000) appears to be the only study that considers a main role for both indirect and direct cash flow information; they compare the predictive abilities of the direct and indirect cash flow presentation in the US setting. Using a small sample of 405 firm-year observations between 1988-1993, they find that the direct method of cash flow presentation is more useful than the indirect method in predicting future cash flows. However, generalising these results to other capital market settings is difficult because of 'self-selection bias' arising from choices adopted by SFAS 95 (e.g., Clinch et al., 2002; Orpurt and Zang, 2009).

This study re-examines this issue using Australian data rather than US data. This is because Australian firms were required to present direct method cash flow information under Australian Accounting Standards Board (AASB) 1026: Statement of Cash Flows (AASB, 1991, revised 1997).[3] Therefore, this study is not subject to self-selection bias or significant measurement errors resulting from the estimation of direct method cash flow information as previous US studies have been (e.g., Krishnan and Largay, 2000; Orpurt and Zang, 2009).

To investigate the research question, a sample of 348 Australian firms over 1992–2004 is analyzed. Two least squares (OLS) regression models are employed on pooled time-series of cross-sectional data. The results of the within-sample and out-of-sample analyses suggest that both direct and indirect methods of presenting cash flow enhance the predictability of aggregate cash flow from operations for future cash flows. However, indirect method cash flow information has a higher ability to forecast future cash flows than direct method cash flow data do. Further, categorization of the sample based on industry sectors indicate that the findings are not influenced by industry groupings.

This study extends the literature by providing direct evidence for the relative abilities of the direct and indirect formats of presenting cash flow from operations for future cash flows using *actual* direct cash flow information. In addition, the current research investigates the effect of industry characteristics on the relative usefulness of direct and indirect methods of cash flow presentation. An industry-level analysis provides further insight into whether there is any cross-sectional variation among industries in terms of the predictive ability of cash flow information.

The remainder of the paper is organized as follows: section 2 reports the research design; section 3 reviews the sample selection, and descriptive statistics; section 4 discusses the main results; in sections 5 and 6, the industry effects and additional analyses are reported, respectively; and section 7 concludes the paper.

2. Research design

To address the research question, the following OLS regression models based on a pooled time-series, cross-sectional regression are estimated.

$$\text{Model(1)}: \; CFO_{it} = \alpha_0 + \alpha_1 CASHRD_{it-j} + \\ + \alpha_2 CASHPD_{it-j} + \alpha_3 INTPD_{it-j} + \\ + \alpha_4 TAXPD_{it-j} + \alpha_5 CASHOTH_{it-j} + \varepsilon_{it}$$

$$\text{Model(2)}: \; CFO_{it} = \beta_0 + \beta_1 EARNS_{it-j} + \\ + \beta_2 \Delta AR_{it-j} + \beta_3 \Delta INV_{it-j} + \\ + \beta_4 \Delta AP_{it-j} + \beta_5 DEP_{it-j} + \\ + \beta_6 TAXACC_{it-j} + \beta_7 ACCOTH_{it-j} + \varepsilon_{it}$$

where *i* and *t* denote firm and year respectively and *j* ranges from 1 to 2. *CFO* is net cash flows from operating activities as disclosed in the cash flow statement; *EARNS* is earnings after tax before extraordinary items; ΔAP is change in accounts payable during the year; ΔAR is change in accounts receivable during the year; ΔINV is change in inventory during the year; *DEP* is depreciation and amortisation expenses; *TAXACC* is accruals in relation to income tax expense (for example, change in income taxes payable and deferred tax liability/assets) calculated as income tax expense minus tax paid, reported under the cash flow statements; *ACCOTH* is other accruals determined as *ACCOTH=EARNS-CFO-*($\Delta AR+\Delta INV-\Delta AP-$ *DEP-TAXACC*); *CASHRD* is cash received from customers; *CASHPD* is cash paid to suppliers and employees; *INTPD* is net interest paid; *TAXPD* is taxes paid and *CASHOTH* is other cash flows from operations.

The selected variables are consistent with those used by Clinch et al. (2002) and Barth et al. (2001). To evaluate the relative usefulness of the direct and indirect methods of cash flow presentation, the predictive ability of model (1) is compared with that of model (2). The adjusted R^2 is measured to compare the within-sample explanatory power of the models for the period 1992-2001. In model selection, one with a higher measure of adjusted R^2

[3] This standard was withdrawn in January of 2005 and replaced by *AASB 107: Cash Flow Statements* (AASB, 2004), which is equivalent to *IAS 7: Cash Flow Statements* (IASC, 1992).

is preferable (Gujarati, 2003). Vuong's (1989) likelihood ratio test is used for non-nested model selection to determine which of the competing models best explains the data (see Dechow, 1994, Appendix 2). White (1980)'s heteroscedasticity-consistent variances and standard errors is also used to take into account cross-equation correlation and heteroscedasticity in each cross-section.

Theil's *U*-statistic is estimated to determine forecast accuracy, as per Kim and Kross (2005). The hold out sample is 2002-2004. This forecast error measure can be separated into three proportions: bias, variance, and covariance. The covariance proportion is larger than the bias and variance proportions in a good forecast. The measure of this error metric falls between zero (prefect fit) and one (predictive ability at its worst) (e.g., Pindyck and Rubinfeld, 1998).

3. Characteristics of data

3.1 Sample selection

The current study analyses data gathered from firms listed on the Australian Stock Exchange (ASX) via *Aspect Financial Analysis* database from 1992 to 2004. The sample period begins from 1992 as firms were required to prepare the Statement of Cash Flows under *AASB 1026* for financial years ending on or after 30 June 1992. The sample ends in 2004 because Australia adopted the IFRS as of 1 January 2005. The sample criteria require that each firm must have data for the entire test period. Furthermore, firms in the Financials sector (Global Industry Classification Standard (GICS) Code 4010–4040) have been excluded since their financial statements are subjected to specific accounting regulations. Accordingly, our total primary sample contains 4,537 firm years representing 349 firms. 17 observations are diagnosed and excluded from the total sample as outliers using Cook's distance.[4] This reduces the total sample to 4,520 firm-year observations representing 348 firms. All variable measures are scaled by the number of common shares outstanding to mitigate heteroscedasticity, as per Krishnan and Largay (2000).

For the industry analysis, the companies are classified into industry sectors based on the two-digit GICS code. To be included in the industry analysis, each industry sector must have been represented by at least ten companies. Therefore, Telecommunication Services and Utilities with six and three firms are excluded. The industry composition of the sample is displayed in Table 1.

As can be seen, the sector with the most sample firms is Materials, which is a dominant industry sector in the Australian capital market, followed by the Consumer Discretionary and Industrials sectors.

Industry sector is defined by two digit GICS code as follows: Energy (10), Materials (15), Industrials (20), Consumer Discretionary (25), consumer staples (30), Health Care (35), Information technology (45), and Telecommunication services (50).

3.2 Descriptive statistics

Table 2 presents descriptive statistics on the properties of *EARNS*, *CFO*, and various selected accruals and cash flows components. The magnitudes of both the mean and the median of *CFO* ($0.18, $0.00) are larger than those of *EARNS* ($0.08, $-0.00). This is due to the non-cash expenses such as depreciation and amortisation items that often are excluded from *CFO* under the requirements of the cash flow statement. Furthermore, the standard deviation of *CFO* (0.47) is higher than that of *EARNS* (0.38), implying that accruals are able to smooth out a significant portion of *CFO* variability. *DEP* has higher values of mean and median than those of selected current accrual components (i.e. ΔAP, ΔAR, and ΔINV). However, it is less variable in comparison to current accrual components, in particular ΔAP and ΔAR.

Distributional statistics for the five components of *CFO* reveal that the mean (median) of *CASHRD* and *CASHPD* are $2.57 ($0.15) and $2.34 ($0.14), respectively, which is much larger than the other three components of cash flows –*TAXPD*, *INTPD*, and *CASHOTH*. The standard deviations of *CASHRD* and *CASHPD* are 6.53 and 6.23, respectively, which are the highest in comparison to other three components. This implies that the forecast power of cash flow from operations would be mostly affected by these two components.

Table 3 Panel A reports Pearson and Spearman correlations among *CFO*, *EARNS*, and accrual components. There is a positive and significant relationship between *CFO* and *EARNS* with Pearson (Spearman) correlation of 0.52 (0.69).

[4] The regression models are re-estimated by removing the observations with extreme upper and lower 1% of earnings and cash flows from operations. The results are not influenced by their exclusion.

Table 1. Sample composition by industry sector

Industry Sector	Number of Firms
Energy	33
Materials	141
Industrials	54
Consumer Discretionary	54
Consumer Staples	24
Health Care	18
Information Technology	16
Telecommunication Services	6
Utilities	3
Total	349

Table 2. Descriptive statistics (sample of 4,520 firm-year observations, 1992-2004)

Variables	Mean	Median	Standard Deviation
EARNS	0.08	-0.00	0.38
Δ*AP*	0.02	0.00	0.26
Δ*AR*	0.03	0.00	0.24
Δ*INV*	0.02	0.00	0.21
DEP	0.09	0.01	0.20
TAXACC	-0.00	-0.00	0.09
ACCOTH	-0.21	-0.04	0.58
CFO	0.18	0.00	0.47
CASHRD	2.57	0.15	6.53
CASHPD	2.34	0.14	6.23
INTPD	0.02	0.00	0.12
TAXPD	0.04	0.00	0.12
CASHOTH	0.01	0.00	0.35

Variables are defined as follows: *CFO* is net cash flows from operating activities under the Statement of Cash Flows. *EARNS* is net income before extraordinary and discontinuing items. Δ*AP* is change in accounts payable during the year. Δ*AR* is change in accounts receivable during the year. Δ*INV* is change in inventory during the year. *DEP* is depreciation and amortisation expense. *TAXACC* is accruals in relation to tax expense calculated as income tax expense less *TAXPD*. *ACCOTH* is other accruals determined as *ACCOTH= EARNS-CFO-*(Δ*AR*+ Δ*INV*-Δ*AP-DEP*). *CASHRD* is cash received from customers. *CASHPD* is cash paid to suppliers and employees. *INTPD* is net interest paid. *TAXPD* is taxes paid. *CASHOTH* is other cash flows from operations. All the variables are deflated by the number of ordinary outstanding shares. Both *EARNS* and *CFO* significantly positively correlated with accrual components (Δ*AP*, Δ*AR*, Δ*INV*, and *DEP*) and significantly negatively with *TAXACC* and *ACCOTH*.

Panel B of Table 3 presents the correlation matrix for the set of cash flow from operations and its five components. The correlation between *CFO* and *CASHRD* is positive and significant (Pearson: 0.44, Spearman: 0.70) while *CFO* is significantly and negatively correlated with *CASHPD* (Pearson: -0.40, Spearman: -0.60), *INTPD* (Pearson: -0.11, Spearman: -0.44), and *TAXPD* (Pearson: 0.58, Spearman: -0.61). Both *CASHRD* and *CASHPD* variables are significantly related to *INTPD* and *TAXPD*. In addition, the Pearson (Spearman) correlation between *CASHRD* and *CASHPD* is -0.99 (-0.94), which is the highest of the correlations shown in the table. This suggests the possible presence of severe multicollinearity, which is likely to affect the related results. This issue will be fully discussed in Section 6.

Table 3. Correlation matrix

Panel A: Correlation matrix between earnings, cash flow from operations, and accruals

Variable	*EARNS*	*CFO*	*ΔAP*	*ΔAR*	*ΔINV*	*DEP*	*TAXACC*	*ACCOTH*
EARNS		0.52†	0.09†	0.17†	-0.11†	0.12†	-0.23†	-0.04†
CFO	*0.69*†		0.19†	0.16†	0.07†	0.23†	-0.26†	-0.46†
ΔAP	*0.19*†	*0.20*†		0.59†	0.37†	0.04†	-0.14†	-0.04†
ΔAR	*0.29*†	*0.18*†	*0.4*†		0.39†	0.05†	-0.15†	-0.23†
ΔINV	*0.21*†	*0.10*†	*0.37*†	*0.25*†		0.03†	-0.09†	-0.24†
DEP	*0.53*†	*0.67*†	*0.21*†	*0.23*†	*0.15*†		-0.12†	-0.83†
TAXACC	*-0.58*†	*-0.60*†	*-0.21*†	*-0.24*†	*-0.16*†	*-0.66*†		0.16†
ACCOTH	*-0.32*†	*-0.65*†	*-0.15*†	*-0.30*†	*0.17*†	*0.73*†	*0.52*†	

Panel B: Correlation matrix between the components of cash flow from operations

Variable	*CFO*	*CASHRD*	*CASHPD*	*INTPD*	*TAXPD*	*CASHOTH*
CFO		0.44†	-0.40†	0.11†	0.58†	0.37†
CASHRD	*0.70*†		-0.99†	0.19†	0.50†	-0.04**
CASHPD	*-0.60*†	*-0.94*†		0.18†	0.48†	-0.02
INTPD	*-0.44*†	*-0.57*†	*0.51*†		-0.07†	0.03**
TAXPD	*-0.61*†	*-0.70*†	*0.68*†	*0.42*†		-0.18†
CASHOTH	*0.16*†	*0.09*†	*-0.14*†	*-0.06*†	*-0.07*†	

Pearson correlation coefficients are presented above the diagonal while *Spearman* correlation coefficients are shown below the diagonal. Variables are defined in Table 2. † Significant at level 0.01. ** Significant at level 0.05.

4. Main results

To compare the usefulness of the direct and indirect methods, the forecasting performance of models (1) and (2) is assessed. Table 4 reports the summary results of within-sample and out-of-sample forecasting tests for models (1) and (2) with one-year and two-year lag periods. For the one-year lag model (1), all variables including the intercept are significant at the 0.05 level or lower. The exception is *TAXPD*, which is not significant at any level. As expected, *CASHPD* and *INTPD* have negative sign while *CASHRD* has a positive sign. The coefficients of *CASHRD* (0.529) and *CASHPD* (-0.521) are greater than those of other variables indicating that these two variables are more important in the forecast of future cash flows compared to other direct method cash flow components. For the one-year-lag model (2), the coefficient for Δ*INV* is not statistically significant. The other variables are significant at 0.1 or lower. Except for Δ*AR*, *ACCOTH*, and Δ*INV*, which have negative signs, the other variables are positively related to future cash flows.

Panel A of Table 4 for the one-year-lag models shows that the adjusted R^2 for the direct model (model (1)) is 51.3%, which is lower than the adjusted R^2 for the indirect model (model (2)), which is 58.2%. The result of Vuong's test shows that the difference between the adjusted R^2s of model (1) and model (2) is significant at the 0.01 level (*Z*-statistic: 3.95).

Table 4. The relevance of the direct and indirect methods of presenting cash flow from operations in predicting future cash flows

$$\text{Model (1):}\quad CFO_{it} = \alpha_0 + \alpha_1 CASHRD_{it-j} + \alpha_2 CASHPD_{it-j} + \alpha_3 INTPD_{it-j} + \alpha_4 TAXPD_{it-j} + \alpha_5 CASHOTH_{it-j} + \varepsilon_{it}$$

$$\text{Model (2):}\quad CFO_{it} = \beta_0 + \beta_1 EARNS_{it-j} + \beta_2 \Delta AR_{it-j} + \beta_3 \Delta INV_{it-j} + \beta_4 \Delta AP_{it-j} + \beta_5 DEP_{it-j} + \beta_6 TAXACC_{it-j} + \beta_7 ACCOTH_{it-j} + \varepsilon_{it}$$

Panel A: Summary of results for within-sample forecasting tests (1992-2001)

Variables	One-Year Lag		Two-Year Lag	
	Model (1)	Model (2)	Model (1)	Model (2)
Intercept	0.030† (5.79)	0.008 (1.53)	0.034† (6.78)	0.128 (1.68)
CASHRD	0.529† (5.59)		0.568† (5.16)	
CASHPD	-0.521† (-5.25)		-0.561† (-4.93)	
INTPD	-0.358** (-2.32)		-0.585† (-2.50)	
TAXPD	0.174 (0.77)		0.197 (1.21)	
CASHOTH	0.623† (7.61)		0.599† (5.34)	
EARNS		0.538† (6.57)		0.565† (6.11)
Δ*AR*		-0.301† (-5.14)		-0.351* (-2.48)
Δ*INV*		-0.163 (-1.29)		-0.236 (-1.62)
Δ*AP*		0.268† (3.67)		0.249 (1.51)
DEP		0.720† (2.81)		0.773† (2.61)
TAXACC		0.409* (2.28)		0.262** (1.85)
ACCOTH		-0.222† (-5.73)		-0.322† (-2.98)
Adjusted R^2	51.3%	58.2%	48.1%	54.5%
Vuong's *Z*-statistic	n.a	3.95†	n.a	2.59†
N	3,131		2,783	

Panel B: Summary of results for out-of-sample forecasting tests (2002–2004)

	One-Year Lag		Two-Year Lag	
	Model (1)	Model (2)	Model (1)	Model (2)
Theil's *U*-statistic	0.34	0.31	0.36	0.34
Bias Proportion	0.00	0.00	0.00	0.00
Variance Proportion	0.12	0.01	0.04	0.01
Covariance Proportion	0.88	0.99	0.96	0.99
N	1042		1039	

i and *t* denote firm and year, respectively, and *j* = 1 and 2. Figures in parentheses denote *t*-statistics based on heteroscedasticity-consistent covariance matrix (White, 1980). Vuong's *Z*-statistic relates to Vuong's (1989) likelihood ratio test for model selection. A significant positive *Z*-statistic shows that the first model is rejected in favour of the second model. Variables are defined as in Table 2. N is the number of firm-year observations. † Significant at level 0.01. ** Significant at level 0.05. * Significant at level 0.10.

Panel B of Table 4 presents the results of the out-of-sample forecasting test over the period of 2002-2004. These results support the findings of the within-sample forecasting tests, shown in panel A of Table 4. The covariance proportion is higher than the variance and bias proportions for one-year-lag models (1) and (2). This implies that the two models are able to predict future cash flows.

However, the Theil's *U*-statistic decreases from 0.34 in equation (1) to 0.31 in equation (2). This reveals that the predictability of model (2) is higher than that of model (1) with respect to future cash flows. The results of within-sample and out-of-sample forecasting tests for two-year lag models (1) and (2) re-confirm the above findings.

The above findings underscore that disaggregating cash flow from operations based on both the direct and indirect methods improves the forecast of future cash flows. However, the indirect format of cash flows presentation is more relevant in predicting future cash flows than the direct format.

5. Industry effects

Table 5 presents within-sample and out-of-sample forecasting statistics for one-year- lag models (1) and (2) at the industry level. Coefficient results for model (1) exhibit that *CASHRD* and *CASHPD* are statistically significant at conventional level; however, the significance of the other components (*INTPD*, *TAXPD*, and *CASHOTH*) varies across industries.

Table 5. Industry analysis of the relative relevance of direct and indirect methods of presenting cash flow from operations in predicting future cash flows

$$\text{Model}(1):\ CFO_{it} = \alpha_0 + \alpha_1 CASHRD_{it-1} + \alpha_2 INTPD_{it-1} + \alpha_3 TAXPD_{it-1} + \alpha_4 CASHOTH_{it-1} + \varepsilon_{it}$$

$$\text{Model}(2):\ CFO_{it} = \beta_0 + \beta_1 EARNS_{it-1} + \beta_2 \Delta AR_{it-1} + \beta_3 \Delta INV_{it-1} + \beta_4 \Delta AP_{it-1} + \beta_5 DEP_{it-1} + \beta_6 TAXACC_{it-1} + \beta_7 ACCOTH_{it-1} + \varepsilon_{it}$$

Variables	Energy		Materials		Industrials		Consumer Discretionary	
	Model (1)	Model (2)	Model (1)	Model (2)	Model (1)	Model (2)	Model (1)	Model (2)
Intercept	0.01†	0.01	0.00	-0.01†	0.03*	0.07	0.05†	0.04†
CASHRD	0.64†		0.57†		0.14†		0.33†	
CASHPD	-0.65†		-0.54†		-0.11†		-0.32†	
INTPD	0.47		-0.52†		0.35†		0.98†	
TAXPD	-0.24†		-0.60†		0.76**		-0.03	
CASHOTH	0.67†		0.50†		-0.23*		0.57†	
EARNS		0.74†		0.47†		0.56†		0.55†
ΔAR		0.03		-0.36†		-0.07		-0.13†
ΔINV		-0.35**		-0.00		0.02		-0.21†
ΔAP		-0.05		0.36†		0.06		0.10*
DEP		0.66†		1.26†		1.17†		1.14†
TAXACC		0.07		0.49*		-0.49		-0.21
ACCOTH		-0.49†		-0.46†		0.00†		-0.10†
Adjusted R^2	72%	75%	67%	70%	57%	66 %	55%	59%
Vuong's *Z*-statistic	n.a	2.13*	n.a	3.57†	n.a	4.78†	n.a	2.12*
U-Statistic	0.32‡	0.31‡	0.35‡	0.31‡	0.29‡	0.25‡	0.32‡	28‡
N	404		1769		689		685	

VARIABLES	Health Care		Information Technology		Consumer Staples	
	Model (1)	Model (2)	Model (1)	Model (2)	Model (1)	Model (2)
Intercept	-0.00	0.00	-0.01**	-0.01**	0.04†	-0.01
CASHRD	0.57†		0.11*		0.57†	
CASHPD	0.58†		-0.09*		-0.55†	
INTPD	0.11		0.36		-0.63†	
TAXPD	0.19**		0.02		-0.44†	
CASHOTH	0.81†		0.21		0.23	
EARNS		0.87†		0.17†		0.61†
ΔAR		-0.93†		-0.13*		-0.35†
ΔINV		0.88†		-0.16		-0.22*
ΔAP		0.91†		0.16		0.31*
DEP		0.88†		0.51*		1.48†

TAXACC		0.21		0.15[†]		.0.02
ACCOTH		-0.90[†]		-0.11[*]		-0.37[†]
Adjusted R^2	59%	94%	10%	13%	73%	72 %
Vuong's *Z*-statistic	n.a	7.35[†]	n.a	4.94[†]	n.a	1.16
U-Statistic	0.31	0.17[†]	0.84	0.81	28[†]	25[†]
N	291		229		174	

i and *t* denote firm and year respectively. Variables are defined as in Table 2. Vuong's *Z*-statistic relates to Vuong's (1989) likelihood ratio test for model selection. A significant positive *Z*-statistic shows that the first model is rejected in favour of the second model. The *U*-statistic refers to Theil's *U*-statistic. N refers to the total included observations for analysing within-sample and out-of-sample forecasting tests at the industry level after the exclusion of outliers. [†] Significant at level 0.01. [**] Significant at level 0.05. [*] Significant at level 0.10. [‡] The covariance proportion is higher than the variance and bias proportions.

Individual industry results indicate that although adjusted R^2 measures vary across industries, the value of adjusted R^2 for model (2) is higher than the value of adjusted R^2 for model (1) with a significant Vuong's *Z*-statistics for each industry sector. The exception is the Consumer Staples section, where the adjusted R^2 (72%) for model (2) is lower than the adjusted R^2 (73%) for model (1) and the difference is not statistically significant.

The values of Theil's *U*-statistics and its components across all industry sectors also reconfirm the results of within sample forecasting tests. The results for the industry analysis appear to parallel those based on the total sample; that is, based on models (1) and (2), both the direct and indirect methods of presenting cash flows from operations enhance the forecast of future cash flows. Additionally, the predictability of the indirect method of cash flows presentation is higher than that of the direct method across industries.

6. Additional analysis

In this section, two additional analyses (unreported) are conducted to confirm the robustness of the main results. First, it has been well established in the literature that earnings are significantly associated with future cash flows (e.g. Dechow et al., 1998; Barth et al., 2001). Although not hypothesised, the power of the earnings variable raises the question of whether this particular variable may overshadow the remaining variables in the indirect method of cash flows presentation and the relative predictability of this method. Therefore, in an untabulated test, model (2) is re-examined after excluding earnings for the full sample.

The unreported results verify that the relative predictability of the direct model is almost identical to the relative predictive power of the indirect model without earnings. This conclusion remains unchanged for two-year lag model (2).

Second, Table 3 reports that *CASHRD* is almost perfectly inversely correlated with *CASHPD* (Pearson (*Spearman*) correlation is -0.99 (*-0.94*)). Thus, model (1) may be subject to multicollinearity. To mitigate this potential problem, two methods are applied (see Gujarati, 2003). First, model (1) is examined after combining *CASHRD* and *CASHPD* for the total sample. The regression results change little. Then model (1) is re-analysed after dropping *CASHPD*. However, the prediction ability of model (1) decreases by excluding the variable. Cross-industrial results also yield similar conclusions. It is argued that multicollinearity is not a severe issue if the forecast ability of the model (1) is lower than that of a model with only a subset of the variables (Maddala, 2001, p. 278). Therefore, in this situation, the existence of multicollinearity is accepted.[5]

7. Summary and conclusions

This study investigates whether the direct method of cash flows presentation has superior prediction power to forecast future cash flows compared to the indirect method in the Australian context. The results support the view that while both the direct and indirect methods improve the forecast of future cash flows, the indirect method of cash flows disclosure is more relevant than the direct method in predicting future cash flows. However, when the net income variable is removed from the indirect model – since it appears this is the primary factor in the significance of this model – the direct model's predictability is the same as the indirect model's predictability with net income removed for total sample. Evidence from the industry-level analysis overall reinforces the main results. This finding questions the assertion of the IASB and FASB that the indirect method has a supplementary role in the cash flow statement and thus restricted to the notes of financial statements instead of the cash flow statement. It also contradicts Krishnan and Largay (2000) who conclude that the direct method outperforms the indirect method in predicting future cash flows.

Results from this study provide important information for accounting standard setters in developing standards relating to cash flow

[5] Krishnan and Largay (2000), and Clinch et al. (2002) also indicate similar issue in relation to *CASHRD* and *CASHPD*. They also conclude to continue with their main equation.

statements. A general inference of this study is that both direct and indirect methods are useful in predicting future cash flows. This suggests that accounting standard bodies should consider mandating the report of both the direct and indirect formats of cash flow presentation in cash flow statements. This would allow the users of financial statements to benefit from their preferences, as it provides better comparability across two formats. In closing, this study is subject to the following limitations. First, other alternative forms of prediction models for both direct and indirect methods of cash flows presentation are possible beyond the ones examined in this study. This study may also be influenced by survivorship bias.

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THE IMPACT OF LITIGATION RISK ON CORPORATE PROSPECTIVE DISCLOSURE: A REVIEW OF THE EMPIRICAL LITERATURE

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Abstract

We review the literature on the impact of litigation risk (a form of external governance) on corporate prospective disclosure decisions as reflected in management earnings forecasts. From this analysis we identify four key areas for future research. First, litigation risk warrants more attention from researchers; currently it tends to be treated as a secondary factor impacting MEF decisions. Second, it would be informative from a governance perspective for researchers to explore why litigation risk has a differential impact on MEF decisions across countries. Third, understanding the interaction between litigation risk and forecast/firm-specific characteristics is important from management, investor and regulatory perspectives but is currently under-explored Last, research on the litigation risk and MEF attributes link is piecemeal and incomplete, requiring more integrated and expanded analysis.

Keywords: Litigation Risk, Disclosure, Governance, MEF

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I. Introduction

The literature on corporate disclosure is vast (see Healy and Palepu, 2001; Beyeret *al*., 2010 for previous reviews). In this literature corporate disclosure is examined from many perspectives, e.g. disclosure type (voluntary and mandatory disclosure, narrative and quantitative disclosures, environmental disclosure, and strategic disclosure), disclosure antecedents, incentives and consequences, and retrospective and prospective (forward-looking) disclosure. Of all these areas there has been a paucity of research on the consequences of corporate disclosure where the disclosure is misleading or fails to comply with regulations. The consequences are likely to vary across countries and across time because of (1) the extent of enforcement of statutory and common law, (2) the increase in more onerous corporate disclosure regulation, and (3) the increasing growth in litigation action evident in many countries.

The objective of this review is to provide an overview of the current state of research that examines the impact of litigation risk on prospective disclosures and provide suggestions for future research. Because corporate disclosure can take many forms, in this review we focus our attention on a frequent form of prospective disclosure: *management earnings forecasts* (MEFs). This form of prospective disclosure has universal applicability and the underlying disclosure attributes can be readily examined in a litigation context.

Prospective disclosures in the form of *management earnings forecasts*, commonly referred to as *management earnings guidance*[6] in the business media, have become increasingly common in many countries. MEFs are traditionally considered to be a form of voluntary disclosure (Hirst *et al*., 2008). As with other forms of voluntary disclosure, managers have much discretion over their disclosure decisions. For example, managers choose whether to disclose or not, whether to update an earnings forecast, when to disclose a forecast, how precise the forecast information should be, and whether to bundle the forecast with other information. In some situations, managers may intentionally bias or delay their earnings forecasts and subsequently face the consequences of litigation action.

Hirst*et al*. (2008) review different types of factors influencing MEF decisions, among which litigation risk is one factor reviewed. They argue

[6]The terms *management earnings guidance* and *management earnings forecasts* are used interchangeably in this thesis.

that litigation risk is an important factor influencing managers' information disclosure behavior. However, most of the studies they review are U.S.-based and related to whether or not preemptive disclosures triggers litigation action. While they note the importance of the legal and regulatory environment in influencing the disclosure decisions they do not consider research beyond the U.S. institutional setting.[7]

Following prominent corporate failures and concerns over corporate disclosure behaviour during the recent global financial crisis, market participants and regulators have begun to pay more attention to corporate disclosure transparency (see Freixas and Laux, 2012). As a consequence there have been regulatory reforms related to information disclosure in a number of jurisdictions (e.g. the U.K, Europe, Australia, New Zealand, Hong Kong, etc.). Following these reforms, litigation risk arising from misleading disclosure has become an increasingly important factor impacting on their earnings guidance behavior. Correspondingly, research on the impact of litigation risk on MEF disclosure behavior in countries outside the U.S. has also emerged in recent years. Given the important role this research can play in assessing transparency and governance and in providing guidance to market participant and regulators, it is an opportune time to offer some direction to researchers in this field.

With this motivation in mind, this review paper organizes prior studies of the impact of litigation risk on MEF decisions, and identifies a number of potential areas for future research. First, given the importance of timely and complete prospective disclosure in capital markets, researchers need to pay more attention to litigation risk in non-U.S. markets, and not merely dismiss this factor as one that is applicable only to the U.S. setting. Second, by examining how litigation risk influences MEF decisions outside the U.S, researchers may reach different conclusions from those that have been reported in U.S. studies due to differences in regulations, legal culture, and other institutional factors. Third, it is likely to be productive for researchers to pay more attention to the interactions of litigation risk and forecast specific factors or firm specific factors. Fourth, besides the MEF characteristics that has received much attention, the impact of litigation risk on other MEF attributes, such as MEF venue and attributions, are also likely to be rewarding areas for future research.

This study is organized as follows. First, litigation risk and different types of MEF decisions are explained. Then in the research review section, studies of how MEF decisions are influenced by litigation risk are reviewed. Finally a summary and suggestions for future research are provided in the last section.

II. Explanations of Litigation Risk and MEF Decisions

Prior disclosure research generally measures litigation risk in two ways: the first is the probability of being sued, which is commonly used in U.S. studies primarily because of the large amount of disclosure-related shareholder lawsuits. The second involves the broader combination of both the legal and regulatory environment (the more common approach in non-U.S.-based research). The second approach can be attributed to the traditionally lower level of private shareholder lawsuits and greater reliance on enforcement action by regulators in those countries compared to the U.S.

The impact of both private and public enforcement action have not gone unnoticed in the MEF literature. Notably in the MEF research classification framework of Hirst *et al*. (2008), two categories of forecast antecedents are identified: the *forecast environment* and the *forecaster environment*. The legal and regulatory environment is classified under the forecast environment, and the risk of shareholder lawsuits (firm-specific litigation risk) is classified under the forecaster environment. These two measures are both related to litigation risk faced by firms, and it is difficult to clearly differentiate between them. Further, prior studies show the two measures often influence firms' disclosure decisions in the same direction. Therefore, in this study, the two measures are pooled under our broader definition of litigation risk.[8]

Management Earnings Forecast Decisions

According to King*et al*. (1990), management earnings forecast decision is a sequential approach that involves two steps. First, managers decide whether to disclose an earnings forecast, and related to that decision, they decide on disclosure frequency, and subsequently, whether to update a forecast. Second, after deciding to issue a forecast,

[7] Hirst *et al*.(2008,footnote 6, p. 321) recognize that research could be extended to other jurisdictions: "We focus on the U.S. environment. However, the framework could be expanded to cover cross-border issues in otherlegal and regulatory regimes." They provide an example of a U.S. – Canadian study (by Baginski*et al*., 2002).

[8] Our definition is consistent with the common definition of litigation risk: "The possibility that legal action will be taken because of an individual's or corporation's actions, inactions, products, services or other events".(Investpedia, 2012, available at:http://www.investopedia.com/terms/l/litigation-risk.asp#ixzz25YfoRUaz)

managers need to decide the properties (or attributes or characteristics) of their forecasts. These include forecast bias (or level of accuracy), horizon, precision, attributions, etc. As an antecedent to the disclosure decisions, the presence of litigation risk is likely to influence those decisions to varying degrees. The following provides an overview of the main MEF characteristics that are likely to be considered in the MEF framing decision.

Forecast news type. In prior research (Skinner, 1994; Soffer*et al*., 2000) MEFs are usually classified as bad, neutral and good news, depending on whether they reveal unfavorable/neutral/favorable information compared to the current market earning expectation. In most U.S. studies the current market earnings expectation is measured relative to consensus analysts' earnings forecasts.

Forecast accuracy. In prior research (Dunstan*et al*., 2011; Karamanou and Vafeas, 2005), the level of MEF accuracy usually includes directional forecast error (or bias) and non-directional forecast error (the magnitude of the error). The former tests whether MEFs are pessimistic or optimistic compared to the actual earnings and the latter tests the absolute forecast error. MEF accuracy is one of the forecast attributes that is of most concern to investors, because investors need to evaluate the credibility of the forecast in their investment decisions. While this can only occur *ex post* (i.e. after the realization of the forecasted earnings), prior evidence of accuracy it likely to impact on the credibility of an MEF when it is released.Some evidence supports this expectation (Rogers and Stocken, 2003).

Forecast horizon. MEF horizon commonly refers to the time between MEF issuance date and the end of the fiscal year (Ajinkya*et al*., 2005; Baginski*et al*.,2002). Those MEFs issued earlier are considered as timelier.

Forecast precision. Like MEF credibility, more precise MEFs can allow investors to be better informed about companies' future earnings (Karamanou and Vafeas, 2005), They enable investors to more accurately verifyMEFs following future earnings realizations (Lev, 1992). Moreover, more precise MEFs indicate management is more certain about future earnings (Baginski *et al*., 1993; Choi*et al*., 2010). MEFs are always classified in increasing precision or specificity levels as: qualitative, open-ended, range and point forecasts (Baginski*et al*.,2002; Dunstan *et al*.,2011).

Routine and non-routine forecasts. Following Gallery*et al*. (2003), Chan*et al*.(2007) and Dunstan*et al*. (2011), MEFs are classified as routine and non-routine MEFs. Routine MEFs are forecasts disclosed in periodic financial reports and other recurring events such as at the company's annual general meeting (AGM), letters to shareholders, etc. MEFs issued in other announcements are classified as non-routine.

Forecast venue. Related to routine/non-routine classification, Bamber and Cheon (1998) classified MEFs as forecasts issued in special press releases, and forecasts issued in meetings with analysts and reporters. The former is more proactive and received by a larger audience, and the latter is more reactive with a restricted immediate audience.

III.Review of the Key MEF Literature

U.S –based MEF Research

Forecast Likelihood/Frequency

There is a paucity of research directly focusing on the impact of litigation risk on MEF likelihood/frequency, and the mixed relationship between litigation risk and MEF likelihood/frequency is often include in the MEF likelihood/frequency models where litigation risk is only used as a control variable.

There are two types of contrary explanations for the impact of litigation risk on MEF likelihood/frequency: managers may be more likely to disclose earnings forecasts to avoid or reduce the litigation risk of withholding material earnings information, especially future earnings declines. On the other hand, managers may be less likely to disclose earnings predictions to avoid or reduce litigation risk that could arise from missing their forecasts, especially missing bad news forecasts. The research is inconclusive on which explanation dominates in managers' decisions.

Some studies (Ajinkya*et al*.,2005; Brown *et al*., 2005; Chen, 2004; Dai*et al*., 2009; Hribar and Yang, 2010; Larocque, 2011) document companies with higher litigation risk are more likely to issue MEFs. Stoumbos and Tanlu (2009) find companies with higher litigation risk issue more MEF revisions. Additionally, Ajinkya *et al*. (2005) find managers are more likely to issue earnings forecasts in the U.S. after the issue of Reg. FD.[9]Also, Anilowski*et al*. (2007) find that earnings guidance and forecasting firms show a general increasing trend from 1994 to 2003, and they state that one reason may be the Reg. FD. Houston *et al*. (2008) document companies with higher litigation risk are more likely to cease quarterly earnings guidance, indicating that managers curtail short-term earnings forecasts to lower litigation risk. Lee (2009) finds a significantly negative relationship between litigation risk and MEF disclosure likelihood/frequency. Further, Rogers and Van

[9] Regulation FD (Regulation Fair Disclosure) was implemented by SEC (U.S. Securities and Exchange Commission) in August 2000. It mandated that all publicly traded companies must disclose material information to all investors at the same time.

Buskirk (2009) examine how management earnings forecast behavior change after being sued. They find the probability of a firm hosting an earnings-related conference call or disclosing MEFs decline following lawsuits, which is contrary to the full disclosure preferences of regulators or private litigants.

The influence of litigation risk on forecast likelihood/frequency is shown to vary between good and bad MEF news. There is much U.S. research focusing on the impact of litigation risk on bad news MEF disclosure, and the results are quite consistent. In the high litigious U.S. environment, firms are more likely to disclose bad news earnings predictions to avoid shareholder lawsuits for withholding bad news.

Skinner (1994) finds that because of an asymmetric loss (litigation and reputational costs) that arises in negative versus positive earnings surprises, managers in the U.S tend to disclose bad news MEFs more frequently to avoid negative earnings surprises. Similarly in more recent U.S. studies, Brown *et al*. (2005) find firms with higher litigation risk issue a larger proportion of bad news MEFs. Likewise, Field *et al*. (2005) document that firms with higher litigation risk are more likely to release earnings warnings. Additionally, Brown *et al*.(2005) find firms facing higher litigation risk are more likely to disclose forecasts when the market's expectations are unduly optimistic. Cao and Narayanamoorthy (2010) also argue that firms are more likely to be sued for withholding bad news, and firms may incur lawsuits if they announce good news MEFs but fail to achieve them. Accordingly, Cao and Narayanamoorthy find that firms with higher litigation risk are more likely to release bad news MEFs, and such firms release less news in good news periods.

