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CONTENTS

INSTITUTIONAL THEORY FOR EXPLAINING CORRUPTION: AN EMPIRICAL STUDY ON PUBLIC SECTOR ORGANIZATIONS IN CHINA AND INDONESIA

Yudha Aryo Sudibyo*, Sun Jianfu*

Abstract

Many researches on corruption examined macro factors such decentralization, political democracy, press freedom, and economic freedom, as shown by Lecuna (2012), Alexeef and Habodazzova, (2012) and Goel and Nelson (2005). However, there are limited studies on corruption that examine this topic from organizational approach. The main purpose of this paper is to investigate existing institutional theories describing corrupt behaviour in Asian public sector organizations. A total of 171 questionnaires were distributed to public service officers who were currently enrolled as accounting postgraduate students in both China and Indonesia. The results support the institutional theoretical model used to explain corruption in public sector organizations. However, cultural differences in democracy was not a significant factor on respondent's perception concerning corruptions in both of countries.

Keywords: Institutional Theory, Corruption, Public Sector, Task Environment, Institutional Environment, Democracy

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1 Introduction

Asia is a potential region for conducting research on corruption issues (Luo, 2002). Transparency International (2013) showed high-corruption level among public sector organizations in 34 countries in Asia. As compared to other Asian Countries, Singapore, Hongkong SAR, and Japan have relatively higher Corruption Perception Index (CPI) with score of 86, 75, 74 respectively. Rank below these three countries is United Arab Emirates, Qatar, Buthan, Taiwan, Brunei, Korea Selatan and Malaysia that have CPI ranking between 50 and 70. Countries which have scored less than 50, indicate corruption is a serious problem.

Past studies on corruption have focused macro factors such as decentralization, political democracy, press freedom, economy freedom and fiscal decentralization that could affect corruption (e.g., Lecuna, 2012; Alexeef and Habodazzova, 2012; Goel and Nelson, 2005). Furthermore, limited studies have examined corruption on organizational level. The work of Luo (2002), Pillay and Kluvers (2014) are some of the examples that examined corruption in organizational level.

Luo (2005) argued corruption research that used organizational approach is vital for many reasons. First, organization is the place where corruption may take place. Second, studying corruption among organizations may lead us to understand what drive corruption at organizational level. Third, organization is the primary lead to understand corruption level of a country. Fourth, corruption studies might significantly contribute to improve organization well being. Corruption often slows down organization performance and firms have to pay more for the damages caused by corrupt practices.

The Global Economic Crime Survey conducted by Pricewaterhouse Coopers (2011) showed that assets misappropriations, accounting fraud, bribery and corruption are considered the most fraudulent practices found in public sector organizations. Hence the research objective of this study is to provide empirical evidence on public sector organizations' involvement in corruption within the institutional framework. The model is derived from Luo model (2005) which incorporates institutional theories as the grand theory (DiMaggio and Powell, 1983; Eisenhardt, 1988; Tolbert and Zucker, 1996; Scott, 2001).

Institutional model believes that corruption at organizational level is caused by lack of support from task environment, poor comprehension of the regulations as well as execution and practices of these regulations. Other aspects are weak commitment to eradicate corruption, lack of transparency of institutional environment and, the complexity of administration system (Luo, 2005; Pillay and Kluvers, 2014). Pillay and Kluvers (2014) provided empirical evidence of corruption at public sector organizations in South Africa which is a democratic and developing country. They managed to describe corruption at organizational level by incorporating Luo's Model in their study.

Besides the motives for corruption, studies conducted in some high corrupt level countries considered culture as a variable that is significantly correlate to corruption. For examples, Treisman (2000), and Pellegrini and Gerlagh (2008) have identified culture as a factor that contribute toward corruption.

As for the two countries in this study (based on CPI 2013 issued by Transparency International), China scored 39 which is slightly better than Indonesia with a score of 32. These scores reflected a high-level of corruption in these two countries.

The general aim of this research is to understand corruption at public sector organizations from organizational perspective. The specific aim is to examine the influence of task environment and institutional environment concern for corruption, and the culture of democracy toward corruption in China and Indonesia.

2 Literature review

2.1 Institutional theory

Institutional theory has been discussed in many research and literatures (DiMaggio and Powell, 1983; Tolbert and Zucker,1996; Scott, 2001). However, the rationalization of corruption research has shifted from the competitive marketplace to the state and professions.

As for isomorphic process, DiMaggio and Powell (1983) had identified three mechanisms namely: coercive, mimetic and normative that could influence organizations guest for change. Coercive isomorphism describes organizational change as a result of a political decisions introduced by the authority. In public sector, an organization often must implement new regulation(s) initiated by the government. Mimetic isomorphism refers to environment uncertainty and ambiguous goals that lead organizations to imitate others. In normative isomorphism, organizations and professions are subjected to change as a result of pressure from peers.

Tolbert and Zucker (1996) explained that based on individuals' interests, they would accept and follow social norms unquestioningly, without any critical reflection or resistance. For instance, corrupt environment would lead individuals to behave corruptly as they considered it as a common norm.

2.2 Corruption

Corruption can be defined broadly or narrowly depending on the focus of study. Generally, corruption is defined as a behaviour, which deviates from the norm or violation of the rules. The motivation is personal gain by using his/her position. While the broadest sense, corruption is a deviant behaviour against individual formal responsibilities in various institutions / organizations (not just the government or the public sector) for the sake of personal gain (Luo, 2002). Corruption may be characterized based on the following nature:

Corruption is perceptual. The behaviour of an individual related to corruption due to wrong perception. This entails community perception that corruption is common.

Corruption is contextual. Corrupt behavior is influenced by ideology, paradigm, culture and other inherent corruption contexts. Politics not only affect how one understands and defines corruption, but it also generates a social behavior such as corruption itself.

Corruption is power-related. To perpetuate corruption, a corrupt person should be in a strong position in a government or an organization.

Corruption is illegal or norm-deviated. Corruption is an illegal act that is characterized by the unauthorized money transfer in which the aim is to gain a personal advantage. Violation of the regulation is one characteristic of corruption. Hence, the government should promulgate easy-to-understand laws relating to corruption for a clear-cut between corruption gift-giving, which is common in some culture.

Corruption is intentional. The motivation for personal gain is attached to the connotation of corruption.

Corruption's mode of expression is usually covert. Corruption tends to be hidden or informal, making it difficult to detect.

This study will use the generic definition of corruption, in the context of examining corruption in public sector organizations. Acts of corruption in this study also referred to theft of assets (asset misappropriation), tax fraud, accounting fraud, bribery and money laundering (Pricewaterhouse Coopers, 2011).

Luo (2005) explained that in the institutional model, the task environment and institutional environment will affect individuals in an organization to perform fraudulent acts (malfeasant behaviour). Malfeasant behaviour could led to the development of lack of focus and deterrent outcomes. This could result in the organization weak and unable to respond to environment change.

Organizational anti-corruption became mechanism described by Luo (as a mean to prevent corrupt practices) incorporates the elements of organizational culture, organizational structure and compliance system. Organizational culture is the tradition where decision-making is morality-based, while organizational structure is a structure that aims on detecting and correcting any fraudulent act occurs within the organization. Compliance systems, on the other hand, are built to prevent corrupt practices through the development of anti-corruption programs and codes of conduct within an organization.

2.3 Corruption in China and Indonesia

CPI ranks countries based on their level of corruptions. The index indicates perception of respondents toward corruption based on a scale between 0-100. Zero score indicates highest level of corruption, while a score of 100 indicates the lowest corruption index. Based on CPI year 2013, China scored 39, which is relatively higher than Indonesia with a score of 32. This implies that China is slightly less-corrupt than Indonesia. However, both countries are the same range of score between 30-40, thus, corruption level is still considered high in both countries.

China has become one of the world economy giants and attracts large foreign direct investment. However, it continues to have a high-level of corruption. CPI issued by Transparency International (2013) ranked China in 87 position from total 177 countries with a CPI of 39.

President Xi Jinping is determined to eradicate corruption and one of his political priority is to combat corruption in China. In 2013, China Government has expelled 17 senior officials (positions equivalent to ministry-assistant and governor-assistant), conducted investigation on 197.000 corruption cases, and has sentenced up to 182.000 government employees who were involved in corrupt practices (Pei, 2014).

Meanwhile, Indonesia is also experiencing fast economy growth. However, it still ranked 114 position, with a low of CPI score 32. During 2004-2014, Corruption Eradication Commission/ Komisi Pemberantasan Korupsi (KPK) has preliminary-investigated 604 corruption cases, investigated 365 cases, charges were made to 290 cases (KPK, 2014).

2.4 Hypothesis development

DiMaggio and Powell (1983) argued that organization would change correspondingly to coercive, mimetic and normative processes. Coercive process explains that external pressure such as from the government, will direct organizational to change. Mimetic process describes that environment uncertainty and ambiguous goals that would also guide the organization for change.

Luo (2005) explained that task environment consists of information, external resources or conditions that might affect achievement of a strategy. The concentration of powers in the government and weak regulatory oversight allow government officials to intervene policies and gain access to resources. These conditions resulted in the opportunities for the business community to co-opt with government officials with motive of achieving individual gains.

Institutional environment consists of three elements namely: transparency, fairness and complexity. Transparency is the degree of openness and ease in understanding the applicable rules. Luo (2005) found that ambiguous rules provide opportunities for government officials to engage in corrupt practices and exploit weaknesses of these rules. Fairness is described as rules that can be enforced and implemented fairly. Complexity, on the other hand is a system of rules and socio-cultural environments that are difficult to understand, subsequently, triggers people to commit corrupt practices (Luo, 2005; Pillay and Kluvers, 2014).

The hypotheses (H) for this study are stated as the follow:

H1: Task environment affects the occurrence of corruption

H2: Institutional environment affects the occurrence of corruption

2.5 Culture of Democracy

Evaluation of corruption level across countries based on empirical research is challenging because the definition of corruption is fluid influenced by different cultures and also difficult to detect corruption as it is a closed nature (Pellegrini dan Gerlagh, 2008). Hence, current research tried to compare respondents' perception towards high-level corruption countries with different cultures and democracy level.

China which is ruled by single political party (Communist Party). The Economist Intelligence Unit (2007) classified china as an authoritarian regime based on its democracy index. On the other hand, Indonesia is categorized as a flawed democracy since it has multiple political parties. Democracy index was built based on five categories; election process and pluralism, civil freedom, government function, political participation, and political cultures. Some researches argued that level of democracy correlates negatively with corruption (See Hill, 2003; Chowdhury, 2004; Bohara et al, 2004; and Pellegrini and Gerlagh, 2008). On the other hand, Treisman (2000) argued that level of democracy has no significant impact on corruption. Based on explanation above, the following hypothesis is being proposed.

H3: Level of democracy affects perception of corruption.

3 Methodology

Data presented in this paper were collected by distributing 210 questionnaires to public service officers who were pursuing postgraduate study in accounting at Faculty of Economics and Business, Universitas Jenderal Soedirman (UNSOED), Indonesia, and College of Management, Hebei University (HBU), China. They were chosen based on their work experiences in public sector organizations with a minimum of one year working experience. Out of the 210 responses, 39 questionnaires were not usable due to incomplete items. Only 171 questionnaires representing a response rate of 81,42% were valid for further analysis.

3.1 Research variables

The variables used in this study consist of task environment and institutional environment as independent variables, as well as deterrent outcomes to measure the impact of corruption among the public sector institutions. The research model was developed from previous studies conducted by Luo (2005) and Pillay and Kluvers (2014).

The questionnaires were translated into Indonesian and Chinese language which were reviewed by language experts to avoid linguistic ambiguities. Seven items represent task environment, eight items for institutional environment, and two items for deterrent outcomes were adopted from previous studies. All items were measured using Likert scale, ranging from '1' representing Strongly Disagree, and a score of '5' representing Strongly Agree.

3.2 Validity and realibility of the questionnaires

Reliability testing (Table 1) for each variables showed Cronbach's Alpha of more than 0.60. It gave the indication of an acceptable internal consistency. Pearson Product Moment was used to confirm validity of the instrument in this research. Table 2 showed each items in questionnaires has r-value > 0.126 (r-table).

Table 1. Reliability Testing

Variables	Cronbach's Alpha
Task Environment	0,659
Institutional Environment	0,709
Deterrent Outcome	0,767

Source : SPSS Output

Table 2. Validity Testing

Variable Task Environment

Item	r value	r table
1	0,339	0,126
2	0,493	0,126
3	0,611	0,126
4	0,485	0,126
5	0,593	0,126
6	0,636	0,126
7	0,565	0,126

Source : SPSS Output

Variable Institutional Environment

Item	r value	r table
1	0,360	0,126
2	0,522	0,126
3	0,660	0,126
4	0,657	0,126
5	0,656	0,126
6	0,577	0,126
7	0,576	0,126
8	0,530	0,126

Source : SPSS Output

Table 2. Validity Testing – Continued

Variable Deterrent Outcome

Item	r value	r table
1	0,905	0,126
2	0,896	0,126

Source : SPSS Output

4 Results

4.1 Descriptive statistics

A total of 171 responses were received, 89 of the respondents were from China and 82 were from Indonesia. Table 3 showed that slightly more than half (57.9%) of the respondents were females while 42,1% were male respondents. Table 4 categorized the respondents based on job hierarchy: Low management public service officers (63.7%), middle management (24%), top management (4.1%), and others (8.2%).

Table 3. Gender

Gender	Total	Percentage
Male	72	42,1%
Female	99	57,9%

Source : SPSS Output

Table 4. Job Hierarchy

Job Hierarchy	Percentage
Low management	63,7%
Middle management	24%
Top management	4,1%
Others	8,2%

Source : SPSS Output

Table 5. Types of Corruption

	China	Indonesia
Asset Misappropriations	47,2%	32,9%
Tax Fraud	11,2%	7,3%
Accounting Fraud	4,5%	31,7%
Bribery	37,1%	28%
Money Laundering	-	-

Source : SPSS Output

Table 5 showed that asset misappropriations was the most frequent type of corrupt practices committed by respondents in China (47.2%) and Indonesia (32.9%). This result was consistent with the survey conducted by Pricewaterhouse Coopers (2011) among public sector organizations across countries. Bribery was also a common type of corruption committed by respondents in China (37.1 %).

Luo (2002) argued that corruption in Asia came from gift-giving culture (known as 'guanxi' in China; 'wa' in Japan; and 'inhwa' in Korean), and an act for keeping relationship within business environment. Under corruption motive, gift-giving culture between individuals was orientated to achieve personal gains. It is a norm-deviated motives applied in business practice in many countries.

4.2 Hypothesis testing

The results from subsequent analysis were discussed below. Table 6 provided the results from regression analysis to test the regression model developed for this study. Unstandardized regression coefficient (B), standardized regression coefficient or beta (β), the intercepts, multiple correlation coefficients (R), and the coefficient of determinations (R^2) for the model were presented.

Table 6. Regression Result

	B	S.E	Β	t	Sig
Constant	1.192			4.932	*0.000
Task Environment	0.193	0.086	0.197	2.246	**0.026
Institutional Environment	0.573	0.088	0.568	6.492	*0.000
R^2	0.540				
R	0.735				
F-Value	98.782				

Note: *p<0.01; **p<0.05
Source: SPSS Output

The next step was to examine the model R^2. The R^2value for the regression model was 0.540 and, it was statistically significant at the p < 0.05 level. These results implied that all the independent variables had accounted for 54% of the variation in the model. The remaining variation 46% could be explained by unobserved independent variables.

Based on the information on Table 4, task environment has t-value 2.246 > t-table 1.653, and significant at 0.05 level (p>0.026). Hypothesis 1 that stated task environment affects the occurrence of corruption was supported statistically. Institutional environment has t-value 6.492 > t-table 1.653, and significant at 0.05 level (p>0.000). Hypothesis 2 that stated institutional environment affects the occurrence of corruption was also supported statistically.

Hypothesis 3, examined the distinct perception toward factors (task environment and institutional environment) which affect occurrence of corruption based on different democracy-culture among countries. Table 7, presented homogeneity of variances test p-value > 0.05. This means that there is similarity between respondent groups. Therefore, Analysis of Variance (ANOVA) was used to examine the differences between groups. ANOVA test shown that p-value > 0.05 (Table 6). Both groups have similar perceived factors (task environment and institutional environment) which trigger corruption. Hence, Hypothesis 3 could not be supported statistically.

Table 7. Homogenity of Variances Test

Variable	*Levene Statistic*	*Sign*
Task Environment	0,126	0,723
Institutional Environment	0,146	0,703
Deterrent Outcome	0,102	0,749

Source: SPSS Output

Table 8. Analysis of Variance

Variabel	Nilai F	Sign
Task Environment	0,000	0,992
Institutional Environment	0,327	0,568
Deterrent Outcome	1,145	0,286

Source: SPSS Output

This research hypothesized that task environment and institutional environment affect the occurrence of corruption (Hypothesis 1 and 2). The multiple regression results showed the independent variables (task and institutional environment), have a positive correlation with corruption. These results provided empirical support for institutional models proposed by Luo (2005), Pillay and Kluvers (2014) developed these models further by taking into account the background of countries with relatively high level of corruption.

This study has also provided evidence on the factors that drive corruption in China and Indonesia. DiMaggio and Powell (1983) argued that organizations would respond accordingly to coercive, mimetic and normative process. The mimetic process explains that external pressure such as control of the task environment, regulations, inconsistent structure, concentration of power in a particular group, and coercive process (institutional environment) such as transparency, fairness, complexity of institutions could influence corruption level in the context of public sector organizations.

Hypothesis 3 could not be supported statistically. It could be explained that culture of democracy has no correlation with occurrence of corruption in China and Indonesia. This result is consistent with Treisman (2000) who argued that level of democracy has no significant impact on corruption level.

5 Conclusions

Task environment and institutional environment are significant factors influencing corruption in public sector organizations. Institutional theory can be used to explain the occurrence of corruption at the organizational level. However, culture of democracy has less influence on corruption in China and Indonesia. Treisman (2000) argued that level of democracy has no significant impact on corruption level.

This study contributes to corporate governance research. It is aimed to explain corruption behaviour that could be used as fundamentals in designing a management control system in public sector organizations especially in countries with high-corruption level such as China and Indonesia.

The limitation of this study is that survey respondents do not represent public service officers in each department / divisions. Future research could involve respondents from wider geographical area and across departments / divisions, which in turn could enhance generalization of the results.

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MONITORING THE EFFORTS VERSUS ALIGNING THE INCENTIVES OF MANAGERS WITH THOSE OF THEIR STAKEHOLDERS

Amjad Toukan*

Abstract

I examine the case where a firm bids on a private contract. To win the award, the firm may choose to comply with a demand by the corrupt manager for a share of the value of the project to avoid being excluded from trade. My analysis shows that in countries with weak enforcement of property rights and under the prevalence of corruption, we will arrive at an equilibrium that is sub-optimal in the sense that stakeholders' welfare is not maximized. My analysis also shows that the optimal way to avoid this sub-optimality is to align managers' incentives with those of their stakeholders.

Keywords: Corruption; Private Sector Procurement; Shareholders Welfare; Contest Functions, Conflict of Interest; Corporate Governance

JEL classification: C72, D73, H57, D60, D23, D74, G34

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1 Introduction

Private sector procurement contracts generate immense opportunities for bribes, kickbacks, and other payoffs. Corrupt payments to win such contracts are generally the preserve of corporate managers. According to Rose-Ackerman (1999) there are several reasons why a firm would want to pay a bribe to a corporate manager when bidding for a large scale project. First it may induce the manager to include the firm in the short list of firms qualified to bid for the project while limiting the number of other bidding firms. Second it may be for inside information that would ultimately provide the firm with a competitive advantage. Third it may induce the manager to customize project specifications to fit firm's proposal. Fourth it may induce the corrupt manager and/or his agent to manipulate their evaluation of contract proposals in favor of the firm. Finally, once the firm wins the contract, it may pay to skimp on quality or inflate prices. In my analysis, I am examining the fourth case and I model the interaction between the corrupt manager and the firm as extortion, which according to Auriol (2004) extortion occurs when a firm complies with a demand for a share of the value of the project to avoid being excluded from trade[1].

Laffont and Tirole (1991) argue that in a multi attribute auction, the auction designer may bias his subjective evaluation of quality or distort the relative weights of the various attributes to favor a specific bidder. The paper analyzes the steps to be taken to reduce the possibility of favoritism. The authors first assume that the supervisor is benevolent and that the firm's technologies are commonly known. The principal then compares the quality differential and the cost differential between the agents. Depending on the parameters, the cost differential or the quality differential may be "decisive" in the principal's selection. The paper also relaxes the assumption that the supervisor is benevolent and does not collude with bidders. The potential for collusion stems from the agents' stake in the supervisor's report about quality. When the supervisor's information about quality is not verifiable by the principal, the principal imposes a symmetric auction even though the supervisor's information about quality would vindicate discrimination between the two bidders.

Celentani and Ganuza (2001) provide a positive theoretical analysis of the impact of competition on corruption and show that there are reasons to doubt that increasing the competitiveness of the environment is guaranteed to lead to reduced corruption. The authors consider a procurement problem and they focus their attention on a situation in which corruption is likely to prosper, i.e., a case in which the good to be procured is not homogeneous but can be produced at different quality levels and in which the agent has superior information about delivered quality. The previous assumptions imply that, in exchange for a bribe, the agent can assign the project to a firm he favors and hide the fact that it delivers lower quality

[1]Please see Mogiljanski (1994), Konrad and Skaperdas (1997) and Leppamaki (2000)

than promised. The authors characterize equilibrium corruption and study how it depends on the degree of competitiveness of the environment. They identify the effects through which higher competition affects corruption and find that, contrary to conventional wisdom, the total effect is everything but clear cut: more competition may lead to either higher or lower corruption.

Burguet and Che (2004) study competitive procurement administered by a corrupt agent who is willing to manipulate his evaluation of contract proposals in exchange for bribes. Their results indicate that with complete information and no corruption, the efficient firm will win the contract for sure. If the agent is corrupt and has large manipulation power, however, bribery makes it costly for the efficient firm to secure a sure win, so in equilibrium the efficient firm loses the contract with positive probability. Burguet and Perry (2007) examined the effects of bribery on the behavior of suppliers and the outcome of a first-price auction. In the particular form of bribery that they have considered, one supplier bribes the auctioneer in order to revise his bid downward when this is necessary to win the contract and profitable. In particular, an inefficient allocation of the contract to the weaker dishonest supplier occurs with high probability even when the cost of the stronger honest supplier is very low.

The contribution of my paper is that it models the competition between the firm and the corrupt manager as a contest where the corrupt manager is expending costly efforts in trying to expropriate part of the value of the project and the firm is also expending costly efforts in trying to protect its profits. I incorporate the preferences of the corrupt manager and the enforcement of property rights in my model where I am able to shed some light on the impact of these two important variables on stakeholders' welfare. My results show that with complete information and no corruption, we will arrive at an equilibrium that is optimal in the sense that stakeholders' welfare is maximized. In this case the project will be awarded to the firm that provides the competitive market quality at the competitive market price. In the case of complete information and corruption, my results show that corrupt managers' preferences towards corruption in countries with weak enforcement of property rights play an essential role in determining whether we will arrive at an equilibrium that is optimal. I argue that in such countries aligning the incentives of corrupt managers with those of their stakeholders and building the national integrity system are necessary in combating corruption and arriving at an equilibrium that is optimal.

The paper is organized as follows. Section 2 outlines the model. Section 3 solves the model utilizing Tullock (1980) contest success function, examines the firm's decision to bid for the project and the corrupt manager's decision to award the project. Section 3 also analyzes the effect of a change in the efficiency of the legal system and the manager's preferences toward corruption on stakeholders' welfare. Section 4 concludes.

2 The Model

I consider a two-stage model, where in the first stage the firm is deciding whether to bid for the private project. I assume that firms are forward-looking whereby their decision to bid for the private project in stage one of the game is taken in a manner that maximizes their expected payoff in stage two where they actually perform the project. We can think of the manager as the buyer, and the firm as the seller. The manager derives utility from stakeholders' welfare as well as from the amount he can expropriate from the firm awarded the contract. We define stakeholders' welfare to equal to

$$\sum_{i=1}^{N} U_i(s_j, p_j) = (s_j - p_j)X \text{ , where } U_i(s_j, p_j) = \frac{(s_j - p_j)X}{N}$$

is the utility of stakeholder i, N is the number of stakeholders and X are the units of output per project.