MEF Accuracy

Shareholders are more likely to be disappointed and sue companies when they find companies' actual earnings is lower than what they expect. Therefore, prior U.S research finds companies facing higher litigation risk are more likely to issue conservative MEFs. Skinner (1994) argues firms are more likely to be sued when there are negative earnings surprises at the earnings announcement date. Accordingly, Soffer *et al*. (2000) find U.S. firms in high-litigation industries are more likely to have positive earnings surprises at the earnings announcement date. This result indicates that firms facing higher litigation risk tend to be more conservatively biased when releasing MEFs. Further, Rogers and Stocken (2005) find weak evidence that managers who are more likely to face litigation, issue less optimistic forecasts. They also observe that managers' incentives to misrepresent information caused by the threat of litigation are influenced by the difficulty market participants face in detecting the misrepresentation.

In a more recent study focusing on MEF bias, Ciconte*et al*. (2012) examine the forecast bias of range MEFs (whether the midpoint is a good proxy for management earnings expectations in range forecasts), and whether forecast bias of range forecasts changed after Reg. FD. They argue that after Reg. FD managers are not allowed to communicate with analysts privately, so they can only influence analyst earnings forecasts through public guidance. Therefore, they find an increased strategic use of range forecasts to walk down analysts' earnings expectations after Reg. FD, that is, managers are more pessimistic and true earnings expectations are more likely to be close to the upper bound of range forecasts after Reg. FD. These findings open up a new avenue for further MEF/litigation risk research.

There is little research directly examining the impact of litigation risk on absolute MEF error and the inconsistent results are only found when testing MEF accuracy models where litigation risk is used as a control variable. Companies facing higher litigation risk may issue more accurate MEFs to avoid the litigation risk of missing MEFs. However, the results regarding the relationship between litigation risk and MEF accuracy is inconsistent. Fang (2009) and Stoumbos and Tanlu (2009) find firms facing higher litigation risk issue earnings forecasts with larger forecast errors. Similarly, Hribar and Yang (2010) find companies with higher litigation risk are more likely to miss their MEFs. In contrast, Baik *et al*. (2010) document companies with higher litigation risk issue more accurate MEFs. Consistent with the asymmetric loss function, the impact of litigation risk on forecast accuracy varies between good and bad news forecasts. Brown *et al*. (2005) find firms with higher litigation risk release a larger proportion of the total news when preempting negative earnings surprises than when preempting positive earnings surprises. They attribute this behaviour to a desire to decrease the probability of shareholder lawsuits that are more likely to arise following negative earnings surprises.

MEF Horizon

MEF horizon is related to the timeliness of MEFs (those disclosed earlier are regarded as more timely). Timely forecasts are considered desirable in capital markets, because manager have less information and face more uncertainty with earlier forecasts. However, those that are issued earlier (i.e. with a longer horizon) are more likely to be proven inaccurate *ex post*. As a consequence, companies are more likely to be sued when they miss a forecast issued earlier in the forecast horizon. On the other hand, disclosing bad news

forecasts earlier can help firms defend the charges that they failed to disclose earnings warnings in a timely manner. Also, issuing MEFs earlier can mitigate the potential liability as the class period typically ends on the MEF release date (Francis*et al*., 1994; Skinner, 1994, 1997). Therefore, it is difficult to reach a conclusion regarding how litigation risk impacts on MEF horizon.

In the empirical studies, Brown *et al*. (2005) find that companies with higher litigation risk issue their MEFs earlier for both good and bad news. Cao and Narayanamoorthy (2010) document firms with higher litigation risk release bad news MEFs earlier. However, when examining changes in disclosure behaviour of firms involved in disclosure related class-actions, Rogers and Van Buskirk (2009) find after being sued, firms tend to disclose less timely MEFs, which is contrary to the goals of regulators or private litigants.

MEF Precision

There are two contrary explanations regarding the impact of litigation risk on MEF precision. On one hand, companies with higher litigation risk may issue less precise MEFs to reduce the litigation risk of missing forecasts, especially bad news forecasts. On the other hand, companies with higher litigation risk may issue more precise MEFs to avoid subsequent accusations of providing insufficiently precise information about firms' future earnings expectations.

Inconsistent results regarding the relationship between litigation risk and MEF precision are found in prior research. From a forecast precision (or specificity) perspective, Bamber and Cheon (1998) argue less precise MEFs are more likely to be proven accurate *ex post*. Accordingly, they find that the greater the exposure to legal liability, the less likely managers issue precise earnings forecasts. In contrast, Brown *et al*. (2005) document companies with higher litigation risk tend to issue more point MEFs (precise forecasts) relative to range forecasts.

Consistent with the Bamber and Cheon's argument more recent studies support the inverse relation between litigation risk and forecast precision. For example, Dai*et al*.(2009) find companies with a higher likelihood of exposure to shareholder lawsuits are more likely to disclose qualitative MEFs.Similarly, Rogers and Van Buskirk (2009) find firms move towards less precise MEFs after being sued. Consistent with litigation risk concerns, Choi *et al*. (2010) also find that when forecast uncertainty is greater, managers issue less precise earnings forecasts. Likewise, Hribar and Yang (2010) find companies with higher litigation risk issue less precise MEFs.

It is important to note that the impact of litigation risk on MEF precision varies between good and bad news forecasts, but the results are inconsistent. On one hand, Skinner (1994) finds that among the MEFs examined in his study, good news forecasts tend to be point or range forecasts, and bad news forecasts tend to be qualitative forecasts. That is probably because bad news forecast are considered as more credible by the markets. Therefore, firms obtain no additional benefits from issuing more precise MEFs, and also because they may face higher litigation costs if they issue more precise MEFs which are more likely to be proven inaccurate ex-post (Brown *et al*., 2005). However, on the other hand, Brown *et al*. (2005) also argue firms with higher litigation risk may issue more precise bad news MEFs to bolster their defence against the charges that they deliberately withheld material information. Cao and Narayanamoorthy (2010) state that firms with higher litigation risk release less precise good news forecasts to avoid or mitigate shareholder lawsuits related to negative earnings surprises. Accordingly, Cao and Narayanamoorthy (2010) find that firms with higher litigation risk tend to issue more precise MEFs when they have bad news, but issue less precise good news forecasts.

Forecast Venue

Bamber and Cheon (1998) examine forecast venue and specificity for a sample of U.S. firms. They use the trend of firms' earnings performance as one of the measures of firm's legal liability costs, and they argue firms with declining earnings are exposed to more legal liability. Accordingly, they find companies with declining earnings are more likely to issue MEFs in special press releases, suggesting companies with higher litigation risk tend to proactively issue forecasts in more open contexts to reduce potential litigation costs.

Non-U.S.-based MEF Research

Although most MEF studies are U.S.-based, there is an emerging body of MEF research based in non-U.S. settings. Because of the lower levels of shareholder lawsuits in those countries, most of the non-U.S. research examines the impact of the domestic public regulatory environment on MEF disclosure behavior.

In an early study comparing differences in legal regimes, Baginski*et al*. (2002) contrast earnings forecasts issued by Canadian managers with those issued by their U.S. counterparts. They find that Canadian managers issue more frequent, more precise and timelier earnings forecasts as Canadian managers face lower legal penalties related to inaccurate forecasts. They also find Canadian managers issue more forecasts when earnings increase; a result that Baginski*et al*.also

attribute to lower litigation risk faced by Canadian managers following earnings disappointments.

Extending Baginski *et al*. (2002), Tinaikar (2008) compares MEF characteristics of Canadian and U.S. firms, and finds that Canadian firms' MEFs are more precise. He also finds Canadian firms' MEFs are more optimistic compared to those of U.S. firms. Consistent with Baginski*et al*., Tinaikar attributes the differencesto the higher litigation risk is the U.S. than in Canada.

Similar to Canada, the U.K. has traditionally been a less litigious country than the U.S. Prior to 1994 U.K. regulations did have specifically restrict private disclosure of corporate information. However, the situation changed in 1994 when the London Stock Exchange introduced new guidance regarding the immediate public disclosure of price sensitive information. In a study of corporate earnings warnings (bad news MEFs) before and after the 1994 regulatory change, Helbok and Walker (2003) find the frequency, precision and timeliness improved in the recent regulated period.

Jong *et al*. (2012) examine the impact of cross-listings in the US or UK on the attributes of MEFs by Dutch firms. Listed firms are exposed to a stricter legal environment, greater disclosure requirements and additional scrutiny. Consistent with litigation risk arguments, they find the cross-listed firms disclose forecasts that are less specific, more accurate and more conservative.

In Japan disclosure of MEFs is effectively mandated by the Securities Listing Regulations of the Tokyo Stock Exchange (TSE) (Kato *et al*., 2009). Although there is no statutory backing to the TSE's continuous disclosure rules, the listing rules encourage companies to disclose sales and earnings forecasts regularly at the beginning of each financial reporting year, and according to *Rule 405* of *Securities Listing Regulations*, a listed company must immediately disclose details of any material variation from forecasts. Their evidence suggests that most companies comply with continuous disclosure rules (Kato *et al*., 2009). Nevertheless Kato *et al*. (2009) note that the Japanese setting is one in which litigation risk associated with providing biased forecasts is relatively low. Consistent with this low level of litigation risk, they find the initial MEFs are systematically optimistic, but interestingly, managers revise their forecasts downward across the fiscal year to avoid negative earnings surprises at the end of the financial year.

Over the past two decades Australia and New Zealand have undergone a series of regulatory reforms related to continuous disclosure. As a result, both jurisdictions have provided fruitful environments for observing the impact of the regulatory reforms on corporate disclosure behaviour. In one early study, Brown *et al*. (1999) examine the effect of statutory sanctions on companies' voluntary disclosures issued by ASX-listed companies from 1992 to 1996. Their results indicate that any increase in voluntary disclosure from the introduction of statutory sanctions had little impact as most of the improvement was confined to smaller firms and firms that performed relatively poorly.

In a later study Chan *et al*. (2007) examine MEFs issued by ASX-listed companies from 1994 to 2001 to test the impact of the 2000 legislative changes and increased enforcement action introduced to strengthen the continuous disclosure regime. In contrast to Brown *et al*. (1999) they find after 2000, there was an increase in the disclosure of non-routine MEFs consisting largely of increases in bad news forecasts. In other words, after the regulatory reforms, companies were more likely to disclose material changes in earnings expectations in non-routine announcements, rather than waiting to release the information at a routine event such as an AGM. Consistent with the findings of Skinner (1994) they attribute this change in behavior to the increase in litigation risk arising from the regulatory reforms. Interestingly, Chan *et al*. (2007) also find MEF precision has improved after the regulatory reform.

The regulatory reforms associated with the continuous disclosure regime in New Zealand are similar to the reforms in Australia, but comparatively later. These reforms introduced in 2002 are not as onerous as those observed in Australia, and in contrast with the Australian reforms, were not accompanied by an increase in private class actions. In a key study, Dunstan *et al*. (2011) explore the MEF impact of the New Zealand's continuous disclosure regulatory reforms for a sample of most of the NZX-listed companies over the 1999 to 2005 period. They find MEF frequency, accuracy, non-routine MEF disclosure, and precision have improved after the reforms. From these findings they infer that public regulatory reforms may have a greater benefit in a low private litigation environment like New Zealand.

IV. Summaries and Conclusions

Litigation risk is an important factor influencing MEF decisions, and there are numerous U.S. studies related to this topic. In recent years non-U.S. studies have emerged following regulatory reforms which aim to enhance corporations' disclosure transparency. As the number of disclosure studies on this topic in other countries increases they provide new insights into the impact of litigation risk on the behavior of managers in their disclosure of prospective information. These new insights offer a number of potential productive topics for future research.

First, from the studies reviewed it is obvious that litigation risk is an important factor influencing

MEF decisions. However, except for Skinner (1994), and Cao and Narayanamoorthy (2010), most studies reviewed take litigation risk as an afterthought (i.e. as a control variable in a prediction regression model). Thus the impact of litigation risk on MEFs has not been explored and explained comprehensively beyond the initial decision to disclose or not to disclose. Therefore, it is likely to be productive for researchers to focus more effort on understanding how litigation risk shapes MEF characteristics.

Second, much research on the impact of litigation risk on MEF decisions is U.S.-based. However, from the small amount of related research in other countries (such as the Australia and New Zealand studies), it seems that the impact of litigation risk in similar MEF decisions differs from those encountered in U.S. research. Therefore, it would be useful to explore why an increase in litigation risk does not lead to similar outcomes across jurisdictions. Also, a related and potential fruitful area of research would be to investigate how regulatory enforcement by the public regulatory authorities differs and interacts with the growth in private litigation action.

Further, all the studies reviewed here are based on companies in developed countries, and there is a dearth of research in developing countries (or emerging markets). In many developing countries, disclosure transparency and the related legal environment are not as advanced as those of developed countries. However, due to growing demands of investors, listed companies are under increasing pressure to provide more transparent disclosure of prospects when raising funds in international capital markets. Therefore, it is likely that companies, market participants and governments in developing countries will increasingly pay more attention to global developments in information disclosure and its associated governance.

For example, in most countries MEFs are voluntary disclosures, but in China a part of earnings pre-announcements are compulsory. From 2002, Chinese stock exchanges require companies which turn a loss (profit) to profit (loss), and with earnings decreasing/increasing by more than 50 per cent issue to earnings pre-announcements in routine or non-routine reports. However, there is still no statutory support for such rules, and related shareholder lawsuits are very rare. Therefore, there is a pressing need to strengthen the legal environment for disclosure in developing countries, such as China, to improve the quality of prospective disclosure, including MEFs. As these changes emerge they offer interesting avenues for disclosure research in developing countries.

Third, a potential productive area for future research is the interaction between litigation risk and forecast specific characteristics or firm specific characteristics. Some researchers (Baginski*et al*., 2002; Brown*et al*., 2005; Rogers and Stocken, 2005) have done some work in this area. For example, Rogers and Stocken (2005) find managers' incentives to bias their earnings forecasts due to litigation risk are affected by the difficulty the market has when assessing forecast credibility. Therefore, researchers should exploit the opportunity to examine whether the impact of litigation risk on management forecast behavior is affected by forecast or firm specific characteristics.

Fourth, much research on the impact of litigation risk on MEF decisions focuses on forecast frequency/likelihood, forecast news type, forecast bias, horizon and precision. However, the influence of litigation risk on other characteristics (e.g. absolute forecast error, forecast venue, forecast attributions, etc.) has not received much attention. It would be useful for future research to explore a broader range of MEF attributes when examining the impact of litigation risk on corporate disclosure behaviour.

With the rapid adoption of new technologies and internationalization of capital markets, market participants and corporate regulators will increasingly demand timelier and more frequent prospective disclosures. A pervasive example is management earnings guidance. As managers attempt to meet these demands they will increasingly face private and public litigation risk. However, as this review has revealed, the research on the link between prospective disclosure and litigation risk is still in its infancy. In this review we have suggested number areas where this link can be productively investigated to better inform the governance of capital markets.

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CORPORATE GOVERNANCE AND PERFORMANCE IN TURNAROUND: A SYNTHETIC INDEX

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Abstract

In this work we carried out an empirical research on a panel of companies in turnaround SMEs, venture capital backed, with the objective of deepening the analysis: Firstly, if warning signs were submitted from firms in turnaround. Secondly, we tried to verify the role played by the Corporate Governance in restructuring, with the definition of an index of good Governance for SMEs (scG) and Performance ad hoc index (scP). Thirdly, the definition of a Synthetic Index (SI) aggregates the two kinds of information: Corporate Governance Quality and Performance. We conducted an analysis of the balance sheets of the companies in turnaround participated by a turnaround fund, in the years 2004 and 2009. In relation to the total number of firms involved in turnaround in the period in question, which were 26 in total; it was possible to reconstruct the historic trend only for 12 of them, for the others the balance sheets could not be found.In conclusion, it can be noted that the analysis of important aspects of management through the development of Z-score, and scG, scP, and SI can summarize complex concepts into a number and allows for comparisons between situations that are not readily comparable in terms of accounting. This study can suggest the definition of Corporate Governance Index for SME in critical situations. This study offers some ideas about the opportunity of stimulating the SME to introduce the Corporate Governance System spread to listed companies.

Keywords: Corporate Governance, Bankruptcy Prediction and Determinants, Corporate Finance, Venture Capital, Accounting, Auditing and Performance Evaluation, Governance Index

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1. INTRODUCTION

In this evolving context a great deal of attention should be devoted to an early recognition by understanding the warning signs of decline, so that it will be transformed into crisis and to seek promptly options of turnaround.

In the context of turnaround management, increasing attention has been given to the study of systems and instruments that can be adopted in the prevention, diagnosis and rehabilitation of corporate crisis (Kane 2002, Lappalainen and Niskanen 2009). In literature on corporate finance there are numerous studies on problem analysis and forecasting crisis (Altman 1977, 2000, 2002, Altman and Hotchkiss 2006, Beaver 1966, 1968, D'Annunzio and Falavigna 2004, Friedman 1977, Hui And Jing-Jing, 2008, Lee and Yeh, 2004, Mumford 2003).

There is now an innovative view in relation to the past, where the attention was led only on liquidation of tangible assets for the recovery of claims, thus penalizing the portfolio of intangible assets. Now the turnaround objective is not only to recover the performance of the company in crisis, but to return to its previous performance and possibly to improve it by extolling the value of intangible assets (Bebchuk, Cohen and Ferrell 2009, Chen2008, Cook and Deakin1999). The entry of the turnaround fund operators has given new life, energy, of interest for such investigations. The turnaround fund purpose is now to create value! Its main aim is to restore economic and financial balance when there is decline or crisis. For this purpose the prediction crisis methods and the deepening of the possible causes which led to the crisis are very important to analyze and to resolve the critical situation (Elsubbaugh, Fildes and Rose Mary 2004). Among the many reasons that lead a company to the crisis we must highlight the problems related to Corporate Governance (Chen 2006, 2008). This work carried out an empirical research of which we show some preliminary results. We identified a panel of companies in turnaround (cluster), SMEs, venture capital backed, with the objective of deepening the analysis.

1. Firstly, if firms in turnaround showed warning signs with the Z-score, especially in working capital management and debt ratios.

2. 2- Secondly, we investigated the role played by the Corporate Governance in restructuring, this is done with the definition of an index of good governance for SMEs (scG).
3. 3- Thirdly, we completed the crossover study everything with the relief of the performance recorded by these firms in the post-restructuring period, proceeding also in this case the sintering of an ad hoc indicator (scP).
4. 4-the analysis is completed with the definition of a Syntetic Index (SI) that aggregate the two information: Corporate Governance Quality and Performance.

As a conclusion it can be noted that the possibility for analysis of important aspects of management, through the development of indexes Z-score, scG, scP, allows for comparisons between reality also not readily comparable in terms of accounting.

Again, we highlight that this work is a first step in the overall research, a work in progress: the study, in fact, is proceeding with an expansion of the sample, the introduction of a sample of more extensive comparison, an application with other prediction methods of crisis, and the test of indicators of other situations.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

The corporate studies field has shown a lot of interest in corporate values under headings like shareholders value and every link between strategies, company behavior and performance (Beasley and Frigo 2007, Koller 1994). In this direction the effect of Corporate Governance, a strategic business behavior, on performance has received considerable attention in the recent literature (Acharya Hahn and Kehoe 2009, Bebchuk, Cohen and Ferrell 2009, Cescon 2002, Cook and Deakin 1999, Coles et al 2001, Gompers, Ishii and Metrick 2003, Mayer 1997, Ronday and Nielsen 2002, Weir and Laing 2000). We can consider the Corporate Governance as the mechanism of control and balanced system design, created to regulate activities of a company organized in a system where the business ownership and management are separated, to prevent illegal activities, such as fraud and achieve the objective of corporate social responsibility[10]. It is, also, the set of processes that provides an assurance to outside investors of a fair return on their investment (Bhagat, Bolton and Romano 2010).

Corporate Governance during the last two decades had a process of transformation and redefinition of rules which show the change experienced by financial markets. Before this only the entrepreneurs and managers of big companies devoted their attention to Corporate Governance, considering it a real problem to be addressed and not to be underestimated. This new interest is largely attributable to 3 events:

1. The homogenization of governance structures as a result of globalization of financial markets, which affected the public sector regarding the processes of privatization, liberalization and competition of private capital in public;
2. The issue of governance is seen to extend to SMEs. SMEs in Italy represent 99.9% of the economic system and they began to consider Corporate Governance an important asset.
3. These issues led Italian lawmaker to introduce new laws, involving more controls and the presence of external auditors.
4. But especially the occurrence of a series of crises, involving companies with public participation, in large part caused by ineffective and inefficient management systems and control.

The importance of Corporate Governance, indeed, became dramatically clear in recent years with the cases of strong corporate crises which have led to the collapse of some of the main financial and industrial giants of the world (Enron, WorldCom, AOL, Elan, Parmalat, Tyco, ecc). In many critical situations a series of corporate meltdowns arising from managerial fraud, misconduct, and negligence have been highlighted, causing a massive loss of shareholders wealth.

The scholars have employed a good deal of study to measure Corporate Governance quality but also the effect of it on performance. About this remarkable need to measure, over the years, researchers have developed a Corporate Governance series of indexes G (Gompers, Ishii and Metrick 2003), E, O (Bebchuk, Cohen and Ferrel 2009), ATI (Cremers, B. Vinay, 2005), Gov-Score Index (Brown and Caylor 2006), Corporate Governance Index (Bubbico, Giorgino and Monda 2012) that allow us to express a single synthetic value of the quality of firms' corporate governance, as well as firms wanting to signal governance quality to investors.

The contemporary attention, in fact, is directed at governance indexes, able to combine multiple governance dimensions into one number. In all likelihood, the more compelling reason for the success of indexes is the elegant simplicity of having only one number to capture the multiple dimensionality of governance that could be related in correlation with other parameters, such as, exactly, performance.

There are also innumerable studies examining the impact of board composition on performance (Baker and Anderson 2010, Bhagat and Black 1999, 2002, Bhagat, Black and Blear's 2004,

[10]The first definition of corporate governance is of Berle and Means in the Modern Corporation and Private Property, in the 1932. .

Baghat, Bolton and Romano 2010, Romano 1996, Shleifer and Vishny 1996, Todd 2010). These researches are carried out on panels of listed companies for which there are extensive regulations and information. For Italian companies there are similar studies in this direction (Bubbico, Giorgino and Monda 2012) but remember that our list contains a total of about 330 companies from a total of 4 million, where the bulk refers to small size companies.

The formulation of the first hypothesis of this study is based actual diatribe found in studies, if it is possible to "detect" a relationship between governance and performance in the firm, especially for SMEs.

Hypothesis 1: The corporate governance mechanism on corporate performance has not been able to consistently identify positive effects

In this work we study a particular kind of company, in turnaround process where the performance can express the firm survival. Many studies are carried out to analyze relationship between Corporate Governance and company performance also in critical situations where there is a "struggle for existence" (Lee and Yeh 2004, Hui and Jing-Jing 2008).

The current economic crisis, further, kicked off a strong debate above all fervent activities of operators of private equity on the theme of the management of companies in deep crisis, the turnaround management where the Corporate Governance is crucial (Alpaslan 2009, Chen 2008, Hui and Jing-Jing 2008, Lee and Yeh 2004, Munford 2003, Wang and Deng 2006).

According to research carried out in the USA, in 4 cases out of 5, the decline was due to cases of internal policies, while only 1 in 5 to external factors (Dhawan Jang-Ting 2001). We can therefore claim with a degree of certainty that there is a clear prevalence of cases in which internal causes provoke the decline of the company, even if in recent decades, beginning with the 1970s trend, the macro-economic, political and social phenomena have accentuated their weight around the world. However we must recognize that within the many causes that are generally identified as responsible for the crisis, financial imbalance/assets arise in particular, which in reality is more an effect than a cause in itself. It is often due to a combination of other factors, but, when considered by itself, it refers to causes linked and factors attributable to the company (risk of the sector, leverage against the banks) and the environment in which it operates (financial markets are not efficient).

The seriousness of the causes of decline is expressed by poor economic performance and often resulting in loss of value for the companies. The outlook of the company is not favorable and the degree of risk is ever increasing. Among the many reasons that lead a company to a crisis, there are the problems related to Corporate Governance (CG) as a bad "gubernum"(Mumford 2003, Wright 2000)The first activity of the turnaround strategy, in fact, is to change the current top management and improve corporate governance (Hofer 1980, Keasey et al 1999).

We define Turnaround strategies as a set of consequential, directive, long-term decisions and actions targeted at the reversal of a perceived crisis that threatens the firm's survival. Turnaround strategies have received systematic research attention in the management literature (Barker &Duhaime, 1997, Carter, Schawb 2008**,** Hofer, 1980, Lohrke and Bedeian1998,Lohrke, Bedeian and Palmer 2004, Schendel, Patton, and Riggs, 1976, Sudarsanam and Lai 2001, Zimmerman 1989); however, the accumulated empirical and conceptual studies have resulted in a rather fragmented understanding and in some important areas the empirical findings remained ambiguous, especially with regard to firm recovery (Nystrom and Starbuck 1984, Pearce and Robbins 1993). It is important to remark that under some conditions, turnaround may not be feasible.

According to the turnaround literature, top management develops and implements turnaround strategies that address an imminent organizational crisis. Top managers become the change agents to reverse organizational decline. Hofer (1980) claims that there is an almost universal need to change the current top management in a turnaround situation and the Corporate Governance must be reviewed. Research finds that incumbent managers are less motivated to engage in turnaround strategies(Ford 1985, Ford and Baucus 1987) especially if they are strongly committed to the firm's current strategy or attribute decline to external causes only (Barker and Barr 2002,D'Aveniand MacMillan 1990).In addition, changes of the top-management can provide important signals to outside stakeholders (lenders and creditors) that the firm is separating itself from "past failed strategies". Such signals can increase the willingness of outside stakeholders to support the struggling organization (Bernabeo2002). Thus, the turnaround literature supports top-management change for organizational turnaround in spite of potential disadvantages associated with organizational knowledge loss and transition frictions (Arogaswamy et al. 1995, Barker and Mone 1994, Lohrke, Bedeian and Palmer 2004).

The entry of the Turnaround operators has given new energy to such investigations. Several crisis forecasting models range from the use of classic comparative financial analysis, with the use of ratios, to the application of more sophisticated methods, such as econometric procedures, that are able to highlight the variables in more detail by

classifying the companies concerned and determining the correct coefficient (Altman 1977, 2000, 2002, Altman and Hotchkiss 2006, Beaver 1966, 1968, D'Annunzio and Falavigna 2004, Friedman 1977, Hui And Jing-Jing, 2008, Lee and Yeh, 2004, Mumford 2003).

With regard to the operations of turnaround management we have to underline that the working capital and debt situation arethe factors of maximum critical and strategic importance both in the identification of the stages and of the gravity of the crisis and the management of an emergency phase at the beginning of the turnaround (Mariani 2007). We must also underline that any maneuvers of "distraction" made on the budget is particularly in the context of the elements of working capital and in particular the voice credits to customers, the inventory and amounts owed to suppliers. With regard to accounts receivable it is often that the balance carried in the budget is "inflated" including values in reality irrecoverable, as credits not yet collected, not for breach of the customers, but for management failure in the phase of payment. This may occur, for example, when the customer requires a procedure articulated to start the liquidation, as the transmission of documentation, for example, occurs in procurement. In times of crisis, in fact, it is common for the organization to fall into a process of "panic management" for which it fails to operate in a constant manner following certain procedures. Also the voice of amounts owed to suppliers may raise similar considerations. It is a common, in fact, that this voice tends to increase significantly as suppliers became aware of the crisis of the business customer and increase the days of collection until they became a real financier. The inventory represents, undoubtedly, the heading in which maneuvers of distraction can hide the true state of the management. The availability, in fact, may be subject to "revaluations" or devaluations in order to increase the value of that asset. The inventory may be, in reality, without realizable value because it is not corrected by outdated elements; at the same time it may be insufficient because the company in difficulty reduces purchases.

In the first phase of screening the Working Capital turnover ratios can provide signals of criticality (Chen 2008). Similar considerations may be made in regard to the early stages of restructuring. The actions depend on the severity of the situation. The factors that make the decision between one and another action is the cash flow, salaries and accounts payable must be fast and incisive. In the emergency phase the company mission, in the short time, is its survival, this means mainly making cuts to stop bleeding cash. So for performance valuation in this kind of company we have to consider working capital and debt ratios; to define the "state of health" of the companies and to detect warning signs we decided to use a simplified approach but very useful and widespread in theory and practice, as the Z-score(Altman 2000, Altman, Haldemanand Narayanan 1977, Platt and Platt 2002). We highlight that if *Z-score* is less of 1.8, the probability of corporate failure is high, and if *Z* is between 1.8 and 2.7 the company has a critical financial situation with a middle-high probability of failure.

Hypothesis 2 The Z-score can express premonitory signals also in turnaround firms, with "creatively adjusted" balance sheets

3. DATA AND METHODOLOGY

The current critical economic situation has brought to the fore the need to develop systems for planning and management control. For this purpose the prediction crisis methods are very important as well as the possible causes which ledto the crisis. The goal is to learn from past mistakes to avoid new ones.

In this paper we carried out an empirical study to show some preliminary results. We identified a panel of companies in turnaround (Cluster), venture capital backed, with the objective of deepening an analysis of four aspects.

1. 1-Firstly, if firms in turnaround (please note that enterprises are in crisis because of defined characteristics) warning signs could be detected. For this purpose we adopted a simplified approach, the Z-score.
2. 2-Forthe critical phase of the lifecycle of the company, we tried to verify the role played by the Corporate Governance in restructuring. Inline with more recent studies we tried to summarize the state of Corporate Governance in these units developing an index for SMEs (scG-small companies Governance) to seek information about the quality of firms' governance.
3. 3-Thirdly we completed the crossover study with the analysis of performance of these firms in the post-restructuring period, proceeding, also in this case, to sintering of an ad hoc index (scP-small companies Performance).
4. 4-Finally we introduced a Synthetic Indicator (SI) that aggregates the two parts of information: Corporate Governance Quality and Performance.

We chose a focused approach, by analyzing case studies, in this first step, so we could draw an accurate profile of the situation, to detect the quantitative but also qualitative aspects, such us the behaviors and the omissions: the choices are not always the result of a mere process of regression! Again, we highlight that this work is a part of an overall research, a work in progress: the study, in fact, is proceeding with an expansion of the sample, the introduction of a sample of more extensive

comparison, an application with other prediction methods, and the test of indicators to other situations.

To analyze the importance of the diagnostic management, an analysis of the balance sheets of the companies in turnaround, participated by turnaround financing fund, was carried out in the years 2004 and 2009. We can only examine this period because the turnaround operations were aggregated with other private equity operators before (PEM). In relation to the total number of firms involved in turnaround in the period in question, which were 26 in total, it was possible to reconstruct the historic trend only for12 of them (the cluster); for the others of it was not possible to find the balance sheets, because they are subject to bankruptcy, or because companies subjected to operation of restructuring were a branch of a greater one, whose specific budget was unavailable (table. 1).

Table 1. The cluster's characteristics

Company Cluster	Sector of Activity	Year	Current Situation	Lead Investor
Coin	Clothing store	2005	Active company	Pai partners
Comital-Saiag	Semi-finished production in aluminium	2006	Active company	Management & Capital
Crisci	Production of shoes	2007	In liquidation	Camelot
Delverde	Pulp production	2006	Active company	Interbanca gestione investimenti Sgr Spa
Di Zio Costruzioni	Mechanical constructions	2005	Active company	Interbanca gestione investimenti Sgr Spa
Ginori	Production of ceramic ware	2006	Active company	Starfin
Giostyle	Production of plastic articles	2006	Active company	Atlantis capital
Jal spa	Production of clothing	2005	Active company	Goldman Sachs capital partner e coinvestor Bank of america capital partner europe
Magli	Production and marketing of shoes	2007	Active company	Fortelus capital
Sutor-Mantellasi	Production of shoes	2007	In liquidation	Camelot
Selecta	Shipping enterprice	2008	Active company	Atlantis capital
Gruppo Favini	Paper production	2008	In liquidation	Orlando

Some of companies' balance sheets are detected by Central enterprise Department (Chamber of Commerce), while other have been sent directly by the turnaround operators or by the companies. For some operations we have had other information from the turnaround funds.

At first we analyzed the economic situation of each company in the cluster and then cross-checked it with some line financial of business that we summarized in Z-score for each of them and for the relative sectors of activity (Mediobanca). An important observation of the study, as expected, is that the companies of the cluster are SMEs, not listed, and characterized with an economic critical situation in the two years before the turnaround operation. With the Z-score analysis, in fact, we can observe that every company has a score in the critical area, *Z-score value*less than1.8, so with a high probability of bankruptcy (table. 2).

Table 2. The Z-score values 2 years before and after the turnaround

Z-score values	2 years before turnaround		1 year after turnaround	
	Companies	Sector of activity	Companies	Sector of activity
Coin	1,3	2,05	1,57	2,2
Comital-Saiag	1,7	1,89	1,5	1,6
Crisci	0,3	2,53	0,64	2,63
Delverde	0,81	2,1	1,3	2,2
Di Zio Costruzioni	1,67	2,58	2,03	2,9
Ginori	0,65	0,96	0,9	1,6
Giostyle	1,25	1,64	1,59	1,9
Jal spa	1,94	2,29	2,67	2,18
Magli	-0,25	2,41	0,48	2,63
Sutor-Mantellasi	-1,24	2,3	2,68	2,53
Selecta	1,52	1,76	1,51	1,57
Gruppo Favini	0,94	1,44	n.d.	n.d.

We can point out that the *Z-score* for the relative sector of activity is better than the single firms. The value is, almost always, in the grey area (1.8-2.7). It is important to underline that the sector's scores aren't elevated, this means that the cluster's companies have amplified the negative effects of a critical economic period that invaded all the sector, which is not exactly in good health. It should be mentioned, for example, that production of shoes and clothing sectors report extremely critical values. These sectors have had, for some time, the worst performance of the national average. It is significant to detect the relevance of the Z-score in the year following the restructuring. We must consider that the turnaround management is a restructuring exercise, which must "bear fruit" within 18 months, generating cash flows. It may be noted that the market data shows a notable improvement so it is a trend towards a favorable habitat for recovery. Please remember, in fact, that companies in turnaround are those in which the business environment is in crisis but not the market where they operate; otherwise faster recovery operations would not be conceivable. The turnaround process aim, in fact, is to return to the performance of the previous period and possibly improve extolling the value of intangible assets. Companies that are worth mentioning even reported a value of Z-score better than the sector (Jal and Sutor Mantellassi).

The second part of the empirical research targeted to define a good governance index of the small Italian business. In the other part of this paper we examined the different Corporate Governance indexes that are currently in use by academics and practitioners.

In this regard we tried to adapt the complex problem of synthesizing a Corporate Governance index for SMEs that we called scG (small companies Governance) that was able to come out the peculiarities of small companies, of the Italian law and of the turnaround management.

The first survey was conducted to test the applicability of this index to the sample that – as ready indicated – is very particular in view of the fact that the enterprises are, in some way, in a critical phase. This analysis had to overcome some difficulties, the main impediment being the retrieval of data on the sample under study since the companies did not to answer certain questions. Please note that the selected sample is represented by Italian manufacturers and SMEs subject to turnaround, with turnaround financing funds, between 2004 and 2009. A short questionnaire, containing 3 main themes, was submitted to these companies. Such themes were: a. the composition of the corporate structure (in particular who is entrusted with the management); b. the structure of the government (information regarding both the administrative and control structure) and c. the role of the turnaround fund (e.g. if it has a leadership or support role).Based on data collected through the questionnaire we tried to synthesize an index able to define the goodness of Governance in the sample of selected companies. For the construction of this index (small companies Governance-scG) we based on the training mode of governance indexes produced in literature, even if we made some changes. In addition to using evaluates 0 and 1, 2 was also introduced to reflect an improvement in the corresponding corporate governance. It is also necessary to underline the fact that our indicator should be seen as a first approach and we must add empirical tests to compare, to enrich, or to change the methodology. The index was constructed by summarizing the values obtained from the questionnaire; all elements with a positive contribution to governance have been assigned a score equal to 1 (or 2 if there is no need to calibrate). These include the presence of private equity, membership of a group, not family-controlled management, the existence of an appropriate traditional administration, of independent directors, the amendments made to the Board of Directors and Corporate Governance during the turnaround process, the appointment of directors and auditors, the presence of the Selected Committee, the independent auditors, documents of governance, lack of corporate agreement and / or veto by the Private Equity. The valuation range goes from 0 to 17 (Table 3).The index scG takes values within the range of 8and 12, none of the companies still has a Governance status with the "highest score", so the level of Corporate Governance can still improve. There are few businesses that retained a limited level of Corporate Governance: they are those for which the data is even more difficult to find because they are still in a critical situation.

Table 3. The small companies Governance index values (smG)

	Current presence of Private equity	Group membership	Family control	Typical administration	Indipendent directors	Changes of the board After the deal	Appoint the board of directors	Selected committee	Changes of regular auditors After the deal	Appoint the regular auditor	Auditing company	Governance documents	Changes of management	Imposition of corporate Agreement or veto	Control of board director	Control of regular auditor	Summary index of good governance
Coin	0	1	1	1	1	0	F	0	0	F	1	2	1	1	0	0	9
Comital-Saiag	0	1	1	1	1	1	P	0	0	P	1	1	0	2	0	0	9
Crisci	1	1	1	1	1	0	P	0	0	P	1	0	1	0	1	1	9
Delverde	0	1	1	1	0	2	P	0	0	P	1	2	1	2	0	0	11
Di Zio Costruzioni	1	1	1	1	0	1	F	1	0	F	1	1	1	2	0	0	11
Ginori	0	1	1	1	1	2	P	1	2	P	1	0	0	2	0	0	12
Giostyle	1	0	1	1	1	0	F	0	0	F	1	2	1	2	0	0	10
Jal spa	1	1	0	1	0	0	F	0	0	F	1	1	0	0	0	0	5
Magli	1	1	1	1	0	1	F	0	1	F	1	0	0	1	0	0	8
Sutor-Mantellasi	1	0	1	1	1	2	P	0	0	P	1	0	1	2	1	1	12
Selecta	1	1	1	1	0	0	F	0	0	F	1	2	0	1	0	0	8
Gruppo Favini	1	0	1	1	1	1	F	0	0	F	1	1	1	0	0	0	8

The sample shows that 75% of the analyzed firms have sufficiently structured governance with a significant improvement by limiting the management of the property, sometimes in the hands of a family, to promote the role of professionals. Further improvements would have been possible if the firms have used appropriate alternative governance systems; the absence of selected committees and the presence of independent directors would allow a better organization and an independent judgment. Moreover, in the long run the presence of the PE who clearly holds a supremacy position, may drive the firm into a new critical situation, when he sells his shares to the other shareholders without passing his management methodology. Finally, the lack of data prior to the deal doesn't let us understand if the cause of the difficulties comes from prior bad management.

Another negative element that is highlighted is the imposition by the shareholder or investor shareholders' veto rights that restrict the activities of several government bodies.

It can be seen that then try of PE has marked out for the companies an important stimulus for the management of Governance.

With regard the performances, about debt and working capital management, the sample improved their business performance as indicated by the scP index: we can see a reduction in borrowing costs and a decrease in short to medium to longer than that. As anticipated to briefly analyze the company's performance we constructed an index that measures modifications in debt ratios (stockholders' equity/total assets, long term debts/total assets, Financial debts/total debts, short term financial debt/financial debt, annual interest expense/Total debt service, annual interest expense/EBIT,) and working capital of each company (annual sales/capital employed, inventory turnover ratio, days inventory, average collection period, average payment period, cash conversion cycle).

Table 4. The small companies Performance index values (smP)

	Debt Ratios						Working Capital Ratios					
	Stockholders' equity/ total assets	Long term debts/ total assets	Financial debts/ Total debts	Short term financial debt/ Financial debt	Annual interest expence / Total debt service	Annual interest expence/ EBIT	Annual sales/ Capital employed	Inventory turnover ratio	Days inventory	Average collection period- supplier	Average payment period- customers	Cash conversion cycle
Coin		+	-		+	-	+	-	+			+
Comital		+					-			-		
Crisci	-	+		+								
DelVerde	+	-	-	+			+			-		
Di Zio		+				-						
Favini	-	-										
Ginori						+		+	-	+		-
Giostyle												
Jal	+	-	-			-						
Magli	+	-	-								+	+
Selecta	-		+							-	+	
Sutor							-				+	

A + (-) sign means an increase (reduction) of corresponding ratio while a blanks cell indicates a not (statistically) significant change in the corresponding index.

In the comparative fundamental financial analysis we chose two particular groups of ratios that are able, in our opinion, to show a distressed situation. With regard to debt ratio, first of all, it's necessary to clarify their meaning. First of all we must observe that *Annual interest expense*/*EBIT* can't be possible, sometimes, to calculate for the same companies because the EBIT was negative in some exercises; for which the ratios would not meaning. For this reason, in calculating the average we eliminated the values of this element of income statement, when these were negative. A final methodological clarification must be done on *Annual interest expense*/*Total debt service*: in the evaluation we eliminated the cases in which this value was not real data for the current market, for example with values more than 15%. After these premises of method we can observe, for the cluster, a particular critical situation for *Stockholders' equity*/*total assets* and *Annual interest expense*/*EBIT*.

From the analysis of the budgets we tried to define a short indicator of performance, about debt and working capital management, which we called scP (small companies Performance), to determine the modification before and after intervention and in recent years (2008 -2010).In this way we can also verify the different contribution of debt and working capital to performance.

For our panel of unlisted companies it isn't possible using the Q-Tobin (Thomsen. 2004) as a proxy of enterprise value: so we decided to define a traditional fundamental portfolio to evaluate the performance. It's important to highlight that the companies of the panel are in a critical situation so it can be more expressive to evaluate performance with analysis of critical fundamentals.

3.1 Statistical analysis

In order to draw up an index which reflects the financial trend of each firm we built a matrix A_{mxn} where m is equal to 12 and represents the number of firms and n is equal to 12 and represents the number of financial statement indexes in the dataset: 6 debt ratios and 6 working capital ratios.

Each element $a_{i,j}$ of A can assume a value between $\{-1/n;1/n\}$ where $-1/n$ indicates a worsening of the related financial index while $1/n$ signals an improvement.

To evaluate the trend of financial statement indexes we use an ordinary least squares approach (Greene 2003). We regress the index time series against time and, if the estimated β is significantly greater (smaller) than zero, we assign a value of $1/n$ $(-1/n)$.

The row wise sum of first six columns of A_{mxn} gives us what we call "Small Companies Debt Ratios Index" (from now on scdI), while the row wise sum of the remaining six columns gives us the "Small Companies Working Capital Index" (from now on scwI). The sum of scdIand scwIallows us to obtain the "Small Companies Performance" (from now on scP).

As previously said, our main aim is to build a synthetic index taking account both corporate and performance indexes. For doing so we put scGand scP indexes in an x, y space and evaluate the distance of each point from the point $(-1,0)$ as the square root of the sum of the squares of scGand $(1+scP)$. This value, divided by $5^{1/2}$, permit us to obtain the "Small Companies Synthetic Index" (from now on SI) that can assume a value between $[0,1]$. The firms with a SIcloser to 0 are those

having a worse global performance, in Corporate Governance and about debt and working capital management, whereas a SI index closer to *1* indicates a better global performance.

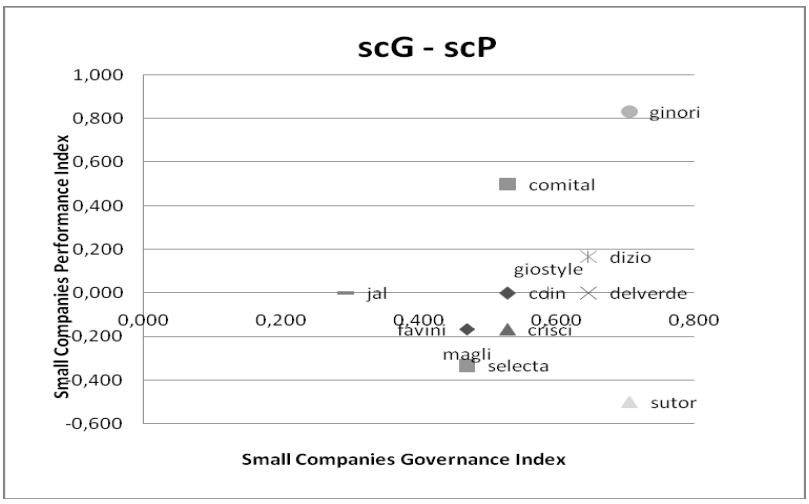
To verify the relation between the company performances, measured by scPindex, and Corporate Governance Quality, measured by scG, we rescale scG in a *[0,1]*space and define a synthetic index (SI). We report the results with a single graph (Graph. 1). The graph shows us the concentration of the data of scP in the intermediate level, e.g. there is an improvement trend of debt ratio and working capital indexes as regards the years of the deal; this improvement can be due to the current governance structure, which is sufficiently structured as indicated by the parameters used to measure it .

Table 5. The small companies Performance index values (smP) and Synthetic index values

	scG	SCDI	SCWI	scP	SI
Coin	0,53	0,00	0,000	0,000	0,506
Comital-Saiag	0,53	0,17	0,333	0,500	0,711
Crisci*	0,53	-0,167	0,000	-0,167	0,442
Delverde	0,64	0,000	0,000	0,000	0,533
Di Zio Costruzioni	0,65	0,167	0,000	0,167	0,597
Ginori	0,71	0,167	0,667	0,833	0,879
Giostyle	0,59	0,000	0,000	0,000	0,519
Jal spa*	0,47	-0,167	0,000	-0,167	0,428
Magli	0,29	0,000	0,000	0,000	0,466
Sutor-Mantellasi	0,47	0,167	-0,333	-0,167	0,428
Selecta	0,47	-0,333	0,000	-0,333	0,365
Gruppo Favini*	0,71	-0,167	-0,333	-0,500	0,387

*(SI) (*Companies in liquidation)*
scG = Small companies Governance index
SCDI= Small Companies Debt Ratios Index
SCWI =Small Companies Working Capital Index
scP= Small companies Performance index
SI = Synthetic Index

Graph 1. The ratio between scG and scP



4. SOME RESULTS AND DISCUSSION

It must be specified that the results referred to above must be considered a first summary of the whole research; there is, however, some very interesting ideas. It may be, in fact, that the Z-score would have fully revealed a critical situation of companies in the cluster. Thanks to its strong connotation of composite indicators, it allows an easy and immediate benchmark compared to other companies and to sectoral data.

We must draw attention to the fact that, as we said above, in this critical situation any maneuvers of "distraction" on the balance sheet are frequent, especially on the working capital elements; so it is important to highlight that Z-score is able, all the same, to emphasize the crisis also *with "creatively adjusted" balance sheets*. We can support the Hypothesis 2.

Worthy of note is the fact that we can observe real improvement signals for the period following the turnaround, especially for Sutor, Magli, Jal, Del Verde e Di Zio. It is important to point out that in the cluster it isn't possible to register a correlation between Z-score trend, Corporate Governance and performance. Only Del Verde, Giostyle, Jal have reported a significant improvement in Z-scores and a good level of scG and in scP.

From analysis it is possible to reflect on some results. We can note thatSI is high for Ginori, Comital, Di Zio, where there is a correspondence between Corporate Governance of quality and positive performance indexes. We note the Del Verde, a company with a good scG index but without follow-up from turnaround strategies and performance. Another situation to point out is about Sutor where we can find a good Corporate Governance structure but with low performance, especially in working capital management. We can inform that Crisci, Sutor e Faviniare in liquidation: they have a lower SI value, especially for the bad debt management.

There isn't any correlation SI and Z score values for these companies. Sutor Mantellassi has been a good improvement in ex post situation, with a very critical Z-score ex ante value (-1,24).The separate analysis of the two indicators, Governance and Performance of companies, doesn't, however, always reveal a similar trend: for example the two companies Coin and Del Verde, show a positive position for the two cases, as with the Z-score. On the contrary the two companies, Ginori and Mantellassi, show a high level of scG but this result still has effects on the financial structure and management of working capital, although the Z-score shows major points of growth signals. In the research it wasn't possible to find a correlation between Corporate Governance and performance. This analysis supports the Hypothesis 1.

In this regard we should draw attention to the fact that, in such cases, there were significant improvements in the Corporate Governance, but only for a short time, and so they need to metabolize. From the above analysis we can see that the joint use of multiple indexes allows you to view some elements in an immediate trend. It is clear that the 3 indicators, scG and scP, with the SI, should assume an attitude of caution because, despite being inspired by a broad theoretical basis, they represent only an initial check and therefore the need for further study. Please note that in the case of SMEs, the difficulty in obtaining the information is high, even considering the fact that among these units international accounting standards are not common. For an in-depth analysis the removal of the information asymmetries is especially needed. In academic literature we can find research essentially on listed companies which allows the collection the data necessary for the synthesis of an indicator. However, in some markets, just like the Italian one the focus on public companies, lets out a huge business enterprise that is almost the entire GDP.

In conclusion, it can be noted that the analysis of important aspects of management through the development of indexes Z-score, scG, scP, and SI allows for comparisons between situations that are not readily comparable in terms of accounting. The ability to synthesize using an index, such as the Z-score, by now consolidated, allows an initial screening and monitoring of certain situations, which can then be further discussed with other diagnostic tools to more comprehensive end, above all from the inside out critical early warning signs become apparent. It's important to individualize the first stage of the crisis to limit the effects to the internal of the company. In an analysis of the external type it is not clear who plays a key role in the various and different financial reporting systems that cannot make the accounting information comparable.

To simplify the analysis, to obtain the first piece of information, it is very useful to define indexes that can summarize a complex concept into a single figure. Although it can be noted that this approach may be oversimplified and may sometimes be superficial, on several occasions, especially for practitioners, the use of the indicator is friendly, clear and an important communication driver. The diffusion of the Z-score, for example, is mainly due to its immediacy of expression.

It is clear that it is necessary to further the investigation in order to test the pool of indexes into a larger number of situations that may help recognize the significance test.

We can also underline that the little cluster represents an important limitation of the research;

the future steps of the analysis must expand the sample to reach a statistical expressive.

You must also check in business contexts not in crisis, although in this case they often impose decided and timely actions on Corporate Governance. It should be pointed out that primarily in unlisted companies the evaluation of Corporate Governance requires direct and measuring parameters not perfectly imposable to those Corporate Governance indexes available.

We want, also, to extend the study with the analysis of some case-studies to test the quantitative feed-back with a qualitative "point of view".

What should be noted is the degree of balance between the rights of shareholders and managers, but also the opening degree of management and control structures outwards, in essence "*to need to Access*"(Gubitta andGianecchini2011), especially towards institutional investors who would be willing to recognize a premium for companies well governed (McKinsey 2002).

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РАЗДЕЛ 2
КОРПОРАТИВНОЕ УПРАВЛЕНИЕ В БАНКАХ

SECTION 2
CORPORATE GOVERNANCE IN BANKS

BANK CAPITAL AND BASEL 3 IMPACTS ON ITALIAN BANKS

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Abstract

The issues raised by Basel III, with specific reference to the introduction of more stringent capital requirements, are numerous and touch upon different aspects, such as cost and profitability-related problems and the repercussions concerning strategies implemented by banks. Our aim is to clarify the impact on Italian banks. We will first present some general considerations addressing the main implications for bank management, before illustrating the results of a survey aimed at detecting possible fears and doubts, on the part of banks, with reference to the extent to which some of the capitalisation proposals included in the reform can actually be pursued.

Keywords: Bank, Capital, Basel3, Italy

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1. Introduction

The main critical issues that surfaced during the crisis include non-harmonised capital structures, weak disclosure of capital components, and governmental actions in favour of banks featuring high Tier 1 ratios but low levels of Common Equity, net of regulatory adjustments. These phenomena have led to a capital requirement revision aimed at more substantial, as well as better-quality allocations. In fact, non-Common Equity instruments have often proven to be unable to absorb losses, and as a consequence the market has rewarded the "best" capitalised banks, while losing confidence in Tier 1 Capital as a capital adequacy measure, and focusing on indicators considered to be more significant (primarily, Core Tier 1 ratio and Tangible Common Equity ratio).

The regulatory revision (BCBS, 2010b), known as "Basel III", has been developed along several lines. The most significant ones include: enhancing the core component, which complies with the requirements concerning permanence and the ability to absorb losses on an ongoing concern basis; harmonising the regulatory adjustments and deducting them mainly from the core component; providing more specific criteria for the inputting of capital components, while always safeguarding the character of permanence (the proscription of provisions concerning step-up, or other incentives to early reimbursement for non-Common Equity instruments, should be interpreted in this sense);

simplifying aggregates (Tier 2 Capital sub-categories and Tier 3 Capital are eliminated); and strengthening disclosure, in order to enable a reliable comparison between banks based in different countries.

The pressure to strengthen the capital core component, which has resulted in several recapitalisation operations carried out by Italian banks – the ones we have examined – at an earlier date than the adjustment deadlines, and the fear of "gridlocks" in the issuance of shares give rise to doubts concerning the actual ability of the market to absorb a higher offer of shares. Essentially, the question is whether and to what extent the process is feasible and sustainable, in consideration of the recourse to market on the part of other issuers (both sovereign and private entities) and the not-so-bright profitability prospects of banks. The latter are significant both in order to capture the extent to which it will be possible to count on income flows to feed capital growth, and in order to attract investors by means of appealing returns, as well as in order to reduce possible repercussions on credit spreads deriving from the higher costs of the raising of capital. Actually, the cost of share capital is subject to diverging stimuli: it is increasing due to the uncertainty of a difficult economic recovery, the yet unclear economic perspective of banks, and the drives generated by the national public debt spread; it is decreasing due to the relieved climate following recapitalisation and, therefore, to the greater stability and solidity perceived by investors, partly thanks to the abidance to the financial leverage ratio introduced by the new international regulations.

Non-Common Equity instruments also present possible issuance-related problems: let us consider the strictness of the eligibility criteria and the reduction in the range of instruments that can be offered for reasons connected, for instance, to the elimination of Tier 2 sub-categories, the removal of Tier 3, and the numerous common elements shared by Common Equity and Additional Tier 1.

The result might be penalisation in terms of instrument marketability and, therefore, difficulties in procuring financial resources.

The issues raised by the introduction of more stringent capital requirements, therefore, are numerous and touch upon different aspects, such as cost and profitability-related problems and the repercussions concerning strategies implemented by banks. Our aim is to clarify the impact on Italian banks. We will first present some general considerations addressing the main implications for bank management, before illustrating the results of a survey aimed at detecting possible fears and doubts, on the part of banks, with reference to the extent to which some of the capitalisation proposals included in the reform can actually be pursued.

The rest of the paper is divided as follows: section 2 includes a review of literature concerning bank capital, with specific reference to the financial crisis and the related response on the part of the supervisory authorities; section 3 includes considerations regarding the main forms of impact on management deriving from the new capital regulations; section 4 illustrates the position of Italian banks with respect to the most relevant issues raised by the regulations; and section 5 draws the conclusions.

2. Bank capital: evidence from the literature

The literature has dealt with the operative and strategic importance of bank capital from different points of view. The approaches that come later have been increasingly influenced by the evolution of the credit and finance sector in the last decades both in terms of progressive internationalisation and higher competition with consequences on the management choices of single intermediaries required to satisfy the needs of an ever more diversified stakeholder community. The relevant in-depth studies have also been affected by market factors (neutrality versus turmoil), more intrinsically connected with issues concerning the supervisory of the bank sector and of the financial stability.

Works on bank capital have therefore tried to provide an in-depth view of various aspects taking different directions. We will point out only a few research paths concerning the topics we dealt with, leaving the other topics to the extensive existing literature. Among the main studies, we find bank capital regulation. An accurate analysis of the different works produced up to 2000 is provided by (Santos, 2001). Over the years the regulation of bank capital grows in importance while other types of banking regulation reduce. This has inevitably influenced the issue concerning how much equity banks should use in their capital structure (see Giuliani, 2011, on the optimum capital structure). The issue of capital level, of the forms that can compose it, and of the associated high costs is of major importance considering the financial crisis started in 2007 and the regulatory response known as Basel III. This is the context in which we developed our paper aimed at understanding the main impacts of the new capital rules on bank management equilibria. Conceptual considerations were further enriched by the results of a field investigation we carried out by surveying a sample of 31 Italian banks. The aim of the survey was to illustrate banks expectations, fears and behaviours in the view of the upcoming alignment with Basel III.

A few studies analysed bank resilience during the crisis, in particular the relationship between capital and performance. These include the work by

(Demirgüç-Kunt et al., 2010) according which capital is positively connected to banks' stock returns during the crisis. Other authors (Beltratti and Stulz, 2009) show that large banks with more Tier 1 capital and higher reliance on deposits for short term funding in 2006 have higher stock returns during the crisis. As far as systemically important banks are concerned, (Kato et al., 2010) show that stock returns from 2007 to 2008 are not correlated to the Tier 1 capital ratio, but positively correlated to the deposit-to-liability ratio. Again on stock returns, the paper by (Das and Sy, 2012) highlights that the relationship with Risk Weighted Assets (RWA) is weaker where banks have more discretion in the calculation of RWA. Specifically, in countries that had implemented Basel II before the onset of the financial crisis, investors look to other balance-sheet measures of risk exposure but not RWA. The academic and institutional community is widely investigating the importance of RWA for reporting purposes and, consequently, the efficacy of the ratios based on them for measuring capital adequacy. Such threat is clearly highlighted in the work by (Ayadi et al., 2012, p. 49): "(…) there is concern that regulatory arbitrage and politically driven policies have put the appropriateness of risk-sensitive regulations in question"; in particular as far as a few business models are concerned, such as the one of investment banks, "more disposed and inclined to use sophisticated derivatives instruments to divert the risks away from their balance sheets".

Keeping the financial crisis and the new prudential supervisory system as the *fil-rouge* of our review, interesting studies on capital investigate the following issue: does bank capital affect lending? Several studies indeed are aimed at understanding whether and to what extent the crisis, combined with the Basel III rules on capital (and more), affects the typical bank activity, credit activity and, more generally, real economy, Analysis refer to several periods (pre-crisis and/or during the crisis) as well as to bank- and/or market-specific variables such as geographic areas as well as size and various business characteristics; there are also works focussed on comparative surveys aimed at understanding the combined effect of several influence factors. The study by (Carlson et al., 2011) belongs to the field above; for the UK market the works by (Mora and Logan, 2010) and by (Osborne et al., 2012). Estimates on implications of credit offer and the relevant costs are included in the studies by (Macroeconomic Assessment Group, 2010a and 2010b; BCBS, 2010a); as far as the national context is concerned the works by (Bancad'Italia, 2010; Locarno, 2011) are worth mentioning. The topic is also dealt with by referring to the impact that higher capital requirements have on banks' cost of funding, and then analysing how this might affect the interest rate charged on loans (di Biase and D'Apolito, 2011). Implications on credit offer to enterprises are also dealt with by referring to countercyclical capital (Jiménez et al., 2012 for the experience of Spain).

Further in-depth studies on bank capital also considered its connection with bank remuneration policies whose importance was clearly highlighted by the crisis, requiring national and international control authorities to reconsider the issue. The works by (Bhagat and Bolton, 2011) and by (Acharya et al., 2009) belong to the abovementioned path; see (Brogi, 2010) for the Italian system.

3. Main management and strategic implications

The provisions concerning the measure and composition of the different components of the minimum regulatory capital have an impact on:

- the *share capital management* policies, through increases aimed at expanding the common equity component;
- the *allocation of profits*;
- the policies concerning the funding through *debt instruments* that can be part of Additional Tier 1 or Tier 2.

The close connection between share capital increases and profit allocation is evident. Also in a context driven by the new regulatory provisions, at a first sight, the usual relationship of mutual complementarity and substitutability still applies: the aim of increasing the common equity component might be pursued by following either method. But actually selecting one or the other, in this case, is not inconsequential. The reasons are, above all, linked to a specific aspect that constitutes the major difference between the ordinary situation faced by any enterprise that decides to increase its equity and the extraordinary and binding situation banks are facing as a result of the new provisions: the targets concerningminimum regulatory capital increases must be attained within a determined timeframe. Therefore, *time* is the first discriminating factor: share capital increases would not be necessary if future profitability was at such levels that the net profits, accumulated and set aside as reserve over the years, were sufficient to cover the greater capital required. Time – a requirement that affects all banks equally – is accompanied by two other discriminating factors whose relevance is different for each individual bank: the *uncertainty of future profitability* that we have just mentioned; and the *capital divide* between the current level, measured with the new quality criteria, and the new minimum level required. This divide could beincreased by the presence, in the capital, of shares belonging to categories that are no longer permitted and by the deductions represented by asset items.

The strategic management of capital, therefore, needs to be reconsidered starting from the choice between profitability allocated to reserves and capital increases from external sources. It is a matter of defining the decision-making criteria and, in case of capital increases, the most suitable timing for the bank, regardless of the time constraints imposed by the new provisions. However, this is not sufficient. The capital reinforcement undoubtedly has positive effects on the bank's management equilibria (Table 1).

Table 1. Capital levels and quality: connections with the bank management's equilibria

New Basel III provisions	Risk Equilibrium	Economic Equilibrium	Financial Equilibrium	Capital Equilibrium
	Reduction of the insolvency risk	Higher net economic results in the absence of costs due to interest on more funds available as common equity. Lower potential costs from funding in the markets and lesser risk of reduction in intermediation volumes against reduced reputational risk thanks to capital level and quality higher than the minimum requirements.	Greater availability of financial means, lesser dependence on funding markets	Capital "reserves" for loss absorption

As a consequence, the analytical approach to this topic cannot be limited to considering as fully satisfactory the attainment of the minimum *regulatory requirements* within the pre-fixed timeframe for the gradual capital growth. *Requirements* and *market opportunities* are equally present in this strategic decision-making process and need to be both taken into account. For instance, the requirement originating from the level of trust a bank enjoys in the market, the consequent reputational risk, and the cost of the funding: a capital growing faster and above the minimum regulatory thresholds will certainly be seen in positive terms. Another example is provided by the opportunity that higher capital levels – more quickly reached – can support new investments leading to growth also through competitive strategies and actions, resulting in additional profitability opportunities. Therefore, can the capital reinforcement policy be based only on future profit results, even when these appear to be possibly sufficient with respect to the minimum regulatory levels to be attained?

The management of capital, in its common equity component, forces everybody to reflect on the need, or opportunity, to follow both methods: capital increases, the accumulation of profit reserves. The transition period to 2019 cannot be seen merely in terms of the attainment of minimum regulatory levels, to be reached within the indicated timeframe, when a bank's current capital is not sufficient or qualitatively adequate. This is also true when the future profitability expected over the years appears to be fully sufficient to attain the target: if it were high, capital increases should not be unwelcome or beyond the comprehension of shareholders. New financial commitments and the temporary renouncement of dividends could, in fact, be more than adequately levelled-off by the even higher additional results that might derive from seizing the growth opportunities offered in a situation characterised by change, for reasons due to both the trend and perspectives of the economies and markets, as well as the impact of the new regulations. Quite probably, over time we will witness diversified choices in terms of common equity increase policies on the part of different banks; and, considering the unstable context in which they operate, the same banks might have to change their strategies over time, adjusting them in consideration of the extent of the divide between actual capital and minimum requirements, regulatory requirements to be abided by, profit results attained over time, their destination towards capital reinforcement, dividend distribution policies, market constrains and opportunities, changes in the economic-financial contexts, adjustments to the provisions possibly issued by the authorities on the basis of the experimentation results, and the evolution of the economic-financial context.

Banks will also have to redefine – and probably reconsider over time – their policies concerning funding through the *debt instruments* that might be part of the Additional Tier 1 or Tier 2. There are two specific aspects requiring consideration: the characteristics these new instruments will need to feature in order to be used to abide by the requirements; the expected reduction – over 10 years starting from 2013 – of the debt instruments issued and used in order to abide by the current requirements, which can no longer be input in the share capital. Besides these specific elements, there are the considerations expressed above with reference to common equity management policies. Just think about the positive effects due to early common equity increases and higher than the minimum levels required: they might enhance the

possibility of issuing adequate debt instruments and reduce their costs. Therefore, we will be the witnesses of reconciliation times and themes between strategies and policies concerning common equity increases, issuing policies of new debt instruments, possible periods of early refund of old existing debt instruments.

Reconciliation over time between the need of increasing capital and profitability trends is made more complex by the need to abide by the requirement concerning the establishment of a capital conservation buffer. This new capital reserve needs to be fed with undistributed profits. The mandatory destination of profits must abide by the two limits mentioned earlier: the prohibition to distribute profits in a decreasing proportion compared to the actual growth of the reserve, the gradual attainment of minimum percentages with respect to the ultimate 2.5 percent target. The combination of these two limits defines the amount of net profits that need to be allotted to the reserve over time. Only the remaining part of the profits – after the dividends that the bank deems appropriate to distribute – can be directed towards the increase in common equity over the years, up to attaining 4.5 percent, in accordance with the minimum regulatory levels. The part falling short will have to come from capital increases. Similar considerations in terms of reconciliation with the other rules aimed at capital reinforcement might be expressed if, in the future, the authorities of each individual country should choose to introduce the counter-cyclical buffer.

Setting a minimum limit on the required capital, together with the provision of measures concerning indebtedness and liquidity, means limiting the operating choices on the part of banks, reducing the risks they can take on, as well establishing asset dykes aimed at absorbing losses possibly deriving from the operating choices made and the risks run. The new requirements affect all of the equilibria in the bank's management (as for the capital, see Table 1; for the other requirements, see Tutino et al., 2011).

Profitability requires further examination. The most evident and note-worthy impacts produced by capital regulations include the limits placed on the growth of intermediation volumes, the increase in minimum requirement, the improvement of quality in terms of composition, and the increase of weighting criteria concerning market and counterparty risks.

The limits sets on the overall intermediation volumes reduce, in absolute terms, the size of interest-bearing assets and their margins of contribution, gross of the corresponding funding costs. In this regard, it is necessary to recall the distinction between the *nominal* total amount of interest-bearing assets and the total amount of *risk-weighted* interest-bearing assets, as well as underline their effects on profitability. Limits on the growth of intermediation volumes are applied while taking into account the weighting based on risks; the interest income come from the combination of rates, amounts, and the investment time of the nominal interest-bearing assets. Their growth could be high in the absence of limits related to risk weighting. The interest income, therefore, could grow further: their maximum potential growth limit would be defined by the availability of funds to be lent. It is a well-known issue. However, it is appropriate to recall it because of the more stringent aforementioned requirements introduced by Basel 3 with reference to the minimum capital and the weighting of certain types of risk.

The relationship between *net equity* and *profitability* is important for other reasons, and needs to be interpreted in a different way. The direct impact affects shareholders: a reduction is expected in the profitability of the capital they have invested and that they will probably have to increase. The increase in the common equity minimum requirements and the limits posed on the distribution of dividends reduces the profitability per unit of capital invested in banking shares. This reduction – for shareholders – is additional to that deriving from the limits posed by the new regulatory requirements, and is included in a general economic and financial context that has recorded low profitability performance in recent years and is not showing any sign of fast or substantial recovery in the future.

From the perspective of the relationship between *risks* and *profitability*, some considerations are also necessary. We are not considering – as it is neither possible here nor relevant – the theme concerning the actual efficacy of the new rules and their overall impact on banks: both will be measured and commented variously on in the next few months and years by scholars and analysts. Instead, we move from the question concerning the need of risk control: authorities must take action through these and other measures. This is necessary both to contribute to safeguarding the stability of the financial system and the individual banks, as well as because the lack of stability can have negative effects – in a clearly negative circle – on the profitability of the banks themselves. However, it is also necessary to ask ourselves, starting from the present, what effects such demanding measures will produce on the profitability of banks; and, moreover - when the general stability of the financial system allows for it- we should assess whether, to what extent and in which directions the new requirements can and have to be reviewed and modified.

Before these considerations can lead to possible revisions of the provisions, it is necessary that the banks' management acquire a thorough and

meaningful awareness of the limiting impact the new rules will have on banking profitability, and take subsequent action, identifying ways to recover profitability and redefining their corporate strategies.

4. The Response to the Capital Framework of a Sample of Italian Banks

The considerations concerning the main impacts of Basel III on banking management equilibria are integrated below with the evidence obtained from a survey. The purpose is to identify the expected effects, fears, probable behaviour and/or the conduct already adopted in view of the adjustments to the new prudential rules. The survey itself was carried out by means of a questionnaire (included in the appendix) sent in January 2012 to a sample of 31 Italian banks representing all size categories identified by the Bank of Italy: major, large, medium, small, and minor (Bancad'Italia, 2012, Appendice, pp. 307-309). The incidence of the sample in terms of total assets is slightly over 70 percent of the total assets in the entire Italian banking system (2). In the case of holding companies of banking groups, the answers provided refer to the entire group.

The answers provided by intermediaries are outlined below in the form of indicators grouped into 4 classes:

1. Acceptance indicators;
2. Impact indicators;
3. Behaviour indicators;
4. Cost, profitability and credit indicators.

4.1. "Acceptance" indicators

This first group includes the questions concerning the degree of acceptance with reference to the capital framework and the composition of Common Equity Tier 1.

84 percent of the banks in the sample consider the current revision also necessary for Italian institutes. This need is due to both their low capital ratios at an international level and to their imbalance, that has occurred in recent years, towards non-Common Equity instruments; i.e., towards Additional Tier 1 and Tier 2. The remaining intermediaries consider the rules currently applicable to be adequate, even though this clashes with the alarming signals launched with reference to Italian banks (see, as representative, Eba, 2011) and the various recapitalisation operations carried out in anticipation of the Basel III deadlines which started, especially, in 2011. Among those who do not consider the revision necessary, some manifest doubts concerning the efficacy of stricter rules (also see Masera, 2010): will the mechanical application of rules – even though stricter – be adequate to safeguard the stability of the financial system on the occasion of new future difficulties, while a significant worsening in the quality of assets and great difficulties to access financing sources exist? Is it possible that the application of quantitative parameters, deemed congruent in order to ensure the banks' solvency, will prove unreliable on the occasion of fast and radical changes in asset risk and the availability of financing sources? This aspect is definitely worth consideration and forces us to reflect on which alternative is the most effective: a careful, thorough supervision on the individual entities, or a mechanical application of quantitative parameters and principles?

The second indicator expresses the degree of acceptance with regard to the composition of Common Equity Tier 1, which is considered as penalising by most respondents (81 percent). The remaining banks consider the composition adequate with respect to the risk profile, while none, as expected, consider the composition still to be too lenient. The prevailing opinion that the definition of Common Equity is penalising for Italian banks is caused by how preferred stocks and preference shares are considered for both the advantages to holders upon payment and compensation mechanisms that are privileged and proportional to the instrument's nominal value: preferred stocks and preferred shares are excluded, with a progressive reduction in the amount (a 10 percent reduction per year), starting from January 1 2013 (BCBS, 2010b, § 94 (g) and § 95). The respondents specify that these instruments cannot be considered as comparable to those whose inclusion in the regulatory capital is questioned, and this is especially true for preference shares under the English law. However, the Italian prudential framework removed preferred stocks and preference shares from the share capital as early as December 31 2010, even though a 30-year transition period has been scheduled (Bancad'Italia, 2006, 5th update). Consequently, the Italian rules have preceded Basel III in implementing the measures necessary to continue to calculate preferred stocks and preference shares in the Core Capital; i.e., their conversion into common shares or, at least, changes in the articles of association aimed at removing the characteristics that are not in line with common share requirements, such as the accumulation of preference, the assignment of greater profit, and the priority right on dividends. This is what happened, for instance, at the end of April 2011 in Monte deiPaschi di Siena, when the Meeting modified the articles of associations in order to continue including non-common shares in the capital.

Finally, banks also complain that the framework – focusing on the model of joint stock companies – is unable to fully grasp the juridical and operating peculiarities of Cooperative Banks.

Their shares – which are calculated according to Circular 263/2006 (Bancad'Italia, 2006, 5th update, p. 12) – need to meet requirements aimed at ensuring full equivalence to common shares in terms of the absorption of losses, as well as provide a guarantee to confront stressful periods in the markets (BCBS, 2010b, note 12). Furthermore, provisions can be applied in order to gradually remove them (BCBS, 2010b, § 94 (g)) in the event that the requirements for inclusion are not met.

4.2. Impact Indicators

As far as the impact indicators are concerned, 52 percent of the respondents think that the variable most impactful on the Common Equity Tier 1 ratio is represented by the higher percentage, included in the questionnaire without taking into account the counter-cyclical buffer, therefore, equal to 7 percent (Common Equity plus Capital Conservation Buffer). The remaining respondents indicate, as the most impactful variable, either the stricter definition of capital (26 percent), or the probable increase in Risk Weighted Assets (23 percent). The stricter definition derives, above all, from the modified system of deductions (directly implemented in the Common Equity) and the aforementioned exclusion of preferred stocks and preference shares. On the other hand, the increase in RWA might originate especially from the trading book and counterparty risk.

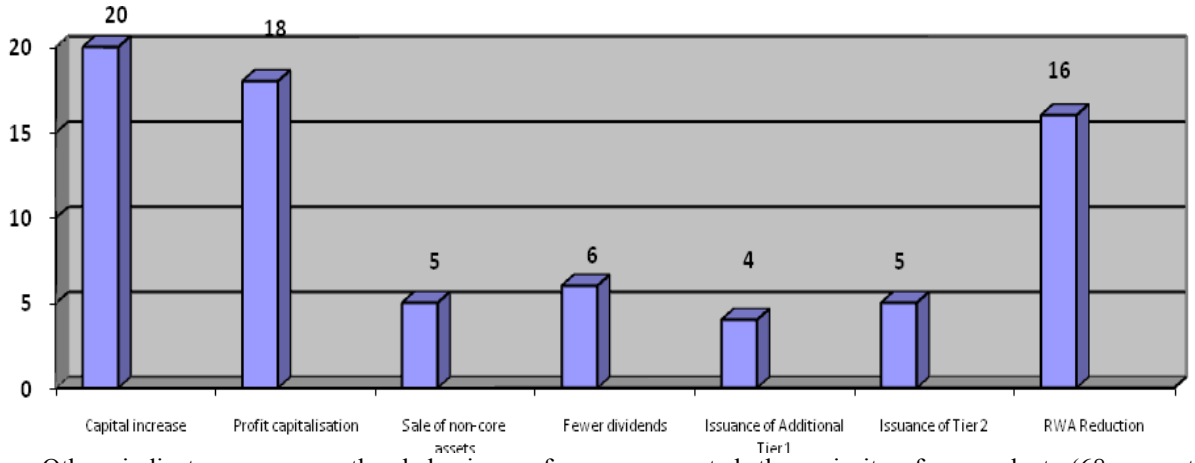
The "capital haemorrhage" caused by applying the new framework to financial statements has been examined with reference to the estimated impact arising from the new deductions from the Common Equity. In most cases, this was the lowest in the questionnaire, i.e., lower than 50 bps (61 percent of the sample). The shift from gross to net capital exceeds 50 bps among the other respondents which chose the higher options in an equal proportion (50-100 bps; 100-200 bps). The expected impacts were reduced – as some respondents wrote in their comments – thanks to the provisions in the agreement dated July 26 2010 (BCBS and BIS, 2010): the reference is to the partial inputting of significant investments in common shares issued by non-consolidated financial institutes and the deferred tax assets due to time lags (3). With reference to the Deferred Tax Assets, banks also mention the removal of the severe penalty imposed on them, thanks to the fact that deferred taxes can be used to hedge losses on an ongoing concern basis through the amendment to the 2011 "Milleproroghe" decree (Legislative Decree 225/2010, converted into Law 10/2011). The amendment provides for the transformation of DTAs into tax credits that can be transferred or offset with tax debts when an operating loss is recognised. This applies to deferred tax assets related to credit devaluations that have not yet been deduced from the taxable income, and those related to the value of goodwill and other intangible assets.