The share of the gross value of the private project expropriated by the manager is a function, $q(e_m, e_s)$, depending on two kinds of effort: e_m representing costly efforts exerted by the manager to expropriate part of the gross value of the private project, and e_s representing costly efforts exerted by the bidding firm to maximize its return from performing the project. Assume, $q(e_m, e_s) \in [0,1]$, which is increasing in e_m and decreasing in e_s, $1 - q(e_m, e_s)$ represents the share received by the firm. In the second stage of the game, the competition between the firm and the manager is modeled as a contest in which the participants exert costly efforts to increase their share of the value of the project [Clark and Riis 1997]. What is unique about this specification is that it supposes that, even when the two participants expend identical efforts, one of the two participants will enjoy a greater share of the value of the project.

$$q(e_m, e_s) = \frac{(1-\theta) f(e_m)}{(1-\theta) f(e_m) + \theta f(e_s)} \quad (1)$$

Where, $f(e_i)$ is differentiable and strictly concave with $f''(e_i) < 0$, $f'(e_i) > 0$ for every $e_i \geq 0$ and $f'(e_i) \to 0$ as $e_i \to \infty$. □□represents the efficiency of the judiciary and law enforcement system in a country□and it varies between 0 and 1. An increase in □□towards 1 would indicate□stronger law enforcement or a more efficient legal system which would favor the firm. Conversely a movement of □□toward 0, would indicate weaker law□enforcement or a less efficient legal system. Suppose, for example, that □□<1/2, if□both parties devoted an equal amount of effort to the contest, the outcome would□favor the manager.

The manager wants to buy 1 unit of the project that produces X units of output and has quality s_j, where s_j is the quality per unit of output measured in dollars per unit of output. Each bidding firm is interested in selling at least one unit of the project that has quality s_j at a price per unit of output, p_j.

2.1 Second stage choice of efforts

Firms and managers choose their efforts simultaneously and in a manner that maximizes their total payoffs in stage two of the game. α is between 0 and 1 and it represents the weight that the manager places on the benefit from expropriation with $\alpha = 0$ indicating that the manager is completely benevolent. Given values of the manager's preferences, □, the price per unit of output, p_j, the quality of the project per unit of output, s_j, and the output of the project, X, the manager chooses e_m to maximize her payoff function:

$$\underset{e_m}{Max} V_m = \alpha\, q(e_m, e_s)\, p_j X + (1-\alpha)(s_j - p_j) X - e_m \qquad 0 \leq \alpha \leq 1 \quad (2)$$

Similarly firms choose e_s to maximize their payoff function:

$$\underset{e_s}{Max} V_j = [1 - q(e_m, e_s)] p_j X - s_j X - e_s \quad (3)$$

Assuming interior optima, e_m^* and e_s^*, these solutions are defined implicitly by the respective first order conditions as functions of a , p_j, X, and s_j. Substituting the equilibrium efforts e_m^* and e_s^* into equations (1) and (2) above I get the equilibrium payoffs to the manager V_m^* and to the firm V_j^*. Because e_m^* and e_s^* are a function of a , p_j, X, and s_j, V_m^* and V_j^* are also functions of a , p_j, X, and s_j.

3 Equilibrium Choices where the Parties Compete in an Asymmetric Contest

I solve for the manager's equilibrium efforts by deriving the first-order condition from the manager's payoff function shown in equation (2) above:

$$\frac{\alpha\theta(1-\theta) f(e_s) f'(e_m)}{[(1-\theta) f(e_m) + \theta f(e_s)]^2} p_j X = 1 \quad (4)$$

In order to solve for the firm's equilibrium efforts, I derive the first-order condition of the firm's payoff function shown in equation (3) above:

$$\frac{\theta(1-\theta) f(e_m) f'(e_s)}{[(1-\theta) f(e_m) + \theta f(e_s)]^2} p_j X = 1 \quad (5)$$

Combining equations (4) and (5) above, I get:

$$f(e_m^*) = \alpha \frac{f'(e_m^*)}{f'(e_s^*)} f(e_s^*) \qquad (6)$$

Plugging equation (6) into equations (4) and (5) above, I can solve for the manager's and the firm's equilibrium efforts as given respectively by equations (7) and (8) below:

$$e_m^* = f^{-1}[\frac{\alpha^2\theta(1-\theta) f'(e_s)[f'(e_m)]^2}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]^2} p_j X] \qquad (7)$$

$$e_s^* = f^{-1}[\frac{\alpha\theta(1-\theta) f'(e_m)[f'(e_s)]^2}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]^2} p_j X] \qquad (8)$$

Substituting (7) and (8) into (2) and (3) above I get the equilibrium payoffs to the manager and to the firm respectively:

$$V_m^* = \frac{\alpha^2(1-\theta) f'(e_m)}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]} p_j X - f^{-1}[\frac{\alpha^2\theta(1-\theta) f'(e_s)[f'(e_m)]^2}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]^2} p_j X] + (1-\alpha)(s_j - p_j)X \quad (9)$$

$$V_s^* = \frac{\theta f'(e_s)}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]} p_j X - f^{-1}[\frac{\alpha\theta(1-\theta) f'(e_m)[f'(e_s)]^2}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]^2} p_j X] - s_j X \qquad (10)$$

3.1 Choosing the optimal quality to both the manager and the firm

We assume that the market for the project is competitive where the manager can always buy the competitive market quality per unit of output of the project, s_w, at the competitive market price per unit of output of the project, p_w. The firm can also sell the competitive quality per unit of output of the project, s_w, at the competitive market price per unit of output of the project, p_w.

Given the above assumption, the manager will choose the quality and the price of the project such that the value she receives is at least equal to the difference between the competitive market quality, s_w, and the competitive market price, p_w:

$$V_m^* \geq (s_w - p_w)X \qquad (11)$$

Which implies that,

$$s_j \geq [\frac{s_w - p_w}{1-\alpha}] + \frac{\theta f'(e_s)}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]} p_j + \frac{[1-2\alpha]\alpha(1-\theta) f'(e_m)}{[1-\alpha][\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]} p_j$$

$$+ \frac{1}{(1-\alpha)X} f^{-1}[\frac{\alpha^2\theta(1-\theta) f'(e_s)[f'(e_m)]^2}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]^2} p_j X] \qquad (12)$$

or,

$$[s_j - p_j] - [s_w - p_w] + \frac{\alpha^2(1-\theta) f'(e_m)}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]} p_j \geq \frac{1}{X} f^{-1}[\frac{\alpha^2\theta(1-\theta) f'(e_s)[f'(e_m)]^2}{[\alpha(1-\theta) f'(e_m)+\theta f'(e_s)]^2} p_j X] + \alpha[s_j - p_j] \quad (13)$$

Examining inequality (13) we see that the benefit to the manager from participating in the project is equal the difference between stakeholders' welfare per unit of output of the project, $[s_j - p_j]$, and stakeholders' welfare per unit of output from buying the competitive market quality project at the competitive market price, $[s_w - p_w]$, plus the gain per unit of output from expropriating part of the value of the project,

$$\frac{\alpha^2(1-\theta) f^{'}(e_m)}{[\alpha(1-\theta) f^{'}(e_m) + \theta f^{'}(e_s)]} p_j .$$

The cost to the manager from participating in the project is equal to the effort per unit of output that she exerts in expropriating part of the value of the project,

$$\frac{1}{X} f^{-1}[\frac{\alpha^2\theta(1-\theta) f^{'}(e_s)[f^{'}(e_m)]^2}{[\alpha(1-\theta) f^{'}(e_m) + \theta f^{'}(e_s)]^2} p_j X]$$

plus the loss in stakeholders' welfare due to the manager's preferences for expropriation, $\alpha[s_j - p_j]$. Inequality (13) represents the participation constraint for the manager. The manager will recommend the project as long as the benefit from participation is at least equal to the cost of participation.

The firm cares about maximizing profit and it will choose the price and the quality of the project such that the value it receives is at least equal to the value it receives if it sold the project in the market at the competitive market price per unit of output, p_w, and provided the competitive market quality per unit of output, s_w:

$$V_s^* \geq (p_w - s_w)X \qquad (14)$$

Which implies that,

$$s_j \leq [s_w - p_w] + \frac{\theta f^{'}(e_s)}{[\alpha(1-\theta) f^{'}(e_m) + \theta f^{'}(e_s)]} p_j - \frac{1}{X} f^{-1}[\frac{\alpha\theta(1-\theta) f^{'}(e_m)[f^{'}(e_s)]^2}{[\alpha(1-\theta) f^{'}(e_m) + \theta f^{'}(e_s)]^2} p_j X] \quad (15)$$

or

$$[p_j - s_j] - [p_w - s_w] \geq \frac{\alpha(1-\theta) f^{'}(e_m)}{[\alpha(1-\theta) f^{'}(e_m) + \theta f^{'}(e_s)]} p_j + \frac{1}{X} f^{-1}[\frac{\alpha\theta(1-\theta) f^{'}(e_m)[f^{'}(e_s)]^2}{[\alpha(1-\theta) f^{'}(e_m) + \theta f^{'}(e_s)]^2} p_j X] \quad (16)$$

Examining inequality (16) we see that the benefit to the firm is equal the difference between the profit per unit of output of the project, $[p_j - s_j]$, and the profit per unit of output from selling the competitive market quality project at the competitive market price, $[p_w - s_w]$. The cost to the firm is equal to the value of the project per unit of output expropriated by the manager, $\frac{\alpha(1-\theta) f^{'}(e_m)}{[\alpha(1-\theta) f^{'}(e_m) + \theta f^{'}(e_s)]} p_j$, plus the effort per unit of output exerted by the firm to protect its profit from performing the project,

$$\frac{1}{X} f^{-1}[\frac{\alpha\theta(1-\theta) f^{'}(e_m)[f^{'}(e_s)]^2}{[\alpha(1-\theta) f^{'}(e_m) + \theta f^{'}(e_s)]^2} p_j X].$$

Inequality (16) represents the participation constraint for the firm. The firm will submit a bid for the project as long as the benefit from participation is at least equal to the cost of participation.

I examine two possible cases below:

Case 1: Complete Information and No Corruption

In this case the manager only cares about maximizing stakeholders' welfare ($\alpha = 0$) and according to inequality (13) she will choose the quality and the price per unit of output of the project such that $[s_j - p_j] \geq [s_w - p_w]$. The firm will choose the quality and the price per unit of output of the project in accordance with inequality (16) which implies that $[s_j - p_j] \leq [s_w - p_w]$. So in the case of complete information and no corruption the project will be performed at the competitive market quality per unit of output, s_w, and at the competitive market price per unit of output, p_w.

Case 2: Complete Information and Corruption

In this case the manager cares about the return from expropriation and she also cares about stakeholders' welfare ($0 < \alpha < 1$). Inequality (16) imply that unless the economy has perfect enforcement of property rights ($\theta = 1$) or the manager is completely benevolent, stakeholders' welfare achieved from performing the project under the prevalence of corruption will always be less than stakeholders' welfare achieved with no corruption $[(s_j - p_j)X < (s_w - p_w)X]$.

To find the combination of prices and quality per unit of output of the project acceptable to the firm we rearrange inequality (16) above to get:

$$[p_j - s_j] - [p_w - s_w] \geq [\frac{\alpha(1-\theta) f'(e_m)}{[\alpha(1-\theta) f'(e_m) + \theta f'(e_s)]} p_j + \frac{1}{X} f^{-1}[\frac{\alpha\theta(1-\theta) f'(e_m)[f'(e_s)]^2}{[\alpha(1-\theta) f'(e_m) + \theta f'(e_s)]^2} p_j X]] > 0 \quad (17)$$

By examining inequality (17) we see that as long as the manager gets some utility from expropriation ($0 < \alpha < 1$), the firm can always get a greater benefit from winning the bid than from selling the competitive market quality at the competitive market price. The benefit to the firm is increasing in the manager's preference for expropriation, α, and decreasing in the enforcement of property rights, θ.

$$\frac{\partial}{\partial \theta} [\frac{\alpha(1-\theta) f'(e_m)}{[\alpha(1-\theta) f'(e_m) + \theta f'(e_s)]} p_j + \frac{1}{X} f^{-1}[\frac{\alpha\theta(1-\theta) f'(e_m)[f'(e_s)]^2}{[\alpha(1-\theta) f'(e_m) + \theta f'(e_s)]^2} p_j X]] < 0$$

$$\frac{\partial}{\partial \alpha} [\frac{\alpha(1-\theta) f'(e_m)}{[\alpha(1-\theta) f'(e_m) + \theta f'(e_s)]} p_j + \frac{1}{X} f^{-1}[\frac{\alpha\theta(1-\theta) f'(e_m)[f'(e_s)]^2}{[\alpha(1-\theta) f'(e_m) + \theta f'(e_s)]^2} p_j X]] > 0$$

Which implies that the decline in stakeholders' welfare due to corruption represented by the gap between $(s_j - p_j)X$ and $(s_w - p_w)X$ is increasing in the manager's preference toward corruption, α, and decreasing in the enforcement of property rights, θ.

We similarly rearrange inequality (13) above to get the combination of prices and quality per unit of output of the project acceptable to the manager:

$$[p_j - s_j] - [p_w - s_w] \leq [\frac{2\alpha^2(1-\theta) f'(e_m) + \alpha\theta f'(e_s)}{[\alpha(1-\theta) f'(e_m) + \theta f'(e_s)]} p_j - \frac{1}{X} f^{-1}[\frac{\alpha^2\theta(1-\theta) f'(e_s)[f'(e_m)]^2}{[\alpha(1-\theta) f'(e_m) + \theta f'(e_s)]^2} p_j X] - \alpha s_j] \quad (18)$$

A necessary condition for inequalities (17) and (18) to hold simultaneously and for the project to be performed is:

$$\alpha \geq \frac{(1-\theta) f(e_m)}{2(1-\theta) f(e_m) + \theta f(e_s)} \quad (19)$$

Examining inequality (19) we see that in the case of very weak enforcement of property rights, $\theta \approx 0$, the private procurement contract will be awarded and the outcome will be suboptimal from stakeholders' point of view only if the manager places more weight on the benefit she gets from expropriation than on the benefit she gets from stakeholders' welfare, $\alpha > 0.5$. The reason behind this result is that for $\theta < 0.5$, if both parties devoted an equal amount of effort to the contest, the outcome would favor the manager. This means that in order to protect its rate of return on investment in the project, the firm will require a premium in the form of a large difference between the profit per unit of output of the project, $[p_j - s_j]$, and the profit per unit of output from selling a competitive market quality project at the competitive market price, $[p_w - s_w]$. This action by the firm will result in a large reduction in stakeholders' welfare.

In the case of very strong enforcement of property rights, $\theta \approx 1$, the private procurement contract will be awarded and the outcome will be suboptimal from stakeholders' point of view if the manager places some weight on the benefit she gets from expropriation but not necessarily greater than the benefit she gets from stakeholders' welfare, $\alpha > 0$. The reason behind this result is that for $\theta > 0.5$, if both parties devoted an equal amount of effort to the contest, the outcome would favor the firm. This means that the manager will derive more benefit from maximizing stakeholders' welfare than from expropriation[2].

The above important results indicate that in order for an economy with weak enforcement of property rights, $\theta \approx 0$[3], to arrive at an optimal allocation of resources in private procurement, it is important to align the incentives of the managers' with those of their stakeholders', $\alpha < 0.5$. In this case an improvement in the enforcement of property rights without the alignment of the incentives of the managers' with those of their stakeholders' may not lead to an optimal allocation of resources in private procurement. On the other hand if the economy was able to align the incentives of the managers' with those of their stakeholders', $\alpha < 0.5$, that will necessarily result in an optimal allocation of resources in private procurement. In the case of an economy with strong enforcement of property rights, $\theta \approx 1$, to arrive at an optimal allocation of resources in private procurement, it is important for regulators to completely align the incentives of the managers' with those of their stakeholders', $\alpha \approx 0$. In this case as long as the manager gets some utility from expropriation ($0 < \alpha < 1$), a sub-optimal allocation of resources in private procurement may occur.

One example where the outcome will be suboptimal from stakeholders' point of view is when the firm with the cooperation of the corrupt manager inflates the technical evaluation of its bid and offers a discount after the opening and the technical evaluations of all bids. Even after the discount the benefit to the firm calculated as the difference between the lower price and the lower quality will be greater than the benefit to the firm from selling a competitive market quality project at the competitive market price.

Anechiarico and Jacobs (1996) argue that the pursuit of corruption-free government by means of more rules, procedures, and organizational shuffle is an important contributing factor to government inefficiency. They also argue that it should not be assumed, as it often has been, that corruption controls actually reduce corruption. Langseth, (1999) on the other hand describes two basic arenas in which action can be taken against corruption within a country: "i) the government needs to put in place a solid set of preventive tools. Codes of Conduct and strong independent oversight bodies can help ensure that the acceptable standards of behavior are respected in both the private and public sector. ii) the public needs to be educated on the advantages of good governance and participate in promoting it. The public needs to learn: (a) not to let anybody buy their vote; (b) not to pay bribes themselves; (c) to report incidents of corruption to the authorities; and (d) to teach their children the right values; e.g. that integrity is good and corruption is bad."

3 Conclusion

My results show that in order for an economy with weak enforcement of property rights to arrive at an optimal allocation of resources in private procurement, it is necessary to align the incentives of the managers' with those of their stakeholders'. Improvement in the enforcement of property rights without the alignment of the incentives of the managers' with those of their stakeholders' may not lead to an optimal allocation of resources in private procurement while aligning the incentives of the managers' with those of their stakeholders' will necessarily result in an optimal allocation of resources in private procurement. In the case of an economy with strong enforcement of property rights as long as the manager gets some utility from expropriation, a sub-optimal allocation of resources in private procurement may occur.

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CATEGORIZING SOUTH AFRICAN SMES ACCORDING TO CUSTOMER RELATIONSHIP BUILDING PRACTICES

*L.E. Fourie**

Abstract

It is becoming increasingly important for small and medium enterprises (SMEs) to build relationships with their customers. Relationship building is supported by collecting up to date information on the customer, the service rendered and the satisfaction with the product. Recent previous literature on customer relationship management seem to focus on how technology can assist with relationship building but there is a gap in the knowledge as to how South African SMEs go about building relationships and collecting feedback from customers. Quantitative self-administered online survey was sent to small business owners that are registered with an official state institution for SME's in South Africa. Based on the results SMEs can be categorised as average presumers, passive respectors ordo-it-all-right'ers based on how they build relationships and collect feedback from customers.

Keywords: Relationship Building, Relationship Management, Customer Satisfaction, Customer Loyalty, SMEs, South Africa

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1 Introduction

Relationships with customers in today's digital age are more important than ever. It is not only important for big corporations but also for small businesses. With the high failure rate of small businesses and the increasing environmental pressure that is placed on them, they need to ensure that they have strong relationships with their customers. Small businesses should provide excellent customer service and listen to what existing customers have to say about their products and services in order to retain them. In previous research conducted by Reicheld (1996) it was shown that a minor increase in the retention of customers (5%) can result in the net present value delivered by customers increasing by 95%. Retention is however not the only reason why small businesses should consider building relationships with customers. The more knowledge a small business has of their consumers the easier it is to customise products and services to suit their particular needs.

Previous research on customer relationship management in small businesses focus more on CRM readiness, e-CRM and the adoption of customer relationship technology (Vallabh, Radder & Venter, 2015; Newby, Nguyen & Waring, 2014; Nguyen & Waring, 2013; Harrigan, Ramsey & Ibbotson, 2012; Viljoen, Bennet, Berndt & van Zyl, 2005). How small businesses build relationships with their customers are not clear from the literature available. The purpose of this article is to categorise small business according to their relationship building practices.

In the sections following the South African small business sector will be briefly sketched, wherafter customer relationship management will be discussed. The method utilised will be explained and the results obtained will be presented. The article will conclude with comments on the implications of the study for marketing practice, theory and research.

2 Literature review

In South Africa, the small and medium enterprises (SME) industry account for 91% of formal businesses and contribute about 57% to the South African GDP (Abor & Quartey, 2010:218). In South Africa, SMEs contribute to the economy by creating employment, increasing production and exports and presenting opportunities for innovation and entrepreneurship (National Credit Regulator, 2011:7). This is the case for most developing countries including Brazil and Asia. The great importance of SMEs in economic growth of a country is evident, but they are often confronted with sustaining long-term performance (Ates, Garengo, Cocca & Bititci, 2013). Five out of seven new small business in South Africa fail within the first year and despite overall economic growth, small business growth has stagnated between 2003 and 2012 (Entrepreneur, 2015). There are numerous SMEs seen closing their doors for business every year. This is not necessarily due to unpredictable or unstable external conditions but due to management not being able to react and make correct decisions with regard to the blows from the external environment (Williams, 2014:91). It is thus of utmost importance that SMEs build solid relationships with their customers in order to stay in business in the long run.

2.1 Customer relationship management

As with large organisations, the importance of customer relationship management for small businesses cannot be ignored. Due to the high failure rate of SMEs it is important that small businesses keep their customers and increase business from them; as survival is not only dependant on attracting new customers (Kotler & Keller, 2012).

Customer relationship management's objective is to manage comprehensive customer information to gain maximum loyalty and to improve the business's capability to reach the ultimate goal of retaining customers in order to achieve a competitive advantage (Kotler & Keller, 2012; Newby, Nguyen & Waring, 2014). Small business should thus follow a customer focused strategy in order to keep customers. By following a customer focused strategy and investing into CRM it illustrates to existing customers that they are just as important as new customers (Berndt & Tait, 2014:7). There are various ways in which relationships can be built with customers. It need not be a complicated and expensive exercise. Small business owners can start small by asking customers for feedback and listening to them. It is however important to not just listen to the feedback but also act on it (Kotler & Keller, 2012). By doing this the process of relationship building is set into motion.

This feedback can be stored in a customer database to gain insight into the customer and can be used for customer relationship management (Berndt & Tait, 2014:25).To develop a comprehensive database regular interaction is required to collect all the necessary information. The types of information that can be collected range from demographic information, contact information, customers' transactions with the business and preferences to name a few. There are also two levels of CRM, namely (Berndt & Tait, 2014:25):

Analytical CRM. This level of CRM makes use of customer data to inform long term planning and assist with decision making.

Operational CRM. This level of CRM uses captured day-to-day customer based activities such as enquiries and orders to improve processes and systems.

Zeithaml, Bitner and Gremler (2006) indicated that a business will likely pursue a closer relationship with a customer as their relationship value increases. This makes the primary goal of relationship management to build and maintain a base of committed customers who are profitable to the organisation (Zeithaml, *et al.*, 2006). The main decision makers in SMEs have close connections with their customers making relationships particularly prominent within SMEs (Newby, Nguyen, & Waring, 2014).

The elements of CRM are widely contested and no formal list exists of what should and should not be seen as part of CRM. For the purpose of this study customer satisfaction and two-way communication will be considered as important elements of CRM.

2.1.1 Customer satisfaction

Consistent customer satisfaction should lead to customer loyalty, the intention to repurchase a product or service, as well as positive word-of-mouth from consumers who in turn pay less attention to competing brands (Boshoff, 2014; Okharedia, 2013; Helgesen, 2006; Seiders, Voss, Grewal & Godfrey, 2005; Curtis, Abratt & Rhoades, 2011;Cant & Van Heerden, 2013). It is a well-known fact that a satisfied customer will tell less people about his or her good experience than a dissatisfied customer will. This can result in loss of reputation for the organisation. When customers feel satisfied with a product or service, they will refer potential customers to the organisation. By measuring customer satisfaction, the small business will know exactly how they are perceived.

2.1.2 Two way communication with customers

The best way to know if customers are satisfied with your business, product and or service is to ask for their feedback. Goodman (2012: 26) indicates that as a small business owner, huge crises are usually known and handled effectively. It is the smaller things that bother customers that will not be known unless feedback is asked. Feedback can be collected in various ways. It can be done via an online or paper survey, a courtesy call or an email to a customer. These small gestures can result in a strong relationship with customers.

The main benefit of having long term relationships with customers is the increase in profits. Godson (2009:155) also indicates that knowledge gathered about customers can assist with categorizing them to assist with future customer recruitment. It is evident from the preceding literature that building relationships with customers is an important activity for any business, especially smaller businesses. What is more important is managing and maintaining these relationships in such a manner that the business and the customer benefits from it.

3 Methodology

In an effort to categorise SMEs regarding their relationship building practices, a sample of South African small business owners registered with an official state institution for SME's were asked to indicate the extent to which they agree that a list of statements regarding customer relationship building and how they measure customer satisfaction of their customers and how often they measure customer satisfaction.

Quantitative questions where sent to small business owners in the form of a self-administered online questionnaire allowing small business owners to indicate their relationship building practices and frequency of their efforts to measure satisfaction levels of customers. The questionnaire was administered randomly to SME owners in the provinces of Gauteng and KwaZulu Natal in South Africa. The combined contribution of these provinces to the national GDP is 50% (Gauteng 33.9%; KwaZulu Natal 16.1%) and can therefore be regarded as representative of SME's in South Africa (Anon, 2015). An adequate amount of surveys were distributed at a confidence level of 95% and a confidence interval of 10. Of the surveys distributed 105 usable responses were returned, which means a 95% confidence level and a 9.26 confidence interval at 50% was achieved.