4.3. Behaviour Indicators

The first behaviour indicator concerns the propensity to assume an anticipatory attitude with respect to the dates indicated by the capital framework. The process aimed at aligning with stricter capital requirements was implemented by 84 percent of the surveyed banks within a timeframe corresponding, in most cases, to the end of 2011. The increases in capital carried out by several banks in 2011 (Intesa Sanpaolo, UBI Banca, Monte dei Paschi di Siena, Banca Popolare di Milano, Banco Popolare) confirms this strategy. The pressure encouraging an early alignment comes from several sources: urging from investors, invitations from supervisory authorities, competition between banks to excel in the ratios, the present scenario still being menaced by substantial losses on credits, as well as the alarming signals launched by international bodies with reference to the capital adequacy ratios of Italian banks (4) and the subsequent recommendation asking 4 Italian institutes (UniCredit, Monte deiPaschi di Siena, UBI Banca and BancoPopolare) to increase their Core Tier 1 ratio to 9 percent by June 30 2012 (EBA, 2011). Growth strategies, however, need to focus on a number of critical points: it is especially necessary to take into account the high quantity of maturing debts – nearly 35 percent of total debt for the years 2011-2012 (IMF, 2011, p. 9) – and the risk of failing to procure capital due to the low profitability of intermediaries.

Nearly all of the banks, intending to align before the deadlines, indicate the increase in capital as a method to improve the ratios. Other options, chosen in the same percentage, include the capitalisation of profits and the reduction of RWAs (Figure 1). Little propensity to issue non-Common Equity instruments is evident, and this perhaps is due to the relevant regulatory provisions which, as shown below, do not make such instruments attractive.

Figure 1. Options aimed at increasing capital ratios: number of reporting banks (multiple answers possible)



Other indicators concern the behaviour of banks with reference to non-Common Equity instruments, due to the uncertainty over the corresponding final regulatory provisions. This state of uncertainty has led some banks not to issue such instruments as they are waiting to see how the rules will develop (32 percent); other banks have issued them but have included provisions for possible refund/change rights in the contracts in the event that they prove to be non-compliant with the future rules (58 percent). Only a few banks chose the "not recalling the existing capital instruments" option (10 percent) and none chose the last option ("forcing banks to apply the call option on the first date available").

The trend reversal – with respect to the practice generally followed by banks of applying the call option on the first date available – is also shown by the percentage of intermediaries that have not reimbursed the instruments that could be recalled in the 2-year period 2010-2011: 65 percent of all banks with instruments that could be recalled in that 2-year period. Therefore, whereas refinancing at more favourable rates and progressive loss of the qualification of capital component upon approaching maturity have often led banks to exercise the call option, the high cost of newly issued instruments and, above all, the uncertainty concerning their computability in the capital were the main factors underlying the dilemma between replacing the shares and not meeting the expectations of their investors.

The fact that the instruments are maintained is also shown by the answers concerning the question regarding the recomposition of non-Common Equity elements: 65 percent of respondents did not follow that direction. If we consider that some banks do not feature Lower Tier 1 and Tier 2, and feature even less Tier 3, this figure indicates a widespread "play-for-time" approach due to the uncertain development of the rules.

Another behaviour indicator concerns the propensity to employ non-traditional instruments, such as contingent capital and capital insurance. As expected, the majority of respondents (68 percent) considers these too complex to be successfully placed in the market. In particular, banks point out that these instruments cannot target retail investors, are too expensive and unclear with respect to how they are going to be issued: for the contingent capital, this is exemplified by the problems associated with the definition of conversion and trigger event.

4.4. Cost, Profitability and Credit Indicators

The last category of indicators includes, first of all, the expectations concerning the cost of share capital and non-Common Equity instruments.

In the former case, the majority of respondents (81 percent) thinks that a higher cost is likely due to the increase in the risk premium against the uncertain prospects of the banks' performance negatively affected by sovereign risk; some respondents indicate that the cause of this is the "crowding" of capital increases followed by an inadequate reception on the part of investors. The remaining few intermediaries think that the effect on the risk premium might be compensated for by more stringent rules, with a subsequent expectation of reduced costs. Other factors mentioned in the comments also contribute to this: the long transition period, the good quality of Italian banks' capital, the prevailing orientation towards the traditional business model, and the widespread observance of the leverage ratio which should decrease the debt cost and risk premium.

In the second case, nearly all of the banks (90 percent) think that the more stringent requirements for Additional Tier 1 capital and Tier 2 capital will make such instruments more expensive. The references indicated more frequently – which rise significant doubts concerning the fact that their use can be successful – concern the full discretionary power of annulling payments and loss absorption, which might lead to the conversion into common shares upon reaching a given trigger point or, in the

same hypothesis, the activation of the write-down mechanism (BCBS, 2010b, § 55, points 7 and 11). These criteria are, moreover, reiterated with reference to all non-Common Tier 1 and Tier 2 instruments issued by banks operating internationally since January 1 2013; if dated previously, they will be gradually eliminated starting from the same date (BCBS, 2011). Further requirements indicated by the respondents as potentially impeding issuance concern the strict limits concerning the exercise of the call option and the prohibition of step-up and other incentives to reimburse.

The question concerning how the new provisions on capital will impact the bank's profitability met with a variety of answers: a little over half of the respondents (61 percent) foresee an essentially stable ROE; the other respondents indicate a reduction. The answers are born out of concern and hope: on one hand, higher funding charges are feared, as is the still remote economic recovery; on the other hand, hope is placed on anything that can provide drive and momentum to the recovery of profitability, including cost synergies, rate increases, and the sale of non-strategic assets.

The last questions deal with estimates concerning variables that have been the subject of many a study (see, as representative, Macroeconomic Assessment Group, 2010a and 2010b, BCBS, 2010a, Angelini and Gerali, 2012): lending spread and credit offer.

The expectations with regard to lending spread are different: some banks (58 percent) expect repercussions due to the higher funding charges, with a possible offset on the clientele due to the strong dependence on banking credit characterising Italian enterprises and, therefore, the poor incidence of alternative financing sources. This would result from the possible drive to increase the rates applied to the clientele aimed at reaching ROE levels that can attract investors by encouraging them to underwrite capital increases. Vice versa, the argument in favour of the opposite position is represented by the gradual nature of the adjustment, which should be able to minimise the impact.

Notwithstanding the fear of the limited development of lending activities expressed in several studies (see, for instance, Lusignani and Zicchino, 2011, and Cellino, 2011), most banks (81 percent) do not expect a reduction in the credit offer, even though some of them specify that there might be a remodulation in favour of loans that absorb less capital. In essence, banks do not think that loan trading will suffer a serious impact also thanks to the favourable treatment reserved for small-sized enterprises by Basel II. On the contrary, the trend to reserve preferential treatment for SMEs is becoming stronger (European Commission, 2012). The recent longer-term refinancing initiatives implemented by the ECB also aim at lessening the risk of a lower financing offer: the liquidity injection in favour of banks will certainly help them support the economy financially.

5. Conclusions

The rules concerning capital as provided by the new prudential regulations raise several questions that we have repeatedly highlighted in this paper.

Some of these questions are closely related to the architecture of capitalisation instruments, such as the complex design of Coco bonds. Others refer to the strong fears concerning economic recovery and the extent to which sovereign debt will continue to impact the capital procurement policies of banks. This state of uncertainty seems to continue to undermine the recovery of profitability with regard to Italian banks, essential to successful capital increases and to avoid higher costs applied to the financed clientele.

Italian banks follow a model oriented towards retail funding – with tendentially increasing costs – and loans to the real economy which is encountering difficulties in terms of development. Being mainly domestic banks – i.e., having no profits from operations in foreign markets – they are tied to the future of the national economy which is not recovering easily. Profitability, therefore, surfaces once again as the decisive lever to obtain greater bank solidity.

The adjustment to the new capital requirements implies action to be taken on several fronts: capital increase, distribution of fewer dividends, optimisation of RWAs. The new regulations both are impacting and will strongly impact the decisions made by banks and, consequently, their management equilibria and strategies.

Our aim was to reflect on the repercussions of the new capital regulations: at first in general terms, with a focus on the implications in management and strategy, and then through considerations based on the answers provided by the banks that participated in a survey.

This aim was only partially achieved as it was subject to limits that we will try to overcome through subsequent investigations. A prominent limit is represented by the sample of banks that participated in the survey: we will have to extend it in order to make the research more significant and representative. Our research might also cover a sample of foreign banks, so as to grasp similarities/differences in the adjustment to the regulations on the part of banks in different countries, and it might also examine the adjustment to the other rules of Basel III, so as to obtain a wider view and better understand the banks' decisions in all of the fields where they are requested to take action.

Notes

(1) Even if the study reflects a common view, Franco Tutino mainly contributed to Sections 3 and 5; Giuliana Birindelli to Sections 1, 4.1 and 4.4; Paola Ferretti to Sections 2, 4.2 and 4.3.

(2) The survey draws on a previous study covering a more limited number of banks: 16 overall (Tutino et al., 2011, p. 283 ff.).

(3) Computability, which also concerns the rights related to mortgage services, occurs within 10 percent of Common Equity Tier 1. Starting from January 1 2013, it will also be necessary to deduct the amount corresponding to the sum of the three items exceeding 15 percent of the Common Equity, only gross of those same items and, therefore, excluding any other deduction (Also see BCBS, 2010b, §§ 87-89).

(4) The vulnerability indicator connected to the capital ratios of Italian banks is significant in the (IMF, 2011, p.12): in terms of assets, the proportion of banks in the sample featuring a Core Tier 1 ratio below 8 percent in 2010 exceeds 49 percent.

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Appendix
Questionnaire on capital framework

1. Company profile

Bank group:

Total assets as of 31/12/2011:

Indicate your role/position within the Bank:

2. Do you consider the ongoing revision of the capital rules within the Basel III framework as:

□ necessary also for Italian banks

□not necessary for Italian banks. Adequate regulation is already in force

□ not necessary since the new rules might prove ineffective to guarantee bank solvency in case of new future difficulties

□ other (specify):

Comments:

3. Do you consider the composition of Common Equity Tier 1 within the Basel III framework as:

□ adequate compared to the risk profile

□ inadequate compared to the risk profile since it is still too lenient

□penalising Italian banks (considering the treatment of preferred stocks and preference shares, Cooperative Bank shares, etc.)

□ other (specify):

Comments:

4. Which do you think will be the strongest reason for the impact of the Common Equity Tier 1 ratio on your Bank?

□the narrower definition

□ the RWA likely increase

□ the higher percentage (7% per Common Equity plus capital conservation buffer)

Comments:

5. The impact of the new deductions from Common Equity Tier 1 should be equal to:

□<50 bps

□ 50-100 bps

□ 100-200 bps

□ 200-400 bps

□>400 bps

Comments:

6. Do you think your Bank will align with the stricter capital requirements before the dates indicated by the Basel III framework?

□ no

□ the Bank is already aligned with the new Basel III capital requirements

□ yes, by 2011

□ yes, by 2012

□yes, by (specify) ……..

Comments:

7. According to your opinion, your Bank intends to increase the capital ratios through:

□ capital increases

□ programme of capitalisation of profits

□ sale of non-core assets

□ less "generous" dividend policy

□ issue of instruments included in the Additional Tier 1 capital

□ issue of instruments included in the Tier 2 capital

□ decrease in RWA

□ other (specify):

Comments:

8. Do you think that the uncertainty over the final regulatory provisions will lead to:

□ failure to issue Additional Tier 1 capital and Tier 2 capital instruments

□ issue of said instruments with right to reimburse/modify contractual terms if they should not comply with future rules

□ failure to recall existing capital instruments

□ banks force to exercise call option upon the first date available

□ other (specify):

Comments:

9. Has your Bank restructured the non-Common Equity instruments?

□ yes, by replacing Tier 3 with Tier 2

□ yes, by reimbursing Lower Tier 1 and replacing it with instruments of the same quality

□ yes, by reimbursing Tier 2 and replacing it with instruments of the same quality

□ no

□ other (specify):

Comments:

10. As far as instruments to be recalled in 2010 are concerned, your Bank:

□ reimbursed them

□ did not recall them considering that the newly issued instruments are expensive

□ did not recall them due to the uncertainty over the regulatory capital composition

□ did not recall them due to (specify):

Comments:

11. Do you think that instruments such as contingent capital and capital insurance are too complex to be successfully placed in the market?

□ yes

□ no

Comments:

12. Do you think that in the upcoming years the use of share capital will be:

□ more expensive due to the higher risk premium required considering the uncertainty over bank profits and dividends

□ more expensive due to (specify):

□ less expensive since stricter rules will compensate uncertainty over bank performance

□ less expensive due to (specify):

Comments:

13. Do you think that said instruments will be more expensive due to the stricter requirements provided for by Additional Tier 1 capital and Tier 2 capital?

□ yes

□ no

Comments:

14. Do you think that the new capital provisions will affect your Bank profitability (ROE)?

□ no, profitability will substantially remain stable

□ yes, profitability will decrease

Comments:

15. Will the compliance with the new regulatory standards affect your Bank lending spread?

□ no, since it will be a progressive process

□ yes, due to higher funding charges

□ other (specify):

Comments:

16. Do you think that the implementation of Basel III will reduce your Bank credit offer?

□ yes

□ no

Comments:

BANKING SECTOR REFORMS IN KENYA: PROGRESS AND CHALLENGES

Sheilla Nyasha*, NM Odhiambo**

Abstract

This paper gives an overview of the banking sector in Kenya; it highlights the reforms since the country's independence in 1963; it tracks the growth of the banking sector in response to the reforms implemented over the past four decades; and finally, it highlights the challenges facing the banking sector in Kenya. The country's banking sector consists of more than 40 commercial banks, with the Central Bank of Kenya, which is the country's central bank, at the apex. Since the 1980s, the Kenyan government has implemented a number of banking sector reforms – in order to safeguard and improve the banking sector. The response to these reforms by the banking sector has been varied. As a result of these reforms, there has been a shift in the dominance from the State-owned banks to the private commercial banks. There has also been an improvement in the Central Bank's oversight of the financial institutions, and an enforcement of the banks' capital-adequacy requirements. By the standards of African countries, Kenya currently has one of the most developed banking systems in Africa. The country has enjoyed a substantial bank-based financial sector development over the years, and its institutional framework has also grown stronger. However, like many other developing countries' financial systems, the Kenyan banking system still faces wide-ranging challenges, such as high interest rate spreads and financial inclusion challenges.

Keywords: Banks, Reforms, South Africa, Banking System, Financial Sector

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1. Introduction

Banks play a central role in the development of every economy by mobilising resources for productive investments, and by being the conduit for the implementation of monetary policy. The role of banks in economic development is widely acknowledged in the literature. In particular, Schumpeter (1911) put the role of financial intermediation at the centre of economic development. He argued that financial intermediation, through the banking system, plays a pivotal role in the economic development; and it does this by affecting the allocation of savings, thereby improving productivity, technical change and the rate of economic growth.

The endogenous growth literature also supports the argument that financial development has a positive impact on growth (Smith 1991). Well-functioning bank-based financial systems are able to mobilise household savings, to allocate resources efficiently, to enhance the flow of liquidity, to reduce information asymmetry and transaction costs, and to provide an alternative to raising funds through individual savings (Smith, 1991). In the light of these functions, it may confidently be stated that banks have a positive impact on growth.

In Kenya, the bank-based segment of the financial sector, as in any other banking sector, plays a crucial role in both financial-sector development and economic development. The banking system ensures the efficient allocation of resources in the Kenyan economy, through lending to businesses and individuals, and by using credit-scoring systems. Additionally, banks facilitate business through the settlement of funds and the provision of credit to consumers. They provide 24-hour access to funds and facilities, thereby enabling institutions and individuals to save and invest with safety (Central Bank of Kenya, 2012a).

Although Kenya has one of the most developed financial sectors in Africa, its financial development, as in many other developing countries, is largely driven by the bank-based segment. Although banks play such an important role in the economic development of Kenya, the Kenyan banking sector has not received adequate coverage in terms of research. Not much has been documented on the bank-based segment of the financial sector in Kenya. Moreover, previous

studies done in Kenya tend to generalise the financial sector – without giving specific attention to the bank-based segment of the financial sector. This paper aims to put Kenya's banking sector in the spotlight – by providing an overview of the country's banking sector, its reforms, growth and challenges – since the country's independence in 1963 – and through to 2010.

The rest of this paper is organised as follows: Section 2 gives an overview of the Kenyan bank-based financial system. Section 3 outlines the reforms implemented to revitalise the banking sector. Section 4 tracks the growth of the banking sector in Kenya, in response to the reforms. Section 5 highlights the challenges facing the development of the bank-based financial sector in Kenya. This is followed by the concluding section.

2. An Overview of Kenya's Bank-Based Financial System

The Central Bank of Kenya ("the Bank") was established in 1966 through an Act of Parliament – the Central Bank of Kenya Act of 1966, after the dissolution of the East African Currency Board (EACB) (Central Bank of Kenya, 2012a). The establishment of the Bank was a direct result of the desire among the three East African states to have independent monetary and financial policies. During the colonial period of Eastern Africa, the EACB was the governing body for finances and currency for the British colonies of Kenya, Tanzania, and Uganda. This Board was disbanded in 1966, when these countries became independent and acquired their own central banks. At that point, the Central Bank of Kenya was established. The Central Bank of Kenya is headquartered in Nairobi, with branches in Mombasa, Eldoret and Kisumu (Central Bank of Kenya, 2012a).

The Central Bank of Kenya, which falls under the Minister for Finance docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. Thus, it plays an oversight role and its activities are governed by the Central Bank of Kenya Act of 1966. The Central Bank of Kenya Act of 1966 set out objectives and functions and gave the Central Bank limited autonomy. Since the amendment of the Central Bank of Kenya Act in April 1997, the Bank has now greater monetary autonomy, as its operations have been restructured to conform to the on-going economic reforms.

The Banking industry in Kenya is governed by, among other acts, the Banking Act of 1985, as amended, the Central Bank of Kenya Act of 1966, as amended and the various prudential guidelines issued by the Central Bank of Kenya. For decades since independence from Britain in 1963, Kenyan banking was dominated by local units. These have been, however, challenged by home-grown institutions targeting the lower end of the market. Currently, there are 43 licensed commercial banks and one mortgage finance company (Central Bank of Kenya, 2012c). Of the 44 institutions, 31 are locally owned and 13 are foreign-owned. The locally owned financial institutions comprise three banks with significant shareholding by the Government and State Corporations, 27 commercial banks and one mortgage finance institution. The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banking sector's interests. The KBA serves a forum to address issues affecting members (Central Bank of Kenya, 2012a).

Over the last few years, the banking sector in Kenya has continued to grow in assets, deposits, profitability and product-offerings. The growth has been mainly underpinned by: an industry-wide branch network expansion strategy – both in Kenya and in the East African community region, and the automation of a large number of services, and a move towards emphasis on the complex customer needs rather than traditional 'off-the-shelf' banking products (Central Bank of Kenya, 2012a). As the financial sector develops, greater institutional diversity is expected, together with diversification of the services offered. Although Kenya's financial sector could be described as being relatively diversified in terms of the number of financial institutions, banking services continue to dominate the sector.

3. Bank-Based Financial Reforms in Kenya

Given the critical role of banks in a modern market economy, the opacity of banks' balance sheets and the dispersion of banks' creditors, there are limitations to market discipline, and additional sources of fragility, compared to non-financial corporations. Banking has, therefore, historically been one of the most regulated sectors, with regulation ranging from licensing requirements to on-going supervision, to a bank-specific failure regime and deposit insurance (Beck *et al*., 2010). The banking sector is driven by numerous policies; and Kenya's banking sector is no exception. This section presents the banking sector policies in Kenya since the 1970s.

During the late 1970s, the 1980s and the early 1990s, the government of Kenya introduced a number of policy reforms aimed at gradually liberalising the banking sector. These reforms – together with the reforms aimed at strengthening the institutional framework of the financial system – were supported by the Financial Sector Adjustment Credit from the World Bank. Government intervention in the banking sector in Kenya since independence has had two major

objectives. The first objective was to control monetary aggregates for macro-economic stabilisation. The second objective was the direct development of the banking sector, and in particular, the nature of its asset allocation, in accordance with political and economic priorities. The third objective, that of prudential regulation and supervision, did not initially receive much attention; but it has been the focus of increasing emphasis since the mid-1980s (IMF, 2002).

The financial system that existed at independence was dominated by foreign-owned commercial banks concentrating on trade-related finance, and serving the white settler community. As a result, financial gaps were perceived to exist, consisting of the credit requirement of African entrepreneurs and the long-term financial needs of the business sector. To close this perceived gap, the parastatal financial institutions were set up to provide finance to parastatal segments of the market (farmers, and small businesses). However, financial performance of most of them was very poor, largely because many of their clients were not profitable (Central Bank of Kenya, 2012a).

Commercial banks and other financial institutions in both the private and public sectors were largely free of formal government controls over the sectoral allocation of their lending, with the exception of a stipulation that they extend credit to agriculture, amounting to at least 17% of their deposit liability. However, compliance was low, since there were no penalties imposed on financial institutions, which failed to meet this requirement (Demirgüç-Kunt *et al*., 2004). It can be noted that formal influence over public and private financial institutions was exerted by government and politicians through the placement of parastatal deposits in particular financial institutions (Central Bank of Kenya, 2012a).

The rapidly deteriorating terms of trade of the 1970s led to the balance of payments crises of 1974 and 1978-80, to which the Government of Kenya reacted by imposing controls on bank lending, licenses on foreign exchange transactions, and interest rate controls. While restrictions on domestic credit were later lifted, the others were made even more stringent, thereby generating important distortions in economic activity and giving rise to pervasive rent-seeking (Durevall and Ndung'u 1999). Real interest rates were negative from 1974-78; and domestic savings plummeted in 1975 and 1979, and never fully recovered (Durevall and Ndung'u 1999).

In 1978, investment efficiency fell as State-owned banks financed low-productivity public investments. Returns on public investment averaged 0.2%, as compared to a 15% return on private investments (Government of Kenya, 1982). Real interest rates followed an upward trend from 1978 onwards, and so did interest rate spreads – reflecting the higher levels of uncertainty in the economy, the increasing number of non-performing loans and low investors' confidence. Domestic savings came tumbling down from a high of 27% of GDP in 1977 to a low of 3% in the year 2000 – compared to about 15% average in sub-Saharan Africa (World Bank Indicators, 2012).

The second oil crisis and the severe droughts of 1979/80 helped trigger reforms. A change in the exchange rate policy, from a fixed to a crawling peg, was adopted to deal with the appreciation of the real exchange rate. The policy switch was accompanied by fiscal stabilisation and interest rate adjustment. In one year (1981) deposit rates doubled. Inflation fell from 21 to 11% in 1982 (Government of Kenya, 1982). This led to a double inflow of aid from international donors. In 1983, Kenya experienced its first post-independence banking crisis, when several indigenous banks developed acute liquidity problems. The crisis came as a result of conscious Government Policy to transfer economic activity into the hands of indigenous Kenyans. The banking sector was no exception – given the large number of new entrants and the low levels of expertise and experience (Central Bank of Kenya, 2012b). Despite efforts by Treasury and Central Bank to bail out the ailing institutions, one institution was closed in December 1984.

This crisis precipitated amendments to the Banking Act in 1985 – to expand the safety net and improve the bank-failure resolution mechanism. The Deposit Protection Fund Board (DPFB) was established as a deposit-insurance scheme to provide cover for depositors, and to act as a liquidator of banks, which could not be salvaged. The same amendments gave the Central Bank of Kenya the responsibility of risk minimisation through enhanced prudential regulation, supervision and surveillance. The function of curator and revival of ailing institutions was also entrusted to the Central Bank. In addition, there was a change in the licensing procedures for banks that introduced a clearer mandate for the Central Bank in the licensing process (Central Bank of Kenya, 2012b).

In order to improve the role of the DPFB in enhancing depositor confidence, initiatives are currently underway to enact a new and separate Kenya Deposit Insurance Corporation Act that should give the Fund autonomy in its operations (Central Bank of Kenya, 2012b). Among other additional roles, the draft Act provides the DFPB with powers to request the Central Bank to carry out an inspection of a member institution, and, where deemed necessary, to conduct the examination itself.

In 1990, dual exchange rate was put in place (official and market rate). Government abolished all charges and fees from the ceiling on commercial bank loan rates, allowing effective rates to exceed

ceilings. In 1992, the economy went into a recession. Money supply was inflated by 76%, in order to finance the electoral campaign (Beck *et al*., 2010). A shift in policy was required to bring the economy under control. Controls on foreign exchange transactions were relaxed. A floating exchange rate was adopted.

In 1993 there was an 81% devaluation of the Kenyan Shilling, which led to an overnight jump of the external debt to 143% of GDP, and a fall in inflation to pre-1970s levels. In the same year, under pressure from the IMF, World Bank and other donors, the Central Bank of Kenya put around 16 financial institutions into liquidation, while others, including a government-owned commercial bank were recapitalised by their shareholders (Central Bank of Kenya, 2012a).

In 1995, further amendments to the Banking Act were made, aimed at increasing and strengthening supervision of the banking industry (Beck *et al*., 2010). Prudential guidelines were revised to encourage self-regulation. These prudential guidelines covered codes of conduct for directors, chief executives and other employees; duties and responsibilities of directors, chief executives and management; duties and responsibilities of external auditors; and the definition of bad and doubtful advances and loans. In the same year the banking sector was liberalised and exchange controls were lifted.

The Central Bank of Kenya Act of 1966, which sets out the objectives and functions, and gave the Central Bank limited autonomy, was amended in April 1997, restructuring the Central Bank operations to conform with on-going economic reforms, and to grant it greater monetary autonomy. In 1998, the Central Bank enhanced capital requirements to avoid a repeat of the banking crises experienced in the mid-1980s and early 1990s (Beck et al., 2010). To this end, the gearing ratio was raised to 7.5% from 5% (Beck *et al*., 2010). Although monetary policy was cautious throughout most of 1998, it was relaxed in late 1998, in the context of the rescue of one of the government-owned banks. Following a sharp decline in interest rates, a 20% depreciation of the shilling, and a considerable loss of official reserves, monetary policy was tightened in mid-1999, partly reversing those developments (Central Bank of Kenya, 2012a).

In 1998, and in the first half of 1999, inflation remained subdued, but it increased in the third quarter of 1999, mainly owing to increases in fuel and food prices, as well as the lagged effects of the depreciation of the Kenyan shilling.

In 2000, the Central Bank adopted the Basel I standards on capital adequacy. This led to the introduction of additional capital adequacy ratios of 8% and 12 % for core capital and total capital to risk-weighted assets respectively. These reforms were in tandem with the then-prevailing global trends that required financial institutions to maintain capital commensurate with the credit risk inherent in their business (Central Bank of Kenya, 2012a).

In response to gaps identified in the 2003 joint IMF/World Bank Financial Sector Assessment Program (FSAP), a series of legal and regulatory reforms were undertaken. These have included significant changes to the Banking Act (Cap 488) and to prudential guidelines to strengthen arrangements in relation to bank licensing, corporate governance, capital adequacy, risk classification of assets and overall-risk management (FSD, Kenya, 2010).

In 2003, the Government of Kenya published the Economic Recovery Strategy (ERS) paper on Wealth Creation and Employment that defined certain critical high-level objectives that underlined the reform efforts through to 2007 (Government of Kenya, 2003). In the ERS, the government acknowledged that the banking sector was experiencing difficulties that would undermine the achievement of the objectives set out in the ERS, including a comparatively high ratio of non-performing loans in some major banks, inadequate competition in the banking sector; persistence of wide interest rate spreads, leading to the high cost of credit; insufficient quantities of credit (and poor quality credit assessments); the absence of vibrant institutions for the provision of long- term finance; weak legal arrangements, creating long delays in contract enforcement; and weak dispute-resolution mechanisms (FSD Kenya, 2010).

In 2007, the Government of Kenya published "Kenya's Vision 2030" as a long-term development plan for the country. The Vision 2030 put the provision of financial services at the centre of the planned economic growth trajectory through to the year 2030 (Government of Kenya. 2007). The main objectives that were articulated in Vision 2030 for the financial sector were: (i) to improve stability; (ii) to enhance efficiency in the delivery of credit and other financial services; and (iii) to improve access to financial services and products for a much larger number of Kenyan households. Delivery of these objectives required the implementation of policies that would contribute to stable macro- and fiscal positions aimed at lower inflation and financial sector stability (Government of Kenya, 2007).

In 2009, calls to improve the financial inclusion by the international community and the need to implement Vision 2030, saw Kenya passing the Finance Act that became operational in January 2010. This Finance Act of 2009 further amended the Banking Act, to enable the use of third-party agents by banks (FSD Kenya, 2010). Banks were, therefore, able to leverage on additional cost-effective distribution channels to offer financial

services. This initiative was informed by the need to leap-frog access to financial services in Kenya. The National Financial Access Survey of 2009 showed that 32% of Kenya's bankable population remained totally outside the orbit of financial services; and many more were being served by the informal financial system (FSD Kenya, 2010).

Although government intervention in the banking system has been wide-ranging, Kenya has managed to avoid some of the most damaging features of financial repression that characterised several other Sub-Saharan Countries (Central Bank of Kenya and FSD Kenya, 2009); and this is reflected in the expansion of the financial system in terms of both the volume of its liabilities and assets, and the diversity of its institutions over four and a half decades following independence. In 1966, broad money amounted to 22.9% of GDP; but it was at 43.3% of GDP in 1990.

In recent years, Kenya has made substantial progress in improving the stability and efficiency of its banking system (Central Bank of Kenya, 2010). An upgrade of the supervisory framework was accompanied by the write-off of non-performing loans and reduced government interference in the financial sector. Interest rate spreads, while still high in general, have been reduced recently – due to lower loan loss provisions and overhead costs. However, lower profit margins suggest that there is a certain degree of competition. These developments were accompanied by a reduction in inflation, a reduction in the fiscal deficit and stable exchange rates, which in turn facilitated not only a drop in interest rates, but also improvements in the government-managed and government-influenced institutions.

4. Banking Sector Growth in Kenya

At independence in 1963, the bank-based financial system of Kenya consisted of nine foreign-owned commercial banks, together with several non-bank financial institutions. In the decade following independence, the government established the Central Bank of Kenya, three parastatal commercial banks and a number of non-bank financial institutions. During the 1970s, the non-bank financial institution sector began to expand rapidly, stimulated by differences in the regulatory treatment of banks and non-bank financial institutions, which created market opportunities for the latter (Central Bank of Kenya, 2012a).

The growth of locally owned financial institutions accelerated during the 1980s, and began to include commercial banks, some of which were set up by the owners of existing non-bank financial institutions. During the mid-1980s, the financial system suffered its first episode of financial fragility. This saw some of locally owned financial institutions closing down, due to severe liquidity problems, as a result of mismanagement and fraud (Central Bank of Kenya, 2012a).

It is this crisis that led to a series of revisions to the banking laws and the strengthening of bank supervision (Central Bank of Kenya, 2012a).

Non-bank financial institutions set up to offer long-term credit in the 1980s increased in number over the years. By 1988, their number had almost tripled from the 1981 level, while commercial banks experienced a 50% growth. The growth of the bank-based financial segment of the financial sector in Kenya can be traced as far back as 1970, when there were only 11 commercial banks. Five years down the line, only three banks were left; but the growth momentum had picked up by 1981, registering a total of 16 commercial banks. The upward trend in the total number of commercial banks continued to dominate, with 22 banks in 1984 and 24 banks in the year that followed. However, in 1986, there was a slight drop to 23 commercial banks in the sector before they returned to the 1984 level in 1988.

By 1990, there were 26 commercial banks in Kenya. The number significantly increased to 33 in 1993, and continued to increase over the years, until they reached a peak of 53 in 1997, before falling to 49 the following year. Currently, there are 43 commercial banks in Kenya (Central Bank of Kenya, 2012c).

With the review of the Banking Act in 1990, aimed at strengthening the sector's institutional framework, the position of the banks in the financial system was further strengthened. In the 1990s, four banks continued to dominate the sector. With the review of the Banking Act in 1990, the financial sector was liberalised with the intention of stimulating it to become more dynamic. From 1996, many of the non-bank financial institutions converted to banks, as indicated by the increase in the number of banks in the same period.

However, the banking crisis of 1998 and 1999 saw the collapse of some of the smaller of these banks (Beck *et al*., 2010).

Kenya's banking sector faced major crises in the 1980s and 1990s, due to under-capitalisation, high levels of non-performing loans and weaknesses in corporate governance. Non-bank financial institutions were mostly affected, but the number of failing commercial banks increased as well in the 1990s. The crisis culminated in 1992, when – according to Honohan and Laeven (2005) – Kenya suffered a systemic banking crisis.

Although the banking sector in Kenya has faced challenges, like domestic financial crises, it has grown, both in number of institutions and quality of offerings. The percentage of non-performing loans decreased from 33.3% in year 2000 to a low of 7.8% in 2010, as measured by bank non-performing loans to total gross loans (World Bank, 2012). This development is

commensurate with an improvement in the knowledge of credit-related information, as evidenced by credit depth in the information index.

On a scale of zero to six, where 0 represents low and six represents high, the index was zero (0) in 2004, and improved to two (2) in 2005, and further improved to four (4) in 2007, but was stagnant up to 2010. Although the index has not yet reached six (6), there has been development in terms of credit information, a tool which also determines access to financial services (World Bank, 2012).

The development of the banking sector in Kenya is also evidenced by the growth in private sector credit. The late 1970s saw a modest increase in the credit provided by financial institutions to the private sector. Kenya did well from 1975 to the early 1990s. It had a steadily increasing lending rate until 1995, when the rate fell from slightly above 50% to 40%; thereafter, the private sector lending was around 40% of GDP until 2009. While this number is no higher than it was in 1994, the quality of lending has significantly improved, as shown by the increasing ratio of loans net of provision, relative to GDP (World Bank, 2012).

With the growth of the banking sector, came a shift in the dominance of foreign versus local banks in the banking sector. Foreign banks had dominated the banking sector in Kenya, since its independence; but their share of the market has been decreasing gradually, while that of the locally owned banks is increasing (World Bank, 2012). This is clearly portrayed by the share of banking assets among three major participants: foreign, private local and government-owned banks. The government market share in the banking sector is also decreasing.

Table 1 illustrates some of the banking indicators, showing the development of Kenya's banking sector, and the increase in the number of locally owned financial institutions

Table 1. Growth of Banking Sector in Kenya (2000 – 2010)

Indicator	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Domestic Credit Provided to Private Sector by Banking Sector as a Percentage of GDP	39.2	37.5	40.3	39.8	40.2	38.4	38.0	37.3	40.5	44.8	51.0
Loans (Net of Provisions)/GDP (%)	20.9	20.2	20.9	20.5	22.8	23.5	23.6	24.8	-	-	-
Bank Non-performing Loans to Total Gross Loans (%)	33.3	13.1	18.1	34.9	29.3	25.6	21.3	10.9	9	7.9	6.3
Credit Depth of Information Index (0=low to 6=high)	-	-	-	-	0	2	2	4	4	4	4
Share of Banking sector Assets											
Foreign (%)	44.3	46.3	48.3	48.7	45.3	43.4	43.8	43.5	-	-	-
Private Domestic (%)	21.9	22.7	22.6	24.1	25.7	28.7	29.9	31.0	-	-	-
Government (%)	7.1	7.1	6.6	6.0	6.2	5.6	5.3	4.8	-	-	-

Source: World Bank Development Indicators (2012)

The growth of Kenya's banking sector can also be portrayed by the increasing number of Automated Teller Machines (ATMs). Technological innovations have transformed the Kenyan financial sector landscape in the years since 2002, by helping to extend financial services to millions of poor people at relatively low cost. For example, since 2006, automated teller machines have become a major feature of the landscape, with 1,510 ATMs in the country by December 2008. Competition at the lower end of the market has clearly intensified because of the expansion of microfinance into rural areas. Having realised that microfinance is a potentially profitable activity, a number of mainstream banks have started to open branches in rural areas (in some cases, having closed them only a few years earlier) and to downscale the design of some products to provide microfinance services – either on their own account – or by looking for strategic partnerships to do so (FSD Kenya, 2010).

5. Challenges Facing Bank-Based Financial Development in Kenya

Although Kenya's financial system is by far the largest and most developed in East Africa, and its stability has improved significantly over the past years, many challenges still remain (Popiel, 1994). Kenya's banking sector has, for some years, faced several inter-related challenges, including high interest rate spreads, high overhead costs and

relatively high profit margins (FSD Kenya, 2010). One factor in this has been the lack of credit information-sharing, which is seen as one of the several reasons for the high incidence of non-performing loans. Further factors are the deficiencies in the legal and institutional framework that limit the range of assets available to banks as acceptable collateral. There has also been periodic uncertainty in the policy environment relating to the control and regulation of interest rates and related bank fees (FSD Kenya, 2010).

Financial access remains a challenge in the banking sector. By African standards and in comparison with the other East African economies, Kenya's banking sector has for many years been credited for its size and diversification, as partly evidenced by Private Credit to GDP averaging 23.7% in 2008, when compared to a median of 12.3% for Sub-Saharan Africa (FSD Kenya, 2010). Notwithstanding this relative advantage, Kenya's financial system has failed to provide adequate access to banking services for the bulk of its population. Efforts are, however, being made by the government and the banking industry to improve access, especially to those in rural and remote areas by innovative banking solutions, like M-Pesa and the introduction of agent banking – where banks can improve their presence in remote areas via an agent (Central Bank of Kenya and FSD Kenya, 2009).

FinAccess 2009, a household survey conducted by the FSD Kenya, jointly with the Central Bank of Kenya (2009), confirmed three previously assumed conclusions on the access to financial services, which are: (a) a large proportion of the Kenyan population has no access to financial services, whether formal or informal; (b) there is a general tendency for access to services from formal and semi-formal to decline, as one goes from urban to rural, from high-income to low-income, and from better-educated to uneducated; and, (c) although the percentage of the population that is served is similar in urban and rural districts, the mix of those services is different. In urban areas, respondents rely more heavily on services from banks and semi-formal sources, while in the rural districts, there is a greater reliance on the services provided via informal groups (Central Bank of Kenya and FSD Kenya, 2009).

Another challenge faced by Kenya's banking sector is unfair lending practices. While the larger proportion of savings comes from small depositors, lending is skewed in favour of large private and public enterprises in urban areas (Central Bank of Kenya and FSD Kenya, 2009). Like most of the African countries, Kenya is faced with expensive financial services, as evidenced by high interest rate spreads and account fees. This challenge has had a feedback loop on access to financial services. The more expensive it is to have a bank account, the more likely one is excluded from accessing financial services (Capital Markets Authority *et al*., 2011).

Although there is a deposit insurance scheme, DPFB, to provide cover for depositors and act as liquidator of banks which could not be salvaged, insurance coverage is still very low in relation to the total exposure of the Fund. Consequently, there is a need to continue building the fund, as well as ensuring that the financial system is sound. On the one hand, loan recovery is hampered by slow and costly court processes in which debtors have undue advantage of procedural technicalities to the detriment of creditors and the financial sector. On the other hand, the operations of the Fund are governed by different laws, including the Central Bank Act; the Banking Act and the Companies Act, and this has presented a lot of limitations to its smooth operations; and hence, the now urgent need to harmonise the relevant sections into a single piece of legislation (FSD Kenya, 2010).

The banking sector in Kenya is less competitive, partly due to limited information-sharing (Beck and Fuchs, 2004). Thus, lack of information-sharing on debtors has increased banks' credit risk over the years; and it has reduced the competitiveness of the banking system (Beck and Fuchs, 2004). On the other hand, the absence of reliable information on potential borrowers has increased the adverse selection risk for banks, resulting in higher credit risks and loan-loss provisions, which in turn have raised interest rate spreads (Beck and Fuchs, 2004).

Another challenge is the inability of borrowers to build up a positive credit history, which prevents them from accessing bank finance, and increases the costs of switching lenders, effectively tying borrowers to one bank. The resulting rents increase the profit margin of banks, and thus of interest rate spreads (IMF, 2002).

The banking sector in Kenya faces human-resource challenges. Better financial regulation requires a system that can readily identify weaknesses and emerging vulnerabilities; is capable of analysing risks, and so adequately pricing risks; provides appropriate incentives (and penalties) to induce prudent behaviour in the market place; building strong institutions that can withstand shocks and give confidence to the market; and strong institutions of the regulated and strong institutions of the regulator.

These pillars hinge on human-resources capital availability and application. The challenges call for enhanced human-capital development to cope with this changing dynamic world. The Governor of the Central Bank of Kenya, in his speech at the opening ceremony of the Joint Kenya School of Monetary Studies and COMESA Monetary Institute Symposium for Central Banks' Human Resource Directors (2012), said that Kenya's banking sector

is facing human-resource challenges; and he encouraged the human-resources specialists in attendance to formulate capacity development initiatives to equip banking staff with the necessary skills and competencies to effectively manage these challenges in a manner that would guarantee a balance between efficiency and stability (Central Bank of Kenya, 2010). The industry also continues to experience accounting challenges; the lack of a uniform chart of accounts, unrealistic or lack of provisioning, and poor compliance with International Financial Reporting Standards (IFRS) (Capital Markets Authority *et al*., 2011).

6. Conclusion

This paper has given an overview of the banking sector in Kenya; it has highlighted its reforms since the country's independence in 1963; it has tracked the growth of the banking sector in response to the reforms implemented over the past four decades; and it has highlighted the challenges facing the banking sector in Kenya. Since the onset of financial reforms in developing countries, the Government of Kenya has implemented a number of reforms, in order to safeguard and improve the banking sector in Kenya. These reforms have focused on increased risk-management procedures and enhanced corporate governance, in order to strengthen and reposition the banking industry, to enable it to contribute effectively to the development of the real sector through its intermediation process. In addition, these reforms have also involved a process of substantially improving the regulatory and surveillance framework, fostering healthy competition in banking operations, and ensuring an efficient framework for monetary management. Although the banking sector responded positively to some of these reforms, it still faces a number of challenges. These challenges include high interest rate spreads, high overhead costs and financial access/inclusion challenges.

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РАЗДЕЛ 3
КОРПОРАТИВНОЕ УПРАВЛЕНИЕ В ЮЖНОЙ АФРИКЕ

SECTION 3
CORPORATE GOVERNANCE IN SOUTH AFRICA

CEO COMPENSATION AND PERFORMANCE OF STATE OWNED ENTERPRISES IN SOUTH AFRICA

Sam Ngwenya*, Mahlomolo Khumalo**

Abstract

The study investigates the relationship between CEO compensation and performance of State Owned Enterprises (SOEs) in South Africa, using data for the period 2009 to 2011. The results indicated that there exist no positive relationship between CEO compensation and SOEs performance as measured by return on assets. The results also indicated a positive relationship between CEO compensation (base salary) and the size of SOEs as measured by total revenue and number of employees. The results suggest that board members of SOEs in South Africa should hold CEOs accountable for the performance of SOEs, and should not pay huge salaries and bonuses to non performing CEOs.

Keywords: CEO Compensation, SOE Performance, Corporate Governance, South Africa

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1. Introduction

The issue of the gap between the remuneration paid to company directors and that paid to other employees has, in recent times, made headlines in the international media. The chief executive officers (CEOs) of the 15 largest companies in the United States were reported to have earned 520 times more than the average worker in 2007 (International Labour Organisation (IOL), 2008). A study conducted by PwC (2011) of the top 40 companies listed on the Johannesburg Stock Exchange (JSE) revealed that the median pay of executive directors has increased by 23.3% to R4.8 million in 2010. This, of course, has significantly increased the wage gap between executives and ordinary company employees. Two cases in point are the salary increases of 109% paid to Eskom

executives (*Business Day*, 2011) and the 81% increase for Sasol's directors (Politicsweb, 2011); both these increases prompted labour unions to embark on a violent strike, with members demanding that their wage increases matched those of their managers.

In the United States the Securities and Exchange Commission set tighter rules towards the end of 2006 for corporate proxies – these rules require that more information be provided about the methods used to compile pay packages for top management (Jeppson, Smith and Stone, 2009). In 2007, the average overall compensation for chief executives at 200 large companies that had filed proxies in the United States approached $12 million. Recent reports in Kenya, which state that pay increases have pushed civil servants ahead of private sector (TradeMark SA, 2012), have added fuel to the debate on remuneration paid to executives, especially executives of state owned enterprises. Unlike private companies, state owned enterprises (SOEs) receive the bulk of their revenue from the Treasury (the tax payer) and are supposed to serve the public. However, the remuneration of top executives in SOEs seems to be competing with that of private companies, resulting in consumers paying high tariffs in SOEs such as Eskom when, in fact, these consumers should be benefiting from the subsidy paid to Eskom by the Treasury.

In the UK, the Chief Secretary to the Treasurer announced on 12 February 2012 that there would be a review into all public sector bonuses in order to ensure that bonuses would only be paid for 'genuine excellence' and that 'there is no reward for failure" in publicly funded bodies (Winnet and Kirkup, 2012).

Given all this, the question arises: does the compensation of the Chief Executive Officer (CEO) reflect company performance in South Africa? To be more specific: is there a relationship between the compensation of the Chief Executive Officer (CEO) and the performance of state owned enterprises (SOEs) in South Africa?

To date, the empirical studies used to confirm or reject relationships between CEO compensation and company performance have principally used data from listed companies in the USA, UK, Australia, Japan and other emerging or transitional economies. Little or no study has been conducted using data from state owned enterprises. The purpose of this paper is to help fill the gap, and to add to the existing body of literature on the topic of executive compensation by investigating the relationship between CEO compensation and performance of SOEs in South Africa. To this end, we shall use data for the period 2009 to 2011. The remainder of this paper is structured as follows: firstly, a literature study presents the theoretical foundation of the study related to CEO remuneration and company performance. Secondly, we shall then outline the sample, variables and methodology used. Thirdly, we shall analyse the data and, lastly, we shall present the results of this analysis and put forward our recommendations.

2. Literature review

According to Agency Theory, an agency problem exists when an agent, such as a CEO, has established an agenda that conflicts with the interests of the stockholders (Attaway, 2000). Lilling (2006) states that the CEO is the agent, while the shareholders are the principles. The agent (CEO) is looking after his or her best interests: in other words, he or she wants to get paid as much as possible. On the other hand, the principles (shareholders) own a stake in the company, and want the company to perform as best as it can. The board members must find a way to compensate the CEO so that he or she is amply rewarded if the company performs well. One way to avoid agency problems would be to reward executives on the basis of financial returns to shareholders. Mallin (2007) explains that the economic literature demonstrates that the compensation received by senior management should be linked to company performance for economic reasons. However, given the salary increases paid to executives, shareholders are now convinced that there is no connection between executive pay and corporate performance (Attaway, 2000). In fact, shareholders should be the focal group whose interests are furthered by designing executive salary arrangements that result in a high-performance company. According to Bruce, Buck and Main (2005), the key factor in effecting this outcome is pay-performance sensitivity.

Unlike private and public companies, the major shareholder in SOEs is the government. In South Africa, SOEs are defined in terms of the Public Finance Management Act (PFMA), 1 of 1999. There are two main categories of SOEs in South Africa, those that fall directly under the Department of Public Enterprises and those that do not fall directly under this Department. There are currently nine SOEs that fall directly under the Department of Public Enterprises. The South African government, as the major shareholder of SOEs that fall directly under the Department of Public Enterprise, is responsible for the appointment of board members. The CEO is thus appointed by the Minister of Public Enterprises after recommendations from board members and after consultation with the Cabinet. In order to prevent the abuse of power by the ruling party and to prevent cadre deployment, the National Planning Commission headed by the Minister in the Presidency made a proposal that the power to appoint CEOs in SOEs should be removed from the

Minister of Public Enterprises and given to the Board of Directors (Shoba, 2011).

Studies on executive compensation can be traced back to the late 1950s (Jeppson, Smith and Stone, 2009). Company performance has been measured in different ways by different researchers (see Lilling, 2009; Jepson, Smith and Stone, 2009; Crumley, 2008; Attaway, 2000; Izan, Sidhu and Taylor, 1998). The most common methods used to measure company performance are shareholder equity, share performance, and profitability (see Liling, 2009; Attaway, 2000), while CEO compensation is usually measured in term of base salary, cash bonus, share awards, option awards, and benefits such as pensions and other perks (Jeppson, Smith and Stone, 2009; Crumley, 2008).

Previous studies conducted internationally have found a small but significant link between CEO compensation and company performance. Izan, Sidhu and Taylor (1998) conducted a study on 99 listed Australian companies for the years 1987 to 1992, using both accounting and share price as performance measures. The results indicated that there was no connection between CEO pay and performance.

Attaway (2000) conducted a study on the relationship between company performance and CEO compensation using a sample of 42 computer and electronic firms listed in E.S. Hardy's article entitled "Payday for America's 800 top chief executives". The results revealed a small but positive relationship between company performance and the compensation paid to CEOs.

Lilling (2006) conducted a study into the link between CEO compensation and company performance, making use of the theory of incentive-based contract, where the CEO is paid a base salary and is rewarded with a performance-based bonus (which can take the form of cash, stock grants or stock options). For his study, Lilling used data obtained from Compustat North America, which consisted of 16 211 companies for the period 1993 to 2003. The results revealed a positive relationship between CEO compensation and a company's market value. The study concluded that incentive-based contracts are effective owing to the positive pay-to-performance link.

Crumley (2008) conducted a study of the relationship between company performance and CEO compensation in the U.S. commercial banking industry, making use of data collected from 36 companies during the period 2001 to 2003. The results indicated that there is a weak relationship between both percentage stock price return and percentage return on equity and the percentage change in CEO compensation. The study further revealed a strong relationship between sales, assets and number of employees and dollar level of CEO compensation.

Jeppson, Smith and Stone (2009) also conducted a study on the relationship between CEO compensation and company performance. The study used change in net income, percentage change in net income, and total revenue as measures of company performance. The results of this study revealed that no strong relationship existed between CEO compensation and company performance in terms of variable change in net income and percentage change in net income; however, the study also revealed the existence of a significant relationship with total revenue.

Studies conducted in South Africa on the relationship between CEO remuneration and company performance are scanty. However, in 2009, Scholtz conducted a study on share options as part of executive remuneration. As a result of his study, he proposed changes at internal governance level in order to align executive remuneration with the interests of stakeholders. Theunissen (2010) conducted a study on remuneration and benefits of the directors of State owned enterprises. He recommended that remuneration should be distributed more equally (i.e. throughout all ranks of employees) because an SEO's performance is the result of work done by all employees, not just the CEO.

3. Research objectives

The objective of the study was to investigate the relationship between CEO compensation and performance of SOEs in South Africa, using data for the period 2009 to 2011. Data was obtained from SOEs that fall directly under the Department of Public Enterprises and an equal number of SOEs that do not fall directly under this Department. The study tested the relationship between SOE performance and CEO compensation using premises and variables that have been used in prior studies. The study aimed to build on previous studies conducted into the relationship between CEO compensation and company performance, with particular reference to Jeppson, Smith and Stone (2009), Attaway (2008), Crumley (2008) and Izan, Sidhu and Taylor (1998).

4. Research methodology

4.1. Data, variables, and hypotheses

The study population consisted of all nine SOEs that fall directly under the Department of Public Enterprises and all SOEs that do not fall directly under this Department. Secondary data used in the empirical study was acquired from SOE annual reports for the years 2009 to 2011, thus providing the researchers with three years of uninterrupted observations. The data for a particular SOE was included in the test sample only if the following

two conditions were met. First, the data for each dependent and independent variables had to be available for each of the three years covered by the study. Second, each SOE had to be managed by the same CEO for the entire duration of the study. Attaway, 2000 (citing Madura et al., 1996) suggests that, for the study to be able to determine whether CEO compensation is linked to company performance, the same CEO should be in place during the period in which performance is measured. Due to the fact that most SOEs were not managed by the same CEO for the entire period under review, the sampling frame of this study was thus limited to five SOEs that fall directly under the Department of Public Enterprises and five selected SOEs that do not fall directly under this Department, thus resulting in a total sample frame of ten SOEs.

4.2. Definition of variables

Variables used to measure SOE performance

Company performance has been analysed in different ways by different researchers. Most studies (see Attaway, 2000; Izan, Sidhu and Taylor, 1998) used profitability, share performance, or shareholder equity (ROE) to measure company performance. However, others (Canarella and Gasparyanm, 2008; Lilling, 2006) used return on assets (ROA) as proxy to measure company performance. Attaway (2000) argues that the use of profitability as a measure of company performance is subject to criticism, simply because profitability may not reflect the company's real value (because executives can manipulate profitability indicators). Attaway (2000) further argues that executives can do this by manipulating the depreciation policy (accelerated versus straight-line), changing inventory valuation procedures (FIFO versus LIFO), using short-term, non-capitalised lease to obtain productive equipment, and using 'window-dressing techniques' such as holding borrowed money as cash until the end of the financial year to make the balance sheet look good.

Hagel, Brown and Davidson (2010) concur with Attaway (2000) by arguing that return on equity (ROE) is not the best way to measure company performance, because this places the focus on returns given to company shareholders. They further argue that companies can resort to certain financial strategies to artificially maintain a healthy return on equity (ROE) and hide the company's deteriorating performance in terms of actual business fundamentals. For example, growing debt leverage and share buybacks funded through accumulated cash can help a company's ROE, even though its operational profitability is eroding. Given this, according to Hagel, Brown and Davidson (2010), ROA is a better ratio for measuring financial performance, because it takes into account the assets used to support the company's activities.

Further reasons for using the ROA instead of the ROE is that the Department of Public Enterprises has argued that the performance of SOEs should not be judged using the standard applicable to the private sector (i.e. whereby dividends are declared to shareholders). Indeed, the Department decided that SOEs were not obliged to declare dividends. They argued that revenue or profit should be "reinvested" in infrastructure development and other commercial activities that they are involved in order to strengthen their balance sheets with a view to increase their access to the capital markets, and thereby reduce their dependence on the fiscus (Ensor, 2011; Shoba, 2011). For the purpose of this study, ROA is defined in two ways: firstly, it is defined as the percentage of corporate return on assets or the ratio of earnings before interest and taxes to average total assets (ROA_1). Secondly, ROA is also defined as the ratio of earnings before interest and taxes to total assets (ROA_2).

Size of SOE

According to Crumley (2008), one of the most important influences of compensation, according to the literature, is the size of the company. The size of the company is measured by its book value of assets, level of sales and number of employees (Crumley, 2008). Lilliang (2006) agrees with Crumley (2008), and states that the most commonly used measure of the size of a company is its sales volume and number of employees. In this study, annual total turnover, value of total assets, and number of employees were used to measure the size of SOEs.

Variables used to measure CEO compensation

Due to the fact that benefits paid to CEOs differed from one SOE to another, total compensation was thus limited to base salary plus cash bonus only. Also, because the annual cash bonus was not paid regularly during the duration of the study, dummy variables were used, with 1 indicating that a bonus was paid to the CEO, and 0 indicating that no bonus was paid to the CEO.

Hypotheses

The literature (i.e. in the discipline of Economics) argues that, for sound financial reasons, compensation awarded to senior management should be linked to company performance (Malin, 2007). In order to investigate whether CEO

compensation in SOEs concurs with what is said in the literature, the following seven hypotheses were tested:

HO: 1 - A positive relationship does not exist between SOE performance as measured by the return on assets (ROA) and CEO compensation (base salary plus cash bonus).
HO: 2 - A positive relationship does not exist between the size of SOEs as measured by total revenue (in Rands) and CEO compensation (base salary plus cash bonus).
HO: 3 - A positive relationship does not exist between the size of SOEs as measured by total revenue (in Rands) and CEO compensation (base salary only).
HO: 4 - A positive relationship does not exist between the size of SOEs as measured by total assets (in Rands) and CEO compensation (base salary and cash bonus).
HO: 5 - A positive relationship does not exist between the size of SOEs as measured by total assets (in Rands) and CEO compensation (base salary only).
HO: 6 - A positive relationship does not exist between the size of SOEs as measured by number of employees and CEO compensation (base salary and cash bonus).
HO: 7 - A positive relationship does not exist between the size of SOEs as measured by number of employees and CEO compensation (base salary only).

All these hypotheses were tested using Pearson Product-Moment Correlation and linear least squares regression analysis.

5. Results

Table 1 shows the descriptive statistics for this study. These statistics are divided into three panels: Panel A depicts the results of SOEs that fall directly under the Department of Public Enterprises, Panel B depicts the results of SOEs that do not fall directly under this Department, while Panel C depicts the results of the descriptive statistics of all samples.

Table 1. Descriptive statistics

	Panel A: SOEs that fall directly under the Department of Public Enterprise (N =15)				**Panel B: SOEs that do not fall directly under the Department of Public Enterprise (N =15)**			
Variable	Mean	Minimum	Maximum	Std. dev.	Mean	Minimum	Maximum	Std. dev.
CEOANSal	2 802 021.27	2 011 000	3 831 000	625 949.47	2 083 685.73	1 081 000	3 908 000	1 072 542.93
DUM_AnBon	0.27	0	1	0.498	0.53	0	1	0.516
CEOTotComp	3 113 154.60	2 011 000	5 674 000	1 016 029.30	2 083 685.73	1 081 000	3 908 000	1 072 542.93
Tot. Rev.	12 831 463 210	127 517 726	36 474 000 000	14 973 097 684	6 740 248 533	1 061 142 000	21 169 000 000	5 794 972 234
Tot. Ass.	18 224 037 635	519 925 867	85 771 000 000	25 965 817 237	37 805 685 933	91 878 000	2,E+11	68 284 580 569
EBIT	2 819 822 668	-543 900 000	35 712 000 000	9 171 666 444	1 819 447 800	-488 170 000	22 521 125 000	5 758 042 875
No. Emp.	7 891.47	680	23 520	8 395.,22	4 553.00	178	18 870	6 656.34
ROA_1	0.0496	-0.140	0.501	0.1613	0.065	-0.021	0.405	0.102
ROA_2	0.0497	-0.126	0.628	0.180	0.056	-0.022	0.326	0.083

NOTES:
CEOASal - total annual salary paid to the CEO; DUMAnBon - total annual cash bonus paid to the CEO; CEOTotComp - CEO total compensation; Tot. Rev. - total annual revenue in Rands; Tot. Ass. - total assets in Rands; EBIT - earnings before interest and tax; No. Emp.- total number of employees; ROA_1 and ROA_2 return on investment.

Table 2. Descriptive statistics (Panel C: Total sample)

Variable	N	Mean	Minimum	Maximum	Std. dev.
CEOANSal	30	2 442 853.50	1 081 000	3 908 000	936 985.25
DUM_AnBon	30	0.40	0	1	0.498
CEOTotComp	30	2 598 420.17	1 081 000	5 674 000	1 152 296.66
Tot. Rev.	30	9 785 855 872	127 517 726	36 474 000 000	11 577 514 959
Tot. Ass.	30	28 014 861 784	519 925 867	2,E+11	517 26 706 783
Net Inc	30	2 319 635 234	-54 300 000	35 712 000 000	7 541 492 004
No. Emp.	30	6 222.23	178	23 520	7 635.22
ROA_1	30	0.057	-0.140	0.501	0.133
ROA_2	30	0.053	-0.126	0.628	0.138

Table 1 depicts the descriptive statistics for this study. The final sample for 2009 to 2011 data set consisted of 5 SOEs that fall directly under the Department of Public Enterprises (resulting in 15 observations), 5 SOEs that do not fall directly under this Department (also resulting in 15 observations), and 10 SOEs for the total sample (resulting in 30 observations). The descriptive statistics are presented in three panels: Panel A represents SOEs that fall directly under the Department of Public Enterprises (N=15), Panel B consists of SOEs that do not fall directly under this Department (N=15), and Panel C depicts the results of the total sample (N=30). The mean compensation of CEOs (base salary and cash bonus) was R2 802 021.27 for Panel A, R2 083 685.73 for Panel B, and R2 442 853.50 for Panel C. The mean return on assets (ROA_1) was 4.97% and (ROA_2) for Panel A, 5.6% for Panel B, and 5.3% for Panel C. The mean total revenue was R12 831 463 210 for Panel A, R6 740 248 533 for Panel B, and R9 785 855 872 for Panel C. The mean total assets were R18 224 037 635 for Panel A, R37 805 685 933 for Panel B, and R28 014 861 784 for Panel C. The mean number of employees was 7892 for Panel A, 4 553 for Panel B, and 6 222 for Panel C.

Based on the above results, it is clear that there is a large variation in some of the variables. Only the variation of the total sample (Panel C) will be explained. CEO total compensation varies from a minimum of R1 081 000 to a maximum of R5 764 000. Similarly, return on assets varies from a minimum of-14.0% to a maximum of 4.9% (ROA_1), and -12.6% to a maximum of 62.8% (ROA_2). Total turnover varies between R127 517 726 and R364 74 000 000, and number of employees varies between 178 and 23 520. These variations indicate that there are significant differences between the maximum and the minimum values, but they do not explain the reasons for the variability of the values.

Regression analysis

The result of the Pearson Correlation was omitted in this study because no significant correlation was observed . Regression was thus used to predict CEO compensation and SOE performance using the variable ROA_2. The results of ROA_1 were not analysed, since they revealed no correlation with other variables. The variable ROA_2 will now be referred to as ROA in the following paragraphs. Regression was also used to test whether there is a positive relationship between CEO total compensation (base salary plus annual cash bonus), CEO compensation (base salary only), and the size of the SOE (total revenue, total assets, and number of employees). Table 3 depicts the regression analysis of both the dependent variable (ROA) and the independent variable (CEO total compensation).

Table 3. Regression analysis of both the dependent variable (ROA) and the independent (CEO total compensation) variable

Model summary (ROA)					ANOVA
Panel A: SOEs that fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.22[a]	0.000	-0.076	0.18720964	0.425
Panel B: SOEs that do not fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.183[a]	0.034	-0.041	0.08513205	0.513
Panel C: Total sample					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.073[a]	0.005	-0.030	0.14024326	0.701

a. Predictors: (Constant), CEO total compensation.

The regression results of Hypothesis 1 shown in Table 4 reflects an R-square of 0.000 for Panel A, 0.034 for Panel B, and 0.005 for Panel C, which is the correlation coefficient squared. It is interpreted as the proportion of the total variation of 0 for Panel A, 3.4% for Panel B, and 0.5% for Panel C of the value of CEO compensation explained by the ratio return on assets (ROA). Since these percentages are low, this suggests that CEO total compensation for SOEs is not dependent on the ROA ratio.

The correlation coefficient (R) of ROA for Panel A was 0.22, for Panel B 0.183, and for Panel C 0.073. The results of the analysis of variance (ANOVA) are 0.938 for Panel A, 0.513 for Panel B, and 0.701 for Panel C and therefore indicate no significant relationship. Hypothesis 1 is therefore not rejected. A positive relationship does not exist between CEO total compensation and ROA. Table 4 depicts the regression analysis of the dependent variable (total revenue in Rands) and the independent variable (CEO total compensation).

Table 4. Regression analysis of the dependent variable (total revenue) and independent variable (CEO total compensation)

Model summary (total revenue)					ANOVA
Panel A: SOEs that fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.173[a]	0.030	-0.045	15302966999	0.537
Panel B: SOEs that do not fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.244[a]	0.060	-0.013	5831489977	0.380
Panel C: Total sample					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.272[a]	0.074	0.041	11338329154	0.146

a. Predictors: (Constant), total revenue.

The regression results of Hypothesis 2 shown in Table 4 reflects an R-square of 0.030 for Panel A, 0.060 for Panel B, and 0.074 for panel C, which is the correlation coefficient squared. It is interpreted as the proportion of the total variation, or 3% for Panel A, 6% for Panel B, and 7.4% for Panel C of the value of CEO compensation explained by the total revenue (in Rands). Since these percentages are low, this suggests that CEO total compensation is not dependent on the total revenue of the SOE.

The correlation coefficient (R) of total revenue for Panel A is 0.173, for Panel B 0.244, and for Panel C 0.2272. The ANOVA results are 0.537 Panel A, 0.380 for Panel B, and 0.146 for Panel C, thus indicating no significant relationship.

Hypothesis 2 is therefore not rejected. A positive relationship does not exist between CEO total compensation and the size of SOEs as measured by total revenue. Table 5 depicts the regression analysis of the dependent variable (total revenue in Rands) and the independent variable (CEO compensation – base salary).

Table 5. Regression analysis of both the dependent (total revenue) and independent (CEO compensation – base salary) variable

Model summary (number of employees)					ANOVA
Panel A: SOEs that fall directly under the Department of Public Enterprise					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.604[a]	0.365	0.316	12 382 239 411	0.017*
Panel B: SOEs that do not fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.244[a]	0.060	-0.013	5 831 489 977	0.380
Panel C: Total sample					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.424[a]	0.180	0.150	10 671 627 505	0.020*

a. Predictors: (Constant), CEO base salary.
*Significant at 0.005 level (two-tailed)

The regression results of Hypothesis 3 shown in Table 5 reflects an R-square of 0.365 for Panel A, 0.060 for Panel B, and 0.180 for panel C, which is the correlation coefficient squared. It is interpreted as the proportion of the total variation, or 36.5% for Panel A, 6% for Panel B, and 18% for Panel C of the value of CEO compensation explained by the total revenue (in Rands). The total variation for Panel A is slightly higher (36.5%). The correlation coefficient (R) is 0.604, and the ANOVA value is 0.017. The total variation for Panel C is 18%, the correlation coefficient (R) is 0.424, and the ANOVA value is 0.020. The total variation for Panel A (6%) is the lowest, the correlation coefficient (R) is 0.244, and the ANOVA value is 0.380. Hypothesis 3 is therefore rejected. A positive relationship does exist between CEO compensation (base salary) and the size of SOEs as measured by total revenue. Table 6 depicts the regression analysis of both the dependent variable (total assets in Rands) and the independent variable (CEO total compensation).

Table 6. Regression analysis of both the dependent (total assets) and independent

(CEO total compensation) variable Model summary (total assets)					ANOVA
Panel A: SOEs that fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.132[a]	0.017	-0.058	26 711 788 260	0.640
Panel B: SOEs that do not fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.222[a]	0.049	-0.024	69 101 464 750	0.427
Panel C: Total sample					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.191[a]	0.036	0.002	51 675 528 964	0.313

a. Predictors: (Constant), CEO total compensation.

The results of the regression summary of Hypothesis 4 shown in Table 6 reflect an R-square of 0.017 for Panel A, 0.049 for Panel B, and 0.036 for panel C, which is the correlation coefficient squared. It is interpreted as the proportion of the total variation, or 1.7% for Panel A, 4.9% for Panel B, and 3.6% for Panel C of the value of CEO compensation explained by the total assets. Since these percentages are low, this suggests that CEO compensation is not dependent on total assets.

The correlation coefficient (R) of total assets for Panel A is 0.132, for Panel B 0.222, and for Panel C is 0.191. The results of ANOVA are 0.640 for Panel A, 0.427 for Panel B, and 0.313 for Panel C, thus indicating no significant relationships. Hypothesis 4 is therefore not rejected. A positive relationship does not exist between CEO compensation and the size of SOEs as measured by return on total assets. Table 7 depicts the regression analysis of both the dependent variable (total assets in Rands) and the independent variable (CEO compensation – base salary).

Table 7. Regression analysis of both the dependent (total assets) and the independent (CEO compensation – base salary) variable

Model summary (number of employees)					ANOVA
Panel A: SOEs that fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.485[a]	0.235	0.176	23 565 856 934	0.067
Panel B: SOEs that do not fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.222[a]	0.049	-0.024	69 101 464 750	0.427
Panel C: Total sample					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.158[a]	0.025	-0.010	51 979 693 187	0.404

a. Predictors: (Constant), CEO base salary.

The regression results of Hypothesis 5 shown in Table 7 shows an R-square of 0.235 for Panel A, 0.049 for Panel B, and 0.025 for panel C, which is the correlation coefficient squared. It is interpreted as the proportion of the total variation, or 23.5% for Panel A, 4.9% for Panel B, and 2.5% for Panel C of the value of CEO compensation explained by total assets (in Rands). The total variation for Panel A (23.5%) is slightly higher compared with Panel B (4.9%) and Panel C (2.5%) – which is very low – and suggests that there is no positive relationship between CEO compensation and total assets of SOEs. This is confirmed by the correlation coefficient R (0.485) for Panel A, ANOVA value (0.067), R (0.222) for Panel B, ANOVA value (0.427), and R (0.158) for Panel C, ANOVA value (0.404). Hypothesis 5 is therefore not rejected. A positive relationship does exist between CEO compensation (base salary) and the size of SOEs as measured by total assets. Table 8 depicts the regression analysis of both the dependent variable (number of employees) and the independent variable (CEO total compensation).

Table 8. Regression analysis of both the dependent (number of employees) and the independent (CEO total compensation) variable

Model summary (number of employees)					ANOVA
Panel A: SOEs that fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.222[a]	0.050	-0.024	8 493.76	0.425
Panel B: SOEs that do not fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.260[a]	0.068	-0.004	6 669.71	0.349
Panel C: Total sample					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.307[a]	0.094	0.062	7 394.93	0.099

a. Predictors: (Constant), CEO total compensation.

The regression results of Hypothesis 6 shown in Table 8 reflect an R-square of 0.050 for Panel A, 0.068 for Panel B, and 0.094 for panel C, which is the correlation coefficient squared. It is interpreted as the proportion of the total variation, or 5% for Panel A, 6.8% for Panel B, and 9.4% for Panel C of the value of CEO compensation explained by the number of employees. Since these percentages are low, this suggests that CEO compensation is not dependent on the size of SOEs as measured by the number of employees.

The correlation coefficient (R) of number of employees for Panel A is 0.222, for Panel B is 0.260, and for Panel C is 0.307. The results of the ANOVA are 0.425 for Panel A, 0.349 for Panel B, and 0.099 for Panel C, which indicates that no significant relationship exists. Hypothesis 6 is therefore not rejected: a positive relationship does not exist between CEO compensation and the size of SOEs as measured by the number of employees.

Table 9 depicts the regression analysis of both the dependent variable (number of employees) and the independent variable (CEO compensation – base salary).

Table 9. Regression analysis of the dependent (number of employees) and independent (CEO compensation – base salary) variables

Model summary (number of employees)					ANOVA
Panel A: SOEs that fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.544[a]	0.296	0.242	7311.145	0.036*
Panel B: SOEs that do not fall directly under the Department of Public Enterprises					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.260[a]	0.068	-0.004	6669.172	0.349
Panel C: Total sample					
Model	R	R-square	Adjusted R-square	Std. Error of Estimate	Sign.
1	0.405[a]	0.164	0.134	7104.980	0.026*

a. Predictors: (Constant), CEO base salary.
*Significant at 0.005 level (two-tailed)

The regression results of Hypothesis 7 shown in Table 9 reflect an R-square of 0.296 for Panel A, 0.068 for Panel B, and 0.164 for panel C, which is the correlation coefficient squared. It is interpreted as the proportion of the total variation, or 29.6% for Panel A, 6.8% for Panel B, and 16.4% for Panel C

of the value of CEO compensation explained by the total revenue (in Rands). The total variation for Panel A is slightly higher (29.6%) the correlation coefficient (R) is 0.544, and the ANOVA value is 0.036 (< 0.005). The total variation for Panel C (16.4%), the correlation coefficient (R), is 0.405, and the ANOVA value is 0.026 (<0.005). The total variation for Panel B (6.8%) is the lowest, the correlation coefficient (R) is 0.260, and the ANOVA value is 0.349 (> 0.005). Hypothesis 7 is therefore rejected for Panel A and C. A positive relationship does exist between CEO compensation (base salary) and the size of SOEs as measured by number of employees. Table 7 depicts the summary of the results.

Table 7. Summary of results

Hypothesis	Variable tested	Results
H1	SOE performance as measured by the return on assets (ROA) and CEO compensation (base salary plus cash bonus).	Not rejected (Accepted)
H2	Size of SOEs as measured by total revenue (in Rands) and CEO compensation (base salary plus cash bonus).	Not rejected (Accepted)
H3	Size of SOEs as measured by total revenue (in Rands) and CEO compensation (base salary only).	Rejected
H4	Size of SOEs as measured by total assets (in Rands) and CEO compensation (base salary and cash bonus).	Not rejected (Accepted)
H5	Size of SOEs as measured by total assets (in Rands) and CEO compensation (base salary only).	Not rejected (Accepted)
H6	Size of SOEs as measured by number of employees and CEO compensation (base salary and cash bonus).	Not rejected (Accepted)
H7	Size of SOEs as measured by number of employees and CEO compensation (base salary only).	Rejected

6. Limitations of the study

Certain restrictions were imposed on the selection of the sample used in this study. The first limitation is that, due to the fact that most SOEs did not have the same CEO managing the same SOE during the period under study (i.e. 2009 - 2011), the sample frame was reduced to five SOEs that fall under the Department of Public Enterprises and five SOEs that do not fall directly under this Department. The reason why most SOEs did not perhaps have the same CEO for the entire period might be because CEOs of SOEs that fall directly under the Department of Public Enterprises in South Africa are appointed by the Minister after consultation with the Board of Directors and Cabinet. This resulted in most SOEs an acting CEO or having a (different) acting CEO for the duration f the study.

The second limitation is that benefits paid to CEO in the selected sample frame were not the same. Some SOEs, for example, included base salary, allowances, bonus, and other contributions as part of CEO total compensation, while others included only the base salary and bonus, and yet others paid the CEO the base salary only with no bonus or other perks. In order to be consistent, therefore, only the base salary and the cash bonus was taken into consideration as CEO total compensation, and dummies were used in cases where the cash bonus was not paid during certain years of the duration of the study.

7. Conclusion

One of the major roles of CEOs is to motivate employees and to provide leadership in the company's attempts to achieve its objectives. In order to ensure maximum performance from CEOs, the board members must find a way to compensate the CEO so that, if the company performs exceptionally well, the CEO will be paid accordingly. The objective of this study was to examine the relationship between CEO compensation and SOE performance in South Africa. A sample of five SOEs that fall directly under the Department of Public Enterprises and five SOEs that do not fall directly under this Department was selected, resulting in a total sample of ten SOEs.

The results of the analysis indicated that a positive relationship does not exist between CEO compensation and SOE performance as measured by return on assets (ROA). This is in contrast with the results of the study conducted by Lilling (2006), Merhebi, Pattenden, Swan and Zhou (2006), and Canarella and Gasparyan (2008), all of whom also used the ROA as the criterion for measuring company performance and found a positive

relationship. The results also contradict statements made in the literature, which says that compensation received by senior management should be linked to company performance for economic reasons (Mallin, 2007). The reasons for the deviation from similar studies and from statements made in the literature might be based on the following reasons. The first reason for the deviation might be the fact that SOEs are agencies which exist to provide a service to the public without making a profit. Secondly, SOEs receive a subsidy from the government and most of the SOEs surveyed had a deficit in total revenue (negative total revenue).

The results of the study also found that a positive relationship exists between CEO compensation (base salary) and the size of SOEs as measured by total revenue (in Rands), and also by number of employees. These results are supported by studies conducted by Merhebi, Pattender, Swan and Zhou (2006), Jeppson, Smith and Stone (2009), Lilling (2006), and Crumley (2008), all of whom found that a positive relationship exists between CEO compensation and total revenue.

8. Managerial implication and recommendations

Although we expected to find a positive relationship between COE compensation and company performance, we did not find this to be the case in this study when using the ratio return on asset (ROA) as proxy to measure SOE performance. Even though the objective of SOEs is not to make profit, but to provide the public with a service at a reasonable rate, it is important for management to ensure that asset usage is maximised in order to yield a good return on investment (so that SOEs receive sufficient turnover to be able to sustain their operations without being too dependent on government grants and subsidies).

It was also noted that only SOEs that fall directly under the Department of Public Enterprises reveal a positive relationship between CEO compensation (base salary) and the size of SOEs as measured by total revenue and number of employees. However, the same relationship could not be seen in SOEs that do not fall directly under this Department. This is a cause for concern, because all SOEs receive grants and subsidies from the government and there should be no disparity in their performance. The Board of Directors should therefore investigate the reason for such disparity and implement the necessary intervention.

Lastly, it is further recommended that the Board of Directors in SOEs should hold CEOs accountable for their performance and stop paying them huge salaries and bonuses when a SOE is not performing. The Board of Directors of SOEs in South Africa should follow the example set up by the Chief Secretary to the Treasurer in the UK, who announced a review towards the end of 2006 into all public sector bonuses to ensure that bonuses should only be paid for 'genuine excellence' and that 'there is no reward for failure' in publicly funded bodies (*The Daily Telegraph*, 2012).

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AN EVALUATION OF THE ROLE AND CONDUCT OF MULTINATIONAL CORPORATIONS (MNCS) IN SUB-SAHARAN AFRICA

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Abstract

"Africa's not for sissies" is what one often hears when discussing business conditions in sub-Saharan Africa (SSA). However, the good news is that the new millennium increasingly exhibits significant trends in support of the notion that a reversal of SSA's fortunes is underway: annual GDP growth in the region is well ahead of the global average, civil wars in the region have largely come to an end and, for two years running, private equity investment flows into the region have surpassed that of foreign aid, Africa's traditional 'crutch'. Importantly, a small band of early-mover Multinational Corporations (MNCs) are making their presence felt in the region and beginning to make good profits. These firms include the likes of Diageo, The Coca-Cola Company, MTN and SABMiller.
The purpose of this article is to research the nature and the changing face of the MNC, impact on globalization and Foreign Direct Investment (FDI), and some MNC strategies to enter foreign markets.