4 Results

The small business owners were presented with a set of eleven aspects regarding attitudes and actions which deal with customer relationships. They were asked to rate the extent to which they agree with each aspect on a four point scale (1=strongly disagree; 2=Disagree; 3=Agree; 4=strongly agree) They were also given the option of selecting N/A if they felt that the aspect was not applicable to them.

Table 1. Mean level of importance of customer relationships

	N	Mean	Std. Deviation
Our way of doing business is customer friendly	99	3.43	.592
Our procedures are customer friendly	98	3.42	.608
We ask for feedback and comments from customers	95	3.21	.728
We analyse feedback and comments from customers	94	3.22	.764
We respond to feedback and comments from customers	91	3.24	.735
Our customers are satisfied with our business	99	3.32	.683
We measure customer satisfaction	90	3.12	.832
We find out why customers leave	84	3.00	.836
We use feedback on why customers leave to improve our service	86	3.06	.802
Low/Good prices will keep customers	92	2.74	.900
Customers are used to average service	93	2.42	.936

From Table 1 it can be seen that the aspects that the respondents feel most strongly about involves customer friendliness. On average, they feel that their procedures (M = 3.42, SD=.608) and way of doing business (M = 3.43, SD .592) is conducive to creating a customer-friendly experience for their customers. They also feel that their customers are satisfied with their business (M = 3.32, SD=.683). The standard deviations for these aspects are the lowest, indicating that there is the least variation among the agreement levels of respondents regarding these aspects. It is then not surprising that the next highest average agreement score indicates that the respondents tend to respond to feedback and comments from their customers (M = 3.24; SD .735), followed by the fact that they also analyse feedback from their customers (M = 3.22; .764) and specifically ask for feedback and comments from their customers (M = 3.21; SD .725). It can be presumed that in general, the respondents do make an effort to maintain good relationships with their customers.

The wording of the last two aspects is such that lower average agreement scores could have a positive reflection on their businesses since it will indicate that they do not underestimate the quality and service needs of their customers. With these two aspects having an average agreement level around the middle value of the response scale (low or good prices will keep customers (2.74) and customers are used to average service (2.42)) it can be assumed that the respondents are, on average, divided in terms of underestimating the quality and service needs of their customers and this is reflected by the standard deviations that are the highest in the list.

4.1 Dimension Reduction

To reduce the dimensionality of the set of aspects regarding customer relationships, the responses to the eleven items were subjected to exploratory factor analysis using Principal Axis Factoring (PAF). The factorability of the correlation matrix was confirmed with the Pearson's correlation matrix containing of a number of correlations with a magnitude of .3 or higher, the Kaiser-Meyer-Olkin value exceeding the recommended minimum value of .6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reaching statistical significance, p<.001). PAF with Varimax rotation[4] resulted in identifying 4 latent constructs, cumulatively explaining 74.025% of the variance in the data. As can be seen in Table 2, the internal consistency of three of the factors exceed .7, the generally accepted lower limit of Cronbach's alpha (). The fourth factor, with only two aspect items loading on it, demonstrated a Cronbach's alpha of .6 which will, for the purposes of this exploratory research, be considered adequate (Hair et al., 2006, p137). Since the factor solution serves only to

[4] Orthogonal rotation was chosen since the analytical procedures are better developed than those of Oblique rotation. Varimax specifically was chosen since it results in a clearer separation of factors (Hair et al., 2006, p126).

demonstrate higher order dimensionality in the data, this latter factor was retained in the interest of data reduction to aid in the interpretability of the cluster solution discussed in the next section. Having suppressed aspect loadings of .4 and lower on the factors, one of the aspects loads acceptably on two of the factors and it was decided to allow it to contribute to the *Create customer-friendly business environment* factor rather than the *Analyse and respond to customer feedback and comments* factor. For each respondent, values were assigned to the four factors by calculating the mean value of the aspect items that load on them, thus retaining the range of the original response scale (0 to 4). These latent factors with the stakeholder relationship aspects that load on them, the amount of variance they explain, their internal consistency, mean and standard deviation are listed in Table 2.

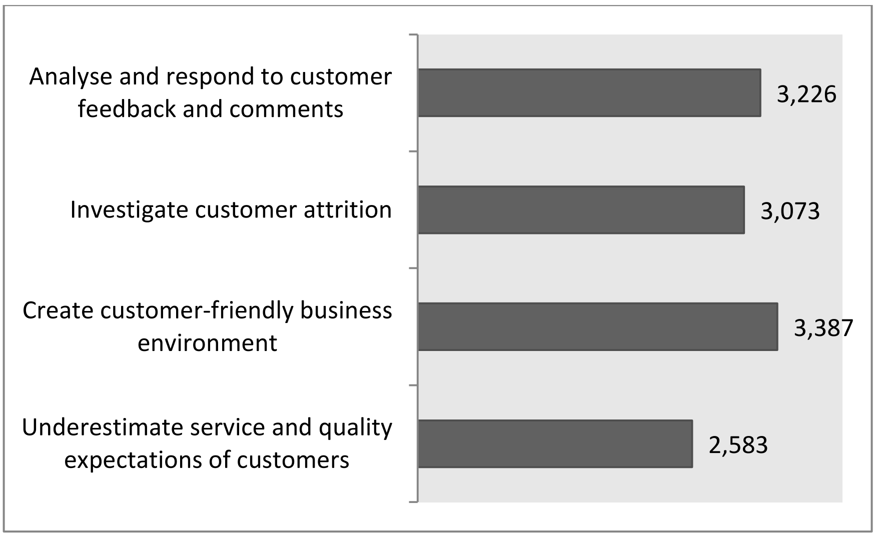
Table 2. Latent construct characteristics

	Analyse & respond to customer feedback and comments	Investigate customer attrition	Create customer-friendly business environment	Underestimate service and quality expectations of customers	Overall
We respond to feedback and comments from customers	.876				
We analyse feedback and comments from customers	.863				
We ask for feedback and comments from customers	.808				
We find out why customers leave		.890			
We use feedback on why customers leave to improve our service		.887			
We measure customer satisfaction		.614			
Our procedures are customer friendly			.919		
Our way of doing business is customer friendly			.794		
Our customers are satisfied with our business	.458		.505		
Customers are used to average service				.651	
Low/Good prices will keep customers				.569	
Variance explained	25.548%	21.153%	19.329%	7.996%	74.025%
Cronbach's alpha	0.941	0.907	0.845	0.600	0.867
Mean	3.226	3.073	3.387	2.583	
Standard deviation	0.697	0.739	0.548	0.787	
Minimum	1.00	1.00	1.67	1.00	
Maximum	4.00	4.00	4.00	4.00	

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

From the mean factor values in Figure 1, it can be seen that on average, on a higher level, creating a customer-friendly business environment is what the respondents feel most strongly about with a mean agreement score tending towards the maximum value of the response scale (3.387). The respondents thus seem generally to be pro-active in creating and maintaining good stakeholder relationships with the average scores for analysing and responding to customer feedback and comments (3.226) as well as investigating customer attrition (3.073) also above 3.

Figure 1. Mean importance of customer relationship aspects



With a mean value almost at the middle value of the response scale and having the largest standard deviation, the respondents' perceptions varied the most with respect to whether they are underestimating customers' quality and service expectations in their businesses. On average however, they tend considerably less towards doing so than their efforts to build positive relationships with their stakeholders.

4.2 Natural groupings among respondents

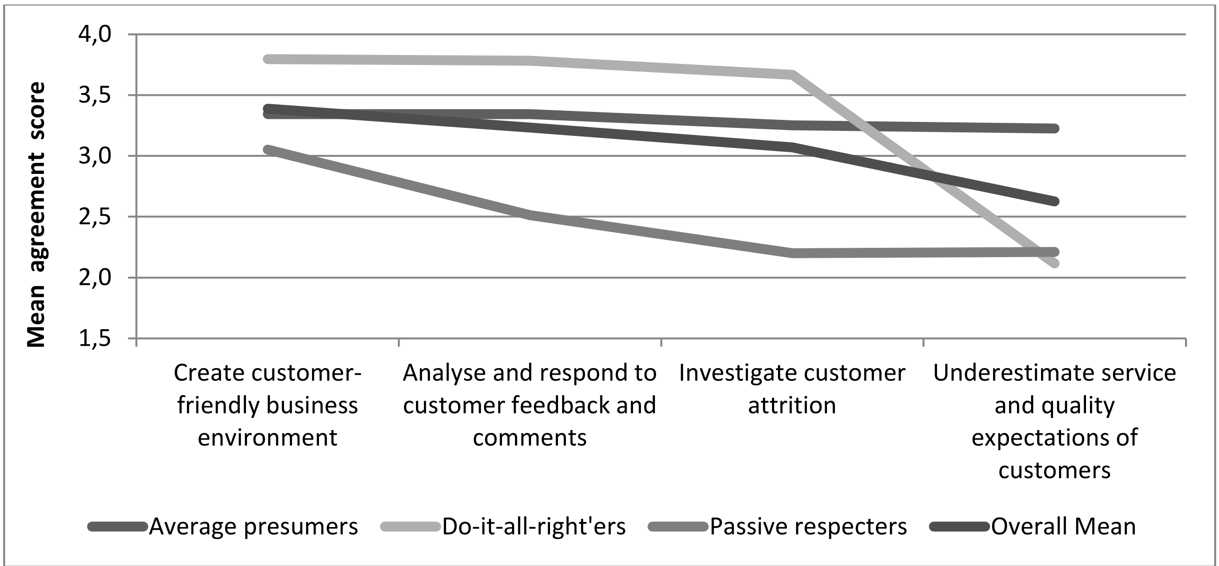
To establish whether respondents can be grouped according to their own perceptions regarding the level of effort they put into different aspects of building customer relationships in their businesses, the four latent factors that resulted from PAF and discussed in the previous section, were subjected to K-means cluster analysis. The same patterns of respondent groupings as a result of the K-means clustering method were also found with a two-step clustering method.

Three different groups emerged, indicating that respondents do differ regarding their relationship building attitudes and behaviour in their businesses. The cluster center values of the separate groups are listed in Table 3 and how the distinguishing features differ per group is depicted in Figure 2.

Table 3. Final cluster centers

	Average presumers	Do-it-all-right'ers	Passive respectors	Overall Mean
Analyse and respond to customer feedback and comments	3.3417	3.7821	2.5128	3.2319
Investigate customer attrition	3.2500	3.6667	2.1987	3.0707
Create customer-friendly business environment	3.3417	3.7949	3.0513	3.3877
Underestimate service and quality expectations of customers	3.2250	2.1154	2.2115	2.6250

Figure 2. Customer Relationship Building groups



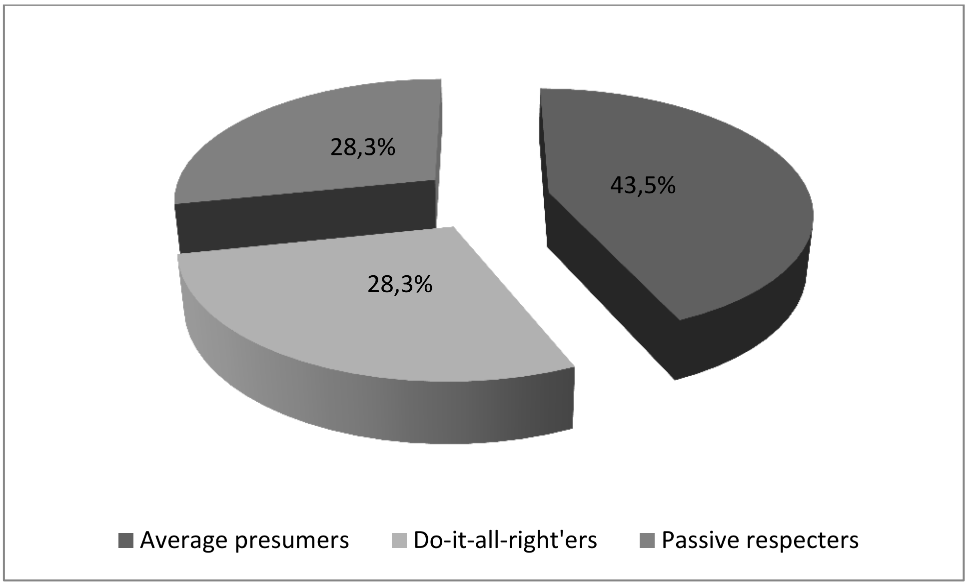
On average, the respondents as a single group (overall) indicated in order of level of agreement that they tend to create a customer-friendly business environment, analyse and respond to customer feedback and comments, investigate customer attrition and to a lesser extent, underestimate service and quality expectations of their customers.

Average presumers has cluster means that are close to the overall mean for "Analyse and respond to customer feedback and comments", "Investigate customer attrition" and "Create customer-friendly business environment" while having a cluster mean that is considerably higher than the overall mean for "Underestimate service and quality expectations of customers" On average, these respondents seem to mimic the group as a whole regarding their active involvement in influencing and monitoring customer behavior but they tend to underestimate the service and quality expectations of their customers.

Do-it-all-right'ers has cluster means that are relatively close to the maximum values for "Analyse and respond to customer feedback and comments", "Investigate customer attrition" and "Create customer-friendly business environment" and the lowest (lower than the middle of the scale) cluster mean for "Underestimate service and quality expectations of customers”. Thus, on average these respondents seem to understand stakeholder relations and the fact that actively facilitating a pleasant customer experience and keeping in mind their customers’ service and quality expectations will contribute to customer loyalty.

Passive respecters has cluster means that are lower than the overall mean for “Analyse and respond to customer feedback and comments”, “Investigate customer attrition”, “Create customer-friendly business environment” and “Underestimate service and quality expectations of customers”. On average this group tends to create customer-friendly business environments to promote customer loyalty but tend to neglect to analyse and respond to customer feedback and comments and to investigate customer attrition behaviour. These respondents also tend to respect their customers’ service and quality requirements and seem to rely on attracting new customers with their customer-friendly business environment rather than to ensure that they retain their existing customers.

Figure 3. Customer relationship building group distribution



As can be seen in Figure 3 above, the largest proportion of the respondents are the Average presumers (43.5%, n=40). The rest of the respondents are equally distributed between the Do-it-right’ers and the Passive respectors (28.3%, n=26).

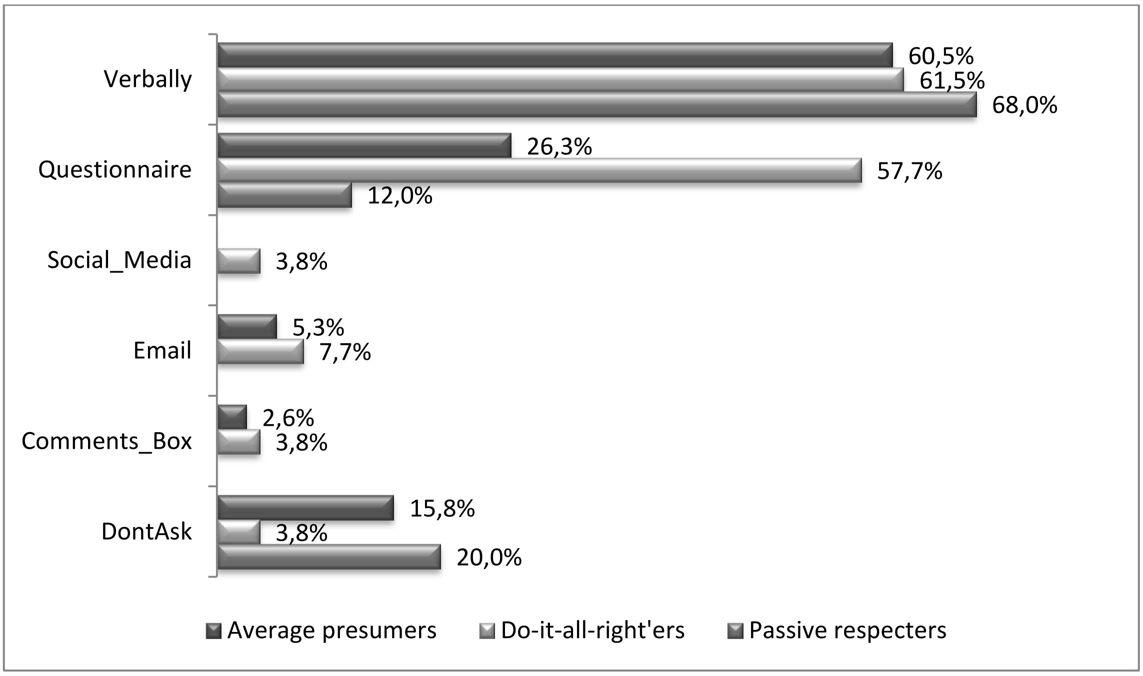
All the respondent groups seem to consider creating a customer-friendly business environment to be most important. The respondents however do vary considerably regarding the other three customer relationship aspects. The Do-it-all-right’ers and passive respecters tend to respect the service and quality expectations of their customers while average presumers, even though considering all the other factors to be reasonably important, tend a lot towards underestimating the service and quality expectations of their customers.

5. How do respondents ask for feedback from their customers?

The small business owners were presented with a list of six different ways to ask their customers for feedback and were asked to indicate which of these methods they use to communicate with their customers, allowing multiple selections from the list of options.

On average, each respondent selected 1.14 options from the list of possible communication methods. Asking their customers for feedback verbally is by far the most popular method and was selected by 61.6% of (n = 61) the respondents, followed by 29.3% (n = 29) indicating that they use questionnaires to collect feedback from their customers. Just over 14% (n = 16) of the respondents indicated that they do not ask customers for feedback.

Figure 4. Communication methods used by relationship building groups



From Figure 4 one can see that verbally is the most popular way of asking for feedback from customers for all the groups, with the largest proportion of respondents being from the Passive respecters group. The Do-it-all-right'ers group is the only one utilising all the listed modalities for obtaining feedback from customers and is in fact, even if only a small proportion, the only group that uses social media to do so. Of those that do not ask for feedback, Do-it-all-right'ers make up the smallest proportions and Passive respecters make up the largest. Questionnaires are used by more than half of the Do-it-right'ers group but not many of the other groups make use of them.

6 Conclusions

This study aimed to determine if SMEs measure customer satisfaction, how they collect feedback from customers and how often they measure customer satisfaction. This research contributes to SME literature in South Africa by introducing groups into which businesses can be classified according to how they approach customer satisfaction and feedback.

Based on the findings of this exploratory study that considered only a limited set of aspects that could be involved in building stakeholder relationships, it is clear that these aspects can be classified into higher order latent constructs. Furthermore, using these constructs to find natural groupings among the respondents, revealed that SME's tend to differ in terms of their attitudes and actions towards building customer relationships and that they can be classified into different groups based on these differences namely average presumers, do-it-all righters and passive respecters.

Future research could build on these findings by possibly extending the set of aspects with all dimensions that are involved in building stakeholder relationships and possibly developing a scale for measuring the extent to which different constructs are attended to by the respondents in their relationship building efforts in their businesses and relating this to the level of success they have in keeping their customers satisfied. This could lead to developing a classification model for businesses that can be used for assessment with accompanying guidelines for improving such relationships if it is deemed necessary.

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THE EFFECT OF HUMAN AND SOCIAL CAPITAL ON THE KNOWLEDGE OF FINANCING ALTERNATIVES BY NEW SMALL BUSINESS OWNERS IN SOUTH AFRICA

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Abstract

The failure rate of new SMEs is very high in South Africa. Financing constraints is one of the major causes of failure. The knowledge of the alternative sources of finance can help to reduce the financing constraints faced by new SMEs. The study investigated the effect of human and social capital on the understanding of financing alternatives. Self- administered questionnaire was used in a survey to collect data from data were from 136 owners of new SMEs in the Limpopo province of South Africa. The Cronbach's alpha was used as a measure of internal consistency. Descriptive statistics and independent samples T-test used for data analysis. The results indicated that new SME owners with higher levels of generic and specific human capital have a better knowledge of financing alternatives. There are significant differences in the level of education and business courses and the knowledge of factoring, venture capital, Alt-X, bootstrapping, Islamic baking and crowdfunding. New SME owners with social capital as measured by direct and indirect ties have a better knowledge of financing alternatives.

Keywords: SME's, South Africa, Human Capital, Social Capital

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1 Introduction and background

South Africa has an unemployment rate of 24.3% (Statistics South Africa 2015). The unemployment rate in South Africa is one of the highest in the world (Kingdon & Knight 2007:816), (Brynard 2011:68). According to de Witte *et al.* (2012:235), unemployment has negative consequences for individuals, families and the country. The negative impact of South Africa's high rate of unemployment includes the erosion of human capital, crime, xenophobia, social exclusion and social instability. Statistics South Africa (2014) reports that poverty level in South Africa has reduced from 57.2% in 2006 to 45.5% in 2011. However, poverty level is still unacceptably high in South Africa with twenty three million people classified as poor in 2011. Inequality is a bigger problem. The Gini coefficient of South Africa was 0.69 in 2011. This is one of the highest levels of inequality in the world (Statistics South Africa 2014). Other development challenges facing South Africa include high levels of crime and rural to urban migration (Chiloane-Tsoka & Mmako 2014:377).

Small and medium enterprises (SMEs) are expected to be one of the vehicles to address these development challenges (FinScope 2011:9). Approximately 91% of all business entities in South Africa are SMEs. The SME sector contributes 61% to employment and 52 to 57% of South Africa's gross domestic product (Abor & Quartey 2010:218), (Khan 2014:1). In addition, SMEs act as a catalyst for economic growth, are sub-contractors to large firms, a testing ground for new products and facilitate innovation and competition. Job creation by SMEs has a multiplier effect on social-economic activities and helps to reduce poverty in South Africa (Dlodlo & Dhurup 2010:165). The contribution of the SME sector cannot be sustained without the creation and survival of new SMEs (Fatoki & Garwe 2010:729). The sustainability of new SMEs is vital to the economic prosperity of South Africa. A new SME can be described as an SME that has been in existence for less than forty two months. (Herrington *et al*. 2009:3).

However, despite the contribution of the SME sector to the South Africa economy, these business entities suffer from a high failure rate. Scheers (2010) asserts that 40% of new SMEs fail in the first year of existence. Furthermore, 60% fail in the second year and 90% in the first ten years of existence. The high failure rate of new SMEs has negative implications on the social-economic development of South Africa. The causes of the failure of new SMEs include lack of finance, lack of management skills, high cost of production, crime, repressive labour laws and regulations (Cant and Wiid 2013:707). Lack of finance is a major constraint to the growth of new SMEs in South Africa. Many new SME owners start their businesses with their personal capital which is often inadequate (Herrington *et al*. 2009:5). New SMEs find it difficult to access both debt and equity markets (Organisation for Economic Cooperation and Development 2014:6).

Matshekga and Urban (2013:259) point out that researchers studying the financial constraints of SMEs have primarily focused on supply-side arguments, thus putting the decision making of owners in the background. It is true that the inadequate financing of SMEs is to a significant extent rooted in supply-side factors (De la Torre *et al*. 2008:5). However, financial constraints are also caused by demand-side factors especially entrepreneur's characteristics. Therefore, access to finance by SMEs is influenced by both supply and demand factors (Gregory 2013:2). It is important to understand the demand-side argument of the financing constraints for new SMEs (Matshekga & Urban 2013:259).

Seghers *et al*. (2009:2) argue that entrepreneurs are the driving force in important financial decisions. Traditional finance theories assume that entrepreneurs know the potential financial alternatives with their advantages and disadvantages. However, entrepreneurs may face finance constraints because of their inadequate knowledge (a knowledge gap) of financing alternatives. Consequently, a large proportion of SMEs are excluded from the financial market (National Credit Regulator 2011:11). Many factors including firm and entrepreneurs' characteristics can influence on the knowledge of financing alternatives by the owners of SMEs (Okafor & Amalu 2010:69), (Kamukama & Natamba 2013:205), (Matshekga & Urban 2013:259).

This study focuses on the effect of the entrepreneur's human and social capital on the knowledge of financing alternatives by new SME owners. A thorough review of the literature revealed that the financing constraints of SMEs have stimulated many studies in South Africa (Abor & Quartey 2010), (Arko-Achemfuor 2012). However, no South African study has investigated empirically the factors that can influence the knowledge of financing alternatives by the owners of new SMEs. This study makes a contribution to the research on the knowledge and understanding of financing alternatives available to new SMEs. Improving access to finance is one of the ways of reducing the high failure rate of new SMEs in South Africa.

2 The objectives of the study

The objectives of the study are (1) to examine the knowledge of financing alternatives by the owners of new SMEs (2) to investigate the effect of human and social capital of the owners of new SMEs on the knowledge of financing alternatives. Specifically the study will examine if there are significant differences in the knowledge of financing alternatives on the basis of human and social capital.