Keywords: Multinational Corporation, Globalisation, Foreign Direct Investment, Multinational Corporation Strategies

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1 INTRODUCTION

This article is devoted to understanding the factors surrounding the emergence of the Multinational Corporation (MNC) to the position of prominence that it enjoys in today's global economy. The article consists of the following sections:

- an introduction to the rationale for the emergence of the MNC and its characteristics
- the globalization process as driving force for the growth in MNCs
- the role of the MNC as efficient provider of foreign direct investment (FDI)
- a review of strategic options available to MNCs.

2 THE MULTINATIONAL CORPORATION (MNC)

This section defines the unique characteristics of, as well as rationale for the existence of the MNC that sets it apart from other enterprises. The section then goes on to explore the changing face of the modern MNC, including a discussion of the international institutions that regulate the environment in which today's MNCs operate.

2.1. Defining the MNC

Multinational corporations (MNCs) are also referred to as multinational enterprises (MNEs), multinational firms, multinational companies and transnational corporations in business literature. For sake of consistency, this study only refers to these firms as MNCs, whereas the literature reviewed also includes the use of these synonyms.

As the name above implies, MNCs conduct business and earn income across a number of foreign countries. Hill (2007: 21) defines a MNC "as any business that has productive activities in two or more countries". Although Hill's views are generally regarded as being authoritative when it comes to international business, this definition has been rejected for purposes of this study as being too broad to be useful (for instance, any South African firm who had made two small investments in neighbouring Lesotho and Swaziland would qualify as a MNC according to this definition).

The Daniels et al definition is more conceptual in nature and has also been rejected as not being definitive enough for purposes of this study: "A MNE takes a worldwide view of markets and production; in other words, it's willing to consider

market and production locations anywhere in the world" (Daniels et al,2011).

At the turn of the century, a more complete definition was provided by Root (1994) who described a MNC as a parent company that (1) engages in foreign production through its affiliates located in several countries, (2) exercises direct control over the policies of its affiliates, and (3) implements business strategies in production, marketing, finance and staffing that transcend national boundaries.

A corporation that has its facilities and other assets in at least one country other than its home country. Such companies have offices and/or factories in different countries and usually have a centralized head office where they co-ordinate global management. Very large multinationals have budgets that exceed those of many small countries. Sometimes referred to as a "transnational corporation".(see www.investopedia.com)

A more recent and comprehensive definition states that: "a multinational firm or MNE is an enterprise that engages in foreign direct investment and owns and controls value-adding activities in more than one country. It typically has multiple facilities across the globe, derives a substantial portion of revenues from foreign operations, manages subsidiaries with a common strategic vision and resource pool and often places foreign nationals or expatriates in key management posts." (Erwee,2007: 176). This definition has been chosen as being most complete for purposes of this study.

2.2. The rationale for 'going global'

Although success can by no means be guaranteed (indeed, it may be *risky business* for a domestic firm to expand beyond the confines of its familiar home market), Hill (2005: 416) states that expanding globally allows firms the opportunity to *increase their profitability* in ways not available to purely domestic enterprises. Firms that take the plunge into international markets are able to:

1) realize location economies by spreading value creation activities to those locations across the globe where they can be performed most effectively

2) realize greater economies of scale by serving an expanded global market from a central location

3) earn a greater return from the firm's core competencies by rolling out these skills to new markets and

4) leverage any valuable skills developed in foreign operations by transferring them to other entities within the firm's global network.

A firm's ability to realise increased profits by going global is, however, not as simple as merely rolling out a winning business formula and/or its brands to all the corners of the world. Consumer preferences, legal requirements and infrastructural realities differ from country to country, requiring MNCs to make the necessary adjustments to meet these local requirements, without which success will remain elusive. This requirement to incorporate *the impact of local differences* into its business model, compounded by the paucity of local business skills, is especially challenging for MNCs operating in SSA, thereby reducing the opportunities identified by Hill above to one only, which is the MNC's ability to profit from the leveraging of its *core competencies* in the markets of SSA.

In fact, the process of transferring core competencies amongst an MNC's affiliates is difficult in itself. Harvey (2006: 422) mentions the following as being the main challenges faced in this regard: culture, language, attitude, developing a 'common language', the 'not invented here' syndrome, time zones and resistance to change.

According to Deresky (as cited in Hough, 2007), firms consider international expansion for reactive and proactive reasons. The former includes trends such as the globalization of competition and the saturation of domestic markets, while the latter is aligned with the growth imperative of firms in mature markets, compelling them to continually look for new opportunities on the global stage.

The US retailer, Wal-Mart, serves as a successful example of a firm that expanded internationally because:

- its growth opportunities at home were becoming constrained;
- it thought it could create value by transferring its value proposition to foreign markets;
- it wished to pre-empt other retailers who were also starting to expand globally.

Despite some early to-be-expected setbacks in the 1990s, Wal-Mart achieved the growth it was searching for. By 2004 it had established 1 500 stores outside the US, generating revenues in excess of US$ 50 billion. In addition, by expanding internationally, Wal-Mart was able to reap significant economies of scale from its expanded global buying power, as well as benefitting from the flow of ideas from the new international markets in which it now competes (Hill,2007: 407 – 408).

The SABMiller story serves as example of a successful South African firm which went in search of profit growth on the international stage by leveraging its core competencies. Up to the end of apartheid in 1994, the then SAB was precluded from investing overseas due to political pressures and was forced to look for growth within the borders of South Africa, which it did by diversifying away from its core beverage business into retail, hotels, furniture manufacture and the like. This strategy did not have the desired results because of management's inability to come to grips with these non-core assets (for instance, SAB

eventually sold its supermarket chain, the OK Bazaars, to Shoprite for one Rand – the latter has subsequently successfully turned OK Bazaars around, while maintaining many of the original OK store locations to this day.)

Once it was politically acceptable for SAB to enter the global stage (following the birth of a democratic South Africa), the firm sold off the bulk of its non-core South African assets, preferring to purchase brewing assets internationally, including in SSA. SAB's core competencies as low cost beer manufacturer, coupled to a robust set of systems and processes that had been proven in South Africa with its unique mix of first and third world characteristics, stood the firm in good stead internationally. It became SABMiller after purchasing the number two brewer in the US and has today become the world's second largest brewer, recognised for its management excellence.

2.3. The changing face of MNCs

According to The World Investment Report,2004 (as cited in Hill,2007), global business activity was dominated by MNCs originating from the USA in the three decades after World War Two. In 1973 almost half of the world's largest MNCs were US firms. By 2000, the US share of the top 100 MNCs had dropped to 24%, with Japanese firms taking up the slack, reaching a share of 16%, with Britain weighing in at 14%. In 2002, only three firms from developing countries made it onto the top 100 list.

However, Van Hoesel (as cited in Daniels & Radebaugh,1995) confirms that as far back as the 1990s considerable FDI growth was beginning to be contributed by MNCs from the newly industrialized countries, while Chetty (as cited in Hill,2007) observes a further trend in favour of developing country participation in the internationalisation of business, being the explosive growth of mini-multinationals, many of whom originate from these countries. This trend of greater outward investment by *MNCs originating from developing nations* is expected to accelerate, thus further shifting the axis of the world economy away from North America and Western Europe and threatening the long dominance of Western Companies (Hill,2005: 20).South African firms, too, have started to spread their wings on the global stage, notably Anglo-American, BHP Billiton, SABMiller and MTN.

Daniels and Radebaugh (1995: 307 – 308) further observed that trends in the distribution of FDI by MNCs generally conform to long-term economic changes in both home and host countries, explaining why MNC investments in manufacturing grew steadily from the 1920s to the early 1970s. Thereafter the trend swung to investing in the services sector (banking and finance), as well as technology-intensive (hi-tech) manufacturing. By 1990, as much as 50% of the world stock of FDI was accounted for by services. They further predicted (correctly, as it turns out)that in future *resource-seeking investments* might grow more rapidly than market-seeking investments as international trade barriers continue to fall and MNCs become more experienced in manufacturing abroad.

This trend has been boosted by sharply increased demand for the world's raw materials due to the tremendous levels of economic growth achieved by China and India, and is borne out by the recent spate of massive mergers and acquisitions in the resources sector by the likes of Mittal, Rio Tinto, BHP Billiton and others.

2.4. The emergence of International Institutions

According to the United Nations Conference on Trade and Development (UNCTAD) (as cited in Fredriksson,2003), MNCs accounted for two-thirds of world trade and employed 53 million people across the world in 2003. Daniels &Radebaugh (1995: 424) further illustrated the sheer size of MNCs in the 1990s by observing that the sales turnover of MNCs such as General Motors, Exxon and Mitsubishi exceed the GNP of many medium-sized economies, including Argentina, Indonesia, South Africa and Poland.

Data generated by the World Trade Organisation (WTO) (as cited in Hill,2007) shows that the volume of world merchandise trade has outstripped that of world economic growth between 1970 and 2004 to the tune of 26 times versus 7,5 times.

Due to the sheer size of the above phenomena, it's clear to see why international institutions have emerged to help manage the global business system. De Lange (2007: 19) singles out 'the Bretton Woods Trinity' as the three main institutions that govern globalisation:

- The International Monetary Fund (IMF), whose task it is to maintain order in the international monetary system.
- The World Bank, established in order to promote economic development.
- The World Trade Organisation (WTO), whose responsibility it is to police the world trading system, essentially by freeing it up.

MNCs operating in SSA would do well to acknowledge the substantial, if somewhat controversial, role played by the Bretton Woods institutions in shaping national legislation and policies, including:

- taxation;
- duties and trade barriers;
- infrastructural finance;
- fiscal and monetary policy;

- privatisation.

Diageo sets the best example of opening up channels of communication with these institutions through regular visits to Washington aimed at presenting their view of the impact of potentially harmful policies, such as excessive taxation, on their operations throughout the world, including those in SSA.

In summary, the emergence of the MNC as a dominant force in the global economy has come about as an appropriate and *efficient reaction by business to the globalisation trend* that has swept the world, particularly post - World War Two. The establishment of the Bretton Woods institutions should be viewed as an enabling factor towards creating a more conducive environment for the growth of MNCs.

3. GLOBALISATION: FUEL FOR THE GROWTH IN MULTINATIONAL CORPORATIONS (MNCs)

From the afore going, it is clear that the growth in importance of the MNC in the global economy is closely linked to the process of globalisation, a not uncontroversial phenomenon, details of which are discussed hereunder.

3.1 Defining globalization

Hill (2007: 4) describes the process of globalization as follows: "A fundamental shift is occurring in the world economy. We are moving away from a world in which national economies were relatively self-contained entities, isolated from each other by barriers to cross-border trade and investment; by distance, time zones and language; and by national differences in government regulation, culture and business systems. And we are moving toward a world in which barriers to cross-border trade and investment are declining; perceived distance is shrinking due to advances in transportation and telecommunications technology; material culture is starting to look similar the world over and national economies are merging into an interdependent, integrated global economic system. The process by which this is occurring is commonly referred to as globalization."

MNCs have emerged as the private sector's response to the opportunities inherent in the process of globalization. In doing so, MNCs have contributed to the process gathering momentum, to the extent that even the furthest flung corners of the world, including SSA, are being integrated into the global economy.

3.2. Empire building

Contrary to popular belief, globalisation is not a new phenomenon. It is a fact that governments and companies have busied themselves in economic activities that stretched beyond their home boundaries for many centuries, mostly to access raw materials in order to fuel growth in their home countries. A fact supported by Ellwood (cited in de Lange,2007) who asserts that the integration of the global economy began in earnest with the launch of European colonialism around five centuries ago.

The emergence of the likes of 'The British Empire' and 'The Dutch East Indies Company' are both early examples of multinational organisations at work in order to unlock new growth opportunities for their respective constituents.

From the outset, these multinational organisations *left a controversial mark on history*:

On the one hand, making hugely positive contributions towards progressing the lot of mankind through, amongst others, the discovery of new types and sources of raw materials, products, trade routes and manufacturing methods. In short, laying the foundation for wealth creation and improved living standards, albeit mainly in their home countries.

On the other hand, however, history also tells a sorry tale of land grabbing, greed, exploitation of host countries and their citizens, as well as numerous wars fought in the name of securing sources of wealth. An example, close to home, is that of the Anglo – Boer wars which were really fought because of the British desire to own South Africa's gold and diamond fields.

MNCs operating in SSA, in particular, would do well to *heed the lessons of the sub-continent's colonial past*, bearing in mind that all of the region's countries, other than Ethiopia, were colonised by a European country in the not-too-distant past. MNCs should be sensitive to local perceptions that often equate foreign investment in a SSA country with the exploitation and repression of local people and their talents, as experienced in their previous brush with colonialism. The MNC should make every effort to be seen to be different from the erstwhile colonisers and should strive to be seen as a *force for good by local stakeholders*, through the way in which it acts, develops local citizens and shares in the benefits of its endeavours.

3.3. The post-World War Two era

Today's MNCs have flourished because of, and contributed to, the era of globalisation that followed the end of World War Two. Although unrecognisable as far as management methods are concerned when compared to the likes of 'The Dutch East Indies Company' or the manner in which Britain ruled her Empire, *the modern MNC shares in the controversial nature* of the benefits reaped by its forerunners such as unquestionable benefits for the largely developed home countries, while the case for the host countries often remains

unclear, especially where they happen to be of a less-developed nature.

Globalization has numerous facets, including globalized markets (the merging of separate national markets into one global marketplace) and the globalization of production, as well as the sourcing of goods and services from around the world in order to take advantage of cost and quality advantages in terms of labour, energy and capital. (Hill,2007: 5-8).

Because of its poor infrastructure and low skills levels, SSA has not to date interested MNCs in search of production globalization benefits, although it is true that the world's large extractive and mining MNCs are well-represented in the region due to its relative wealth in natural resources. As a rule, however, these MNCs do not invest in beneficiating assets in the region. However, SSA is starting to attract MNC attention in terms of the potential it holds on the market globalization front. With the help of global media and the Internet, a great number of international brands are making their presence felt in the region, including Ford, Toyota, BMW, Sony, Hitachi, IBM, Coca-Cola, Heineken, Marlboro, Colgate, Nokia and many others.

Stonehouse et al (as cited in de Lange,2007) identified the following factors as being the main drivers of globalisation:

- Political forces, including reduced trade barriers, the recognition of intellectual property rights, privatisation, regional co-operation and the establishment of trading blocs with common technical standards.
- Economic forces, including increased world trade, rising income levels, efficient financial markets, growing free market forces, increasing competition and reducing government intervention.
- Social forces, including growing consumerism, increasing affluence, converging consumer tastes and improving lifestyles, education and skills.
- Technological forces, including the continued industrialisation of nations, improved transportation networks and the influence of the information and telecommunications revolution.

The drivers of globalisation listed by Daniels et al (2011) are similar:

- Expanded technology.
- The liberalization of cross-border trade and resource movements.
- Development of support services for international business.
- Increased pressure from consumers.
- Increased global competition.
- Changing politics.
- Improved cross-border co-operation.

Small wonder, therefore, that it is a derivative of the modern-day MNC, as opposed to a stand-alone in-country firm, that increasingly represents the most appropriate business model to profit from the opportunities and deal with the challenges presented by the current wave of globalisation. This fact is borne out by UNCTAD estimates that the number of transnational corporations of 14 OECD countries increased from some 7,000 in the late 1960's to 24,000 by 1990 and 64,000 at the turn of the century. According to UNCTAD, these firms controlled 870,000 foreign affiliates, accounted for two thirds of world trade and employed 53 million workers in 2003 (Fredrikson,2003: 8).

A cautionary note comes from Hill (2007: 16) who rightly warns against over-emphasizing the 'global village' phenomenon. A firm that ignores differences between countries does so at its peril – a message that Hill repeats throughout his writings. Even earlier on, Daniels and Radebaugh (1995: 25) had observed that when a company goes abroad, it faces conditions very different from those it encounters at home and may need to engage in national responsiveness, that is, make operating adjustments in order to achieve success in a particular country.

The *need for local responsiveness* applies equally to MNCs wishing to do business in SSA. In fact, as a result of differing histories, cultures and languages, countries within the region also display very significant differences from each other. Although most are poor, there is no such thing as a 'typical' African consumer.

3.4. Anti-globalization sentiment

Globalization has encountered some stiff opposition, as commented on by various international business writers, including Hill (2007: 25) who observes that globalization has its critics, despite the existence of a compelling body of theory and evidence that increased international trade and cross-border investment stimulate economic growth, create jobs and raise income levels.

As early as the 1970s, MNCs were perceived in many quarters to be huge economic powers, being beneficial in some cases, but necessary evils at best. Their actions in developing countries were often interpreted as a threat to the sovereignty of recipient economies which, if not controlled, could be detrimental to their welfare. The policy response was to seek ways for national and international bodies to monitor, restrict and regulate the activities of MNCs (Fredriksson,2003: 4).

Searching amongst the rhetoric of various anti-globalization voices such as Hood and Young, as well as Sweezy and Magdoff (as cited in Hill,2007), one is struck by *a deep underlying fear and suspicion of the growing dominance of 'big*

business', making it an easy target for populist radicals to blame as the cause of many of today's evils, including poverty, the exploitation of labour, pollution, unemployment and the like. Unfortunately, too, there have been a few high-profile cases of wrongdoing by MNCs (Nike's use of child labour, as example) that fuel these radical claims.

Hill (2007: 27 – 33) identifies the following 'ills' currently being laid by various interest groups at the door of globalization:

- The outsourcing of jobs from developed countries in favour of poorer paid jobs in developing countries.
- Manufacturing firms that move from well-regulated environments in advanced countries to less developed countries that lack the necessary controls to protect labour and the environment from exploitation.
- The shift in economic power away from national governments towards international organisations such as the United Nations, WTO and European Union.
- The widening gap between the rich and poor nations of the world.

The latter two arguments, in particular, enjoy a sympathetic audience amongst the governments of SSA.

The threat to national sovereignty is a further concern keenly felt by SSA governments and their citizenry, especially during the process of privatisation. Generally, governments have put state-owned assets up for sale only in those instances where the enterprise concerned had fallen into a desperate state of ill repair and bankruptcy.

Anup Shah's personal website for global issues contains an example of the outpouring from radicals that helps shape the largely undeserved poor press that MNCs enjoy amongst anti-globalisation forces: "Some options that corporations take to make profits can affect people all over the world. Sometimes fatally....As profits are naturally the most important goal, damaging results can arise, such as violation of human rights, lobbying for and participating in manipulated international agreements, environmental damage, child labour, driving to cheaper and cheaper labour, and so on" (Shah,2007).

Although many of the above charges made in the name of the anti-globalization lobby may be watered down or even discounted in the face of well-researched evidence and reason, the point is that MNCs should face up to the fact that *the capitalist system does not have a great track record ofself-discipline in its pursuit of profit-maximization and wealth creation*. Global issues such as food security, protection of the environment, sustainable resource development and poverty alleviation have to be addressed as an integral part of the system. The days of 'business as usual' are long gone. MNCs, in particular, need to clean up their act in this regard or else they'll invite others, such as developing world governments, NGOs, Green Peace and the like, to do so on their behalf. The profit motive has to remain at the centre of any firm's endeavours. However, in addition, MNCs need to develop a new set of tools towards system sustainability that are acceptable to an array of legitimate external stakeholders.

Behrman (2006: 440) summarises as follows: "Globalization will never be acceptable to any given country unless there is a sufficient community of interest to permit the making of trade-offs and compromises necessary to permit reform and change. This, in turn, is dependent on a harmonisation of value systems that include the extension of respect and dignity to others as well as a willingness to seek an equitable distribution of benefits and burdens."

It is clear that the debate that surrounds the impact of globalisation as force for good versus the negative views of its detractors is by no means over. Behrman's expression of *the need for MNCs and other key players to compromise and search for trade-offs in order to extend the positive outcomes of globalisation, especially to the world's poorer nations*, has relevance.

4. MULTINATIONAL CORPORATIONS AS PROVIDERS OF FOREIGN DIRECT INVESTMENT (FDI)

One of the primary functions provided by MNCs in the global economy is that of an efficient provider of FDI which, in turn, generates economic growth and its resultant benefits, also in the poor countries of the world. Because of the importance of this outcome, a closer analysis of the interplay between MNCs and FDI is required.

4.1. An introduction to FDI

FDI occurs when a firm invests directly in facilities to produce and/or market its products in a foreign country. When a firm undertakes FDI, it becomes a MNC (Hill,2010). According to Daniels et al (2009: 63) FDI occurs when an investor takes a *controlling interest* in a foreign company, else an overseas investment is known as a portfolio investment.

Vertical FDI occurs when a firm ventures abroad to secure either inputs (backward) for its domestic production processes or sells the outputs (forward) of its domestic production processes (Hill,2010).

This study is focussed on *horizontal FDI*, defined by Hill (2010) as when firms expand by investing in the same industry abroad as at home due to one or more of the following reasons:

- transportation costs;

- market imperfections, including impediments to exporting and the sale of know-how;
- strategic behaviour, where firms decide to compete in the global market place in order to find new sources of profitable growth;
- the product life cycle, which makes local production of a product in a foreign destination viable once export-led demand has grown sufficiently;
- location specific advantages, where the location of essential raw materials or specialist skills dictate.

The key enabling factor for horizontal FDI is the transfer of knowledge within the firm – knowledge transfer being the primary expression of growth of the firm (Kogut and Zander,1993: 639).

FDI occurs either through a greenfield investment (the establishment of a new operation in a foreign country), or by acquiring or merging with an existing firm in the foreign country. Firms generally prefer the latter entry route as it is quicker to execute, acquired firms usually come with valuable strategic assets and because the acquirer believes that he can improve the efficiency of the acquired unit by transferring capital, technology and management skills (Hill,2007: 238).

4.2. FDI trends

The US accounted for two thirds of world-wide FDI in the 1960s. This dominance was such that it caused acute concern in Europe, including calls for limiting US-sourced FDI flows into countries such as France. From the 1970s onward, Japanese and European firms joined the bandwagon, shifting their production activities in order to lower labour costs, build a permanent presence in foreign markets and to hedge against both possible government intervention from host countries and potential unfavourable currency moves (Hill,2007: 19).

The World Investment Report of 2004 (as cited in Hill,2007) contains the following relevant facts:

- Between 1992 and 2004, cumulative FDI flows grew by 260% to US$8,1 trillion, well ahead of world trade which grew by 100% and world output growth of 32% over the same period.
- In 2003, the existence of at least 61 000 MNCs was recorded, operating more than 900 000 affiliates in foreign markets, employing 54 million people and generating value equal to 10% of global GDP. With global sales of $17,6 trillion, these MNC affiliates almost doubled the value of $9,2 trillion recorded for global exports.

The table below further highlights the extent of rapid growth in global FDI. Between the 1970's and the 7 years ended in 2006, average world annual FDI inflows grew from US$ 24 billion to $ 930 billion, having exceeded the $ trillion mark in 1999, 2000 and 2006 on the back of spikes in the level of cross-border mergers and acquisitions.

Table 1. FDI inflows in $ billion: SSA versus the World

FDI $bn	70's	80's	90's	2000	2001	2002	2003	2004	2005	2006	7yrs
SSA	0,9	1,3	4,6	6,2	14,5	9,6	13,3	11,4	16,1	12,2	11,9
World	24,4	93,9	403,8	1411,3	832,6	622,0	564,1	742,1	945,8	1305,9	930,5
SSA share	3,9%	1,4%	1,1%	0,4%	1,7%	1,6%	2,4%	1,5%	1,7%	0,9%	1,3%

Source: UNCTAD, FDI/TNC database (UNCTAD World Investment Directory, volume X, Africa 2008).

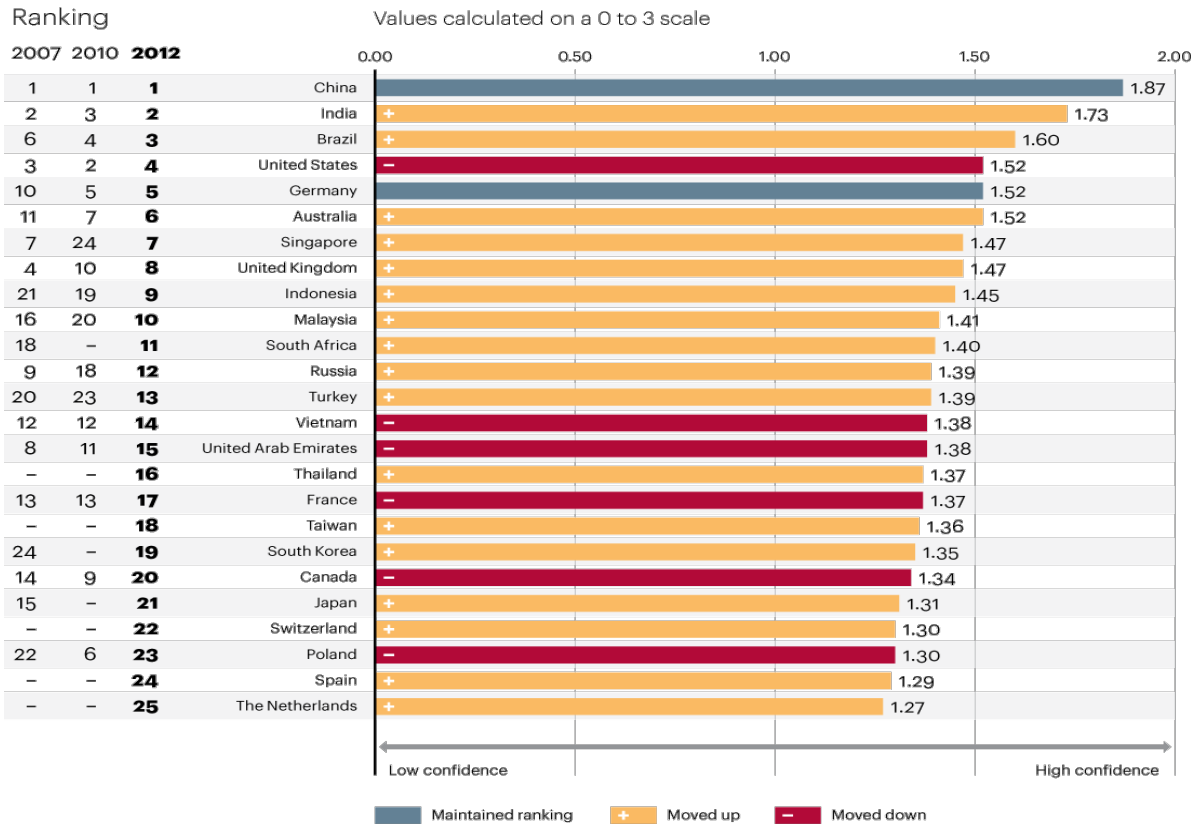
It further confirms the view of SSA as an unattractive FDI destination, with a mere $12 billion per annum flowing into the region over the 7 years ending 2006, despite a sharp increase in investments in the extractive industries.

Luiz (2006:7) confirms that although both SSA and worldwide FDI inflows have risen dramatically since the 1980's, SSA's share has remained stagnant at a paltry 1%.Only the Democratic Republic of Congo, Namibia, Zambia and Botswana were listed among the top 70 out of 141 countries included in The United Nations Conference on Trade and Development (UNCTAD)'s Inward FDI Performance Index for 2004 – 2006 (UNCTAD,2007).

Consultants AT Kearny's list of top 25 economies in their FDI Confidence Index includes only South Africa from the African continent at number 18, despite a marked influx of developing economies onto the list (Kearny,2012).Figure 1 explains this in more detail.

Figure 1. 2012 FDI Confidence Index

Figure 1
2012 FDI Confidence Index®



Source: A.T. Kearney Foreign Direct Investment Confidence Index®, 2012

It is an unfortunate fact that SSA, the economic region that forms the subject of this study, is the *world's least favourite investment destination,* the reasons for which will be dealt with when discussing the prevailing business environment in the region.

4.3. FDI costs and benefits to host countries

It is generally accepted that the benefits of FDI to home countries far outweigh the limited costs, be they in the form of capital outflow or outsourced jobs. However, the impact of FDI on host countries is often a controversial subject, hence the need to objectively evaluate the pros and cons:

Daniels et al (2011) confirm that an inflow of investment by MNCs can bring both gains and losses to the host country. The host country undoubtedly gains through the *transfer of CapitaLand technology*. Critics have claimed, inconclusively, that there are examples where the MNC uses its muscle to make investments that local companies could otherwise have undertaken, thereby displacing local entrepreneurs and entrepreneurial talent.

Hill (2010 identifies four main benefits to host countries:

- Through the supply of capital, technology and management resources that boost the local economy's growth rate.
- By bringing new jobs, both direct and indirectly through the multiplier effect.
- By positively impacting on the host country's balance-of-payments (BOP) via the initial investment capital inflow, by substituting imports and by generating new exports.
- By increasing competition in instances when a greenfield investment is made, thereby unlocking the resultant benefits of greater consumer choice, lower prices, etc.

SSA countries strongly desire the first three benefits above, whereas the desire for increased levels of competition is less of a priority because of the constrained nature of their markets which often results in only one local manufacturer per product category.

Fear of loss of independence and potential negative BOP impacts are what concerns many governments in SSA.

The concern over loss of independence is further exacerbated in countries whose economies are dominated by overseas investors from one particular country, as is the case in Mozambique which has been overrun by South African investors (Grobbelaar,2006: 55).

In fact, de Lange (2007: 30) mentions a number of arguments in favour of host country government intervention in the free flow of trade and investment, including the protection of selected industries from foreign competition. As example, the global brewing giant, SABMiller has, despite its best efforts over many years, been unsuccessful in its attempts to obtain a brewing licence in Namibia where government has acceded to the incumbent brewer's request for protection.

4.4. Host country views of FDI

Hill (2007: 264 – 266) summarizes the various ideological stances taken on the subject as follows:

- The radical view, which traces its roots back to Marxist policy and economic theory. MNCs are seen as an instrument of imperial domination, exploiting host countries to the exclusive benefit of their home countries. This view was widely held, also in Africa, until the collapse of communism in 1989 when it was abandoned in favour of the capitalist model.
- The free market view, which argues that international production facilities should be distributed among countries according to the theory of competitive advantage. Countries should specialise in producing those goods and services that they can produce most efficiently. The MNC becomes the instrument for ensuring overall efficiency of the world economy. Although it is true that the world tide is running in favour of the free market view, no country on earth embraces it fully. Even the US and British governments maintain their rights to intervene, for instance, should local companies become take-over targets for foreign MNCs.
- Pragmatic nationalism, an approach somewhere between the above two extremes, which acknowledges that incoming FDI has both benefits and costs, and designs policies that maximise the positive impact on the host country economy.

Many SSA countries nationalised MNC affiliates during their flirtation with socialism in the mid-1900s, but have subsequently changed their views as a result of the dismal performance of their economies while under government command, contrasted by the strong performance of the Asian Tigers, as example, who had gone the free-enterprise route instead.

A comparison of the economic fortunes of Ghana and South Korea by Hill (2005:306) vividly illustrates the case in point:

In 1970, Ghana's GNP per capita was US$ 250, while that of South Korea amounted to $ 260.

By 1998,Ghana continued to struggle at a lowly $ 390 per capita, whereas South Korea had shot up to $8 600,in the process, becoming the world's 12th largest economy.

Virtually all SSA countries today find themselves in the *'pragmatic nationalism'* camp, determined not to fall back into the socialist trap and going out of their way to attract FDI. However, they are also implementing laws and regulations that are clearly aimed at advancing the national interest. The fear of foreign domination by SSA countries possessed with a colonial past is a fact that remains to this day – one that MNCs operating in the region would do well to bear in mind**.**

5. MULTINATIONAL CORPORATION STRATEGIES

Multinational Corporations (MNCs)come in various guises. It is therefore useful to discuss various strategies employed in response to the extremely complex challenge of operating in a multitude of countries across the globe.

5.1. Strategic options

According to Bartlett and Ghoshal (cited in Hill,2005),MNCs generally follow one of the following strategies:

- Multidomestic, where the MNC focuses on the need for local responsiveness and decision-making through an extremely decentralised organisational structure. This is an attractive option from an organisation perspective because of its simplicity. The need for co-ordination is low, so headquarters only have to intervene on a by exception basis. However, these firms cannot profit from the transfer of core competencies or the realization of location and experience curve economies.
- International, where the MNC creates value by transferring its core competencies (typically R&D and/or marketing) to foreign affiliates by retaining centralised control over the source of these competencies, while decentralising all other operating decisions to affiliates. The need for co-ordination is limited to the transfer of core competencies and the level of complexity is low.
- Global, where the MNC leverages location and experience curve economies of scale through a world-wide product division structure, while headquarters co-ordinates diverse activities

around the world through ultimate control over most operating decisions. The need for integration is high and is best served by a centralised organisation that is quite complex in its nature.

- Transnational, where the MNC endeavours to capture the unique advantages of all of the above, including local responsiveness, global learning and the attainment of location and experience curve economies through matrix-type structures. This requires a complex organisation, capable of mixing high degrees of centralization for some decisions with high degrees of decentralization for others. A strong corporate culture is a requisite for these firms to prosper, given the existence of considerable performance ambiguities.

5.2. Choosing the right international strategy and organizational architecture

With regard to strategy, Hill (2007: 422 – 426) states that MNCs face two counter-pressures. On the one hand, he cites Prahalad and Doz in singling out *the pressures for cost reduction*, which is increasing because of increased international competition resulting from the liberalization of the world trade and investment environment in recent decades. On the other hand, *pressures for local responsiveness* arise from national differences in consumer preferences, infrastructural development, accepted business practices, distribution channels and host country demands.

Hill (2007: 441) further cites Naidler et al in describing organizational structure as being the totality of a firm's organization, including the organizational structure, control systems, incentives, culture, processes and people.

The art in choosing the strategy and organisation that will best suit a particular MNC lies in its ability to strike a balance between the need to lower the cost of value creation on the one hand (generally best served by standardisation of processes and products, the establishment of best practice communities within the organisation and greater central control), and being able to differentiate its product and service offerings to best meet consumer needs within a local context on the other (an objective best met through a decentralised business model that values having capable and autonomous in-country executives and lets them get on with it.)

"It is therefore important to note that industry characteristics, the type of product and related consumer needs will largely determine the type of pressure that a firm will have to contend with and hence the appropriate strategy to be adopted in a specific instance" (Neuland and Hough,2007: 215).

The need for MNCs to 'act local' in SSA countries cannot be over-emphasised, as the national differences referred to by Hill above are accentuated due to the prevalence of quite different histories, cultures, languages and levels of economic prowess. The really successful MNCs are able to carefully *overlay their global recipe for success with local flavour* in order that the operating unit may capture the best of both worlds when meeting the challenges of any particular country.

"There's a paradox at play here: on the one hand we are all participants in a global market, whereas the explosion of products and the technology revolution are making all international markets more local, catering to local tastes" (Peters,1987: 152). In fact, Mr Peters already held the view during the late 1980s that the organisation should decentralize information, authority and strategic planning (Peters, 1987: 609).

Even the experience curve does not necessarily result in success in developing markets due to their dynamic nature. A quote from Kotter (1999: 9) has relevance:"The better a hammer has served in the past, the more all problems look like nails. People often get into trouble when they try to apply the tactics that worked previously."

On the other hand, it is generally accepted that deviations from the global recipe should be limited to the bare necessities, as much of the value of a MNC parent (as opposed to a number of stand-alone independent businesses) lies in the power of its common brands, processes and systems, including the ability to share standardised information and move its people in between jobs and places. In fact, Porter (1998: 332) argues that MNCs should penetrate international markets with a consistent positioning."Efforts to internationalise based on opportunistic modifications of a company's competitive positioning from country to country rarely succeed.....Without a consistent position, the company lacks a real competitive advantage, and its reputation does not cumulate."

According to Bartlett and Ghoshal (as cited in Hill, 2005), a *transnational strategy* is the way to go for most MNCs as it allows them to exploit both experience-based cost economies and location-based economies by transferring core competencies within the firm while paying attention to pressures for local responsiveness. Hill (2005: 430) supports this way of reasoning in asserting that a transnational strategy makes sense when a firm faces high pressures for cost reductions, high pressures for local responsiveness and where there are significant opportunities for leveraging valuable skills within a MNC's global network of operations.

The transnational model is compelling, but Bartlett and Ghoshal (as cited in Hill,2005) warn that building an organisation capable of supporting a transnational strategic posture is a *complex* and

difficult task due to conflicting organisational demands.

As all MNCs operate in competitive markets on the international stage, Porter (1998: 45) rightly adds a further complication by emphasising the competitive imperative. "Competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value."

Kristensen and Zeitlin (as cited in Moore,2005) further caution against the view of MNCs as possessing static forms which change in more or less predictable ways at predictable points in their development. Their image of today's MNC is that of an agent of development and as an integral part of local regions rather than as a detached, goal-focussed global network. They further stress that MNCs are, in fact, *volatile, unstable and constantly changing in a state of continuous experimentation*. This view of MNCs as dynamic organisations is exacerbated when they operate in the volatile environments of emerging economies, where the key question is one of "how to play the game, when the rules of the game are changing and not completely known?" (Peng,Wang and Jiang,2008: 924).

5.3. Entry strategies

A critical sub-set of the MNC's foreign expansion strategy has to do with decisions regarding entry options available to the MNC.

5.3.1. Country, timing and scale

According to Hill (2007: 480 - 485), there are three basic decisions that a firm contemplating foreign expansion must make:

- Which foreign markets to enter?
- Timing of entry.
- The scale of entry.

Firstly then, *the decision on which markets to enter:*

The deciding factor may be summarised as being the MNC's assessment of a nation's long-term profit potential – a really difficult task as this means interpreting current trends in order to form a view of the future benefits, costs and risks associated with doing business in a particular country. Such an analysis generally favours countries that are politically stable, have free-market policies in place, as well as also having inflation and private-sector debt levels under control. Low levels of indigenous competition are a further favourable factor (Hill 2007: 480 – 481).

Although SSA countries may be less politically stable than their counterparts vying for inward FDI, they rate reasonably well on the rest of the above factors, especially with regard to the existence of *low levels of local competition*.