3 Literature review

3.1 Small and medium enterprises

The National Small Business Act of South Africa of 1996, as amended in 2003, defines a SME as "a separate and distinct entity including cooperative enterprises and non-governmental organisations managed by one owner or more, including its branches or subsidiaries if any is predominantly carried out in any sector or sub-sector of the economy mentioned in the schedule of size standards, and can be classified as an SME by satisfying the criteria mentioned in the schedule of size standards" (Government Gazette of the Republic of South Africa 2003). The National Small Business Act provides a schedule of size standards for the definition of SMEs in all the sectors of the South African economy. The SME sector can be categorised into four separate groups. These are micro, very small, small and medium. The groups are distinguishable by the required turnover, gross asset value and the number of employees (Government Gazette of the Republic of South Africa 2003). This study used the number of employees to classify SMEs. The failure rate of new SMEs is very high in South Africa (Scheers 2010). Financing constraints is one of the causes of failure (Arko-Achemfuor 2012). According to Atieno (2009:33) owners' funds are not usually adequate to grow a business. External finance is needed for new firms to start and expand operations, develop new products, invest in new staff or production facilities. Therefore, new SMEs often need financing from external sources.

3.2 Capital structure theories

The capital structure can be described as the way in which a firm raises capital needed to commence and expand its business operations. It is the mix of debt and equity that a firm uses to finance its activities (Niu 2008:133). According to Salehi & Biglar (2009:97), the theoretical principles that explain capital structure can generally be viewed in terms of the static trade-off theory by Modigliani and Miller (1958, 1963), the agency theory by Jensen and Meckling (1976) and the pecking order theory by Myers (1984). The genesis of modern capital structure theory can be traced to Modigliani and Miller (1958). The theory argues that the capital structure choice does not affect the value of a firm. The theory was based on some perfect market assumptions. These were no corporate taxes, no brokerage or floatation cost for securities, and symmetrical information. The value of a firm is determined by its assets and not the ways by which the assets are financed. Modigliani and Miller (1963) noted that perfect markets do not exist in the real world and introduced the tax benefits of debt. Interest on debt is tax deductible and creates tax savings for the borrower. A firm's cost of capital can be minimised and shareholders' funds maximised through the use of debt. The agency theory by Jensen and Meckling (1976) recognised two kinds of agency conflict. (1) conflict between managers and shareholders (2) conflict between equityholders and debt holders. The agency theory explains the problems associated with ownership, management and credit. Issues related to moral hazard, information asymmetry and adverse selection can occur in contractual arrangements between external providers of finance and firms. The pecking order theory argues that there is no defined debt to value ratio. The management of a firm should use internal finance before external finance. When external finance is needed, debt is preferred to new equity (Myers 1984:575).

3.3 Financing alternatives

The financing alternatives of a firm can be broadly classified under debt and equity. Debt finance includes short and long-term borrowings by a firm on which interest is paid. In contrast to debt capital, equity is not repaid to the investors in the normal course of business. Equity denotes the risk capital contributed by the owners of the business or by external investors (Niu 2008:133). Equity can be internal or external. According to Ou & Haynes (2006:157), internal equity which can be described as owners' contributions, contributions from family and friends and retained earnings, is used more widely by SMEs. External equity involves equity contribution from external sources such as business angels, venture capitalists and the stock exchange **(**Berger & Udell 2006:2953).

Niu (2008:133) points out that a new SME can use external debt or and equity. Both financing alternatives have their advantages and disadvantages. An important advantage of debt over equity is that interest payments on debt are tax-deductible. This creates tax savings and reduces the cost of capital for the business. Also, control is maintained by the owner of the business. In addition, profit after interest payment belongs to the business owner. A disadvantage of debt finance is that interest on debt must be paid whether the business makes a profit or not. The advantages of equity include (1) the investor does not need to pay back equity contribution and external equityholders can provide valuable management experience and business contacts. However, with external equity, the business owner loses full control of the business (Niu 2008:133), (Ebiringa 2012:179).

Commercial banks are a major source of financing debt financing for new SMEs. Commercial banks debt-related facilities for new SMEs include overdraft, term loans, business mortgages, trade, factoring (debtor finance) , leasing, leasing, hire purchase and government loan guarantee schemes (Abdulsaleh & Worthington 2013:40). Another source of debt finance for new SMEs is trade credit. Huyghebaert *et al*. (2007:436) point out that trade credit arises when a firm purchases goods and services for which payment is delayed. Government agencies such as the Small Enterprise Finance Agency (SEFA) provide finance to SMEs. This includes bridging loans, term loans, structured finance and credit guarantee products (Small Enterprise Finance Agency 2015). Microfinance institutions provide credit facilities to the smallest SMEs (Babajide 2012:463).

Abdulsaleh & Worthington (2013:42) note that two major sources of external equity are venture capitalists and business angels. Venture capitalists are firms who make equity investments in firms with an opportunity for growth. Business angels are a diverse group of high net worth individuals who invest in high-risk/high-return entrepreneurial ventures. In addition, new SMEs can source for equity investments through the stock exchange. In South Africa, the Alt X was launched in October 2003 as a parallel market to the Main board of the Johannesburg Stock Exchange (JSE). The Alt X is specifically aimed at attracting SMEs to list on the JSE (Johannesburg Stock Exchange 2015).

Commercial bank debt instruments, trade credit, micro credit venture capital, business angels and the stock market can be described as traditional financing options for SMEs (Schwienbacher & Larralde, 2010). Innovative financing options include bootstrapping and crowdfunding. Bootstrapping can be described as creative ways to avoid the need for external finance through thriftiness, creativity and cost-cutting. It involves the use of innovative methods that (i) minimise the amount of finance a firm needs to raise through from traditional external sources of finance and (ii) allow a firm to obtain resources owned by others at little or no cost (Winborg 2008), (Vanacker *et al.* 2011). Crowdfunding involves the provision of finance for SMEs through many small investors usually through the Internet (Collins 2014).

Crowdfunding is a financing source that can help to avoid the limitations of the traditional financing models (Schwienbacher & Larralde, 2010). Islamic banking provides an alternative to traditional financing for Muslims and non-Muslims SMEs that wish to operate in line with Shari'ah Law. Islamic banking is interest free banking. The financing of assets is done through some options which include repayments on an instalment basis and pre-agreed profit sharing (Ali & Farruk, 2013:28). Banks in South Africa that are involved in Islamic banking include ABSA, FirstRand, Al Baraka, HBZ Bank (Banking Association of South Africa 2015).

3.4 Human capital and knowledge of financing alternatives

Unger *et al*. (2011:344) describe human capital as knowledge and skills and knowledge that an individual gain through investment in schooling, on-the-job training and experience. Human capital helps the business owner to acquire financial resources as it is one of the factors that investors attach importance to when evaluating credit applications. Hsu (2007:722) finds that prior experience increases the probability of obtaining capital from investors. The ability of the owner of SMEs to acquire new knowledge is positively associated with the existing stock of knowledge accumulated through education or and experience (Matshekga & Urban 2013:259).

According to Seghers *et al.* (2009:3), the human capital of entrepreneurs can be linked with the knowledge of financing alternatives. Entrepreneurs with higher levels of human capital as measured by education and previous experience should have a lower knowledge gap. SME owners with higher levels of education and previous experience (generic human capital) have a higher probability of learning about alternatives methods of finance. In addition, SME owners with previous experience may have in the past negotiated with financiers. This suggests that SME owners with higher levels of generic human capital will have a greater knowledge of financing alternatives. In addition, SME owners with business education (specific human capital) should already have information about financing alternatives.

Furthermore, SME owners with previous experience related to accounting and finance (specific human capital) may have in the past negotiated with financiers in the past and have better growth potential (Colombo & Grill 2005:795). This suggests that both generic and specific human capital can assist in the knowledge of financing alternatives. It is hypothesised that SME owners with higher levels of specific and generic human capital will have a significantly higher knowledge of financing alternatives.

3.5 Social capital and knowledge of financing alternatives

Social capital increases a firm's legitimacy which in turn positively influences access to external financing by the firm. Social capital is a measure of the character and capacity of SME owners (Ngoc *et al.* 2009:872). Social capital is a means of reducing the problem of information asymmetry between parties. SME owners may be able to obtain financial resources through direct and indirect ties. Direct ties occur if the two parties have been involved in interactions prior to negotiation for resources. Indirect ties exist if the two parties establish their contact through a common third party (Zhang *et al*, 2010:512). According to Seghers *et al.* (2009.4), SME owners with direct ties developed through a close relationship with the providers of finance will have a greater understanding of financing alternatives. In addition, information on financing alternatives can be obtained through interaction with knowledgeable third parties (indirect ties). This suggests that SME owners with higher levels of social capital (measured by direct and indirect ties) will have greater knowledge of financing alternatives. It is hypothesised that SME owners with direct and indirect ties will have a significantly higher knowledge of financing alternatives.

4 Research methodology

The study used the quantitative research method with a descriptive research paradigm. The survey method was used for data collection. The study used self-administered questionnaire to collect data from respondents in Pololwane, Mankweng, Seshego and Mokopane. The four towns are located in the Limpopo Province of South Africa. The study focused on new SMEs (businesses that have existed for not longer than forty two months). The researcher used the convenience and snowball sampling methods because of the difficulty in obtaining the population of new SMEs in the study areas. The research instrument was pre-tested in a pilot study of thirty new SME owners. The pilot study led to some modifications to the questionnaire in order to improve face and content validity. Closed questions were used for all the measures. The Cronbach's alpha was used as a measure of internal consistency. Descriptive statistics and independent samples T-test used for data analysis.

4.1 Measuring the knowledge of financing alternatives

The researcher developed a list of financing alternatives from the literature on financing options such as Seghers *et al*. (2009) and Fatoki (2014). The Five-point Likert scale ranging from "1 not at all knowledgeable", "2 slightly knowledgeable", "3 somewhat knowledgeable", '4 moderately knowledgeable" and "5 very knowledgeable" was used to measure the knowledge of financing alternatives.

4.2 Measuring human capital

Human capital was divided into specific and generic human capital and measured by education and experience. Specific education was measured by "1 business education" and "2 no business education". Specific experience was measured by "1 previous work experience that included management, accounting and finance works" and "2 previous work experience that did not include management, accounting and finance works". General education was measured by "1 if the respondent has a post Matric qualification" and "2 if the respondent has Matric or below qualification". General experience was measured by "1 previous work experience" and "2 no previous work experience". This is consistent with previous empirical studies on human capital (Seghers *et al*. 2009), (Matshekga & Urban 2013).

4.3 Measuring social capital

Social capital was divided into direct and indirect ties. Three questions were used to measure direct ties (1) Before I stated business, I had a professional relationship with someone that is knowledgeable in finance (2) Before I stated my business, I was engaged (club, sport) in an informal social activity with someone that is knowledgeable in finance and (3) Before I started by business, someone knowledgeable in finance was a friend. Three questions were also used to measure indirect ties. (1) Someone that I am confident to discuss my business with knows at least one person knowledgeable in finance. (2) Someone whose judgment I trust can link me with at least one person knowledgeable in finance and (3) I can obtain information about finance through my network of contacts. The responses for direct and indirect ties were coded as “1 yes” and “2 no”. The measures are consistent with previous empirical studies on social capital (Seghers *et al.* 2009), (Zhang *et al.* 2010).

4.4 Ethical consideration

Ethical clearance was obtained from the Ethics Committee of the University before data collection. The participants were informed about the purpose of the investigation and that information obtained will be used for research purposes only. Participation was voluntary and the participants were informed that they could opt out of the survey at any time. The participants were assured that their anonymity would be maintained. The names of the SMEs were not included in the questionnaire. All this information was stated on the cover page of the questionnaire. Consent forms to confirm participation in the study were given to all the participants.

5 Results and discussions

5.1 Normality and reliability

The Kolmogorov-Smirnov test test was used to test the normality of the data. The significance of the Kolmogorov-Smirnov test was greater than 0.05. This implies that the normality of the data can be assumed. The Cronbach’s alpha coefficients for all the financing alternatives, human and social capital were greater than 0.70. This indicates the internal consistency of measures.

5.2 Response rate and biographical details

300 questionnaires were distributed to the owners of new SMEs in the study areas and 136 questionnaires were returned. The study achieved a response rate of 45.3%. 75 respondents were in the retail sector and 61 in service sector. The gender composition of the respondent was 89 males and 47 females. 39 respondents had no employees, 78 respondents had 1-4 employees and 19 respondents had more than 5 or more employees.

5.3 Human capital

58 respondents had post matric qualifications and 78 respondents had Matric or below. 64 did business courses either at Matric or post Matric level and 72 did not do business related courses. 62 respondents had related business experience and 74 had no previous experience before start-up. 30 respondents had previous work experience that included management, accounting and finance works and 32 respondents had previous work experience that did not include management, accounting and finance works.

5.4 Social capital

Direct ties: 51 respondents answered yes and 85 respondents answered no to the question “Before I stated business, I had a professional relationship with someone knowledgeable in finance (a banker or a finance expert)”. 45 respondents answered yes and 91 respondents answered no to the question “Before I stated my business, I was engaged (club, sport) in an informal social activity with someone knowledgeable in finance”. 39 respondents answered yes and 97 respondents answered no to the question “Before I started by business, someone knowledgeable in finance was a friend yes”.

Indirect ties: 37 respondents answered yes and 99 respondents answered no to the question “Someone that I am confident to discuss my business with knows at least one person knowledgeable in finance”. 37 respondents answered yes and 99 respondents answered no to the question “Someone who I trust can link me with who is knowledgeable in finance”. 44 respondents answered yes and 92 respondents answered no to the question “I can obtain information about finance through my network of contacts”.

5.5 Descriptive statistics on financing alternatives

Table 1 depicts the knowledge of financing alternatives by the owners of new SMEs. The results indicate that for debt alternatives, SME owners have a good knowledge of overdrafts, loans, trade credit and micro finance. The knowledge of other debt-related instruments such as factoring and leasing is rather weak. Furthermore, the knowledge of government financial assistance programmes is very weak. Government agencies such as the Small Enterprise Finance Agency provide guarantees and loans to new SMEs. The weak knowledge of these debt-related instruments and programmes suggest that new SME owners will not be able to use these facilities if and when they need external finance.

The results as shown by table 1 reveal that new SME owners have a good knowledge of contribution from family and friends and retained earnings. According to Bhaird & Lucy (2008:312), new SMEs tend to draw initial capital from internal sources. The knowledge of other traditional forms of equity such as venture capital and business angel is not strong. In addition, the knowledge of the Alt-X is not strong. However, this is understandable as only a few new SMEs can list on the Alt-X exchange. The criteria for a listing on the Alt-X securities market are very strict. Shane (2008) points out that access to venture capital is very limited for new SMEs. Venture capitalists often enter the firm at the middle or later stages of its life cycle. Venture capitalists are not interested in the small amounts sought by most new SMEs. In addition, the knowledge of financial bootstrapping and Islamic financial products is very weak. An innovative source of equity that new SMEs can tap is crowdfunding. The results indicate a very weak knowledge of crowdfunding. Crowdfunding depends on access to the Internet. Awareness of this innovative source of finance may be low because of the low usage of the internet by SMEs. Studies such as Dlodlo & Dhurup (2010) and Gareeb & Naicker (2015) find that the internet usage rate by SMEs is very low in South Africa.

5.6 The effect of human capital on the knowledge of financing alternatives

Table 2 presents the summary of the T-test results for effect of human capital on the understanding of financing alternatives. The results indicate that new SME owners with higher level of education, that attended business courses and related experience prior to start-up have a better understanding of financing alternatives as depicted by the means. There are significant differences (sig. $\leq$ 0.05) in the level of education (generic human capital) and business courses (specific human capital) and the knowledge of factoring, venture capital, Alt-X, bootstrapping, Islamic banking and crowdfunding.

5.7 The effect of social capital on the knowledge of finacing alternatives

The results as depicted by table 3 show that new SME owners with social capital as measured by direct and indirect ties have a better knowledge of financing alternatives as depicted by the means. The only measure of social capital that revealed a significant difference (sig. $\leq$ 0.05) as evidenced by the T-test is "Someone who I trust can link me with who is knowledgeable in finance". This is an indirect tie.

6 Conclusion

New SMEs are fundamental to the growth of the South African economy and its future socio-political stability**.** 75% of new SMEs created in South Africa fail within the first two years of operation. Various challenges and impediments prevent the creation of new SMEs as well as cause the high failure rates of new SMEs in South Africa. One of these is the non-availability of formal sector financing. The study investigated the effect of human and social capital on the knowledge of financing alternatives. The results indicated that new SME owners higher levels of generic and specific human capital prior to start-up have a better knowledge of financing alternatives. There are significant differences in the level of education and business courses and the knowledge of factoring, venture capital, Alt-X, bootstrapping, Islamic banking and crowdfunding. New SME owners with social capital as measured by direct and indirect ties have a better knowledge of financing alternatives. The only measure of social capital that revealed a significant difference is the "someone who I trust can link me with who is knowledgeable in finance". This is an indirect tie.

7 Recommendations

It is important for new SME owners to be involved in training and workshops on sources of finance. Many universities and non-governmental organisations that support entrepreneurship in South Africa have training and educational programmes directed at small business owners. Commercial banks in South Africa have credit products directed at SMEs. These programmes are on the websites of commercial banks. It is important for commercial banks to create awareness of the existence of these programmes. Most SME owners do not have access to Internet facilities and so may not be aware of commercial banks and government finance programmes. It is important for government agencies such as the Small Enterprise Finance Agency, the Small Enterprise Development Agency and the Department of Small business to create for government financing options for SMEs. SME owners should improve on Internet usage. Improved usage of the internet can allow small business owners to understand innovative financing product such as crowdfunding which is Internet based. In addition, small business owners should have mentoring arrangement with successful business owners in order to be aware of the various financing options. Government agencies such as SEFA should have field agents that can visit small business owners and create awareness of financing alternatives. Universities, especially the Departments of Business Management should make it as part of their community engagement to visit new business owners and inform them about financing options. The Banking Association of South Africa and the commercial banks should create awareness about the existence of new products such as Islamic finance

8 Limitations and areas for further study

Because of the difficulty in obtaining the population of new SME owners in the study area, the researcher used both convenience and snowball sampling methods. These are non-probability sampling methods. This could have created sampling bias. Other studies can investigate the effect of other entrepreneurs' characteristics such as the gender and age of small business owners on the knowledge of financing alternatives.

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Table 1. Knowledge of financing alternatives

Knowledge of financing alternatives	Mean	Standard deviation
Debt related		
Overdraft	3.62	1.02
Loans	3.55	1.05
Factoring	2.53	0.97
Leasing	2.82	0.92
Hire purchase	3.14	0.97
Trade credit	4.32	1.01
Government financial assistance programmes	2.44	1.01
Micro finance	3.52	1.04
Equity		
Contribution from family and friends	4.02	1.02
Retained earnings	3.50	1.04
Venture capital	2.48	0.97
Business angel	2.78	0.92
Alt-X stock exchange	1.22	0.76
Bootstrapping	1.95	0.79
Crowdfunding	1.26	0.81
Islamic finance	1.30	0.78

Table 4. T-test results of the effect of social capital (indirect ties) on the knowledge of financing alternatives

Financing alternatives	Trust			Contact		
Debt	Mean	T	Sig	Mean	T	Sig
Overdraft	3.70	2.05	.597	3.50	1.75	.176
	3.57			3.74		
Loans	3.60	2.07	.654	3.41	1.41	.354
	3.51			3.68		
Factoring	3.04	1.96	.354	2.66	2.07	.208
	2.20			2.39		
Leasing	3.32	1.49	.652	3.00	2.33	.205
	2.68			2.86		
Hire purchase	3.53	1.85	.110	3.28	1.09	.191
	2.89			3.00		
Trade credit	3.87	1.49	.487	3.71	1.65	.107
	3.57			3.67		
Government	2.87	2.27	.806	2.54	2.22	.155
	2.17			2.33		
Micro finance	3.49	1.37	.066	3.32	1.96	.109
	3.21			3.32		
Equity						
Family and friends	3.83	3.28	.082	3.69	1.77	.125
	3.69			3.80		
Retained earnings	3.60	1.83	.059	3.51	3.48	.120
	3.43			3.48		
Venture capital	3.00	1.45	.074	2.62	2.76	.107
	2.15			2.35		
Business angel	3.28	2.07	.077	2.99	3.67	.129
	2.46			2.58		
Alt-X	2.75	2.24	.086	2.38	3.62	.320
	1.90			2.09		
Bootstrapping	2.60	2.06	0.91	2.26	1.47	.214
	1.85			2.01		
Crowdfunding		1.98	.004	2.01	1.05	.101
	2.25			1.58		
	1.51					
Islamic finance	1.77	1.92	.015	1.63	2.23	.104
	1.42			1.48		

Sig. ≤ 0.05

Table 2.T-test results of the effect of human capital on financing alternatives

Financing alternatives	Level of education			Business course			Related experience			Previous experience included finance		
	Mean	T	Sig	Mean	T	Sig	Mean	T	Sig	Mean	T	Sig
Debt												
Overdraft	3.97 3.25	1.14	.481	4.05 3.25	1.00	.480	4.03 3.24	1.08	.572	4.03 4.03	1.08	.480
Loans	3.90 3.18	1.13	.157	4.00 3.15	0.97	.505	3.98 3.14	5.09	.533	4.03 3.94	1.11	.990
Factoring	3.40 1.61	1.02	.000	3.55 1.63	1.04	.002	3.48 1.63	4.01	0.07	3.44 3.61	1.04	.718
Leasing	3.64 2.18	0.98	.986	3.75 2.21	0.79	.750	3.70 2.21	3.26	.302	3.65 3.84	1.04	.921
Hire purchase	3.76 2.49	0.268	.846	3.88 2.49	0.99	.571	3.85 2.48	1.00	.305	3.82 3.94	2.26	.842
Trade credit	4.09 3.27	1.022	.210	4.19 3.25	1.00	.611	4.17 3.24	4.25	.405	4.32 4.00	0.97	.501
Government	3.11 1.73	1.09	.131	3.25 1.73	1.10	.162	3.18 1.75	3.60	.103	3.29 3.13	2.24	.287
Micro finance	3.66 2.97	0.99	.227	3.80 2.90	0.99	.803	3.79 2.89	4.00	.101	3.74 3.84		.137
Equity												
family and friends	4.07 3.40	1.00	.140	4.16 3.38	0.86	.250	4.14 3.38	4.823	.207	4.24 4.03	0.97	.565
Retained earnings	3.83 3.15	1.20	.125	3.94 3.11	1.12	.133	3.92 3.10	4.60	.202	3.97 3.87	1.06	.480
Venture capital	3.39 1.54	1.00	.000	3.53 1.56	1.00	.003	3.01 2.02	3.09	.101	3.35 3.68	1.01	.918
Business angel	3.63 1.90	1.07	.107	3.72 1.96	1.10	.210	3.70 1.93	3.60	.160	3.65 3.74	1.09	.492
Alt-X	3.06 1.37	0.99	.002	3.17 1.41	0.99	.004	2.62 2.01	4.00	.201	3.03 3.29	1.06	.032
Bootstrapping	2.93 1.31	0.87	.002	3.03 1.36	1.20	.036	2.98 1.35	4.01	.024	2.85 3.19	1.06	.019
Crowdfunding	2.33 1.24	1.01	.000	2.39 1.27	1.01	.000	2.36 1.27	3.26	.002	2.44 2.32	1.00	.269
Islamic finance	1.90 1.19	0.99	.000	1.95 1.21	1.11	.000	1.64 1.50	4.02	.130	2.00 1.90	2.01	.247

Sig. ≤ 0.05

Table 3. T-test results of the effect of social capital (direct ties) on the knowledge of financing alternatives

Financing alternatives	Professional relationship			Informal relationship			Friend		
	Mean	T	Sig	Mean	T	Sig	Mean	T	Sig
Debt									
Overdraft	3.98	1.07	.719	3.92	1.55	.968	3.92	1.75	.865
	3.39			3.46			3.50		
Loans	3.92	1.02	.536	3.85	1.24	.745	3.85	1.04	.773
	3.31			3.38			3.43		
Factoring	3.49	1.02	.481	3.42	1.01	.626	3.36	1.22	.266
	1.92			2.04			2.19		
Leasing	3.72	1.10	.176	3.63	1.07	.282	3.62	1.76	.116
	2.43			2.55			2.65		
Hire purchase	3.87	0.99	.258	3.79	1.05	.657	3.82	1.04	.253
	2.68			2.79			2.87		
Trade credit	4.15	2.26	.957	4.10	1.01	.597	4.15	2.01	.463
	3.39			3.46			3.50		
Government	3.13	2.20	.479	3.21	1.04	.530	3.28	1.97	.245
	2.00			2.02			2.10		
Micro finance	3.75	2.01	.468	3.63	1.04	.214	3.67	1.04	.102
	3.05			3.16			3.18		
Equity									
Family and friends	4.11	1.07	.104	4.06	1.11	.448	4.10	1.22	.673
	3.51			3.57			3.60		
Retained earnings	3.91	1.22	.561	3.85	1.02	.916	3.87	1.06	.444
	3.24			3.30			3.35		
Venture capital	3.47	1.09	.819	3.38	2.21	.955	3.31	1.39	.102
	1.86			2.00			2.15		
Business angel	3.70	1.24	.674	3.58	1.97	.446	3.51	1.40	.052
	2.20			2.35			2.49		
Alt-X	3.17	1.29	.962	3.06	1.55	.363	2.97	1.22	.052
	1.64			1.79			1.94		
Bootstrapping	3.04	1.07	.704	2.92	1.50	.295	2.82	1.09	.031
	1.57			1.72			1.87		
Crowdfunding	2.34	1.05	.037	2.40	1.26	.014	2.44	1.77	.007
	1.45			1.47			1.54		
Islamic finance	1.81	1.22	.060	1.85	1.04	.036	1.95	1.04	.012
	1.39			1.39			1.40		

Sig. ≤ 0.05

CORPORATE MONITORING AND VOTING DISCLOSURE CHOICES: A STUDY OF UK ASSET MANAGERS

Theodore Benjamin Kogan* Galla Salganik-Shoshan**

Abstract

This paper investigates the link between voting transparency and voting behaviour in asset managers, and its implications for corporate monitoring. Our results show that the more effort asset managers put into disclosure, the higher their dissention rate, suggesting that the duty asset managers have to represent their clients' interests is not taken equally seriously across the board. When factoring in voting rationales, we find that 1) the more accepted a rationale for dissent by full-disclosure managers, the greater the overall opposition to management, and that 2) the partial-disclosure and the non-disclosure investors are significantly more complacent than the full disclosure ones. Collectively, our results suggest that when non-disclosure and partial-disclosure asset managers constitute a significant majority of investors, the core accountability mechanism between shareholders and corporate management – namely, stewardship through voting – is malfunctioning.