Secondly, *the timing of entry:*

According to Hill (2007: 481) the first-mover advantages available to an early entrant into a new market are obvious in that the MNC is able to settle into the local way of doing business without the distractions of having to deal with a meaningful competitor. In particular, the firm is able to build a loyal market for its brands well before the competition arrives. However, there are possible first-mover disadvantages, or pioneer costs, associated with learning the rules of the game in a foreign market. Shaver et al (as cited in Hill,2007)further states that research results prove that the probability of survival improves when the MNC enters a national market only after others have done so. The case for entering today's constrained markets of SSA, however, calls for *early entry* where possible, as well as a MNC mindset that views the existence of potentially hostile local rules of the game as an opportunity for it to engage with local stakeholders in order to arrive at more equitable solutions that benefit all participants.

Thirdly, *the scale of entry:*

Broadly speaking, the larger the resources committed by a MNC when entering a new country, the more rapid the entry, especially if a strong competitive position had been established through the acquisition of a successful local company. However, the flip side also holds true in that the cost of potential failure also increases with the increased scale of entry, to the point where failure could damage the performance and reputation of the parent company (HIill,2007: 484 – 485).

Fortunately, the investment levels required in order to enter any SSA market at this moment in time are still small enough not to affect the risk profile of any medium or large-sized MNC.

5.3.2. Entry modes

Hill (2007: 486 - 493) identifies six options available to MNCs once they've decided which country to enter:

- Exporting their products as a means to an end. A manufacturing MNC may choose to establish a market for its products in this low-risk way before committing itself to the next step once demand has been proven.
- Turnkey projects, where a contractor completes all aspects of a greenfield entry on behalf of the foreign client.
- Licensing agreements, allowing MNCs to license the rights to intangible property (trademarks, inventions, formulas, processes) to local firms in return for a flow of licence fees or royalties.
- Franchising, which goes further than licensing, as the franchisor also sets rules and assists the franchisee in the running of his business.

- Joint ventures, which typically occur where the MNC teams up with a local company by means of shared ownership in order to best explore the local market.
- Wholly-owned subsidiaries, which are 100% owned by the MNC, either through a greenfield entry or acquisition of a local firm.

He goes further in identifying a seventh entry strategy that has become increasingly popular in recent times, which is the formation of strategic alliances where cooperative agreements are reached between actual or potential competitors (Hill,2007: 499).

All of the above options have their advantages and disadvantages, and may be found in SSA. As a rule, the limited market sizes of SSA countries tend to render the potential income–flow to be earned through licensing, franchising and long-term exporting as marginal and, therefore, uninteresting. On the other hand, *the joint venture (JV) route is attractive in the SSA context* in that it offers up much greater potential rewards, while also introducing a strong element of local participation in the fortunes of the MNC affiliate which, apart from delivering local knowledge benefits to the JV, also establishes the firm as being local in the minds of key stakeholders. The MNC is also able to partially compensate itself for the loss of earnings shared with the local partner by concluding exclusive licensing agreements for its brands and formulas with the local affiliate.

5.3.3. Greenfield entry or acquisition?

The World Investment Report,2004 (as cited in Hill,2007) reveals that between 50 and 80% of all FDI inflows over the last decade have been in the form of mergers and acquisitions (M&A).

Hill (2007:495-496) mentions three reasons for this trend:

- M&A is quicker to execute.
- It pre-empts entry by global competitors.
- It is also less risky as the MNC is able to share in an existing profit flow from day one.

However, many acquisitions fail because the MNC overpaid for the firm acquired – a common occurrence where more than one international suitor pursues a particular target, as is commonplace these days. Other reasons for failure include an irreconcilable clash of culture between the two firms and the inability of the MNC to realise anticipated synergies. A greenfield entry, on the other hand, allows the MNC the luxury of building the local affiliate from scratch according to its own specifications. However, such an entry takes longer and is extremely risky because of the untested nature of its revenue streams, especially in cases where incumbent competitors exist (Hill,2007: 496 - 498).

In the case of SSA, the above observations generally apply. If the MNC is able to *acquire an established local company at a fair price*, either outright or in the form of a JV, this is by far the preferred way to go, even if the acquired firm has some flaws (which any effective MNC should be capable of fixing.) Quite often, however, no such option exists due to the tiny industrial bases that typically are to be found in SSA countries, forcing the MNC to go the greenfield route, in which event, it would do well to heed the cautions mentioned above, key of which is the risk surrounding future revenue streams. Where it exists, it is a good option to prove a potential revenue stream through building the MNC's exports until levels are reached that could justify putting down an in-country greenfield plant.

5.4. Further strategic considerations

5.4.1. Leadership and management

A critical strategic consideration should be the realization by any prospective MNC that it requires a pool of managers capable of dealing with the *complexities of an international business*, as opposed to successfully managing a purely domestic business. This is often an elusive prize in the early years of a firm's internationalisation, as it generally starts out with the pool of managers at the helm that brought it success when it was still a unitary country business.

Daniels et al (2011) comment that when operating abroad, firms have to adjust their usual methods of doing business. This is because foreign conditions often require more suitable methods and the operating modes for international business differ somewhat from those used domestically. In order to operate effectively within a MNC's external environment, its managers must have knowledge not only of business operations, but also a working knowledge of the basic social sciences: history, political science, law, anthropology, sociology, psychology, economics and geography.

Hill (2007: 34) cites the following factors that contribute to the complexity of doing business internationally:

- Differences in country characteristics, requiring the MNC to modify its practices accordingly. The MNC is faced with a wider range of issues, including the co-ordination of globally dispersed production units, deciding on which new countries to enter and how to do so, dealing with the ethical dilemmas of low wage levels and poor environmental standards in developing countries and the like.
- The need to understand and work within the rules imposed by governments intervening in the international trade and investment systems.

- The ability to deal with international transactions that involve converting money into different currencies.

Whereas the above factors apply to any MNC contemplating a SSA entry, it is especially the demanding need to *interface with governments* that has particular relevance. So too, the currency issue because the MNC affiliate will be trading in local, mostly soft, currencies It has quite a challenge on its hands in order to *deliver hard currency earnings growth* to its MNC parent (who typically reports to its shareholders in US$, Pounds or Euros.) This is a complex and risky matter requiring, amongst others, managers capable of treasury management across a range of currencies.

5.4.2. Competitive advantage

Porter (1998: 331) stresses the need for a MNC to possess a *unique* competitive advantage as the most fundamental building block in developing its global or multi-location strategy, stressing the fact that a company will not be able to overcome the barriers to penetrating unfamiliar markets unless it brings a meaningful advantage in either cost or differentiation or both. Companies should go international first in those businesses and product lines where they have the most unique advantages.

MNCs in SSA have their work cut out to maintain such an advantage in the face of increasing levels of competition. *Building loyalty to a MNC's brands* among local consumers probably offers the most enduring advantage against its competitors.

5.4.3. Culture

Hill (2007: 116 – 118) warns that MNCs should not underestimate the importance of *cultural differences* when entering a foreign country, including the ways in which these differences manifest themselves in how business is transacted in a specific country. Apart from recruiting competent local citizens into the local affiliate (at senior levels in order for them to have impact), MNCs should also work hard at building a cadre of cosmopolitan executives, experienced in working in different countries around the globe. MNCs should further guard against the dangers of ethnocentric behaviour (a belief of superiority in one's own ethnic group) developing in the organisation, when it very easily becomes the MNC's home country culture which dominates those of others, causing potential conflict and loss off key local personnel.

Cultural differences also have a bearing on national competitive advantage or the cost of doing business in a particular country, for instance, Japan's emphasis on group affiliation, loyalty, reciprocal obligations, honesty and education contributes towards lowering the relative cost of doing business in that country. On the other hand, Pacific Rim nations who boast a combination of free market economics, Confucian ideology, group orientated social structure and advanced education systems, have become fierce cost-efficient competitors in international markets (Hill,2007: 117 – 118).

Porter (1998: 155) agrees, arguing that in a world of increasingly global competition, nations have become more important. Differences in national values, culture, economic structures and histories all contribute to competitive success. According to him, nations ultimately succeed in particular industries because their home environment is the most forward-looking, dynamic and challenging.

The poor infrastructure and low levels of education that currently prevail in SSA combine to ensure that *the cost of doing business in the region is relatively high*. However, there's every reason to believe that once governments come to grips with providing appropriate education to its citizens, existing traits, including ubuntu and entrepreneurship visible in the flourishing informal sector, will eventually play a positive role in the emerging business environment of the region.

5.4.4. Ethics

Finally, MNCs should be made aware of their *responsibility* to operate in an ethical manner throughout their operations. Recent fraudulent disasters such as occurred at Enron, coupled to pressures from governments, NGOs and the media concerned at the sharp increase in the global influence of MNCs, place an unenviable responsibility on MNCs to ensure that their strategies, practices and actions are able to withstand the most intense scrutiny from a vast array of stakeholders, some of whom are extremely difficult to please. This is no simple matter for MNCs operating across a vast array of countries, especially those in the developing world where tough trade-off decisions await their affiliates around every corner.

Take the imposition of minimum wage levels as a case in point:

A US MNC manufacturing beverages in India (Pepsico or The Coca-Cola Company, for example) has to decide if it is willing to pay locally acceptable wage levels of about US$ 2 per day (rupee equivalent) for seasonal workers, in order to maintain cost competitiveness against aggressive local cost-driven competitors in an extremely price sensitive market, thereby opening itself to charges of worker exploitation from stakeholders comparing these levels to those back home.

Daniels et al (2011) go further in asserting that: "A major challenge facing MNEs is the globalization of the supply chain and the impact on

workers, especially in the areas of fair wages, child labour, working conditions, working hours and freedom of association". The complexity of the environment in which the MNC finds itself is exacerbated by their statement that "the law is an important basis for ethical behaviour, but not all unethical behaviour is illegal".

MNCs face many such dilemmas in the fields of unfair employment practices, human rights violations, environmental pollution, corruptive practices and also their responsibility to give something back to the communities in which they operate (social responsibility) (Hill,2007: 127 – 133).

Today's best-in-class MNCs have adopted the principle of *triple bottom line accountability* to stakeholders and regularly report on the following, in addition to financial results:

- the results of the impact of their actions on the environment in which they operate;
- the results of the impact of their actions on the communities in which they operate.

The pressures and dilemmas facing MNC affiliates operating in SSA are substantial due to:

- the high levels of corruption still prevalent in the region;
- dysfunctional legal systems;
- incompetent and poorly paid civil servants;
- unscrupulous and well-connected local competitors.

The challenge to operate freely, yet ethically, should not be under-estimated. And yet it can be done, as proven by existing MNCs in the region that are both successful in financial terms, while upholding the requisite ethical standards as prescribed by their parent companies, as is the case with The Coca-Cola Company, Nestle', Unilever, SABMiller, Diageo and others.

Key enablers of ethical behaviour include:

- a clear and unambiguous code of conduct;
- thorough communication of the above to both internal and external stakeholders;
- a reputable local business partner, if possible;
- recruiting executives with a strong ethical bias;
- rewarding ethical behaviour;

Also, the affiliate should seek considered opportunities where it is able to *make an ethical stand, even at the cost of short-term profitability*, such as refusing to bribe officials in order to get containers released from port and escalating the problem to the appropriate ministry.

6. CONCLUSION

The literature review found that firms that expand into international markets are able to generate profitable growth in ways not available to domestic firms, including the realization of location and scale economies, as well as leveraging their core competencies by rolling out these skills to new markets (Hill,2005: 416). The emergence of *the MNC as a dominant force in the global economy* has come about as an appropriate and efficient reaction by business to the *globalisation* trend that has swept the world, particularly post - World War Two. The establishment of the Bretton Woods institutions should be viewed as an enabling factor towards creating a more conducive environment for the growth of MNCs.

The growth of MNCs has gone hand in hand with the rising tide of globalisation that has gathered momentum post-World War Two. It is clear that the debate that surrounds the impact of globalisation as force for good versus the negative views of its detractors is by no means over. Behrman's expression of the need for MNCs and other key players to compromise and search for trade-offs in order to extend the positive outcomes of the process, especially to the world's poorer nations, has relevance (Behrman,2006: 440)

The role of MNCs as efficient providers of foreign direct investment (FDI) was confirmed, including encouraging FDI trends towards developing countries whose governments today go out of their way in order to attract FDI in order to stimulate economic recovery.

It is an unfortunate fact that SSA, the economic region that forms the subject of this study, is the *world's least favourite investment destination*, the reasons for which will be dealt with when discussing the prevailing business environment in the region.

The good news is that virtually all *SSA countries wish to attract FDI today*, determined not to fall back into the socialist trap. However, they are also implementing laws and regulations that are clearly aimed at advancing the national interest. The fear of foreign domination by SSA countries possessed with a colonial past is a fact that remains to this day – one that MNCs operating in the region would do well to bear in mind.

Various strategic options and considerations exist that MNCs need to bear in mind as they plot their course of action in a complex environment that stretches across country borders. From the afore going it is clear that MNCs are faced with a greater number of strategic choices when compared to a less complex unitary country enterprise. Bartlett and Ghoshal's *transnational approach* (cited in Hill,2005)seems to be the most appropriate model for the modern MNC in that it potentially captures the widest range of advantages, including: global learning, local responsiveness and location and experience curve economics. However, it is a complex solution, relying as it does on matrix-type structures in order to be effective and may, therefore, not be suitable for a fledgling MNC setting out on the path of internationalisation of its business. Kristensen and Zeitlin's view (cited in Moore,2005) of MNCs as being volatile and

unstable organisations in a constantly changing state of continuous experimentation may, in fact, hold most relevance when plotting the strategic direction that a MNC should take.

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CORPORATE GOVERNANCE AND THE VALUE OF THE FIRM: AN EMPIRICAL ANALYSIS OF COMPANIES LISTED IN THE JSE SECURITIES EXCHANGE OF SOUTH AFRICA

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Abstract

This study examines the corporate governance characteristics influencing the value of the value of the firm in South Africa (SA). Corporate governance variables including Block shareholding, Dispensed shareholding, Board size, Proportion of non-executive directors and Audit quality were identified from the corporate governance literature. Using panel data of 247-firm years obtained from the annual reports of the 50 largest companies listed on the JSE Securities Exchange of SA, this study found that block shareholding and the proportion of NEDS as the main corporate governance characteristics influencing the value of the firm in SA. The results of this study are important to the King Committee and other corporate governance regulators in SA, in their effort to improve corporate governance practices and probably minimize corporate failure and protect the wellbeing of the minority shareholders. Furthermore, the study contributes to our understanding of the corporate governance variables affecting firm value in developing economies, especially SA.

Keywords: Corporate Governance, Firm Value, Performance, King Report, South Africa

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1. Introduction and Motivation

Cadbury committee (1992) defined corporate governance as the systems used to direct and control companies. It is concerned with the process and structures through which members interested in the overall wellbeing of the firm take measures to protect the interests of the stakeholders (Ehikioya, 2007). The wave of corporate corruption scandals has highlighted the importance of good corporate governance especially in recent years (Standard and Poor's, 2004) Agency theory which has greatly influenced corporate governance, holds that managers will not act to maximize the returns to shareholders unless appropriate governance structures are implemented in the large corporation to safeguard the interests of shareholders (Jensen and Meckling 1976; Fama and Jensen, 1983). It continues to argue that the owners are principals and the managers are agents and there is an agency loss, which is the extent to which returns to the residual claimants, the owners, fall below what they would be if the principals, the owners, exercised direct control of the corporation (Jensen and Meckling 1976). Corporate governance is becoming an increasingly important component of investor relations.

The failure of high profile companies in the USA, UK and other parts of the world has largely been attributed to failures in the corporate reporting process (IFAC, 2003). In the USA the failure of the Enron Corporation in late 2001, apart from signalling the largest corporate bankruptcy in the USA, also raised a myriad of questions about the effectiveness of contemporary accounting, auditing and corporate governance practices (Vintern, 2002). Various commissions were formed (e.g., Blue Ribbon Commission, 1999; Tread away Commission 1987) in response to corporate failure and reduced investor confidence in financial reporting which culminated with the enactment of the Sarbanes-Oxley act (SOX, 2002). The act was enacted to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes (SOX 2002).

In the UK various reports addressing the issue of corporate governance have been published (e.g., Greenbury Report, 1995; Hampel Report, 1998; Higgs, 2003; Smith Report, 2003; Turnbull Report 1999). The Cadbury committee (1992) was constituted in response to the continuing concern about standards of financial reporting and accountability, heightened by BCCI, Maxwell and the controversy over directors' pay, which had kept corporate governance in the public eye. The committee was formed to review those aspects of corporate governance specifically related to

financial reporting and accountability. The committee's recommendation on financial reporting was that although listed companies publish full financial statements annually and half-year reports in the interim, in between these major announcements, boards may need to keep shareholders and the market in touch with their company's progress. The guiding principle once again is openness and boards should aim for any intervening statements to be widely circulated, in fairness to individual shareholders and to minimise the possibility of insider trading (Cadbury 1992).

The purpose of this study is to investigate the relationship between corporate governance characteristics and firm value in companies listed in the JSE Securities Exchange of South Africa. Whereas many of corporate governance studies have been carried out in developed countries of Europe, United States of America (USA) and Japan (Joshi and Wakil, 2004), only a few studies have been completed in developing countries of Africa (for example Fawzy, 2004; Uddin and Choudhury, 2008). McGee (2009) argues that special issues in developing countries, such as dominance of government ownership make the implementation of corporate governance questionable. Tsamenyi, et al (2007) observes that corporate governance studies in developing countries are limited and available only on an individual country basis. Fawzy (2004) and Euromoney (2007) have argued that developing countries differ widely among themselves hence the need to study corporate governance of each country separately (Dahawy, 2009). Furthermore, although a number of firm attributes (including firm value) have been tested for their association with corporate governance quality, there has been no conclusive results (Khanchel, 2007), hence the need for further research.

In South Africa, the King Report (1994, 2002, 2009), sets out the code of corporate governance practices (Max, 2009). According to the World Bank (2003), there has been a number of corporate failures and financial irregularities in SA, notably, Fidentia, JCI-Randgold, Masterbond, Macmend and Regal Treasury. Most of these failures have been blamed on weakness in Corporate Governance Structures (Sarra, 2004, Mangena and Chamisa, 2007). Therefore there is need to understand whether good corporate governance practices influence the market value of companies.

The choice of South Africa is motivated by a number of factors. First, among developing countries and emerging economies, SA pioneered the publication of corporate governance guidelines and codes of best practices in 1994 (Mangena and Chamisa, 2007; Mallin, 2004). Second, although SA is classified as a developing country by the United Nations (2001) and the World Bank (2000), it lies on the upper income bracket of such countries making it a good subject for examining the way in which Corporate Governance practices are applied in a developing country. South Africa is a developing country to the extent that it is an exporter of raw materials rather than finished goods. The economy is very heavily tied to one raw material, namely gold. Furthermore SA has considerable influence on the continent as it is the largest Africa's economy (Mangena and Chamisa, 2007)

Marked economic, political and cultural differences between developed and developing countries exist (Waweru and Uliana, 2005, Bokpin and Isshaq, 2009 and McGee, 2009). For example, most developing countries suffer from a lack of skilled human resources, suggesting that companies in developing economies may experience difficulties attracting people with accounting or finance knowledge to their audit and other governance committees. Cultural differences between developed countries of North America (highly individualistic) and developing countries of Africa (highly collectivistic) may also require different corporate governance arrangements. Rabelo and Vasconcelos (2002) argue that factors such as economic trends towards globalization, structural characteristics of developing countries (under developed capital markets and government interventionism) will make the model of corporate governance different from that found in European or North American contexts.

Mensah (2002) and Dahawy (2009) suggest that African countries are ill equipped to implement the type of corporate governance found in developed countries, due to the characteristics of the economic and political systems of these economies, such as state ownership of companies, weak legal and judicial systems and limited skilled human resource capacity. Mensah (2002) notes a dominance of state enterprises (even with privatization) or closely held family-owned businesses, while companies managed by other than owners and listed companies comprise a very small proportion of GDP. Developing countries are often faced with a myriad of problems, such as underdeveloped and illiquid stock markets, economic uncertainties, weak legal controls and investor protection, and frequent government intervention Tsamenyi, et al (2007). Furthermore, there is a predominance of concentrated shareholding and controlling ownership in most developing countries (Rahman and Ali, 2006; La Porrta et al, 1999). Corporate structures in developing countries are characterized by the desire to maintain control over firms by the majority shareholder, the reliance on debt finance, weak financial markets and an ineffective legal system (Rabelo and Vasconcelos, 2002 and Uddin and Choudhury, 2008).

Using panel data of 247-firm years obtained from the annual reports of the 50 largest companies

listed on the JSE Securities Exchange of SA, this study found that block shareholding and the proportion of NEDS as the main corporate governance characteristics influencing the value of the firm in SA. The results of this study are important to the King Committee and other corporate governance regulators in SA, in their effort to improve corporate governance practices and probably minimize corporate failure and protect the wellbeing of the minority shareholders. We contribute to the debate of whether good corporate governance is a prerequisite to good business and market performance (Che Haat et al, 2008). Furthermore, the study contributes to our understanding of the corporate governance variables affecting firm value in developing economies, especially SA.

The remainder of this paper is organized as follows: The second section reviews the related literature and develops the hypotheses. The third section presents the research design. The findings are presented in section 4 while, the conclusions are presented in section 5.

2. Theory and Hypothesis development

Corporate failure and scandals have led to demand for reforms and for better regulations particularly in the field of corporate governance. In the UK a number of issues in the early 1990's, most notably the collapse of the Maxwell business empire, stimulated discussions and debate about structures for controlling executive power (Power, 2002). A code of best practice was published in December 1992 (The Cadbury Code) which included recommendations for companies to establish audit committees comprising independent non-executive directors (Power 2002). In Africa, SA was the first to develop a corporate governance code of best practices in 1994 (Mangena and Chamisa, 2007, Mallin, 2004). The report, which draws extensively from the UK Cadbury committee report of 1992 was published by the King Committee (known as the Kind Report) was revised in 2002 and again in 2009 (Max 2009). According to Mangena and Chamisa (2007), a conspicuous feature of the king report is its adoption of the "inclusive approach" to corporate governance. Unlike codes of other countries which focus on wealth maximization, the king report encourages firms to consider a wider community of stakeholders.

The king report (2009) recommends; a) a unitary board structure with a balance between executive and non-executive directors (NEDs) preferably with a majority of NEDs, of whom a majority number should be independent. However, unlike the JSE code which specifies that listed companies should have a minimum of four directors, the King report is silent on the minimum number of directors; b) a separation of the roles of the chair person (who should be an independent NED) and the role of the CEO; c) that a substantial portion of the total remuneration of the executive directors should be performance based; and d) formation of at least the audit and remuneration committees, dominated and shared by independent NEDs. Overall, the King report highlights the board as the focal point of the corporate governance system (Mangena and Chamisa, 2007). It is important to note that compliance with the King report recommendations is voluntary in SA. However the JSE Listing code (2005) require firms to disclose in their annual reports the extent of their compliance with the king Report and reasons for non-compliance (Mangena and Chamisa, 2007)

Drawing from previous literature (Gupta et al 2009; Che Haat et al 2008; Mangena and Chamisa, 2007; Ehikioya, 2007; Brown and Caylor, 2006) this study investigates the relationship between corporate governance characteristics and the value of the firm in companies listed in the JSE Securities exchange of SA. Specifically we consider Corporate governance characteristics (Board size, Board composition, Ownership structure and Audit Quality), Firm value (measured by Tobin Q) and firm characteristics (Size, age, leverage, performance and Investment Opportunities).

2.1 Board Composition

The objective of corporate governance is to realize shareholders' long-term value while taking into account the interests of other stakeholders. Effective corporate governance and related accountability mechanisms are presumed to mitigate conflicts of interest and provide reasonable assurance that each party observes certain behavioural norms. One might expect that accounting would be well equipped to examine and prescribe improvements in accountability among agents in capitalist settings. The board of directors plays a key role in accountability, with the non-Executive directors having the most crucial role. Non-executive directors' role is to ensure that managers are accountable to the shareholders and that shareholders' interests are protected. According to Shapiro (2006), a higher proportion of non-executive in the board may increase controls on self-interested managers.

Empirical evidence on the association between outside independent directors and firm performance is mixed. Previous studies have found that having more outside independent directors on the board improves performance (Daily and Dalton, 1994), while other studies have not found a link between independent NEDs and improved firm performance (Hermalin and Weisbach, 1991). The point that can be made from these studies is that there is no clear benefit to firm performance provided by independent NEDs. Petra (2005) argues that the

mixed results may be reflective of a corporate culture wherein corporate boards are controlled by management and the presence of independent NEDs has no recognizable impact on management decisions. However, other empirical evidence does suggest that independent NEDs do play the important role of being a shareholder advocate. For example, Beasley (1996) reports that an investigation commissioned by the Treadway Commission into the governance structures of failed firms indicates that the boards of directors were dominated by management and "grey" directors (i.e. outsiders with special ties to the company or management). Beasley (1996) found that independent NEDs reduce the likelihood of financial statement fraud. Managena and Chamisa also found a negative relationship between proportion of NEDs and listing suspensions in SA. These studies indicate that independent NEDs do monitor and control management and this could lead to better company performance (Mangena and Chamisa, 2007; Ajinkya et al., 2005). Given that the main role of the board is to protect shareholders' interests, their monitoring activities should curtail managers' self-value maximizing actions. Therefore, we hypothesize the following:

H1: There is a significant positive relationship between the proportion of non-executive directors on the board (NEDs) and the value of the firm.

2.2 Board Size

According to Fama and Jensen (1983) the board is the central control mechanism responsible for minimizing agency costs that arise from the separation of ownership and decision control incorporations. Mangena and Chamisa (2007) argue that a well-constituted board of directors is more likely to act in the best interests of shareholders. However, although there is a general agreement that the board plays an important role in managing the firm and its activities there is no agreement over whether a large or small board does this better (Ehikioya, 2007). Prior literature argues that board size is an important aspect of effective corporate governance (Jensen, 1993; Yermack, 1996) and is related to firm performance (Baek et al., 2004; Haniffa & Hudaib, 2006). A larger board is more likely to have a greater range of expertise to monitor the actions of management effectively (Beasley, 1996; Karamanou &Vafeas, 2005) and also in securing critical resources (Goodstein et al., 1994). In contrast, Jensen (1993) and Yermack (1996) argue that large boards may be less cohesive and slow in making decisions, less candid in discussions of managerial performance, more difficult to coordinate, and easier to control by the CEO, thus constraining the board's effectiveness (Mangena and Chamisa, 2007).

Generally, the literature (e.g., Jensen, 1993; Karamanou & Vafeas, 2005) suggests that boards must be small enough for true discussion and debate between members to take place and large enough to have members with a mix of business judgment and experience. Both Linck et al. (2008) and Boone, et al. (2007) provide evidence suggesting that firms structure their boards in a manner that reflects the costs and benefits of monitoring the firm. In South Africa, the JSE Listing Requirements (2005) specifies that the minimum number of directors for listed firms should be four, while the King Report (2009) only recommends that the board should be of a size that allows for a diversity of expertise and experience to be effective monitors. In South Africa Deutsch Bank (2002) revealed that board size ranges from five to 30 directors, with a mean directorship of 12.

Empirically, the evidence on the association of board size with different organizational outcomes is mixed. Yermack (1996) finds an inverse relationship between board size and firm performance, whilst Haniffa and Hudaib (2006) report a positive relationship with operating performance. Karamanou and Vafeas (2005) also find a positive relationship between board size and management earnings forecasts. In a study that included SA, Ho and Williams (2003) fail to detect a significant relationship between performance and board size. We hypothesize the following:

H2. *There is a significant negative relationship between the size of the board and the value of the firm*

2.4 Ownership Structure

It has been argued that ownership concentration has both an entrenchment effect as well as an alignment effect. One argument has been that, concentrated control may be detrimental to minority shareholders as it induces insider expropriation and distorts management decision making (Bebchuk, et al, 2003). The other argument has been that the presence of controlling shareholders may help alleviate the traditional agency problems between owners and managers. However, the existing literature suggests that the alignment effect is subordinated to entrenchment effect under concentrated ownership structures (Lins, 2003)

Consistent with the Cadbury Committee (1992), the King Report 2009 emphasizes the role of shareholders in enhancing corporate governance in SA. Karamanou and Vafeas (2005) and Ehikioya, (2007) suggest that block shareholders are best suited for monitoring management due to their access to better information about the firm. Weir et al. (2002) also argue that there is greater potential for agency costs related to poor performance for block holders, thus providing greater incentives to monitor. Similarly, Shivdasani

(1993) argues that block holders have stronger incentives to invest in voting on corporate issues than non-block holders. Ehikioya, (2007) argue that a highly concentrated ownership structure tends to create more pressure on management to engage in activities that maximize investors and other stakeholders interests. On the other hand, Ajinkya et al. (2005) argue that there are circumstances under which block holders behave as insiders. They suggest that block holders may have undue influence over management and, therefore, secure self-serving benefits that are detrimental to other shareholders. This view is pertinent in the context of SA, because share ownership on the JSE is relatively concentrated (Malherbe & Segal, 2001; Sarra, 2004; World Bank, 2003). The controlling shareholders exert influence on management decisions through, in certain cases, electing their own representatives to the board of directors (Malherbe & Segal, 2001; World Bank, 2003). This problem, commonly referred to in SA as shadow directorship (King Report, 2002; World Bank, 2003, Mangena and Chamisa 2007), causes inefficiencies in the monitoring process as the controlling shareholders, though not directors per se, are able to exert influence on board activities. Thus, rather than being involved in monitoring and assessing the governance of the firms, shadow directors become involved indirectly in the running of the firms (World Bank, 2003). This may lead them to have incentives to extract private benefits that are not available to minority shareholders (Shivdasani, 1993).

Empirical evidence on the relationship between shareholder concentration and the value of the firm is mixed. Ehikioya (2007) and Haniffa and Hudaib (2006) find a positive relationship with firm performance, while Baek et al. (2004) report a negative relationship. Shivdasani (1993) show that block holders who are affiliated with management increase, while unaffiliated block holders decrease hostile takeovers. In India, Sarkar and Sarkar (2000) reported ownership concentration to have a positive relationship with firm value. Ehikioya (2007) also find a positive association between dispensed shareholding and performance in Nigeria. Yet Demsetz and Lehn (1985) and Weir et al. (2002) detect no significant relationship. Following Tsamenyi et al (2007) our study uses two proxies (Block shareholding defined as the proportion of shares held by substantial shareholders in excess of 5 percent of the total shareholding and dispensed shareholding defined as the percentage of the shares held by the 10 largest shareholders to total shares) to measure ownership structure. Therefore, we hypothesize the following:

H3. *There is a significant negative relationship between block-share ownership and the value of the firm*

H4. *There is a significant negative relationship between dispensed shareholding and the value of the firm*

2.4 Audit quality

Previous research indicates that audit quality is an important element of efficient equity markets, because audits can enhance the credibility of financial information and directly support better corporate governance practices through transparent financial reporting (Che Haat et al, 2008; Francis et al., 2003). According to DeAngelo, 1981 and Beatty, (1989), large public accounting firms with greater investment in reputational capital have more reason to minimise audit errors via "auditor-reputation effects". Furthermore, Dye (1993) argues that large audit firms are inclined to supply a higher quality audit compared to small firms, as more wealth is at stake in large audit firms. They will also experience a greater loss through reputation damage if the quality of their audit does not meet the accepted quality standards (Che Haat et al, 2008). Mitton (2002), argue that since quality audit is also one aspect of corporate governance, it is expected that firms which are audited by one of Big Four audit firms (a proxy for audit quality) will have a better market performance as well as greater transparency.

Wooten (2003) found that even after controlling for audit risk, client size and audit complexity, there is an additional premium based on auditor identity. DeFond and Jiambalvo's (1993) found that large audit firms are more independent of management. Therefore, empirical evidence seems to support the differential audit quality based on the type of audit firm. There are a number of empirical studies supporting the positive relationship between audit quality and audit firm size (Palmrose, 1988, 1986; Francis and Simon, 1987; Jang-Yong Jonathan and Lin, 1993; Hogan and Jeter, 1997). Shapiro (1983), Ferguson et al (2005) and Che Haat et al (2008) have also found a positive relationship between audit firm size and audit fee. As argued by Che Haat et al (2008) the use of ratio of audit fee to sales (as a proxy for audit quality) would be expected to provide more robust results compared to the dummy variable used for audit firm size. However their study found no significant relationship between higher audit quality and firm performance. We therefore hypothesize that:

H5: *There is a significant positive relationship between higher quality of audit and the value of the firm*

2.5 Firm Characteristics

Prior studies have found evidence suggesting a relationship between the quality of corporate

governance and firm characteristics such as performance, size, leverage and investment opportunities (Ariff et al 2007; Ehikoya, 2007 and Che Haat et al 2008). However there is no consensus of the direction of this relationship since prior literature show mixed results. Klapper and Love, (2003) and Ehikioya, (2007) using return on assets as a measure of performance found evidence to support that firms with better governance have higher operating performance. However Cho and Kim (2003) argue that a company would enhance their corporate governance, when the company's performance is poor because changes in corporate governance structures are expected to bring out positive results on their performance. This argument is supported by the findings of Gompers et al (2003) and Bauer et al (2004) who found a negative relationship between the quality of corporate governance and performance.

Jensen (1986) argues that the effect of firm size on governance is ambiguous as large firms may have greater agency problems and therefore need to compensate with stricter governance mechanism. On the other hand smaller firms have better growth opportunities and greater needs for external financing and better control mechanisms. The results of prior research have been mixed. Some previous studies (e.g. Cho and Kim, 2003; Ariff et al 2007) support a positive relationship between the size of the firm and its level of corporate governance. On the contrary studies by Gompers et al (2003), Brown and Caylor (2004) and Fama and French (1992) found a negative relationship between firm size and corporate governance.

Previous research on the relationship between leverage and the quality of corporate governance has yielded mixed results. Whereas Black et al (2003) and Brown and Caylor (2004) studies found a positive relationship between leverage and corporate governance, other studies e.g. Faccio et al (2001) and Friendman et al (2003) have found that higher levels of debt are associated with lower governance. Khanchel (2007) argue that good governance would increase capital expenditure and this increase would have a positive effect on the value of the firm. It has also been argued that firms with profitable investment opportunities will have better corporate governance (La Porrta et al, 1999; Dunery and Kim, 2002).

Based on the above literature review this study hypothesis that:

H6: There is a significant positive relationship between firm performance and the value of the firm

H7: There is a significant negative relationship between size and the value of the firm

H8: There is a significant negative relationship between leverage and the value of the firm

H9: There is a significant positive relationship between investment opportunities and the value of the firm

3.0 Research Method

3.1 Sample and data source

Quantitative methods are employed to examine the relationships between the independent variables (block shareholders, shareholder concentration, board size, proportion of non-executive directors, audit quality, investment opportunities, performance, company size and leverage) and dependent variable (value of the firm, measured Tobin Q). The data is drawn from annual reports of 50 largest companies listed on the JSE Securities Exchange of South Africa. These companies represent over 85% of the JSE market capitalization (Max 2009). The companies selected represent the largest companies in the market value on the JSE and as such would represent a wide spectrum of stakeholders' interest and shareholders' wealth, in South Africa. The data collected is for a 5-year period from year 2006 to the year ended 2010, which result in about 247-firm years. The design is chosen because the population is small and the use of panel data increases the number of observations, thus allowing meaningful statistical analysis. Where information was not available in annual reports, data was obtained from the companies' websites, or JSE Securities Exchange. In order to calculate values of variables to test the hypotheses, directors' report, profit and loss account, balance sheet and notes to the accounts were all read.

3.2 Firm value measurement

To measure the value of the firm (our dependent variable), we consider a company's market capitalization, the book value of debt and the book value of assets. Tobin's Q compares the market value of the firm with the replacement cost of the firm's assets. It also implies that the greater the real return on investment, the greater the value of Q (Che Haat et al, 2007). Following Che Haat et al (2007) we measure our Tobin Q as the market value of equity and the books value of the firm's debt divided by the book value of total assets.

3.3 Model specification

Following our hypotheses development in Section 2, we specify the following ordinary least squares OLS) regression model:

$$\text{TOBIN'S Q} = \alpha_0 + \alpha_1 \text{BLOCKSH} + \alpha_2 \text{DISPENSH} + \alpha_3 \text{BSIZE} + \alpha_4 \text{OPRONED} + \alpha_5 \text{AQUAL} + \alpha_6 \text{IOP} + \alpha_7 \text{PERF} + \alpha_8 \text{SIZE} + \alpha_9 \text{LEV} + \varepsilon$$

Where:

TOBIN'S Q = Measured as (MV of Equity + BV of Debt)/BV of total assets.

BLOCKSH = Measured as the number of block holders with shareholdings of 5% or more.

DISPENSH = Measured as the percentage of the shares held by the 10 largest shareholders to total shares
BSIZE = Measured as the total number of Directors
PROPNED = Proportion of non-executive directors, measured as the percentage of non-executive directors on the board.
AQUAL = Measured as the statutory audit fees divided by amount of sales
IOP = Measured as the Capital expenditures divided by total assets
PERF = Measured as Return on Assets (ROA) as measure by EBIT divided by Total Assets
SIZE = Company size measured as the Ln of total assets collected from the annual reports at the end of the financial year end
LEVER = Leverage measured as total liabilities divided by total assets both collected at the financial year end.

4.0 Results

In this section we present the results of the regression analysis. We first report the descriptive statistics and correlation results in Section 4.1. This is followed in Section 4.2 by a presentation of the regression results.

4.1 Descriptive Statistics and Correlation Matrix

Table 1 below presents a summary of the descriptive statistics of the dependent and independent variables.

Table 1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev	Min	Max
TOBIN's Q	247	0.6883	0.7607	0.0270	9.780
BLOCKSH	247	85.9648	17.2682	22.200	99.940
DISPENSH	247	63.2202	20.1018	16.110	98.110
BSIZE	247	13.8664	3.78195	4	27
PROPNED	247	0.73839	0.11752	0.4545	0.9444
AQUAL	247	0.01668	0.11260	0	1.0741
IOP	247	0.09944	0.15992	0.0003	1.0047
PERF	247	0.22102	0.38455	-0.3241	2.8512
SIZE	247	18.64226	1.67889	9.24	25.12860
LEVER	247	0.63446	1.24691	0.003	0.96850

The table shows that the average firm value is 0.6688, suggesting low market valuation during our sample period. This may have been influenced by the 2008/2010 economic crises that may have slowed down the SA capital market. Block shareholding average 85.9% suggesting a high presence of institutional investors among the sample firms. Rahman and Ali, (2006), argued that there is a predominance of concentrated shareholding and controlling ownership in most developing countries. The mean size of the board is 13.8, with a minimum of 4 directors an indication that all the subject firms had complied with the JSE listing code (Mangena and Chamisa (2007).