Keywords: Corporate Monitoring, Accountability, Corporate Governance, Voting Behaviour, Transparency, Remuneration Policy

JEL classification: G23, G34, G32

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1 Introduction

Accountability mechanisms are key to the study of political science and public policy. Whether implicitly or explicitly, the relationships between voters and representatives, legislature and executive, or publicly-funded institutions and government constitute the exoskeleton of the study of political life. While the effectiveness of public accountability mechanisms is arguably front and centre in political science, such discussions rarely progress without mention of the role of transparency in enabling effective governance. The general consensus among academics is that transparency is a necessary but not sufficient condition for accountability. In instances where it falls short, transparency may be akin to window shopping, where the display is two-dimensional, the quality unverifiable, and customer service inaccessible (Fox 2007). In public accountability, this translates to difficult-to-access, difficult-to-assess, and difficult-to-process information. For instance, Security and Exchange Commission (SEC) filings are often criticised for the paucity of their required disclosure, and there has been extensive debate as to whether greater disclosure is associated with greater accountability for the corporations involved. The related question of whether disclosure and monitoring quality are linked for *investors* in these corporations has received far less attention. This paper contributes a partial answer to that question.

In the wake of the 2008 financial crisis, the interlinkage of public and private institutions is ever more apparent, and the boundaries between political and corporate governance ever more blurred. The widespread government intervention that took place as the crisis dragged on is indicative of the importance of global corporate wellbeing, but first and foremost it is to their shareholders that corporations must answer. Whether the relationship between shareholders and corporate management constitutes an effective accountability tool is thus an increasingly pressing question. This paper also contributes a partial answer to that question.

It is at the intersection of these two questions that the focus of this paper lies. We conduct an empirical investigation which uses the primary output of the relationship between shareholders and management (the outcome of votes at annual general meetings, or AGMs) in order to examine the link between voting transparency and monitoring effectiveness of UK asset managers. It contributes answers to the questions of whether shareholder democracy is currently effective and whether transparency leads to accountability, but most importantly, it ties these two debates together by asking the following research question:

How is the transparency level of asset managers related to the quality of their corporate monitoring?

To investigate this question, we focus on votes regarding remuneration-related proposals. The reasons for this are threefold. First, these votes are the most contentious and least uniform (in outcome) of AGM resolutions. Second, focusing on a single type of resolution fosters comparability. Third, remuneration-related resolutions typically receive the most attention, in part because of the high impact that remuneration practices can have on performance, and in part because executive compensation figures often draw public opprobrium.

Ultimately, this paper concerns itself with understanding how and why investors, and specifically UK asset managers, utilize their voting power the way they do, and how this interacts with the way they choose to disclose their voting behaviour. The implications are vast, but the topic little studied. As a result, to our knowledge, this is the first paper to systematically examine the link between corporate voting transparency and voting outcomes, the reasons for corporate voting behaviour, and voting behaviour itself by UK fund managers.

The following section overviews the relevant literature, and introduces the theory and hypotheses guiding this study.

2 Literature, theory and hypotheses

The issue of voting behaviour and its relationship to transparency with respect to corporate investors is an interdisciplinary one. It relates to political science, as at its centre lies an important accountability mechanism (proxy voting[5]) that in many ways emulates that of democratic political systems. The potential failure of this mechanism has vast societal impact that goes well beyond internal corporate affairs. Yet, related literature is most commonly placed within the field of corporate governance. We begin by covering the relevant political science literature, and proceed with the more context-relevant investigations of corporate governance.[6] This literature review leads into the theory and the hypotheses that guide this study, given at the end of this section.

A core feature of accountability mechanisms is that they aim to mitigate principal-agency problems. These problems are based on the fact that the agent (the actor to whom the principal delegates a task) has interests that diverge from those of the principal, and the purpose of accountability mechanisms is to help better align the interests of both actors (Rees 1985). One of the most common methods for doing so is tying agents to principals by giving principals the power to vote in ways that have the potential to control some agent behaviour. While the specifics differ, this is the method that is meant to bind politicians to citizens in democratic societies and management to shareholders in corporate structures.

In both public and private systems, the voting mechanism relies on active engagement by the principal, and political science thus often concerns itself with low voter turnout (especially in popular elections) as a problem to be addressed (e.g. Bingham 1986, Jackman 1987). Several studies (Almond 1989; Inglehart and Welzel 2003) show that a voting culture that shuns non-voting is a strong contributor to citizens' engagement that goes beyond the mere act of voting.

Yet for voters in popular elections, voting itself usually is done anonymously and voluntarily, and so the pressure to engage is a 'gentle' one. In the instances where certain types of democratic voting are conducted publicly but still effectively,[7] voter engagement, both in terms of turnout and genuine consideration of the issues, is significantly higher – despite the lack of explicit coercion (Nai 2009). Part of this is explained by a growing body of research that describes the phenomenon of 'correct voting' (Lupia 1994; Lau and Redlawsk 1997 and 2006), which involves the ability of uninformed citizens to mimic the choices of 'experts'. Political cultures where individual voting decisions (and rationales) are publicly discussed experience higher rates of correct voting, because natural leaders emerge in the deliberative process. In other words, correct voting can help translate greater voting transparency into more efficient voting outcomes. As we show below, the inefficiencies inherent in corporate voting make it particularly interesting to consider the role that transparency may play in ameliorating the proxy voting process.

Perhaps the foundational question in the proxy voting literature is, does voting matter? After all, corporate voting is a process with numerous flaws (Kahan and Rock, 2008): votes may not be binding (Levit and Malenko, 2011), and in any case majority opposition to management is very rare (Romano, 2003) – all of which means that the average investors' vote has an infinitesimal chance of being pivotal. The importance of voting, however, is underscored by results such as those of Cai et al. (2009) who show that even a seemingly unimportant 1% decrease in investor support for the re-election of the head of the remuneration committee is associated with a $220,000 reduction in CEO compensation in the following year.

The literature on institutional investor voting tends to focus on mutual funds (which, since 2003, are required by the SEC to disclose their votes), and in particular on conflicts of interest in the way they vote. A particularly prominent example of this literature is Davis and Kim (2005), who show that funds run by investment management firms which manage substantial corporate pension assets tend to be especially supportive of management in their voting.

[5] In the corporate context, the term proxy voting is used in recognition of the fact that formally shareholders fill out proxy forms when they vote, and therefore refers to voting by shareholders in a company.

[6] For a recent example of an article at the intersection of corporate governance and politics, see Kogan and Salganik-Shoshan (2015).

[7] One such example being Swiss communal assemblies.

Taub (2009) provides a broad-ranging critique of mutual funds' voting practices, with specific emphasis on pervasive voting passivity. Westphal and Bednar (2008) suggest that a partial explanation for shareholder voting passivity is that corporate executives use a combination of ingratiation and persuasion to dissuade institutional investors from activism. However, Gonzalez and Calluzzo (2014) show that occasionally, some investors coordinate their activism, and that coordinated activism is significantly more effective as measured by shareholder returns.

Individual investors' voting has received scant, if any, attention in the literature. A key reason for that is that individual-investor-level voting data are unavailable. In fact, the only study we are aware of that examines individual shareholders' voting uses an experimental design (Krause et al., 2014). Aggregate-level voting data from a report co-authored by the proxy voting firm Broadridge (ProxyPulse 2014) shows that in the 2014 proxy season, participation by individual investors stood at 29%, down from 30% in 2013. In other words, entreaties by the Securities and Exchange Commission (2010) for shareholders to exercise their right to vote so far have largely fallen on deaf ears.

On the whole, the result is overall passivity from both individual and institutional investors. Individuals rarely vote, and institutions rarely vote against management. Partially as a response to this problem, the SEC brought into effect in 2003 minimum disclosure requirements for mutual funds meant to promote more active voting. The UK Financial Reporting Council followed suit and published the Stewardship Code, brought into effect in 2010.

Despite the SEC's intent, Cremers and Romano (2007), based on SEC data, find no evidence of mutual fund companies supporting management proposals less after they were required to make their voting record public. This conclusion would likely apply in the UK as well, but the UK Stewardship Code's 'comply or explain' policy, whereby different levels of disclosure become a choice rather than a requirement, may be a source of divergence and therefore an opportunity for further analysis. Effectively, the Stewardship Code creates a natural layering of institutional investors (specifically, asset managers): those who choose to explain, those who choose to comply, and those who choose to exceed minimum disclosure requirements. This layering provides a potentially useful analytical tool for investigating this study's research question, namely: *how is the transparency level of asset managers related to the quality of their corporate monitoring?*

Presumably, minimum (or partial) disclosure requires more effort than non-disclosure, and further (or full) disclosure requires more effort than minimum disclosure. Additionally, voting for management is considered to be the 'default' (Taub 2009), and therefore a greater propensity towards voting against management is evidence of greater effort. We therefore hypothesize the following:

H1: If the effort that relates to disclosure choices is accompanied by greater effort in voting, then full-disclosure asset managers are less prone to 'rubber-stamping' management proposals than are other asset managers.

As corollaries, we propose the following sub-hypotheses:

H1.A: Full-disclosure asset managers are less prone to rubber-stamping management proposals than are partial-disclosure asset managers

H1.B: Partial-disclosure asset managers are less prone to rubber-stamping management proposals than are no-disclosure asset managers

Transparency, in the case of voting decisions, can refer not only to disclosing how votes are cast, but also to why they are cast the way they are. Indeed, those who practice full-disclosure publish the rationales for their votes against management. In these cases, increased transparency may facilitate 'correct voting' whenever coincident rationales by full-disclosure voters are deemed to be persuasive by other voters. As a result, we hypothesize the following.

H2: If non-disclosure investors are prone to influence by other investors, then:

H2.A: Their voting decisions are more impacted by full-disclosure investors than by partial-disclosure investors.

H2.B: Their voting decisions are impacted by the homogeneity of opposition to management by full-disclosure investors

Below we discuss in greater depth the reasoning that motivates these hypotheses.

Most, if not all, of the plausible reasons for choosing to disclose voting-related matters point to asset managers monitoring their portfolio companies more conscientiously. We therefore hypothesize that there is a positive relationship between voting transparency and voting activism: the more an asset manager discloses its voting decisions, the more likely it is to oppose the default voting option of siding with the management.

Since the Stewardship Code does not compel investment managers to disclose their voting rationales, and since it compels but does not require them to disclose their voting behaviour, it is important to understand what forces may push investment managers toward greater or lesser transparency with regard to their proxy voting.

First, an investment manager may genuinely believe that disclosure is part of accountability to their investors. Second, they may disclose in order to curry favour with their current and potential investors. Third, they may disclose under pressure from The Stewardship Code as well as the media and NGOs. Fourth, they may disclose because they believe that their votes will have more impact if they are disclosed (and perhaps persuade other investors to act likewise). Contrarily, forces acting against disclosure include the direct and indirect costs of disclosure, and the belief that disclosure of 'against' votes would undermine the asset managers' relationship with their portfolio companies.

In this study, we classify investors into categories, or tiers, according to the extent of their voting disclosure in the UK: Tier 1 for those who disclose both their votes and the reasons for those votes (more precisely, their reasons for voting against management proposals); Tier 2 for investors who disclose only their votes but not their reasons; and Tier 3 for investors who do not disclose any of their voting behaviour.

While the more 'active' (in terms of corporate governance) asset managers self-select into T1 and T2, T3 is a catch-all category for the remaining shareowners (cf. Appendix A).[8] Some of these shareowners (the larger asset managers) have the resources to monitor corporate management on their own but choose not to disclose, while others may not have enough own resources to monitor and, to the extent they are interested in participating in the governance process, are liable to be impacted by the 'thought leaders' in this area. The previous hypotheses claim that transparency in voting correlates with leadership and activism in stewardship. The following section overviews the data used to test them.

3 Data

The data used come from several sources. First, we obtained data on management proposals and voting outcomes for FTSE 100 companies in the UK (see Appendix C for the list of the FTSE 100 companies) from the proxy voting advisory firm Manifest. From these, we retained only votes pertaining to remuneration, which resulted in a sample of 206 votes for the 100 firms.

We then obtained a list of asset managers classified according to their voting disclosure from ShareAction's review "Asset Manager Voting Practices: In Whose Interests?" (2015) based on annual general meetings in 2014. According to this report, eight sizable UK-based asset managers practice full disclosure, and 18 practice partial disclosure. However, for the purpose of our research, some asset managers needed to be reclassified (see Appendix D). As a result, we ended up with 5 Tier 1 asset managers and 16 Tier 2 asset managers.

For the 21 asset managers in our sample, we used Factset to collect their percentage ownership in each of FTSE 100 firms. We then aggregate them to obtain the total ownership percentage by each tier in each portfolio firm, as well as to infer the residual (i.e. Tier 3) ownership percentage. This in turn allows us to infer the proportion of for/against/abstain votes on each proposal by Tier 3 investors in each FTSE 100 company in 2014.

The core of the data work was the manual collection of the voting data on the individual asset managers. This was complicated by the fact that the setup of voting-related disclosures is not standardized across asset managers. The data was published in formats ranging from searchable databases where individual votes were stored, to compiled annual, quarterly, and monthly reports. This meant recording 21 * 206 = 4,326 data points (although 17.5% of these are null because the company in question is not held by the asset manager).

Lastly, for against-management votes by Tier 1 asset managers, we recorded the reason they gave for their vote. We then classified the rationales into nine categories to create a measure of agreement between Tier 1 asset managers on against votes, by recording, for each proposal, the maximum number of asset managers citing the same rationale category. We call this measure *MaxArgStrength* as it plausibly captures the strength of argument for voting against the management's proposal. See Appendix E for full detail on the creation of this measure.

[8] See Appendix A for tier definitions and Appendix B for Tier 1 and Tier 2 constituents.

Table 1. Descriptive statistics

This table summarizes the data on investments and voting in FTSE 100 companies in 2014. The sample contains 206 remuneration-related proposals for the 100 companies. See Appendix A for tier definitions.

	Min.	25th Perc.	Median	75th Perc	Max.	Mean	St. Dev.
Percentage of shares voted	41%	67%	71%	76%	95%	71%	9%
Percentage of shares for management	47%	91%	95%	98%	100%	91%	10%
Percentage of shares against management	0%	2%	3%	7%	52%	7%	9%
Percentage of shares abstained	0%	0%	1%	3%	19%	2%	3%
Proportion of shares held by							
Tier 1	0%	2%	3%	5%	17%	4%	3%
Tier 2	1%	9%	13%	18%	32%	14%	7%
Tier 3	60%	76%	83%	88%	99%	82%	9%

Table 1 shows descriptive statistics for our sample. The most striking quantity (at least to those unfamiliar with the literature on corporate voting) to emerge from the table is the very low average opposition to management proposals: only 7% ‘against’ votes, and 2% abstentions. In fact, three-fourths of all management proposals receive 91% or higher support from investors. This stands in stark contrast with voting in the political sphere where, for example, even the widely questioned 2014 Crimea status referendum produced only 80% official support for the Crimea-Russia unification proposal. This in spite of widely expressed concerns about executive compensation in the media and public opinion. Indeed, not reported in the table, investor support for other management proposals (most of which pertain to director elections) by FTSE100 firms in 2014 exceeds 97%. In addition to complacent voting, the table also indicates substantial voter apathy – only 71% of shares outstanding were voted on average. While 29% of shares were not voted at all, formal abstentions represented only 2% of the voted shares. Although we do not have detailed investor type breakdown for the ownership of non-voted and abstaining shares, it is plausible that non-voted shares are disproportionately held by small individual investors who have little incentive to vote. Active abstentions, on the other hand, likely originate disproportionately from institutional investors who may be under pressure to demonstrate effort to represent their clients’ interests by voting on their behalf. In spite of the high average pro-management voting rates, in some cases opposition to management can be substantial, as evidenced by the minimum value of management support of 47% [9] and the substantial standard deviation (10%) of management support.

The bottom three rows of Table 1 show the distribution, across proposals, of the proportion of shares held by investors in every transparency tier. Recall that Tier 1 contains five full-transparency asset managers, Tier 2 has 16 partial-disclosure ones, and Tier 3 comprises the remaining investors (both institutions and individuals). It is striking that, on average, voting direction is observable for investors representing only 18% of voted shares – the 4% of the shares that are held by Tier 1 and 14% that are held by Tier 2. There is, however, substantial variation in these ownership rates – for example, ownership by Tier 1 asset managers ranges from 0% in Randgold Resources to 17% in IMI, while Tier 2 asset managers hold only 1% in Hargreaves Lansdown and 32% in Melrose Industries.

[9] Note that this is the only one of the 206 votes in the sample that constituted a formal defeat for management. This comes from the well-publicized Burberry case, whose investors were concerned about discretionary payments to the incoming CEO as well as the overall level of pay in the remuneration report. Note however, that votes on remuneration reports, unlike those on remuneration policy, are advisory i.e. non-binding.

Figure 1. Dissent rate versus ownership for Tier 1 asset managers

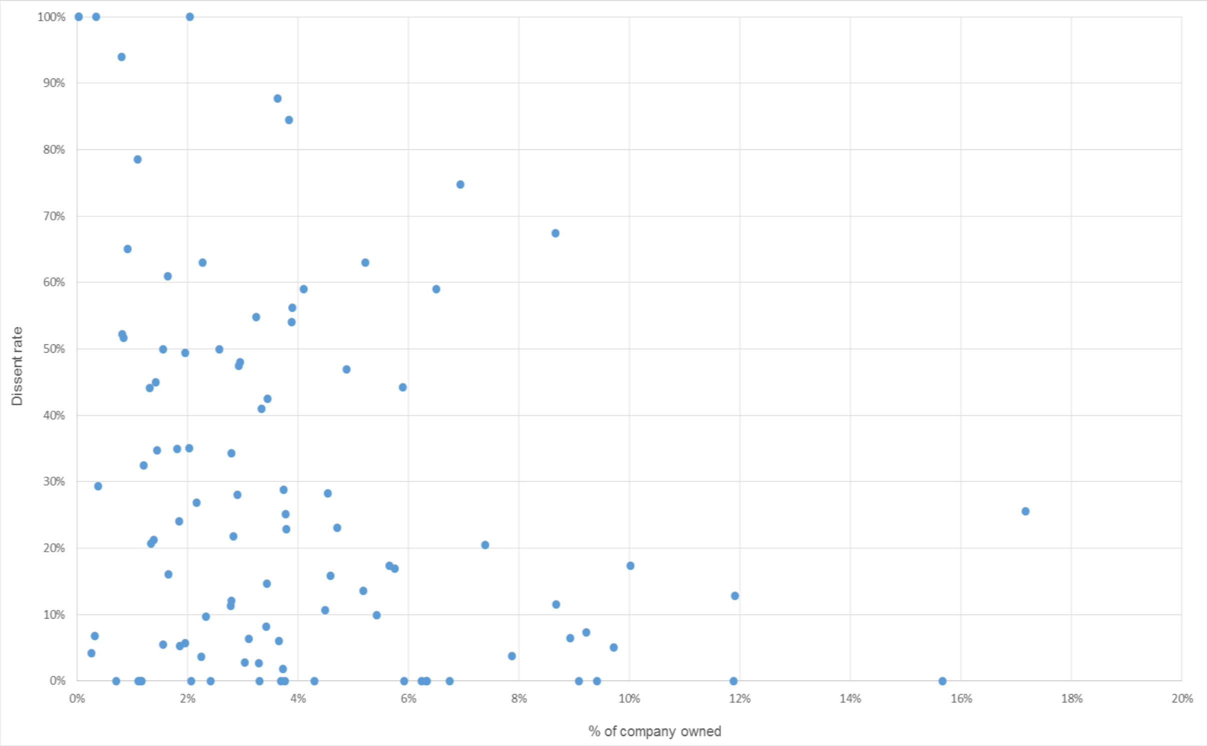
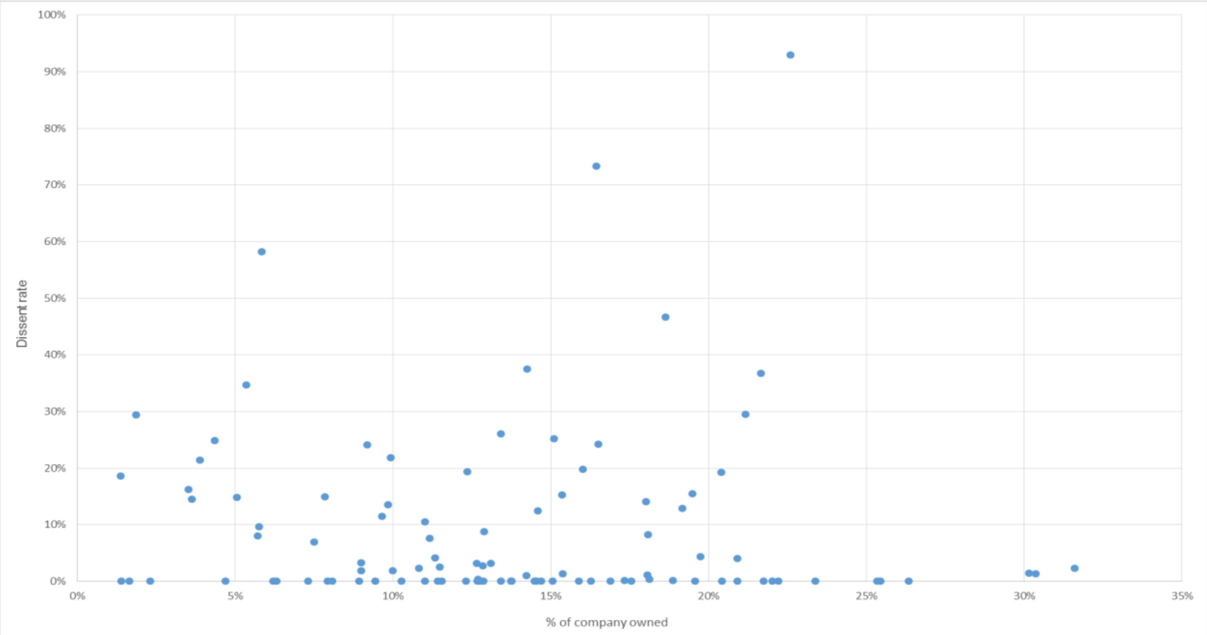


Figure 2. Dissent rate versus ownership for Tier 2 asset managers



A possible impediment to the interpretation of asset manager votes is concern about self-selection: one could argue that the larger a manager's stake in a company, the more likely they are to approve of the way the company is managed, and therefore to vote for management's proposals. To help assess whether this is a concern in the data, Figure 1 plots, for each FTSE100 company, the average rate of Tier 1 managers' dissent (opposition plus abstentions) across all management proposals for that company versus Tier 1's aggregate ownership in the company. Figure 2 does the same for Tier 2 managers. While Figure 1 indeed suggests a negative relationship, it does not appear to be particularly strong, while in Figure 2 greater ownership tends to be associated with higher, not lower, dissent. It is indeed plausible that institutional investors take greater stakes in companies they view as undervalued, and seek to effect positive change in these companies by voting against the status quo.