The mean proportion of NEDs is 73.8%, suggesting that most SA boards are dominated by NED's as recommended by the King Report (2009). The mean leverage ratio of 63.4% means that SA companies maintain a well-balanced capital structure. Furthermore, the mean performance as measured by ROA was 22%, which is considered high. Therefore the dominance of independent directors within SA boards may have translated to higher financial performance in the subject companies.

The Pearson correlations are presented on Table 2.

Table 2. Correlation Matrix for the independent variables

	BLOCKSH	*DISPENSH*	*BSIZE*	*PROPNED*	*AQUAL*	*IOP*	*PERF*	*SIZE*	*LEVER*
BLOCKSH	1.000								
DISPENSH	0.065	1.000							
BSIZE	0.277	0.012	1.000						
PROPNED	0.356	0.069	0.003	1.000					
AQUAL	-0.087	0.090	0.001	-0.051	1.000				
IOP	-0.273	-0.262	0.170	0.076	0.067	1.000			
PERF	0.009	0.016	0.009	-0.021	-0.004	0.039	1.000		
SIZE	-0.238	-0.020	0.003	-0.167	-0.074	0.449	0.056	1.00	
LEVER	-0.138	-0.035	0.035	-0.227	-0.139	0.172	0.058	-.031	1.000

We use the correlation matrix to determine whether the independent variables are highly correlated. *Table 2* shows that there is little correlation among most of the independent variables as the highest correlation is 0.449 is less the benchmark of 0.7, suggesting that the problem of multicollinearity is not serious (Tibachnick and Fidel, 1996).

4.2 regression Results

The Multiple regress results are shown on Table 3 below:

As the table shows, the regression model has significant explanatory power. The adjusted R^2 of the model is 0.1957 and the F-value of 7.62 is significant at the 1% level or better. The adjusted R^2 of the model indicates that the model explains 19.57% of the variation in the firm value (Tobin's Q).

In terms of the explanatory factors, our findings indicate that there is a significant positive relationship between the proportion of NEDs and the value of the firm. The hypothesis that there is a significant relationship between the proportion of NEDs and firm value is therefore supported. These findings are consistent with those of Daily and Dalton (1994) who found that having more outside directors improves firm performance and Mangena and Chamisa (2007) who found a significant negative relationship between proportion of NEDs and listing suspensions in SA. Our study support the view that independent NEDs do monitor and control management and this leads to better company performance (Ajinkya et al, 2007).

Table 3. OLS regression results

Variable	Coeff.	SE	t-statistics	VIF
Constant	3.2351	0.5393	5.9980	
Block Shareholding	-0.01287	0.00280	-4.589***	1.23
Dispensed Shareholding	-0.00121	0.00225	-0.539	1.09
Board Size	-0.01216	0.01392	-0.874	1.44
Prop of NEDs	1.14917	0.42211	2.722**	1.29
Audit Quality	0.45806	0.40276	1.137	1.08
Investment Opportunity	0.58701	0.31801	2.046**	1.36
Performance	0.48207	0.13154	3.665***	1.35
Size	-0.05877	0.03406	-1.926**	1.72
Leverage	-0.02181	0.35133	-0.621	1.01
Adjusted R^2		19.57		
F-value		7.62***		

***,**,*Significant at the 1%, 5% and 10% respectively

We find that board size is not significantly related to firm value, although the direction of the coefficient is negative. Therefore, H2 is rejected. The negative coefficient suggests that large boards may lead to a decrease in the value of a firm. Yermack (1996) argues that large boards may be slow in making decisions and more difficult to coordinate and this may affect firm performance.

Our study finds a significant negative relationship between block shareholding and firm value, thus H3 is supported. Consistent with the findings of Mangena and Chamisa (2007) the results suggest that block shareholders are not effective in monitoring management. The findings are important as they support the view of the King report (2009) that no individual block shareholder should dominate management. Further our results suggest a negative relationship between dispensed shareholding and firm value. Although this relationship is not significant, it offers additional support to the view that large shareholders may participate in management as owner-manager and their participation becomes an obstacle to the CEO's effort to improve governance mechanism (Cho and Kim, 2003) and this would reduce firm value.

Our results find that audit quality is not significantly related to firm value. Although the direction of the relationship is positive as predicted our H5 is rejected. Chee Haat et al (2008) also found no significant relationship between higher audit quality and firm performance. However, our findings show a positive and significant relationship between firm performance and investment opportunity and the value of the firm, thus consistent with H6 and H9. The results support the view that better governed firms can offset myopia and allow managers to make long-term decisions to increase capital expenditures and this could have a positive effect on firm value (Khanchel (2007).

We also found a significant negative relationship between firm size and the value of the firm, which is consisted with H7. However we found no significant relationship between leverage and firm value, thus H8 is not supported. Although the findings are inconsistent with those of Ehikioya (2007) who found that larger firms with higher levels of debt ratio perform better than smaller firms, they support the view that smaller firms may have more growth opportunities, hence a higher valuation by the market.

5.0 Conclusions

The purpose of this study is to investigate the relationship between corporate governance characteristics and firm value in companies listed in the JSE Securities Exchange of South Africa. Specifically we draw from Agency theory to examine whether corporate governance characteristics (Board size, Board composition, Block shareholding and dispensed shareholding and Audit quality) influence the value of the firm. Consistent with agency theory, the results show a positive significant relationship between the proportion of NEDs and firm value, suggesting that independent NEDs help to monitor and control management. Furthermore the results support the recommendations of the King Report (2009) which calls for a board consisting of a balance between executive and non-executive directors preferably with a majority of NEDs, of who a majority number should be independent.

Block shareholding is found to be negatively related to the value of the firm, suggesting that high shareholder's concentration decreases the market value of the firm. The results indicate that block shareholding plays an insignificant role in monitoring and controlling corporate management in SA. This finding is important given the "shadow directors" problem in the SA corporate sector. Indeed the king Report (2009) recommends that shadow directors should be discouraged in SA firms.

Finally, we find no significant relationship between board size, dispensed shareholding and firm value. However we note that the direction of the coefficient is positive suggesting that larger boards may impede firm value maximization. Likewise, higher shareholding concentration inversely affects firm value, suggesting the need for leaner boards and a more dispensed shareholding in SA firms.

Our study contributes to the literature on corporate governance debate both in SA as well as the other developing countries of Africa. In particular the findings are important to those countries, including SA where recent corporate failures have been blamed on poor corporate governance structures. Moreover our study makes the first attempt to evaluate whether compliance with the recommendations of the King Report (2009) increases the value of the firm. In this respect, we have found that good corporate governance practices are associated to higher firm values. Therefore, in the context of Africa, strengthening of corporate governance practices may improve the market value of African firms, which would in turn attract more foreign investors, thus impinge upon economic growth. Empirical evidence suggests that foreign investors avoid investing in developing countries because of weak corporate governance practices (Gibson 2003; Bokpin and Isshaq, 2009)

Despite the importance of our study, the findings should be interpreted in the light of the following limitations. First our study sample consists of the fifty largest firms listed in the JSE of SA. Therefore the results may not be generalized to other smaller firms operating in SA. Second, this

study is constrained to SA. Firms in other developing countries may differ from their SA counterparts. This may be so because of legal and regulatory constraints and economic policies that may differ between countries. Future research may be designed to compare the findings of this study with findings that relate to firms operating in other developing countries of Africa.

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CRITICAL SUCCESS FACTORS FOR THE IMPLEMENTATION OF AN OPERATIONAL RISK MANAGEMENT SYSTEM

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Abstract

Operational risk has become an increasingly important topic within financial institutions resulting in an increased spend on operational risk management solutions. While this is a positive approach, evidence has shown that information technology implementations have tended to have low rates of success. Research has highlighted that a series of defined critical success factors could reduce the risk of implementation failure. Twenty-nine critical success factors were identified by means of a literature review and confirmed by a questionnaire that was distributed to an identified target group within the South African financial services community. Reponses to the questionnaire revealed that 27 of the 29 critical success factors were deemed important and critical to the implementation of an operational risk management system.

Keywords: Critical Success Factors, Operational Risk, Risk Management Systems, Strategy, Governance, Information Technology

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Introduction

Operational risk has become an increasingly important topic within financial institutions of late. A series of high-profile cases as well as increased regulation around the measurement and management of operational risk have prompted an increase in the level of sophistication with which operational risk is managed. To support the management of operational risk, software vendors have developed sophisticated applications to manage the full operational risk management life cycle. This has resulted in an increased spend by financial service organisations on operational risk management solutions. While this move is positive, evidence has shown that Information Technology (IT) implementations generally have high failure rates, jeopardising the success of the investment in any operational risk management solution. It is estimated that about one-third of all IT projects either fail or are abandoned, and around 40 per cent of application development projects are cancelled before completion (Randeree & Ninan 2009).

The Standish Group (2009) identified that 32 per cent of IT projects were considered successful, having been completed on time, on budget and with the required features and functions. A further 24 per cent were considered failures, having been cancelled before they were completed, or having been delivered but never used. The remaining (44 per cent) were considered challenged meaning that they were either over time or over budget, or completed with fewer than required features and functions. The Standish Group (2009:3) defines a successful project as the ability to complete and operationalise the project, on-time, on-budget, meeting features and functions as specified.

One of the probable reasons for these high failure rates is the large number of areas of expertise that must be managed during and throughout the project implementation. Project managers not only need to grasp technical issues, for example, system development and process re-engineering, but also master the human and organisational aspects, such as change management and end-user involvement. Practitioners and researchers have begun to identify these areas and commonly refer to them as critical success factors (CSFs).

Rockart (1979:83) describes a critical success factor as the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organisation, in other words the few key areas where things must go right to ensure a positive outcome for the business.Rockart (1979:86) also argues that the process of identifying CSFs helps to

ensure that these factors receive the necessary attention.

Cooke-Davies (2002:186) describes success factors as those inputs to the management system that lead directly or indirectly to the success of the project or business. The focus of this paper is based on a system implementation-type project, to identify the CSFs that can lead to the successful implementation of that system, more specifically, an operational risk management system.

Literature review

Research into the literature revealed that, while several types of IT implementations had defined CSFs, it seems that none had been done for the implementation of an operational risk management system (ORMS). To address this shortcoming it was argued that a series of CSFs were required to ensure a successful implementation of an operational risk management system. In order to ensure insight into the complexities involved in an ORMS implementation, it is important to first gain an initial understanding of enterprise risk management (ERM) and operational risk management.

For all types of organisations, there is a need to understand the risks being taken when seeking to achieve objectives and attain the desired level of reward. The Institute of Risk Management (IRM) (2010), states that an organisation needs to understand the overall level of risk embedded within their processes and activities. As such, it is important for organisations to recognise and prioritise significant risks and to identify the weakest critical controls. A successful ERM initiative can affect the likelihood and consequences of risks materialising, as well as deliver benefits related to better informed strategic decisions, successful delivery of change and increased operational efficiency.

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004:2) states that ERMis a process:

- effected by an entity's board of directors, management and other personnel;
- applied in a strategy setting and across the enterprise;
- designed to identify potential events that may affect the entity; and
- to manage risk to be within its risk appetite to provide reasonable assurance regarding the achievement of entity objectives.

Ding (2009a:8) defines ERM as a risk management philosophy and approach which adopts a top-down, organisation-wide approach to managing the entire universe of risks. In addition, Ding (2009a) also states that ERM not only covers point risks, such as, operational risk, credit risk, market risk, legal and compliance risk, but also considers the broader risks like strategic, reputational, political, environmental and key people risks.

Risk management is a process that is underpinned by a set of principles. It also requires the support by a structure that is appropriate for the organisation and its external environment or context. A successful risk management initiative should be proportionate to the level of risk in the organisation (as related to the size, nature and complexity of the organisation), aligned with other corporate activities, comprehensive in its scope, embedded in routine activities and dynamic by being responsive to changing circumstances (IRM 2010).

Considering the many risks faced by a business, operational risk can be viewed as a central point at which other risks interface with the business and, if mismanaged, can lead to significant losses. The Basel Committee for Banking Supervision (BCBS) defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Explicitly excluded from this definition are systemic risks, strategic and reputational risks, as well as all indirect losses or opportunity costs. The BCBS (2004) states that operational risk is inherent in every business and support activities, in other words, operational risk can occur anywhere and anytime in any business environment.

In June 2006, the BCBS released the International Convergence of Capital Measurement and Capital Standards, which contained the definitive proposals on capital charges for operational risk under Basel II (BCBS 2004). The Basel Committee however refrained from dictating explicit methodologies for calculating operational risk capital charges towards a more qualitative approach to the management of operational risk. In their final proposals, the Basel Committee stressed the importance of qualitative standards for banks that prefer to use the advanced measurement approach (AMA) for management of their operational risks. The Basel Committee, however, states that an ORM system must be "conceptually sound and implemented with integrity" (BCBS 2004:3), but gives little guidance as to what such a system might actually look like.

Over the last few years, in order to support financial institutions in meeting their Basel II regulatory requirements, along with the automation of the operational risk management process, operational risk management systems have become increasingly sophisticated and important tools (Ding 2009b).

An operational risk management system (ORMS) is a broad term used to describe software designed for the management and monitoring of operational risk within an organisation. Gartner

(2009) defines an operational risk management system as a combination of two primary technologies, namely operational risk engines (OREs) and qualitative risk self-assessments (QRSAs).

According to Gartner (2009), an ORE involves the following:

- it incorporates a tool for the measurement of potential losses that are due to inadequate operations;
- it supports event reporting;
- it calculates economic and regulatory risk capital for operational risk;
- it runs scenarios of potential risk exposures to quantify operational risk;
- it fits statistical distributions to internal and external loss data;
- it links cause and effect to determine key risk indicators;
- it conducts fault tree analysis; and
- it creates qualitative rankings and balanced scorecards for operational risk.

Gartner (2009:64), furthermore defines a QRSA, as a software application that provides the ability to identify operational risk exposures, and then links controls, risk weightings, audit findings and losses to those exposures. QRSA tools focus on qualitative, process-based management of operational risk and typically support risk policy definition and controls, including an organisational framework; business process identification; as well as mapping, evaluation, audit and certification functions. Information related to loss events and key risk indicators are captured, reported, and escalated through a workflow functionality to the appropriate level of management for regulatory reporting.

To start identifying a list of CSFs for an ORMS, IT, ERM and Enterprise Resource Planning (ERP) implementations as well as operational risk in general were researched to determine a baseline and categories for potential CSFs relevant to an ORMS implementation. Strauss and Corbin (1990:15) state that with respect to the naming of a category, "it is usually the one that seems most logically related to the data it represents, and it should be graphic enough to remind you quickly of its referent". Accordingly, the categories and category descriptions for CSFs are depicted in Table 1 below that were obtained from the literature.

Table 1. Categories of critical success factors

Category name	Category description
Strategy	All CSFs related to the support of the strategic direction of the system implementation project
Pre-project planning	All CSFs related to the pre-project planning phase of a system implementation project
Scope	All CSFs that relate to the scope of a system implementation project. The Project Management Institute (PMI) defines scope as "the work that must be performed to deliver a product, service, or result with the specified features and functions" (PMI 2008:444).
Project resources	All CSFs that relate to the project resources who are involved with a system implementation project
Project management	All CSFs that are related to the project management of the system implementation project. The PMI defines project management as the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements
Performance monitoring	All CSFs that are related to the performance monitoring of a system implementation project. The PMI defines performance monitoring as those processes required tracking, reviewing and regulating the progress and performance of the project, identifying any areas in which changes to the plan are required, and initiate the corresponding changes(PMI 2008:444).
Decision-makers' support from senior management	All CSFs that are related to the key stakeholders and decision-makers involved with a system implementation project
Governance	All CSFs related to the governance of a system implementation project
Change management	All CSFs that are involved with the change management effort throughout the organisation undergoing a system implementation project
Communication	All CSFs related to both the internal and external communication between all stakeholders involved in the system implementation project
Data	All CSFs related to the application data required for a system implementation project
Application	All CSFs related to the application being implemented as part of the system implementation project
Architecture	All CSFs related to the solution architecture for the system being implemented
Internal audit	All CSFs related to internal audit's role within a system implementation project

At the same time twenty-nine potential CSFs relevant to the implementation of an ORMS were identified as part of the same literature review and are listed in Table 2 in no particular order.

Table 2. Critical Success Factors

Number	Critical Success Factor
1	Common understanding between business and IT of the risk strategy
2	Defined risk appetite
3	Well defined and documented Operational Risk management policies, processes & procedures
4	Clear, realistic goals and objectives (around the ORMS and what the implementation will achieve)
5	A clear implementation strategy
6	Business Unit and IT involvement in pre-project planning (Business Unit involvement in early planning phases)
7	A clearly establish project scope (clear and fixed statement of requirements along with smaller project milestones)
8	Ensure that the ORMS implementation is enterprise wide
9	Ensure adequate budget for project resources (to cover in addition to the direct project costs, costs associated to project team performance incentives, e.g. project bonuses)
10	A cross functional team consisting of the right mix of external consultants and internal staff
11	Full-time (dedicating 100% of their time to the project) team members (assuming that they are adequately skilled)
12	Have an experienced project team with the right mix of business and technical skills
13	Assign responsibility (to one or several individuals for delivery of the project)
14	Have a competent project manager (both in terms of skill and leadership ability)
15	Have effective monitoring/control throughout the implementation lifecycle (strong/detailed plan kept up to date throughout the implementation lifecycle along with ensuring that risks are addressed/assessed/managed)
16	Have specified measures of project success (predefined metrics to track and monitor the project's success against, e.g. 40% decrease in a particular process time)
17	Have a project Sponsor/Champion from top management (having the CRO, or equivalently empowered decision maker, driving change along with active top management support throughout the implementation lifecycle)
18	Have a documented and agreed project team structure (reflecting clearly defined roles & responsibilities throughout the organisation as they relate to the project team along with a defined project steering committee)
19	Have a defined and documented organisational structure (an organisational wide structure documenting interdepartmental roles/reporting lines that reflecting the ORMS projects relationship/impact on this structure)
20	Ensure effective Change Management (focusing on User/Client involvement throughout the implementation process along with adequate training)
21	Ensure targeted and effective communication (management of expectations at all levels along with communication among key stakeholders and continuous project progress communication)
22	Ensure that Operational Risk related data is available, in a single data repository
23	Have a documented Data Model (Conceptual, logical and physical data model for all data related to an ORMS)
24	Have minimal customisation to the ORMS software (aligning the business processes to the software)
25	Ensure that the ORMS interfaces with legacy systems and other applications
26	Conduct system testing prior to implementation
27	Have a vendor with past experience in a similar implementation
28	Have flexible and configurable architectural framework (architectural design of the ORMS solution)
29	Have Internal Audit control throughout implementation (the involvement of the Internal Audit department throughout the implementation lifecycle)

Each CSF can be allocated to a CSF category, reflected in Table 3.

Table 3. Allocation of CSFs to CSF categories

ID	CSF Category	CSF
1	**Strategy**	
1.1		Well-defined and documented operational risk management policies, processes and procedures
1.2		Common understanding of risk strategy between business and IT
1.3		Define risk appetite and tolerance
2	**Decision-makers' support from senior management**	
2.1		Project sponsor/champion from top management
		CRO required to drive change
		Active top management support throughout the implementation life cycle
		Empowered decision-makers
3	**Governance**	
3.1		Documented and agreed project team structure
		Creation of a project steering committee
		Clearly defined roles and responsibilities throughout the organisation (operational risk-related)
3.2		Defined and documented organisational structure
4	**Data**	
4.1		Data availability, migration, consolidation and cleaning
4.2		Data model
5	**Communication**	
5.1		Targeted and effective communication
		Management of expectations at all levels
		Communication among key stakeholders
		Project progress communication
		Organisational adaptation/culture/structure
6	**Change management**	
6.1		Effective change management
		User/client involvement
		Training provision (budget, resources)
		End-user training
7	**Project resources**	
7.1		Experienced and adequately skilled project team
		Team should have both business and technical knowledge
7.2		Adequate budget
		Adequate compensation and incentives
		Linking output to management compensation
7.3		Full-time team members
7.4		Cross-functional team consisting of a mix of consultants and internal staff
8	**Scope**	
8.1		Clearly established project scope
		Clear and fixed statement of requirements
		Smaller project milestones
8.2		Enterprise-wide implementation
9	**Project management**	
9.1		Responsibility assigned
9.2		Competent project manager
10	**Application**	
10.1		System testing prior to implementation
10.2		Vendor support and past experience
10.3		Interfaces with legacy systems and other applications
11	**Architecture**	
11.1		Flexible and configurable architectural framework
12	**Pre-project planning**	
12.1		Clear realistic goals and objectives
12.2		Business unit and IT involvement in pre-project planning
		Business unit involvement in early planning
12.3		Clear implementation strategy
13	**Performance monitoring**	
13.1		Effective monitoring/control throughout the implementation life cycle
		Strong/detailed plan kept up to date throughout the implementation life cycle
		Risks addressed/assessed/managed
		Maintaining initial project scope
13.2		Specified measures of success
14	Internal audit	
14.1		Internal audit control throughout implementation

In order to determine the critical importance of the identified CSFs for the implementation of an ORMS, the following research methodology was used.

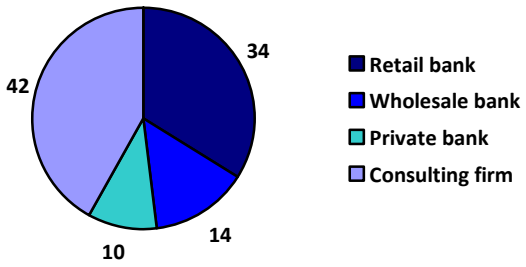
Research Methodology

Research was carried out, via a questionnaire, to validate the list of 29 CSFs by confirming how critical and important each CSF was in relation to an ORMS implementation project. The questionnaire was distributed to an identified target group within the South African financial services community. The target population for the South African financial services industry comprised of the six main largest South African banks. The reason for deciding on this target audience was based on the South African Reserve Bank's statistical information of 2011. According to this information, these banks together constitute approximately 90 per cent of the South African banking market (by assets) and are considered to be the most sophisticated financial services organisations in the industry in terms of information technology maturity.

In addition to the identified financial services institutions, IT consulting firms were also considered in the target population, as they are often contracted by the financial services institutions to play a role in the implementation process. Thus, it was assumed that these firms would have a considerable amount of experience and expertise in implementing an ORMS.

A total of 52 questionnaires were completed, which represents a 68% response rate. Responses across all business-type categories were received, however, analysis of the results (Figure 1 below) indicated that the majority of respondents were from IT consulting firms and retail banks, which represented 42 per cent and 34 per cent respectively.

Figure 1. Respondents business type summary



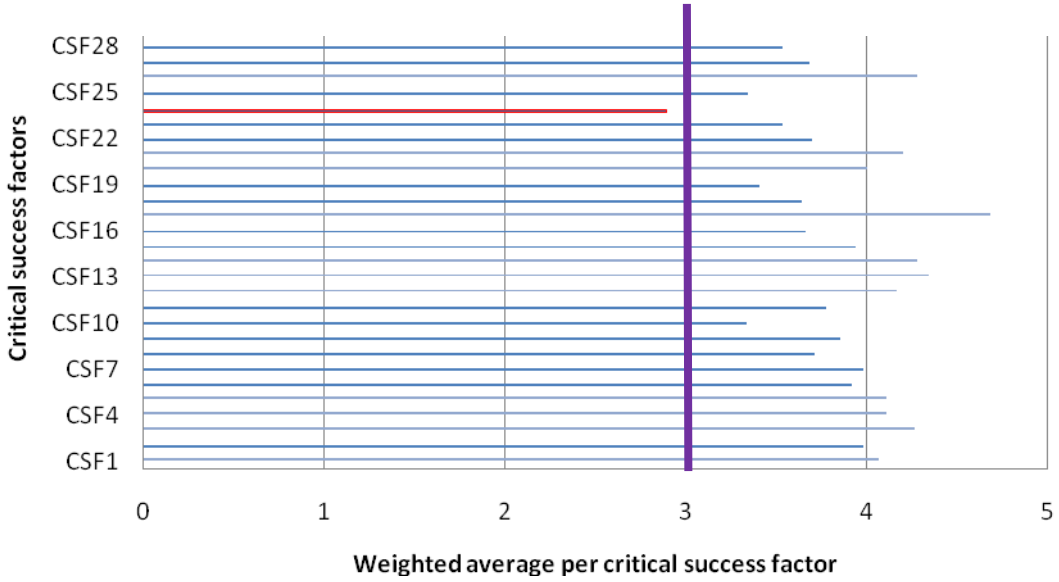
To determine the significance of the 29 identified critical success factors, the respondents were asked to rate, via a Likert scale (Table 4 below), each CSF from "neither critical nor important" to "extremely critical and important".

Table 4: Likert scale rating and description

Value	Likert scale description
1	Neither critical nor important
2	Important not critical
3	Somewhat critical and important
4	Critical and important
5	Extremely critical and important

Reponses to the questionnaire (Figure 2 below) revealed that 27 out of the 29 critical success factors were deemed important and critical to the implementation of an operational risk management system.

Figure 2. Significance of critical success factors

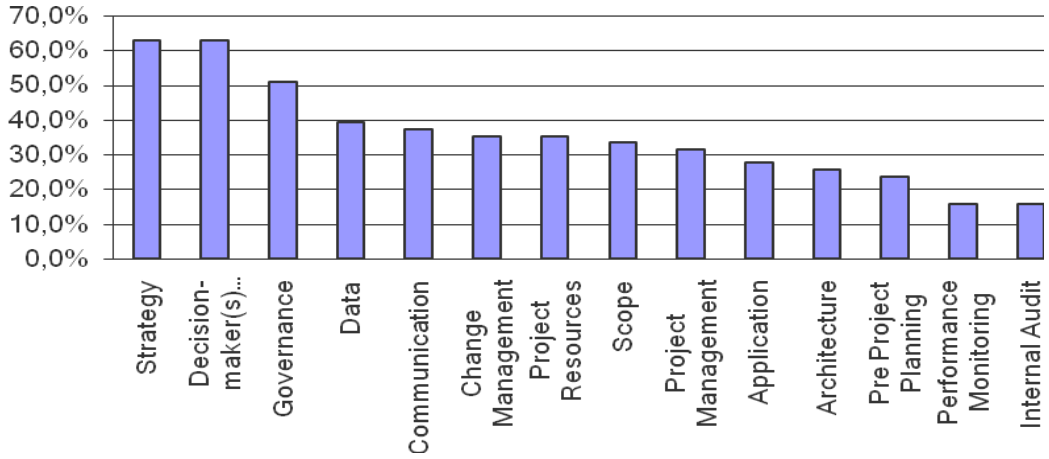


For a CSF to be considered, the average response had to be at least "somewhat critical and important". CSF 24, *minimal customisation to the ORMS software*, in Figure 2 above, was not considered as critical with only 19% of respondents indicating that this was critical and important. The majority of respondents (45%) were of the opinion that this was somewhat critical and important, with 26% being of the opinion that this was important but not critical. Only 6% of respondents thought that this was neither critical nor important. With the majority of respondents considering this CSF as less than somewhat critical and important, CSF 24 was not considered as a CSF in the implementation of an ORMS.

CSF 29, *the importance of having internal audit control throughout the implementation*, in Figure 2 above, was found to be important but not critical by 30% of the respondents with another 30% considering this as somewhat important and critical. Only 29% considered this as being critical and important as well as extremely critical and important. As the majority of respondents considered this CSF as less than somewhat critical and important, it was not considered as a CSF for the implementation of an ORMS.

The questionnaire also determined the priority of the 14 identified CSF categories (originally defined in Table 1 above). Figure 3below presents the cumulative results of the prioritised CSF categories as per the respondents' feedback. The majority (62.7%) of the respondents confirmed that the most important factor categories of an ORMS were *strategy and decision-makers' support from senior management*. This indicated that the respondents recognised the strong need to have a definite and well-defined strategy around implementing an ORMS as well as support from senior management in order to execute a successful implementation of an operational risk management system.

Figure 3. Prioritised critical success factor categories



Based on the response, the 27 identified CSFs along with the prioritised CSF categories were combined to produce a list of prioritised CSFs with associated categories (Table 3above).

The cumulative results from the questionnaire enabled the CSFs and their respective categories to be ranked in order of importance and criticality. There are several conclusions that can be drawn from the results of the questionnaire. These conclusions are grouped below in order of priority according to the 14 identified CSF categories discussed in the section above.

As a general observation, the highest prioritised CSF categories and CSFs tended to be those that influenced or impacted the implementing firm at an organisational level, while the lower prioritised categories and CSFs were found to impact and influence theORMS project environment. As an example, *strategy*, *decision-makers' support from senior management* as well as *governance*, tend to influence and be managed at an organisational level and were thus found to be the top three prioritised CSF categories. *Architecture*, *pre-project planning*, *performance monitoring and internal audit* are all project-specific, and were found to be the lowest prioritised CSF categories. The results seemed to indicate that for an implementation to have the highest probability of success, CSFs that affect the organisational level must first be examined and in place before concentrating on more operational and project-level CSFs.

Other key observations resultant from the literature review and in order of priority according to the empirical analysis, are discussed below:

Strategy

- Having *well-defined and documented operational risk management policies, processes and procedures* was identified as the most important critical success factor to enable a successful ORMS implementation. This is possibly because the existence of these documents is usually considered as a starting point for the implementation process. Documented policies, processes and procedures enable the team involved to clarify with management how the new system will complement the existing way of handling operational risk, and where it will deviate. By identifying specifications and variances upfront, the project team is able to adequately scope and plan for the implementation and ultimately increase the probability of success.
- A *common understanding of the risk strategy between the business and the IT department* will ensure that the solution that is developed will meet the business' needs. It is also important that a mutual understanding of the risk strategy be maintained throughout the implementation in order to ensure alignment of the ORMS to the overall risk strategy.
- A *defined risk appetite and tolerance* will allow for the ORMS to be correctly calibrated. The risk appetite and tolerance will define the operational risk that the bank is prepared to tolerate and will thus have a direct impact on how the system that manages and monitors the operational risk is implemented and calibrated.

Decision-makers' support from senior management

- Having *a project sponsor/champion from top management* is vital to provide the right level of support behind the project. Typically, sponsorship of an ORMS implementation from a business perspective will fall under the risk and/or finance department. As such, the CRO/CFO should provide full support to drive the required change. Active support from top management throughout the implementation life cycle will ensure that decisions are made in a timely manner and that the implementation team receive the required support. All decision-makers involved in the project should be adequately empowered in order to affect the

change and decisions at the level where it is required.

Governance

- A *documented and agreed project team structure along with clearly defined roles and responsibilities throughout the organisation for all stakeholders involved with the ORMS implementation* is crucial to ensure that all parties involved are aware of their role within the implementation. Establishing a project steering committee prior to the commencement of the project allows for a single project governance body to be established with the role of guiding, reviewing and approving all critical milestones and issues that arise during the project. The project steering committee should consist of senior managers and executives who have a direct interest in the ORMS implementation.
- A *defined and documented organisational structure* allows the project team to assess possible areas within the organisation that will be impacted by the implementation. Once an understanding has been established, the project team can adequately prepare and manage the stakeholders within these areas. It was noted in the analysis of the results that banks that have implemented an ORMS found it more critical and important to define and document the organisational structure for the ORMS implementation than compared to banks that did not have an ORMS or who did not plan to implement an ORMS. This finding is in line with the view of having a defined and documented organisational structure prior to implementation.

Data

- The *data required* to set up and run the ORMS should be available prior to starting the implementation. Once the data has been identified, the data needs to be consolidated, verified and migrated into the new ORMS.
- A *data model*, which defines the relationships between disparate data entities within the operational risk environment, should be developed prior to implementation. Having a defined data model will allow for easy integration between the data source systems and the new ORMS. When examining the respondent types, it was noted that a documented data model was considered more critical and important by organisations that were planning on implementing an ORMS than those that did not have an ORMS or were not planning to implement an ORMS. This finding is in line with the view of having a defined data model prior to implementation.

Communication

- Project communication must be addressed by *targeting the correct stakeholders by delivering the correct message* at the right time and in the right format. Throughout the project, the expectations of key stakeholders involved in the implementation must be managed through effective communication. This typically takes the form of frequent project progress communications to all identified stakeholders and is usually adapted to the style, structure and culture of the organisation.

Change management

- Any new system implementation brings a fair degree of change to an organisation. *Effective change management* is important to ensure that all affected parties understand the impact of the change and the way it affects their work. By establishing adequate training prior to the implementation, the organisation can begin to manage the change that a new ORMS will bring by adequately training and familiarising the end-users with the new features and functions of the ORMS.

Project resources

- The *implementation team should consist of experienced and adequately skilled team members who have a balance of both business and technical knowledge*. This is important when gathering business requirements to implement an IT system that will be owned and operated by the business. Having a team with both business and technical knowledge will enable an ORMS to be implemented that meets both the needs of the business while still being technically sound.
- An *adequate project budget* should be set aside to incentivise and link the project teams' compensation to the outcome of the project. Providing a performance bonus tied to the successful outcome of the project will drive the delivery team to provide their best efforts during the implementation.
- Ideally, the *project team should consist of full-time team members with a cross-functional mix of consultants as well as internal staff*. The implementation of an ORMS will require a dedicated and focused team who should be full time involved in the project. The project team should also consist of a mix of cross-functional consultants (with a wide range of skills) as well as internal departmental team members to provide the organisational perspective needed to successfully implement the ORMS.

Scope

- The *scope of the ORMS implementation should be clearly established prior to the project commencing*. The scope should include a fixed statement of requirements and should be organised within a project plan with frequent project milestones.
- The scope of the implementation should be *enterprise-wide*. With operational risk affecting

the entire organisation and not just a department or subsidiary, an implementation should be targeted across the enterprise. This would also create efficiencies and synergies across the organisation by means of common and standardised ways of handling and managing operational risk.

Project management

- *Responsibility for managing the project should be assigned* and made clear to all involved stakeholders before commencing with the project. Typically, a project manager will be assigned responsibility for the delivery of a project. The project manager is one of the most critical team members throughout the implementation and thus a competent project manager should be selected. The project manager's primary responsibility is to ensure that the project is delivered on time, on budget and against the defined scope. Once the project manager has been assigned, this should be communicated to all stakeholders in order to promote accountability for the delivery of the implementation.

Application

- The application should be *tested prior to implementation*. Application testing should focus on the stability and usability of the ORMS application as well as attempt to uncover any performance issues. Having a properly tested system prior to implementation will support the adoption of the system by end-users and will play a key role in determining the success of the overall implementation.
- The vendor implementing the ORMS should have *experience in implementing* and should provide support throughout the implementation life cycle.
- If required, the selected ORMS should be interfaced with the organisation's *legacy systems* in order to ensure that the data required to support the ORMS is available and in the required format. This requirement is typical of organisations with a fragmented application landscape in which several applications contain data needed by the ORMS.

Architecture

- A *flexible and configurable IT architectural framework* should be developed to support the ORMS implementation. With a flexible and configurable IT architecture, the complexity and cost of an ORMS implementation should be reduced by capitalising on unified architectures, scalable solutions and automated services. This should have a positive impact on the probability of having a successful ORMS implementation.

Pre-project planning

- *Clear realistic goals and objectives* should be set prior to the project commencing. By establishing the objectives of the project upfront, the expectations of all stakeholders involved can be managed throughout the project life cycle. A set of clear goals and objectives can also be used to drive out more detailed project planning as well as establish a reference point against which project progress can be assessed.
- *Business units* impacted by the implementation as well as the IT department should be involved early in the pre-project planning phase. This will ensure that all stakeholders are afforded the opportunity to understand the impact that the ORMS will have on their department as well as on their role throughout the implementation.
- A *clear implementation strategy* should be developed and laid out prior to the start of the project. The implementation strategy should provide more in-depth insight into how the ORMS will be implemented and by whom. The strategy should also focus on defining known risks and issues as well as mitigation strategies to address these before the project commences.

Performance monitoring

- *Effective monitoring and control* of the project is necessary throughout the implementation life cycle with a strong and detailed plan being kept up to date. Project risks should be identified, assessed and managed frequently as part of the monitoring and control life cycle.
- *Project success metrics* should be defined up front in order to measure, as part of the monitoring and control life cycle, whether the project is delivering the intended benefits.

Internal audit

- Due to the fact that the category of *internal audit* was found to be non-critical for a successful implementation of an ORMS, it can be considered as not applicable at this stage.

Conclusion

In most countries across the globe, the global financial crisis showcased certain inadequacy of the current financial services industry regulation as well as the inability of industries to successfully detect and prevent the risk exposures. Some of the most severe losses that were experienced during the crisis could be attributed to operational risk failures.

With the introduction of Basel II, the field of operational risk received a boost in terms of the development of tools and strategies. The emergence of operational risk management systems provided much needed support to the management and monitoring of operational risk within an organisation; however there have been challenges in realising these benefits with difficult and often failed ORMS implementations. It was thus determined that an identified list of critical success

factors relevant to an ORMS implementation was needed in order to increase the probability of successfully implementing an ORMS system.

Through a review of the literature and survey on CSFs, the study identified a set of 27 success factors that were considered as critical and important for the implementation of an ORMS. The prioritisation of the success factors along with their corresponding categories provided insight into which CSFs were the most important and should be regarded as a priority when implementing an ORMS. CSFswhich could influence the organisation were identified as the most critical and important with CSFs around strategy, support from senior decision makers and governance being of the highest importance for an ORMS implementation. This finding indicated that broader organisational topics needed to be addressed prior to the actual ORMS implementation taking place.

The remaining CSF categories and associated CSFs all pertained to the ORMS implementation project. CSFs around data, communication, change management, project resources, project scope, project management, software application, IT architecture, pre project planning and project performance monitoring were identified as being critical and important to the implementation of an ORMS.

The identification of the CSFs should provide future ORMS stakeholders with the ability to improve the probability of implementing an ORMS successfully. The identified CSFs should also allow for the efficient allocation of scarce organisational and project resources against the identified CSFs most likely to influence the success of the implementation.

The results from this research should lay a foundation upon which to build the understanding of the CSFs affecting an ORMS implementation. In addition to this research further areas for investigation could be to determine whether:

- the identified CSFs extend across industries; and
- how the size of the implementing organisation affects the identified CSFs.

The adoption of these and other identified CSFs should increase the probability of a successful implementation of an operational risk management system by serving as a guideline during the project management process.

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