Figure 3. Dissent rate for Tier 1 versus dissent rate for Tier 2, by company

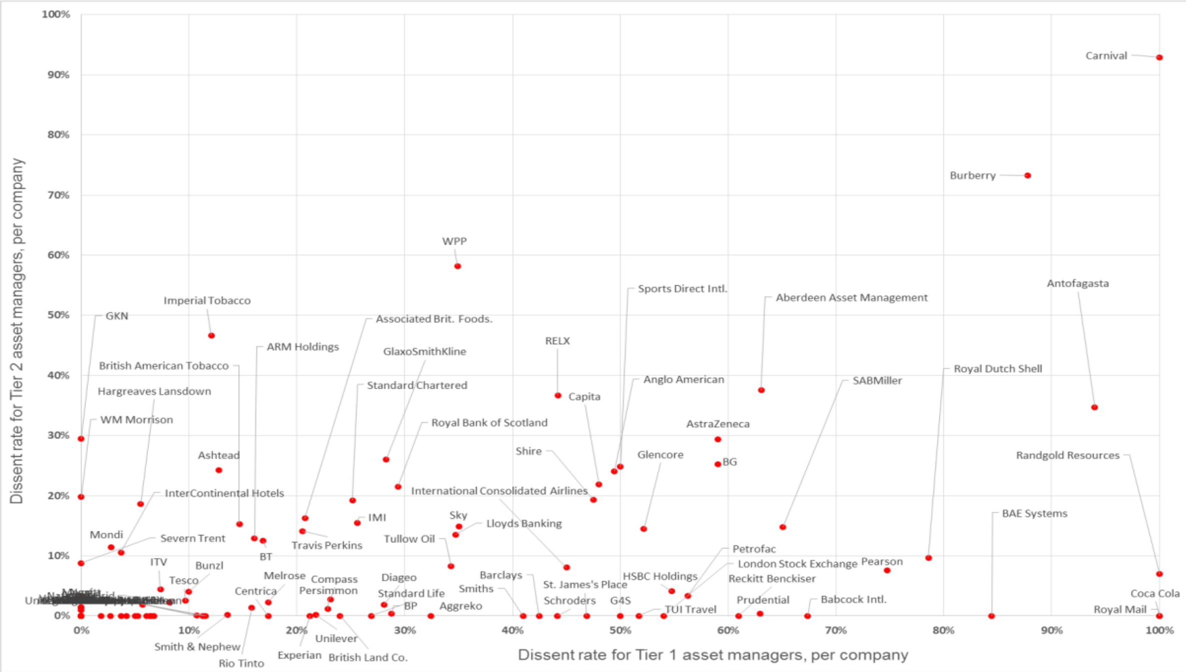


Figure 3 shows, for each company, the average opposition to its management's proposals by Tier 1 investors versus the corresponding measure for Tier 2 investors. A substantial number of companies receive little opposition from either type of investor – a total of 33 companies are in the leftmost bottom quadrant, where both Tier 1 and Tier 2 oppositions do not exceed 10% of the shares voted by them. For the remaining two thirds of the firms, however, the dispersion in opposition to management can be substantial. Also to note in that figure is the strong positive association between opposition to management by Tier 1 and Tier 2 companies.

Figure 4. Average dissent rate of Tier 1 and Tier 2 asset managers

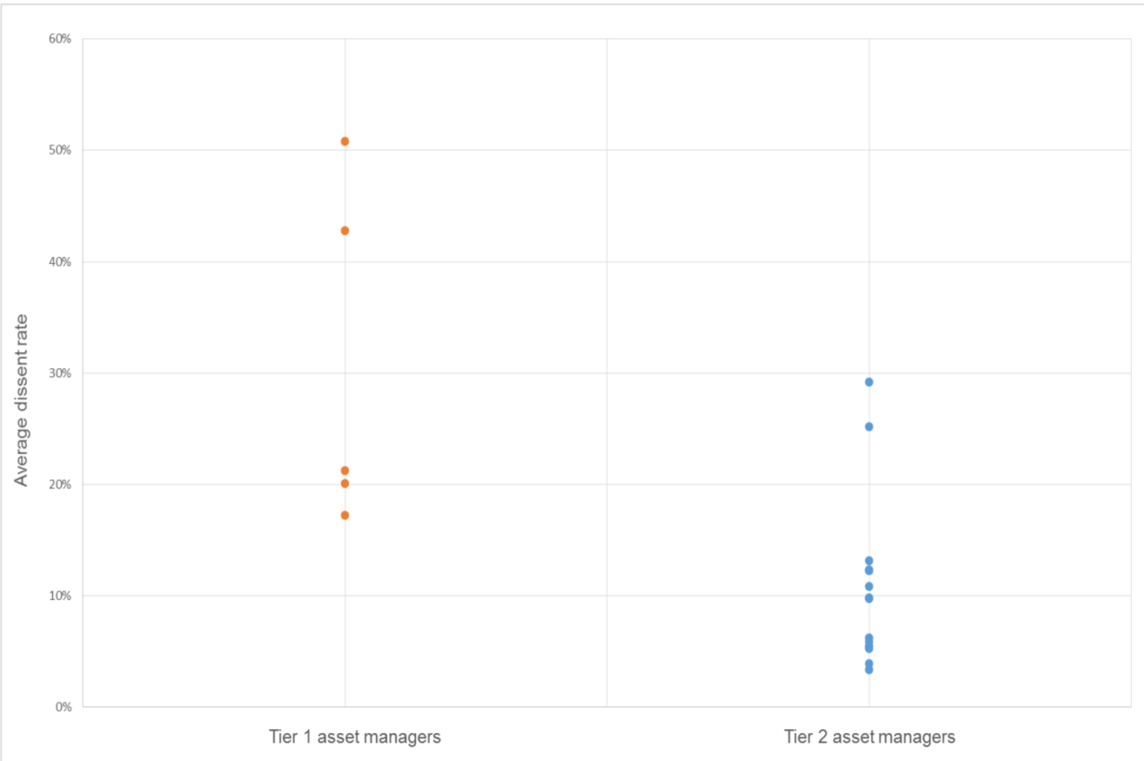


Figure 4 focuses on a comparison of opposition to management by individual Tier 1 and Tier 2 firms. While two Tier 2 firms have opposition rates in excess of 25%, exceeding the opposition of the three most restrained Tier 1 firms, this situation is rather an exception: generally, Tier 1 firms are more likely to oppose management than are their Tier 2 counterparts, and this is clearly the case on average for Tier 1 and Tier 2 firms.

Given the low average level of active opposition to management combined with substantial variation in such opposition, it is especially interesting to understand how voting transparency by asset managers relates to their activism, and we focus on this relationship in the remainder of the paper.

4 Methods

In order to test the hypotheses set out in Section 2, we proceed as follows.

First, to test H1, we calculate the ownership-weighted average for, against and abstain votes by each investor tier on each management proposal. We then calculate average levels of these votes across the proposals for each tier. Lastly, we conduct paired one-tailed t-tests (with each of the management proposals as a unit of observation) to compare average levels of for/against/abstain votes across tiers. See Appendix F for detailed descriptions of the variables.

Second, to test H2.A, we regress the proportion of for/against/abstain votes by Tier 3 investors on the corresponding votes by Tier 1 and Tier 2 investors. Given the [0,1] nature of the dependent variable, we use a fractional logit GLM (Papke and Woldridge 1996), which is a generalized linear model with fractional logistic specifications (i.e. with binomial family and a logit link). Since we have multiple (almost always two) proposals for our sample firms, standard errors need to be adjusted for the possible correlation across these observations, hence we use clustered standard errors.

Lastly, to test H2.B, we need an additional variable that captures homogeneity of rationales for against-management votes given by Tier 1 asset managers. To do this, we construct a variable called *MaxArgStrength*. We obtain this variable as follows. First, for each of the 206 management proposals, for each of the five Tier 1 asset managers, we indicate whether one of nine rationale categories is evoked. Second, we count the number of asset managers evoking a particular category in the context of a given management proposal. The largest number of Tier 1 asset managers agreeing with a particular rationale for a given proposal is *MaxArgStrength*. We then include *MaxArgStrength* as an explanatory variable in the regressions described above. See Appendix E for a more detailed breakdown of the coding procedure.

5 Results

The key analyses herein examine voting behaviour by investor tier in order to understand the link between investor transparency and the tendency to question management proposals. Accordingly, Table 2 summarizes voting behaviour by investor tier.

Table 2. Ownership and voting by investor tier

This table presents the data on investments and voting in FTSE 100 companies in 2014 by investor category, or tier. The investors are categorized into three tiers (see Appendix A for tier definitions and Appendix B for Tier 1 and Tier 2 constituents). The votes considered are those pertaining to remuneration. In Panel A, the first row shows, by investor tier, the mean, median and standard deviation of the proportion of company shares held by that investor tier, across the 100 portfolio companies; the next three rows, respectively, show the same summary statistics for the proportion of votes cast for management proposals, against management proposals, and abstaining from voting. Panel B shows the results of hypothesis tests comparing voting across tiers.

Panel A. Proportions

	Tier 1			Tier 2			Tier 3			Overall		
Variable	Mean	Median	St.D.	Mean	Median	St.D.	Mean	Median	St.D.	Mean	Median	St.D.
Proportion of votes for management	72%	82%	32%	90%	100%	18%	92%	96%	11%	91%	95%	10%
Proportion of votes against management	20%	7%	28%	8%	0%	17%	6%	3%	10%	7%	3%	9%
Proportion of abstentions	8%	0%	15%	2%	0%	5%	2%	1%	4%	2%	1%	3%

Panel B. Test for equality of means for voting proportions across tiers

		Tier 1 and Tier 2				Tier 1 and Tier 3				Tier 2 and Tier 3		
		Mean	*t*-stat	*p*-value		Mean	*t*-stat	*p*-value		Mean	*t*-stat	*p*-value
PropFor	**Tier 1**	72%	-8.58	0.00	**Tier 1**	72%	-9.38	0.00	**Tier 2**	90%	-1.11	0.13
	Tier 2	90%			**Tier 3**	92%			**Tier 3**	92%		
PropAgainst	**Tier 1**	20%	6.33	0.00	**Tier 1**	20%	7.42	0.00	**Tier 2**	8%	1.48	0.07
	Tier 2	8%			**Tier 3**	6%			**Tier 3**	6%		
PropAbstain	**Tier 1**	8%	5.73	0.00	**Tier 1**	8%	5.53	0.00	**Tier 2**	2%	-0.83	0.2
	Tier 2	2%			**Tier 3**	2%			**Tier 3**	2%		

The first row of Panel A shows that the previously reported 91% average support for management disguises a much more sceptical attitude by Tier 1 investors, whose support for their portfolio companies' managers averages only 72%. Tier 2 investors support for corporate management, however, is much closer to that of Tier 3: 90% and 92%, respectively. Panel B reveals that, based on a paired one-tailed t-test, the negative differences between Tier 1 and Tier 2, as well as between Tier 1 and Tier 3, are highly statistically significant (p-value < 0.01)[10] while the difference between Tier 2 and Tier 3 does not achieve significance at conventional levels.

The above results indicate that full-disclosure asset managers indeed play a far more active role in monitoring their portfolio companies than other investors. The link between transparency and activism becomes weaker as one moves from partial-disclosure investors of Tier 2 to the no-disclosure[11] ones in Tier 3.

Against-management votes are largely a mirror image of pro-management ones: there is a much higher level of opposition from Tier 1 investors (20% on average) than from Tier 2 and Tier 3 ones (8% and 6%, respectively). The difference between Tier 1 and Tier 2 and 3 is significant at the 1 percent level, while that between Tiers 2 and 3 is only significant at the 10 percent level.

Abstentions tell a similar story: 8% for Tier 1 versus 2% each for Tiers 2 and 3. Once again, Tier 1 is significantly different from the two remaining tiers. Abstention rates for tiers 2 and 3, on the other hand, are statistically indistinguishable.

Overall, then, the results thus far lend strong support to hypothesis H1.A but not H1.B: the relationship between transparency and monitoring is an increasing one as one goes from partial to full disclosure, but not when one goes from no disclosure to partial disclosure.

It is plausible to imagine that the influence of disclosing investors on aggregate outcomes goes beyond their own votes. Since Tier 1 and Tier 2 investors commit to making their votes public, they are also likely to communicate them, whether formally or informally, before the vote takes place, and so to influence other investors. In order to understand the influence of disclosing voters on their non-disclosing peers, we conduct regressions of manager support by Tier 3 voters on manager support by Tier 1 and Tier 2 voters. Additionally, having classified voting rationales by Tier 1 voters, we examine the effect of consensus among these voters as measured by *MaxArgStrength*.

[10] The significance of the negative difference between Tiers 1 and 2 is confirmed by a binomial test where instead of using proposals as the unit of observation like in the paired t-test whose results are reported in Panel B, we use individual asset manager / proposal combinations as the unit of observation.

[11] In actuality, because we rely on ShareAction's classification of UK asset managers by disclosure, it is possible that Tier 3 contains some disclosing managers from outside the UK. In practice, however, any such managers are likely to be in the minority, as outside of the UK, and with the notable exception of SEC's disclosure requirements for US mutual funds voting on US corporations, the fund management industry is less disclosure-prone. This is corroborated also by the fact that the UK Stewardship code is generally acclaimed as best-practice in asset manager stewardship responsibilities. As an example, the US-based BlackRock, the largest investment management company in the world, only discloses its mutual funds' votes on North American companies – i.e. only the required minimum.

Table 3. Explaining Tier 3 support for management proposals

This table reports the results of Papke and Wooldridge (1996) fractional logit regressions of support for management proposals by Tier 3 asset managers on the corresponding quantity for Tier 1 and Tier 2 asset managers (*PropFor1* and *PropFor2*, respectively). *MaxArgStrength* captures the consensus on voting rationales among Tier 1 asset managers. Standard errors are adjusted for clustering by firm and are given in parentheses below the coefficient estimates. Statistical significance at the 5 percent and 1 percent levels is marked with * and **, respectively. AIC is the Akaike Information Criterion and No. is the number of observations.

	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	1.65***	3.36***	3.21***	2.74***	1.05***	2.92***
	(0.32)	(0.45)	(0.2)	(0.44)	(0.28)	(0.55)
PropFor1	1.12***	-0.15			0.93***	-0.23
	(0.21)	(0.47)			(0.35)	(0.48)
MaxArgStrength		-0.64***	-0.60***	-0.56***		-0.62***
		(0.14)	(0.1)	(0.11)		(0.14)
PropFor2				0.48	0.82**	0.52
				(0.38)	(0.42)	(0.39)
AIC	0.45	0.45	0.44	0.45	0.46	0.46
No.	206	206	206	206	206	206

The regressions are summarised in Table 3. The first regression indicates that PropFor1 is highly correlated with PropFor3 – the coefficient estimate is 1.12 with a standard error of 0.21 (p-value < 0.01). Of course, this analysis does not disentangle causation from correlation. However, it is plausible that at least some of the third tier's voting is impacted by the first tier's leadership, and the results of subsequent analyses are consistent with this conjecture.

The analysis summarized in column 2 additionally includes *MaxArgStrength* as an independent variable. Since this variable measures how many of the Tier 1 investors agreed on the reason to oppose the management proposal, it is highly correlated with Tier 1's opposition to management (accordingly, *MaxArgStrength*'s correlation with PropFor1 is -0.74). Nonetheless, *MaxArgStrength* also captures an important dimension not picked up by voting behaviour – the strength of the reasoning for the opposition to the vote. The highly significant coefficient estimate of -0.64 (standard error = 0.14, p-value < 0.01) for this variable, which 'knocks out' the significance of *PropFor1* is suggestive of the fact that the strength of reasoning is indeed an important factor in influencing aggregate voting outcomes. This is corroborated by regression (3), where *MaxArgStrength* on its own results in a lower Akaike Information Criterion value (0.44) than does *PropFor1* on its own (0.45).

Regressions (4)-(6) are analogous to regressions (1)-(3) but additionally include *PropFor2* as an explanatory variable. This variable is not significant when included alongside *MaxArgStrength* (regressions (4) and (6)), but is significant when included with *PropFor1* only (regression (5)). It is notable that the coefficient of *PropFor2* in regression (5) is lower than that of *PropFor1* (0.82 vs. 0.93), even though the difference between them is not significant. Taken at face value, this is consistent with Tier 3 investors (the 'followers') being more influenced by the outspoken managers of Tier 1 than by those of Tier 2. Regression (6) once again underlines the importance of argument strength, as the corresponding variable is significant in explaining Tier 3 voting behaviour, while neither *PropFor1* nor *PropFor2* is.

Table 4. Explaining Tier 3 opposition to management proposals

This table reports the results of Papke and Wooldridge (1996) fractional logit regressions of opposition to management proposals by Tier 3 asset managers on the corresponding quantity for Tier 1 and Tier 2 asset managers (*PropAgainst1* and *PropAgainst2*, respectively). *MaxArgStrength* captures the consensus on voting rationales among Tier 1 asset managers. Standard errors are adjusted for clustering by firm and are given in parentheses below the coefficient estimates. Statistical significance at the 5 percent and 1 percent levels is marked with * and **, respectively. AIC is the Akaike Information Criterion and No. is the number of observations.

	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	-3.06***	-3.52***	-3.54***	-3.52***	-3.10***	-3.51***
	(0.36)	(0.26)	(0.26)	(0.26)	(0.19)	(0.25)
PropAgainst1	1.38***	0.40			1.02***	0.20
	(0.20)	(0.43)			(0.39)	(0.42)
MaxArgStrength		0.53***	0.61***	0.52***		0.48***
		(0.13)	(0.12)	(0.12)		(0.13)
PropAgainst2				1.02***	1.23***	0.96**
				(0.37)	(0.48)	(0.41)
AIC	0.38	0.38	0.37	0.38	0.38	0.39
No.	206	206	206	206	206	206

Table 4 reports on regressions that are similar to those in Table 3, but which use the proportion of opposition to management, both on the left- and right-hand-sides of the regression. Since opposition = 1 – support – abstentions, and abstentions are few, it follows that the results are close to being the mirror image of those for pro-management voting. Specifically, *PropAgainst1* is highly significant when included without *MaxArgStrength*, but *MaxArgStrength* is even more so (as judged by the Akaike Information Criterion). Differently from Table 3, however, *PropAgainst2* is significant throughout. In fact, in regression (5), where it is included with *PropAgainst1*, it has a higher coefficient than the former. Then, when all the variables are included together in regression (6), *PropAgainst2* has a much higher coefficient than *PropAgainst1* (0.96 vs. 0.20) and is significant at the 5 percent level while *PropAgainst1* is not. At the same time, *MaxArgStrength* is significant at the 1% level, with only a slightly lower coefficient (0.48) than when it is included on its own (0.61). Although the correlations among the three variables can be high (corr(*PropAgainst1*, *MaxArgStrength*) = 0.66, corr(*PropAgainst1*,*PropAgainst2*) = 0.35 and corr(*PropAgainst2*,*MaxArgStrength*) = 0.35), the results are nonetheless suggestive: to the extent that Tier 1 influences voting by other investors, its impact is more due to the reasons it gives for its actions than to the actions themselves.

Table 5. Explaining Tier 3 abstentions

This table reports the results of Papke and Wooldridge (1996) fractional logit regressions of abstentions by Tier 3 asset managers on the corresponding quantity for Tier 1 and Tier 2 asset managers (*PropAbstain1* and *PropAbstain2*, respectively). *MaxArgStrength* captures the consensus on voting rationales among Tier 1 asset managers. Standard errors are adjusted for clustering by firm and are given in parentheses below the coefficient estimates. Statistical significance at the 5 percent and 1 percent levels is marked with * and **, respectively. AIC is the Akaike Information Criterion and No. is the number of observations.

	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	-3.90***	-4.46***	-4.45***	-4.43***	-3.88***	-4.44***
	(0.17)	(0.18)	(0.18)	(0.18)	(0.18)	(0.19)
PropAbstain1	0.90	0.10			0.92	0.12
	(0.75)	(0.80)			(0.74)	(0.79)
MaxArgStrength		0.48***	0.48***	0.49***		0.48***
		(0.13)	(0.13)	(0.13)		(0.13)
PropAbstain2				-1.95	-1.40	-1.96
				(3.80)	(3.47)	(3.76)
AIC	0.19	0.19	0.18	0.19	0.20	0.20
No.	206	206	206	206	206	206

Lastly, Table 5 focuses on abstentions. While we include this table for completeness, it is difficult to interpret the abstention results for two reasons. First, they are only a very small proportion of all votes. Secondly, it is not clear why a Tier 3 investor would decide to vote but mark 'abstain' in the ballot instead of simply not voting. Nonetheless, it is notable that while actual abstaining by Tiers 1 and 2 are not significant, *MaxArgStrength* is. In other words, reasons given by Tier 1 managers to oppose company proposals are enough to sway some Tier 3 investors into abstaining from supporting these proposals.

The above results do not support hypothesis H2a: while the coefficient of *PropFor1* is higher than that of *PropFor2* when explaining *PropFor3*, the difference is not statistically significant, and the results are reversed for the *PropAgainst* variables. In other words, actual voting by Tier 1 firms is not more impactful than voting by Tier 2 firms.

However, there is consistently strong evidence that reasons for voting – and more specifically, the consensus around these reasons by Tier 1 managers – do matter, and this supports hypothesis H2.B. And in fact, the joint impact of actual voting by Tier 1 firms and of their voting disclosure does exceed the impact of voting by Tier 2 firms. In short, Tier 1 firms' behaviour is a better predictor of voting outcomes than is voting by Tier 2 firms – but this is largely due to Tier 1 firms' disclosure of their reasons for opposing management proposals.

6 Discussion and direction for future research

In sum, this study finds that while Tier 1 asset managers do exhibit significantly different voting behaviours from Tier 2 and Tier 3 investors, the difference between Tier 2 and Tier 3 investors is negligible. It also finds that the reasoning behind Tier 1's opposition to management matters more than the extent of Tier 1's opposition to management.

These findings have a natural interpretation. That there is little difference between Tier 2 and Tier 3 gives strength to the idea that minimum disclosure requirements achieve no tangible effect beyond disclosure. That the difference in voting behaviour is so significant between Tier 1 investors on the one hand and Tier 2 and Tier 3 investors on the other hand suggests that an active choice to exceed minimum disclosure requirements accompanies other proactive behaviours. Finally, it is not far-fetched to imagine that opposition to management at the lower levels of disclosure is spurred on by a unified voice at the top of the disclosure hierarchy. When that voice is lacking, dissent from more active asset managers need not translate into dissent from the more passive ones.

From a policy-making perspective, these findings are interesting. They suggest that requiring greater disclosure will do little to affect existing pro-management passivity. However, they also imply that there is a natural hierarchy of 'opinion leaders' that could potentially be exploited by policy makers. Thus, requiring minimum disclosure to the standard of Tier 1 managers might prompt Tier 2 and Tier 3 investors to 'copy-paste' the votes and reasoning of current Tier 1 investors, in a corporate variant of so-called correct voting.

That said, this might not work, or it might do little more than shift the problem without addressing overall levels of disinterest. Shareholder passivity is problematic because it belies the idea that the accountability mechanism between shareholders and management is an effective way for shareholders to express their interests. A functioning representative mechanism is one where every proposal is given due consideration. Rules of thumb that are unrelated to content yet dictate voting behaviour risk making representation ineffective.

Furthermore, for those actors who invest and vote on their clients' behalf, passive voting constitutes a systematic failure of the fiduciary responsibility they have towards their clients. These clients are often middle class individuals who use asset managers to build up their savings or to safeguard their pensions, and it is in their interest that the companies their monies are invested in be committed to maximizing long-term shareholder value. Because corporate management may well be concerned with its own interests more than those of the shareholders, it is in part through the annual general meetings and the proxy voting accompanying it that potential principal-agent frictions are meant to be resolved. Unfortunately, as our results suggest, under the status quo this conduit for addressing shareholder concerns appears to be rather ineffective.

The greatest outlier in Figure 3 is a testament to this. Tier 1 and Tier 2 asset managers both had such significant concerns with Carnival's remuneration policy and report that their dissent rates exceeded 90%.[12] Yet only 23% of shares held by Tier 3 were voted against, so all three of Carnival's remuneration-related resolutions passed with an average approval of 60%. Enabling proper corporate stewardship is a step towards ensuring that such concerns are more widely shared by investors.

This is a problem with serious implications. The corporate world has vast resources, and its interaction with the public and the environment has immense impact. Corporate negligence, or outright misbehaviour, has produced countless environmental disasters, many costing human lives as well. While it would be misleading to say that these tragedies could

[12] In opposing these resolutions, Tier 1 managers gave such reasons as "we do not consider continued employment to be an adequate performance condition for awards upwards of 200% of salary" and "a vote against this proposal is warranted [because of] severance payments to […] Pier Luigi Foschi who had oversight over health and safety at the company during the Costa Concordia disaster".

all have been avoided with stronger monitoring by shareholders, there is little doubt that a shift towards more active stewardship by shareholders would have profound implications for how corporations behave.

As the search for ways to foment active voting by shareholders progresses, the idea of pass-through voting, a mechanism by which asset managers would ask their clients how they would like their shares to be voted, has been gaining traction. This would align incentive with economic interest for individual clients, all the while potentially lessening the burden on asset managers, who would only need to 'pass-through' their clients' voting requests. Beyond that, the transfer of voting power directly to the individual would create explicit demand for a market of 'corporate voting guidance'. Whether that demand is met by existing Tier 1 managers, and/or by other actors who stand to gain from directing shareholder votes, is unimportant. The existence of that market alone would have the potential to inject the world of corporate voting with a fraction of the vibrancy that exists in political voting. This could be the solution to unleashing the true power of shareholders.

A core part of understanding which policy response has the greatest chance of achieving true corporate representation depends on studies, such as this one, that attempt to analyse corporate voting under the status quo. While this paper uses political science and corporate governance literatures as a springboard, it is, to our knowledge, innovative in a number of ways. It is the first paper to systematically examine the link between corporate voting transparency and voting outcomes, the reasons for corporate voting behaviour (cf. *MaxArgStrength*), and voting behaviour itself by UK fund managers. On the other hand, the dataset this study uses could benefit from the addition of further explanatory variables and from extending the time period under study.

The relationship between disclosure and transparency in the context of shareholder democracy has a wide range of implications for the world and is relevant political science, economics, corporate governance, and finance. It is perhaps the interdisciplinary nature of the topic that explains the paucity of work on it. This study is a first step towards filling this gap.

7 Conclusion

We investigate the relationship between voting disclosure practices and voting behaviour on remuneration-related resolutions for investors holding shares in the FTSE 100 in 2014. We find that while those who disclose the recommended minimum (Tier 2 investors) do not vote significantly differently from those who do not disclose at all (Tier 3), those who actively choose to disclose rationales for voting against management (Tier 1) also display more active voting behaviour. We further find that the extent of agreement with Tier 1 on the *reason* for voting against management is a more significant explanatory variable for Tier 3 dissent than either Tier 1 or Tier 2 voting behaviour itself.

In the midst of an arena where the average vote outcome is 97% in favour of management across all management proposals, and 91% in favour of management for remuneration-specific resolutions, there is reason to suspect that shareholders are not engaging with management in meaningful ways. The fact that the most involved investors are also several times more likely to oppose management lends credence to this suspicion. These findings constitute a step towards empowering policy-makers with the knowledge needed to encourage a more genuine democracy for shareholders.

That doing so would be desirable is hard to dispute. The accountability mechanism meant to align management to shareholder interests is malfunctioning. The fix need not be revolutionary, but its implications for corporate monitoring would likely be. This paper, and others like it, could help pave the way to a solution.

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Appendices

Appendix A. Tier definitions.

Tier 1
All UK-based asset managers who disclose:
The way they vote at shareholder meetings for the companies they hold shares in.
Their rationale(s) for voting against management.

Tier 2
All UK-based asset managers who disclose:
The way they vote at shareholder meetings for the companies they hold shares in.

Tier 3
All other shareholders, including:
Non-UK based asset managers with various levels of vote disclosure.
Other institutional shareholders.
Individual shareholders.

Appendix B. Asset manager list by tier.

Tier 1

AVIVA Investors
AXA Investment Management
Newton Investment Management
Royal London Asset Management
Standard Life Investments

Tier 2

Aberdeen Asset Management
Baillie Gifford & Co
Fidelity Worldwide Investments
First State Investments
Goldman Sachs Asset Management
Henderson Global Investors
Hermes Investment Management
HSBC Global Asset Management
Jupiter Asset Management
Legal & General Asset Management
Schroders Investment Management
M & G Investment Management
Morgan Stanley Investment Management
State Street Global Advisors
Threadneedle Asset Management
UBS Global Asset Management

Appendix C. List of FTSE100 companies in 2014.

3i
Aberdeen Asset Management
Admiral
Aggreko
Anglo American
Antofagasta
ARM Holdings
Ashtead
Associated Brit. Foods.
AstraZeneca
AVIVA
Babcock Intl.
BAE Systems
Barclays
BG
BHP Billiton
BP
British American Tobacco
British Land Co.
BT
Bunzl
Burberry
Capita
Carnival
Centrica
Coca Cola
Compass
CRH
Diageo
EasyJet
Experian
Fresnillo
Friends Life
G4S
GKN
GlaxoSmithKline
Glencore
Hammerson
Hargreaves Lansdown
HSBC Holdings
IMI
Imperial Tobacco
InterContinental Hotels
International Cons. Airlines
Intertek
ITV
J Sainsbury
Johnson Matthey
Kingfisher
Land Securities
Legal & General
Lloyds Banking
London Stock Exchange
M & S
Meggitt
Melrose
Mondi
National Grid
Next
Old Mutual
Pearson
Persimmon
Petrofac
Prudential
Randgold Resources
Reckitt Benckiser
RELX
Rexam
Rio Tinto
Rolls Royce
Royal Bank of Scotland
Royal Dutch Shell
Royal Mail
RSA Insurance
SABMiller
Sage
Schroders
Severn Trent
Shire
Sky
Smith & Nephew
Smiths Group
Sports Direct Intl.
SSE
St. James's Place
Standard Chartered
Standard Life
Tesco
Travis Perkins
TUI Travel
Tullow Oil
Unilever
United Utilities Group
Vodafone Group
Weir Group
Whitbread
William Hill
WM Morrison
Wolseley
WPP

Appendix D. Changes to the asset managers' classification as compared to ShareAction's

Reclassifications
Asset managers classified as 'full disclosure' by ShareAction, but whose rationales for votes against do not count as genuine rationales (e.g. "remuneration policy insufficiently aligned with shareholders' interests").
Hermes Investment Management
UBS Global Asset Management

Deletions
Asset managers on the ShareAction list whose disclosure is split by fund, making data collection logistically impossible given limited time and resources.
AllianceBernstein Global Asset Management (Tier 2)
BlackRock (Tier 2)
F & C/BMO Global Asset Management (Tier 1)
Investec Asset Management (Tier 2)
JP Morgan Asset Management (Tier 2)

Appendix E. Coding strategy for *MaxArgStrength*

Because disclosure methods differ, the format of the rationales varied from bullet-pointed to extended descriptions. In order to code up *MaxArgStrength*, we read all the rationales and noted each new 'frame' (or 'central argument') used to justify dissent. We were left with the following nine: poor disclosure, discretionary issues, unsatisfactory pension arrangements, inappropriate level of pay, poor pay-performance linkage, inappropriate service contracts, excessive complexity, short-term/long-term, and lack of board independence. Refer to the next page for detailed descriptions of these frames.
For each rationale provided by Tier 1 asset managers, we then code in binary fashion whether a given frame was used; 1 indicates that the frame was used, 0 that it was not.
We then calculate the maximum number of instances any frame is mentioned by all five Tier 1 asset managers for each vote. *MaxArgStrength* is that number.

Frame	Description
Poor disclosure	Any argument that invokes unsatisfactory level of disclosure about remuneration practices.
Discretionary issues	Any argument that claims that excessive disclosure is given to the remuneration committee with respect to certain practices.
Unsatisfactory pension arrangements	Any argument that indicates displeasure with existing pension arrangements. Typically this relates to excessive pension contributions.
Inappropriate level of pay	Any argument indicating that the level of pay is either too low or excessive in relation to comparable companies.
Poor pay-performance	Any arguments suggesting that the level of pay is either too low or excessive in relation to performance.
Inappropriate service contracts	Any argument claiming that service contracts relating to director employments are flawed.
Excessive complexity	Any argument claiming that remuneration practices are excessively complex.
Short-term/long-term	Any argument suggesting that remuneration practices are either too long-term or too short-term focused.
Lack of board independence	Any argument that claims that the various elements of remuneration (most notably the remuneration committee) are too tied to the company board.

Appendix F. Variable descriptions

Variable	Description
PropFor	The proportion of shares voted in favour of management on remuneration-related resolutions. This proportion is weighted by each individual asset manager's stake in each company. Designates the investor tier when affixed with 1, 2, or 3 at the end of the variable name.
PropAgainst	The proportion of shares voted against management on remuneration-related resolutions. This proportion is weighted by each individual asset manager's stake in each company. Designates the investor tier when affixed with 1, 2, or 3 at the end of the variable name.
PropAbstain	The proportion of shares abstained on votes for remuneration-related resolutions. This proportion is weighted by each individual asset manager's stake in each company. Designates the investor tier when affixed with 1, 2, or 3 at the end of the variable name.
MaxArgStrength	The maximum number of instances one of nine arguments is given for voting against management, across all five Tier 1 asset managers. Refer to Appendix E for details on the coding strategy.
Dissent rate	The sum of *PropFor* and *PropAbstain*.

FRAUD RISK MANAGEMENT IN PRIVATE HEALTHCARE IN SOUTH AFRICA

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Abstract

Worldwide, the healthcare industry aims to provide better health for all. However, fraud risk has become a threat to industries and organisations, including the healthcare industry. In the South African healthcare industry, it has been found that losses due to fraud risk amounted up to R8 billion per year. The purpose of this article was to explore the management of fraud risk within the South African private hospital industry and how this is managed. Primary data was collected by means of a survey, which involved management staff at head office level and at hospital level. The findings suggest that South African private hospitals could improve their current fraud risk management practices. By implementing the recommendations provided by the study, private hospitals will be able to manage fraud risk more effectively.

Keywords: Fraud Risk, Risk Management, Competitive Advantage, Sustainability, Private Hospital Sector, South Africa

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1 Introduction

Globally, the healthcare industry aims to provide better health for all. This industry creates employment and investment opportunities, provides development opportunities, creates international linkages and promotes healthcare scalability through continual innovation and improvement in productivity (Econex, 2013; World Health Organization [WHO], 2011).

However, fraud risk has become a problem for industries and organisations across the globe. The risk of fraud moreover has also been found to be a problem in the healthcare industry (Jones & Jing, 2011; Nouss, 2013). The management of fraud risk within South African private hospitals is therefore essential and requires urgent attention.

The private hospital industry of South Africa makes a significant contribution towards the South African economy. According to the Hospital Association of South Africa (HASA), it has been estimated that the total population covered by the private hospital industry is as high as 10 million individuals, and that in 2013, the three largest hospital groups jointly held stock market capitalisation of R83.688 billion (Econex, 2013; HASA, 2013).

An estimated 50% of the national healthcare expenditure is being spent in the private healthcare industry in South Africa (Econex, 2013). 'Private healthcare' refers to healthcare services which are provided by entities other than government and which are predominantly financed by medical schemes (Basu, Andrews, Kishore, Panjabi & Stuckler, 2012). The private healthcare industry has grown and developed to such an extent that in 2013, this industry provided primary healthcare services for an estimated 38% of the South African population (Econex, 2013).

The primary objective of the present study was to explore the management of fraud risk within the South African private hospital industry and to provide appropriate recommendations.

A description of the industry and the prevalence of fraud is provided, followed by a review of the theoretical underpinnings of risk management. The article reports on the findings of the study and makes recommendations to practitioners and scholars.

2.1 Overview of the healthcare industry

The healthcare industry is concerned with the provision, distribution and consumption of healthcare services and related products, and comprises the services provided by hospitals, general practitioners and community clinics in the prevention, diagnosis and treatment of illnesses. Within this industry, a number of institutions exist, covering preventive, remedial and therapeutic services. Further, the healthcare industry is segmented in private and public suppliers.

The healthcare industry is composed not just of healthcare service providers, but also of funders (both public and private) and consumers (patients) as well as associated providers such as pharmacies, pharmaceutical firms, medical aid schemes, chemical firms, medical equipment manufacturers and suppliers (Comas-Herrera & Wittenberg, 2003). The healthcare industry does not only draw on the services of medical professionals but also makes use of the services of public policy workers, medical writers, clinical research laboratory workers, information technology professionals and marketing specialists (Global Healthcare Marketplace, 2012).

In line with the classifications by the World Health Organization (WHO) and Johns Hopkins Medicine, the healthcare industry can be divided into primary care, secondary care and tertiary care (Johns Hopkins Medicine, 2011; WHO, 2011).

'Primary care' refers to health services which play a role in the local community. It refers to the work of healthcare professionals who act as a first point of consultation for all patients within the healthcare system. 'Secondary care' refers to healthcare services provided by medical specialists and other health professionals who generally do not have first contact with patients. It includes the services of cardiologists, urologists and dermatologists, amongst others. 'Tertiary care' or 'specialised consultative healthcare' is made available to in-patients and on referral from a primary or secondary healthcare professional, in a facility that has personnel and the required resources that enable advanced medical investigation and treatment (Johns Hopkins Medicine, 2011; WHO, 2011).

The healthcare industry can also be subdivided into a public and private hospital sector. A private hospital is one which is owned and governed by a private body. Financially privileged individuals often prefer private care due to the apparent superior quality of service delivery, which emphasises the importance of individual care and attention and the reliability of equipment. In comparison, public hospitals are operated entirely on government funding. Government is responsible for the functioning of these hospitals, from the construction of the building, to the fees of the doctors, and the cost of equipment and the supply of medicines (Simaya & Malandela, 2011).

2.2 The hospital sector of South Africa

In South Africa, the hospital system consists predominantly of a public sector along with a smaller, but fast-growing private sector. Healthcare varies from the most basic primary healthcare, offered by government and funded from its tax revenue, to highly specialised health services available in the private sector. The private hospital sector, managed by large companies, caters for middle- and high-income earners (Econex, 2013). The patients of the private hospital sector generally tend to be members of medical schemes or foreign patients who require quality surgical procedures. Research revealed that within South Africa, the majority of health professionals are employed in the private hospital sector (Brand South Africa, 2012).

At the time of this research, members of the Hospital Association of South Africa (HASA) represented 172 private hospitals in total, providing 25 087 beds. This embodies more than 85% of the private hospital industry in South Africa. The private hospital sector of South Africa is further made up of three hospital groups, namely Life Healthcare, Netcare and Mediclinic, which are all listed on the Johannesburg Stock Exchange (JSE) and currently have a combined average market capitalisation of around R60 billion (Ashton, 2011). This, however, includes international subsidiaries. All three groups have a number of hospitals in other countries too, but for the purposes of this study, the focus was on the hospitals within South Africa's borders only (Ashton, 2011; Econex, 2013; Life Healthcare Group, 2014; Mediclinic International, 2014; Netcare Limited, 2014). Table 1 below presents the private hospital landscape of South Africa.

Table 1. The South African private hospital landscape

Hospital group	Number of hospitals	Number of hospital beds
Life Healthcare Group	63	8 227
Mediclinic International	54	7 436
Netcare Limited	55	9 424
Total	172	25 087

Source: Life Healthcare Group, 2014; Mediclinic International, 2014; Netcare Limited, 2014

The overview and perspective on the healthcare industry and the hospital sector of South Africa serve as introduction to the next section, which will discuss risk management.

2.3 Risk management

The International Organization for Standardization (ISO) defines risk management as the architecture for managing risks effectively (ISO, 2009). Bernstein (1996) views risk management as a process that guides an organisation over a vast range of decision-making initiatives. In Bernstein's view, the capacity to manage risk comprises the key elements of the energy that drives the economic system forward. Purdy (2010) is of the opinion that the management of risk is simply a process of optimisation, which makes the achievement of objectives more likely. As Chapman (2011) states, risk management involves controlling risk as far as possible, thereby enabling the organisation to maximise opportunities.

Risk management should be a continuous and ever-developing process, which forms an integral part of the organisation's strategy. Risk management is considered an inseparable aspect of managing change and other forms of decision-making. Accordingly, risk management should be integrated into the culture of the organisation, providing support to accountability, performance measurement and reward, hence promoting operational efficiency at all levels within an organisation. Risk management requires the engagement of all levels within the organisation, ensuring the interaction of strategic management and operational activities (Valsamakis et al., 2010).

2.4 The importance of risk management

Organisations implement risk management because of the multiple objectives of ensuring successful strategic management, maintaining and promoting a competitive advantage, and contributing towards the achievement of organisational sustainability (Fraser & Simkins, 2010). Ferguson and Ferguson (2011) state that successful risk management is critical to top-level decision-makers in any organisation, involving a fundamental strategic policy and planning to identify scarce resources and to allocate these to projects or activities that generate a sustainable competitive advantage and maximise available long-term growth opportunities.

The claims for the benefits of risk management are numerous. In financial services organisations, risk management has enabled a new focus on the quality of assets and earnings. In the corporate sector, more generally, risk management is perceived as integral to business strategy and to value creation (Elahi, 2010). Weber, Scholz and Michalik (2010) state that improving risk management within organisations would be of value for both science and the industry in which the organisation operates. This pursuit performed through an integrated strategic approach could lead to a proper set of risk management capabilities, which in turn would lead to competitive advantage (Elahi, 2010).

When organisations are able to respond to and treat risks better than competitors, they are in a position to enter riskier ventures with higher potential profits. Elahi (2010) further argues that, if organisations have stronger capabilities in managing risks, they should be able to grow faster in more uncertain business environments. This of course is a competitive advantage. If risk management capabilities justify taking the extra risk, seeking riskier businesses could be a great differentiator, provided the organisation has the capability of managing risk properly (Rejda, 2011).

To summarise, risk management is essential for value creation and sustainability, whereas the lack thereof could have detrimental effects to organisational goals in terms of achieving a competitive advantage and ensuring the sustainability of business operations. The private hospital sector of South Africa should therefore have a clear understanding of the importance of proper risk management and the numerous benefits it holds, making a definite contribution towards gaining a competitive advantage within the industry and in maintaining sustainable business operations. In the section that follows, the concepts of competitive advantage and sustainability will be explained, providing insight into how effective risk management forms part of these two concepts.

2.5 Competitive advantage and sustainability

The goal of management strategies is to ensure that a competitive advantage is achieved and that the sustainability of the organisation is ensured. Since these concepts are the cornerstones of management strategy, the next section explains the concepts of competitive advantage and sustainability from a risk management perspective.

2.5.1 Competitive advantage

Peteraf and Barney (2003) define competitive advantage as a condition that occurs when an entity is capable of creating more economic value than the marginal (breakeven) competitor.

According to the views of Lippman and Rumelt (1982) and Gottschalg and Zollo (2007), the sustainability of competitive advantage depends on the presence of isolating mechanisms that limit the competition's ability to imitate or substitute. Teece, Pisano and Shuen (1997) argue that only the superior ability to innovate continuously in products and processes leads to a continuous competitive advantage. An organisation has a competitive advantage when it implements a strategy competitors are unable to duplicate or find too costly to try to imitate (Hitt et al., 2009).

A resource only becomes a competitive advantage when it is applied to an industry and brought to the market. In this context, one may consider risk management to be a resource. This resource ought to be managed actively and accurately in order to be of value for organisations and to serve as a tool to sustain and create additional value (Delmas, 2001; Elahi, 2010).

From a risk management perspective, Buehler et al. (2008) state that organisations ought to focus on managing and even acquiring risks for which they are competitively advantaged. Buehler et al. (2008) argue that risk management is a management tool which, if properly employed, could create competitive advantage and ensure sustainability for organisations. Elahi (2010) confirms this view, stating that proper risk management capabilities could lead to competitive advantage.

2.5.2 Sustainability

Sustainability can be described by employing the concept of the triple bottom line (Anderson, 2006). For business organisations, the triple bottom line comprises of the traditional bottom line- financial performance, the organisation's environmental record, as well as its social responsibility efforts in treating employees, communities and greater society in a fair and equitable manner (Anderson, 2006; Carter & Rogers, 2008). Therefore, a firm has to ensure financial sustainability, environmental sustainability and social sustainability as envisaged by the King III governance guidelines (Institute of Directors in Southern Africa [IoDSA], 2009).

From a risk management perspective, sustainability relates to the management of risks in a manner that ensures longevity, growth and investor confidence for the organisation (Elahi, 2010). For organisations to survive and prosper in the long term in a volatile and uncertain environment, in other words attaining organisational sustainability, they ought to manage all risks in a comprehensive, systematic and responsible manner (Gavare & Johansson, 2010).

Sustainability leaders embrace opportunities and manage risks which derive from economic, environmental and social developments. Risk management correlates with sustainability, which in return can improve financial performance, produce competitive advantages, improve reputations, lower the cost of capital and increase the share price to the benefit of the shareholders (Anderson, 2006; Gavare & Johansson, 2010). As a result, the triple bottom line of the organisation is improved. This of course translates to the survival of and prosperity for the organisation. However, one of the key risks to be managed is fraud risk.

2.6 Fraud risk

Fraud is defined as an intentional act by one or more individuals, management, employees or third parties, which results in the misrepresentation of financial statements or existing material facts and in addition may result in further damage or injury to other stakeholders (American Institute of Certified Public Accountants [AICPA], 2002; Malaysian Institute of Accountants, 2001; Norman, Rose & Rose, 2009).

The term refers to the use of deception with the intention of obtaining an advantage, avoiding an obligation or causing loss to another party (HM Treasury, 2008). Fraud comprises acts such as deception, bribery, forgery, extortion, corruption, theft, conspiracy, embezzlement, misappropriation, false representation, concealment of material facts and collusion (Samociuk & Iyer, 2010).

The healthcare sector is also confronted with fraud, which specifically include the misrepresentation of the type or level of service provided, the misrepresentation of the individual rendering the service, the billing of items and services that have not been documented, the billing of items and services that were not medically necessary, and seeking increased payment or reimbursement for services that were correctly billed at a lower rate (Jones & Jing, 2011).

Young (2014) defines fraud risk as the risk resulting from illegal actions of an organisation's employees or customers, additional parties to a transaction, or outside intruders, which has a detrimental effect on the organisation. Risk, in the context of managing fraud risk, is consequently the vulnerability or exposure of an organisation towards fraud and irregularity (HM Treasury, 2008).

2.7 Managing fraud risk

The Association for Certified Fraud Examiners (ACFE) reports that 5% of business revenue across the globe, totalling approximately US$3.5 trillion, is stolen through fraud every year (Nouss, 2013). Research by the ACFE from 2002 to 2008 across a wide range of industries has repeatedly indicated the following:

fraud is a widespread problem that affects practically every organisation; and.

the typical organisation loses between 5 and 7% of its annual revenue to fraud (Samociuk & Iyer, 2010).

Musau and Vian (2008) report that healthcare fraud in the United States of America (USA) has been estimated to amount to US$60 million per year of which the majority is found to be in the hospital sector. Moreover, research conducted by the Centre for Counter Fraud Studies (CCFS) at the University of Portsmouth in the United Kingdom (UK) confirmed that 7.29% of the annual global healthcare expenditure or an estimated US$415 billion is lost due to fraud (Jones & Jing, 2011). In South Africa, Qhubeka Forensic Services, a fraud investigation organisation, researched and found that fraud in the South African healthcare sector amounted to between 4 and 8 billion rand per year (Jones & Jing, 2011). Fraud risk has become an area of concern in the healthcare sector as the problem causes organisations and countries to suffer substantial losses. The next section discusses the methodology followed to explore the management of fraud risk within the South African private hospital industry.

3 Research methodology

3.1 Research design

The research for this study was of an empirical nature within the philosophical paradigm of positivism. Empirical positivism is research that is conducted by collecting evidence to add to the field of study by means of observation that can be analysed statistically (Remenyi et al., 1998).

For this study, a non-experimental, descriptive research design was followed to address the research questions, identify the factors and relationships among them and create a detailed description of the phenomenon (Kalaian, 2008). A qualitative research design was considered to be inappropriate, and therefore a quantitative research design was utilised.

3.2 Population of the study

The private hospital sector of South Africa is dominated by three major hospital groups, namely Life Healthcare Group, Mediclinic International and Netcare Limited. The population of the study consequently included private hospitals belonging to these three hospital groups.

A non-probability sampling method in the form of purposive sampling was chosen. Participants included in the study were required to have a holistic view of their organisations, had to be familiar with risk management within private hospitals and had to have an important role in this regard. For this reason, the participants included in the study comprised management staff at head office level, as well as management staff at hospital level. This included risk managers, risk analysts, hospital managers, general managers, line managers as well as general physicians involved in management responsibilities at the private hospitals.

Hospitals were selected based on the number of hospital beds per hospital. Hospitals with fewer than 100 beds were excluded from the sample. This exclusion was made because small hospitals (with fewer than 100 beds) often lack well-developed risk management practices and procedures and consequently would not have been able to provide meaningful results.13 To this end, a total of 40 private hospitals were included in the sample.

3.3 Data gathering method used for this study

A closed-structured questionnaire was selected as the research instrument of choice for this study. The questionnaire was developed from the literature study and with the assistance of senior employees of the companies. As such, specific questions were formulated relating to the literature study on risk management, competitive advantage, sustainability and the management of fraud risk. (See Table 1)

With this study, focusing on non-experimental quantitative research, it was possible to measure the variables across a scale. A 5-point Likert-type scale was the measuring instrument employed in this study. Respondents were requested to rate the extent to which they agreed with each of the statements in the questionnaire ranging from strongly agree to strongly disagree.

3.4 Analyses of the data

All the questions in the questionnaire were coded. The data was captured in Microsoft Office Excel 2010. Descriptive statistical analysis was performed where the data was summarised and presented by means of bar charts and pie charts.

4 Results

Section 1: Organisational information

The evidence from the literature found that the management of fraud risk is indeed essential as significant amounts of money are lost due to fraud annually (Jones & Jing, 2011; Musau & Vian, 2008). The management of fraud risk should thus occur throughout the entire organisation. Figure 1 represents the state of affairs within private hospitals at the time of the research.

The majority of respondents (72.7%) agreed that the management of fraud risk occurred both at head office level as well as at hospital level. A small percentage (9.1%) indicated that the management of fraud risk occurred exclusively at head office level, whereas a further 18.2% of the respondents indicated that it occurred exclusively at hospital office level.

Section 2: The relationship between risk management and sustainability

The literature indicated that risk management is essential for an organisation in order to achieve sustainable business operations (Gavare and Johansson, 2010). Figure 2 represents the current perception among the private hospitals

It is evident that risk management was considered to be essential in achieving sustainability of an organisation's business operations. This can be observed by 96% of the respondents strongly agreeing with the statement, while a further 4% somewhat agreed with the statement.

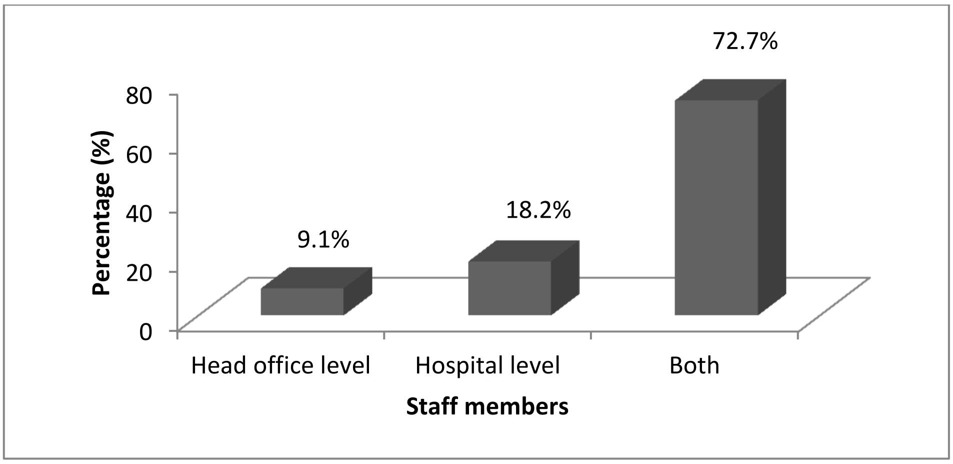
For organisations to survive in the long term in a dynamic uncertain environment, the management of all risks is important. The respondents' opinions are represented in the following pie chart.

[13] This information was obtained during telephonic conversations with hospital managers of the participatory private hospitals included in the sample.

Table 1. Questions to private hospital participants

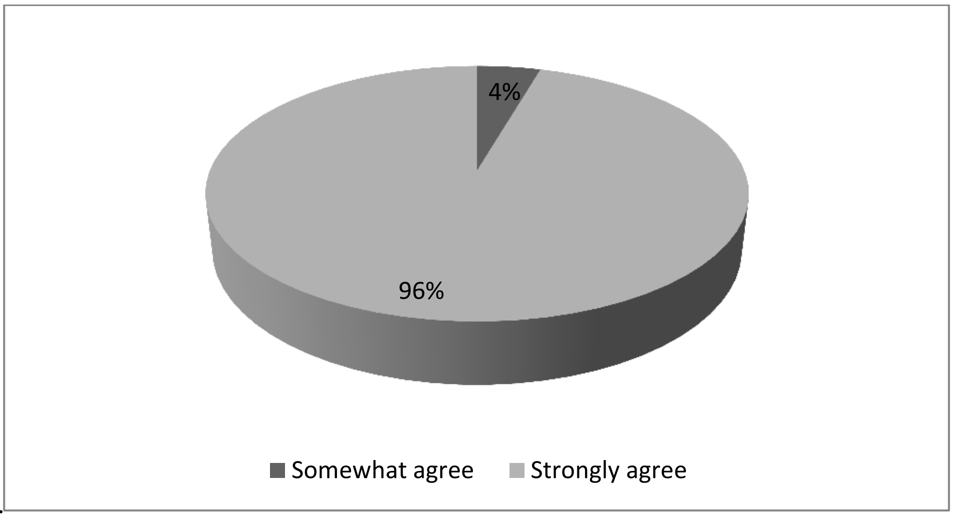
Topic	Rationale
Section 1: Organisational information	To ascertain in which areas the management of fraud risk in private hospitals occurs.
Section 2: Risk management and sustainability	To ascertain whether risk management is essential in contributing towards sustainable business operations. To ascertain whether management of all risks is important in order for organisations to be sustainable.
Section 3: The management of fraud risk as a source of competitive advantage	To ascertain whether the effective management of fraud risk is regarded as a source of competitive advantage.
Section 4: The organisational culture and management procedures regarding fraud risk within private hospitals	To establish the organisational culture with regard to the management of fraud risk.
Section 5: The reporting of risk in private hospitals	To ascertain whether the reporting of risks includes the reporting of fraud risk. To ascertain the frequency of risk reporting. To obtain additional information on the manner in which fraud risk reporting occurs.

Figure 1. The management of fraud risk



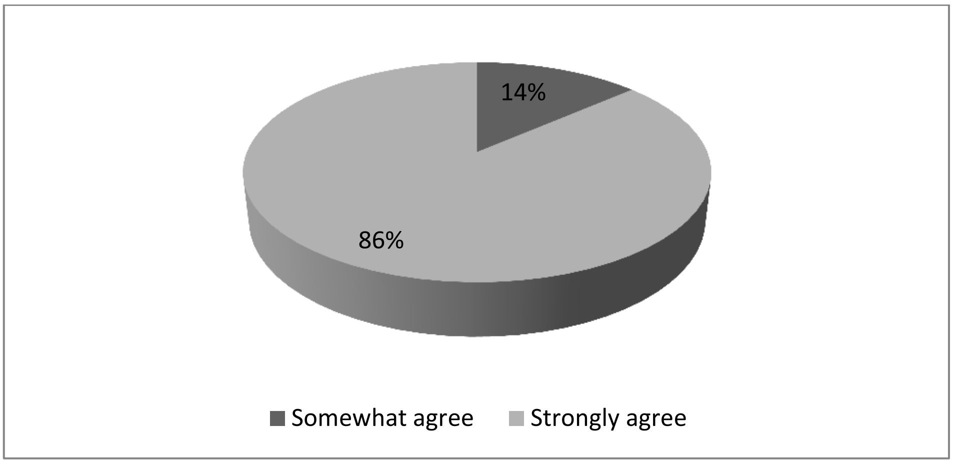
Source: Grebe (2014)

Figure 2. Contribution of risk management towards achieving sustainable business operations



Source: Grebe (2014)

Figure 3. The importance of comprehensive risk management towards the achievement of sustainability



Source: Grebe (2014)

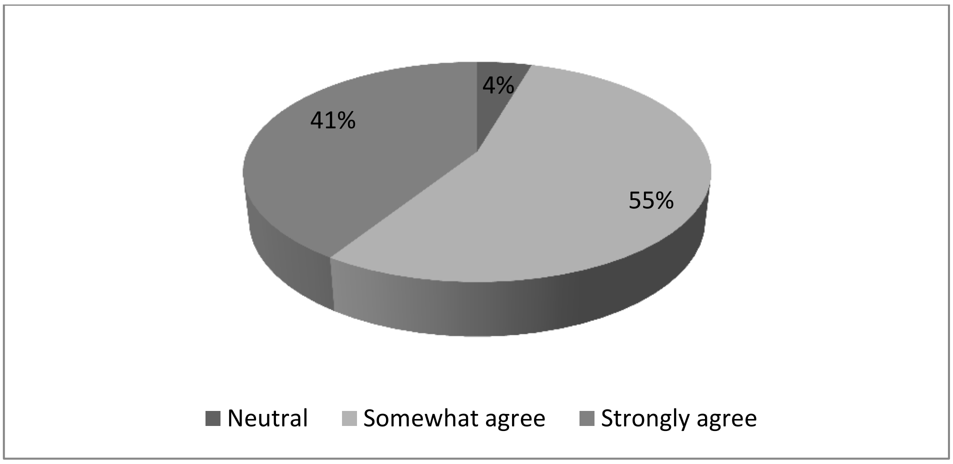
Private hospitals regard the existence of a comprehensive risk management system to be of importance as 86% of the respondents strongly agreed with the statement.

Section 3: The management of fraud risk as a source of competitive advantage

Elahi (2010) and Buehler et al. (2008) argue that risk management could be regarded as a competitive tool which, if properly employed, could create a competitive advantage and ensure sustainable business operations.

The following question tested whether the management of fraud is regarded as a competitive advantage within the private hospitals.

Figure 4. The management of fraud risk as a competitive advantage



Source: Grebe (2014)

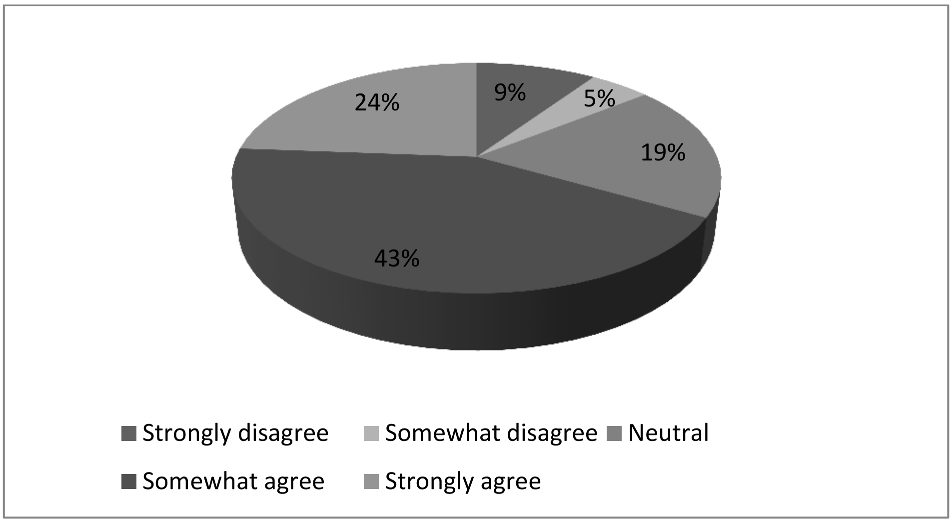
It is evident that 55% of the respondents somewhat agreed that the management of fraud risk could be regarded as a competitive advantage. A further 41% of the respondents strongly agreed with the statement, while 4% of respondents were neutral.

Section 4: The organisational culture and management procedures regarding fraud risk within private hospitals

The Institute of Risk Management (IRM) identified that risk management is a fundamental part of any organisation's strategic management plan. Accordingly, risk management should be integrated into the culture of the organisation, providing support to accountability, performance measurement and reward; hence, promoting operational efficiency at all levels within an organisation (IRM, 2002; Purdy, 2010). Valsamakis et al. (2010) state that risk management requires the engagement of all levels within the organisation, ensuring the interaction of strategic management and operational activities.

In light of the above literature, the following question was formulated.

Figure 5. The organisational culture towards the responsibility amongst staff members in the management of fraud risk



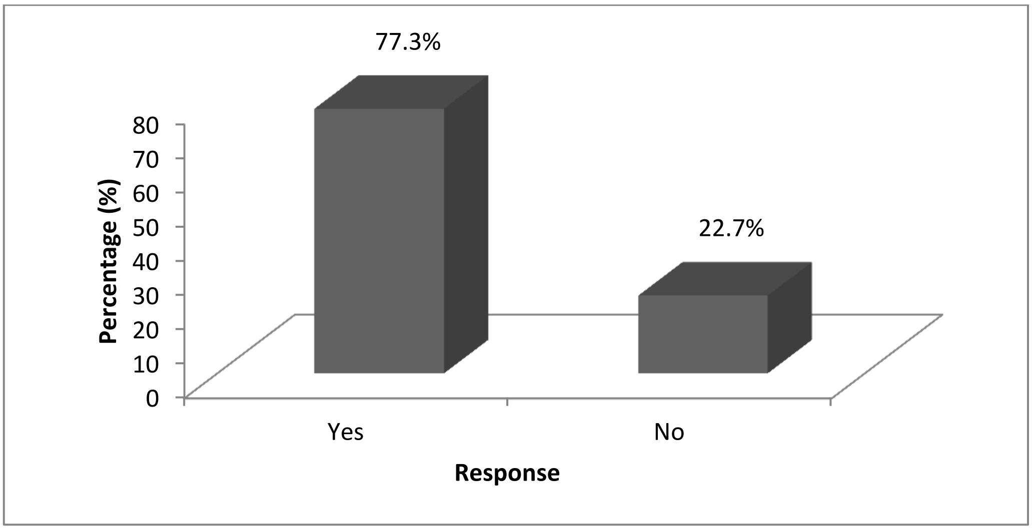
Source: Grebe (2014)

It is evident that 24% of the respondents strongly agreed, 43% somewhat agreed, 19% were neutral, 5% somewhat disagreed and 9% strongly disagreed that a culture within private hospitals existed where the management of fraud risk was a shared responsibility amongst all employees.

Section 5: The reporting of risk

Chapman (2011) indicates that the reporting of risk is just as important as the other activities which form part of the monitoring and review phase within the risk management process. The reporting of risk includes the communication of successes achieved by the organisation to date, as well disclosing the need for additional or improved response actions. Literature further suggests that the reporting of risk ought to occur at least once a year and that the reporting of all risks ought to be included (Chapman, 2011; Fraser & Simkins, 2010). Derived from the literature the following research questions were formulated.

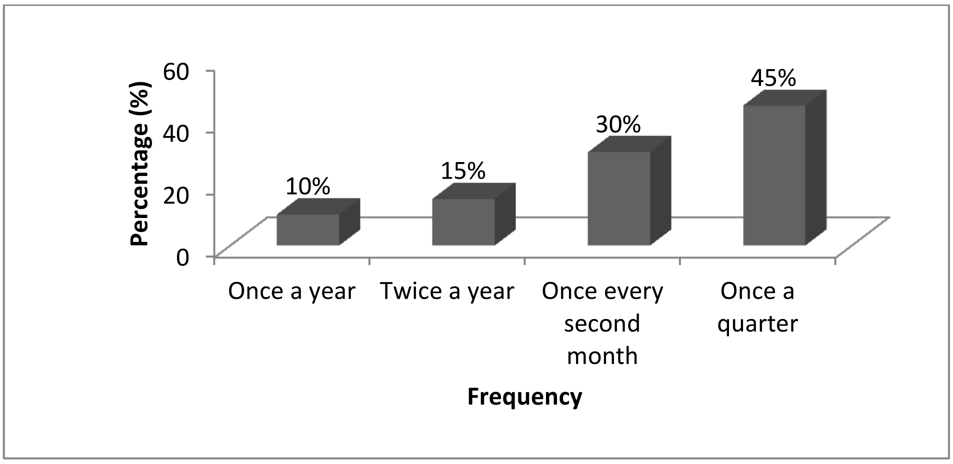
Figure 6. The reporting of fraud risk



Source: Grebe (2014)

It is evident that 77.3% of the respondents pointed out that risk reporting in private hospitals included reporting on fraud risk, whereas the remaining 22.7% of the respondents pointed out that fraud risk was not being reported in private hospitals.

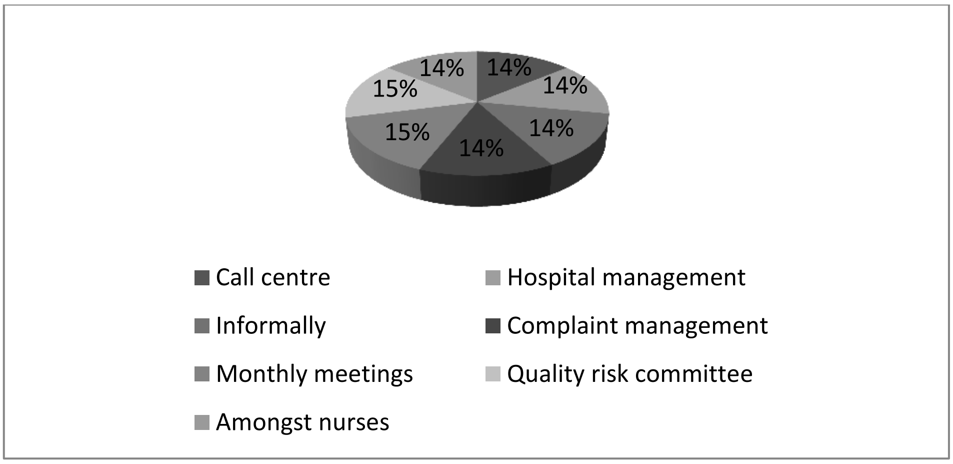
Figure 7. The frequency of risk reporting



Source: Grebe (2014)

A wide distribution existed amongst participating private hospitals as regards the frequency with which risk reporting occurs. Of the respondents, 10% indicated that risk reporting occurred once a year, 15% indicated that it occurred twice a year, 30% indicated that it occurred once every second month and a further 45% indicated that risk reporting occurred once every quarter

Figure 8. The manner of fraud risk reporting



Source: Grebe (2014)

It is evident that the reporting of fraud risk occur via various methods. These methods include reporting by means of a call centre, informally amongst colleagues, by means of monthly meetings, amongst nurses, by hospital and complaint management and finally by the quality risk committee.

5 Conclusion

The risk of fraud has been found to be a problem for industries and organisations across the world. Fraud risk moreover has been confirmed by literature to be a problem in the healthcare sector. The management of fraud risk within South African private hospitals is therefore essential and requires urgent attention.

The primary objective of the present study was to explore the management of fraud risk in the South African private hospital sector. The empirical results are the following:

The majority private of hospitals (72.7%) indicated that the management of fraud risk occurred both at head office level and hospital level. The majority of private hospitals (96%) appreciate the significance of risk management in achieving sustainable business operations, including a comprehensive risk management system for the management of all risks. The majority of private hospitals (55%) acknowledge that the management of fraud risk could be regarded as a competitive advantage, but it requires effective management.

Private hospitals indicated that a culture does exist where the management of fraud risk is a joint responsibility shared by all employees. It was however noted that this culture was not properly communicated and promoted within all of the participating private hospitals. It was further encouraging to confirm that the majority of private hospitals (77.3%) conducted the reporting of fraud risk on a regular basis. What is however an area of concern is the fact that no clear consistency was found amongst private hospitals in the manner in which the reporting of fraud risk occurs. The findings finally suggest that private hospitals are aware of the potential benefits risk reporting holds in achieving a successful risk management process.

However, there are deficiencies within private hospitals and as a result, the following recommendations are made. Firstly, private hospitals should improve their organisational culture with regard to the management of fraud risk, so that all staff becomes aware of the importance of having a shared responsibility in order to manage fraud risk successfully. Secondly, it is recommended that a formalised fraud risk reporting process ought be developed and adopted by private hospitals in order to ensure a consistent, effective risk reporting process.

Areas for further research pertain to extrapolating the exact same research to the public hospital sector of South Africa. It could be of benefit to the public hospital sector if their risk management procedures regarding the management of fraud risk are continuously investigated and improved.

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CORPORATE SOCIAL RESPONSIBILITY AND BANK PERFORMANCE IN TRANSITION COUNTRIES

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Abstract

This paper studies the relationship between corporate social responsibility and bank performance for 16 transition countries of the former Soviet Union and Central and Eastern Europe. The aim is to investigate (1) the nature of the link between corporate social responsibility and bank performance and the motive of banks to engage in corporate social responsibility (2) whether this is different during stable (2002-2005) and turbulent (2008-2012) periods. The results of the structural equation model using the data for 254 banks show that corporate social responsibility positively impacts on bank performance in both periods and implies that the strategic choice is the main motive of the banks to engage in corporate social responsibility for the countries investigated in the paper.

Keywords: Bank, Corporate Social Responsibility, Transition Economies, Performance, Technical Efficiency

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1 Introduction

Over the recent decades corporate social responsibility (CSR) and its relationship with corporate performance became an interesting yet still continuing debate among researchers. According to Wu and Shen (2013) companies are mostly encouraged to adopt CSR thanks to its benefits to micro and macro performances, where the first is generally related to the reputation of companies, retaining and recruiting highly qualified workers, while the second means environmental improvement and reduction in social inequality. Deng et al. (2013) investigate CSR and stakeholder value maximization and find that mergers by high CSR acquirers take less time to complete and are less likely to fail compared to low CSR acquirers suggesting that the acquirers' social performance is a crucial element of merger performance.

There is no single universally adopted definition of CSR, however, all existing definitions share in common the belief that firms are responsible for public goods (Blowfield and Murray, 2008). Particularly, CSR addresses the activities corporate executives take to balance the interests of all stakeholders, namely, shareholders, employees, customers, suppliers as well as the community and the society in which they operate (Thompson et al., 2013). While achieving their corporate goal businesses use the resources of the society they operate in and thus have an impact on changes in their environment.

In this paper we focus on CSR activities of the banking sector, which plays a significant role in economic development (e.g. Levine, 2005, Djalilov and Piesse, 2011). Banks, as financial intermediaries, significantly impact on society while implementing their primary functions such as pricing and valuing financial assets, monitoring borrowers and managing financial risks (Scholtens, 2009). Since the majority of bank assets come from depositors (i.e. society), not from shareholders, banks are required to provide feedback to the community more often compared to other industries (We and Shen, 2013).

The economic literature discovered two main approaches of the CSR definition study:
1) CSR as philanthropy. Social initiatives are identified as actions of funds transfer in favor of individual or non-governmental organization, and act as one of the means of optimizing the tax burden.
2) CSR can be identified as a business or marketing strategy. In the first case, CSR is characterized as a business strategy that involves the impact of CSR on the effectiveness and efficiency of the banking business.

Husted and Salazar (2006) compare the cases of altruism (philanthropy), coerced egoism and strategy examining the situation where firms have profit maximization and social performance. Their analyses show that it is wiser for the firms to behave strategically than to be coerced into investing in CSR. Positive correlation between CSR and bank performance indicators (return on asset (ROA), return on equity (ROE), return on sales, market share) was obtained by McGuire et al. (1988), McWilliams and Siegel (2000), Roman et al. (1999), Mohammad (2012), Orlitzky, Schmidt and Rynes (2003) and others.

However, such scientists as Aupperle et al. (1985), Moskowitz (1972) substantiated the negative correlation of CSR and financial performance. The negative cohesion was intrinsic for such indicators as share prices and dividends. In the research of Alexander and Buchholz (1978) the negative correlation between CSR and financial performance is explained by the fact that these indicators are random variables.

Moreover, the level of engagement of banks in social activities varies across countries and this may come from different perceptions of their impact on banks' performance. Therefore, the existing studies (e.g. Soana, 2011; Wu and Shen, 2013) produce various results on the link between CSR and bank performance so we believe that the nature of the link between CSR and firm performance depends on methods and data used in analyses as well as on the motives of banks engaged in social activities. In general we support the view that businesses should help to solve social problems whether or not firms created them.

Additionally, CSR, as a component of societal marketing, may increase stakeholder loyalty and improve the image of banks, which may ultimately affect their performance. Moreover, due to the sustainable growth over the last decades the role of banks and their importance have significantly improved.

Thus, the aim of this paper is to investigate (1) the nature of the link between corporate social responsibility and bank performance and the motive of banks to engage in corporate social responsibility (2) whether this is different during stable (2002-2005) and turbulent (2008-2012) periods.

This study is interesting because of two reasons. Firstly, many studies address the CSR in banking sectors but most focus on developed and developing countries (e.g. Soana, 2011; Wu and Shen, 2013; Simpson and Kohers, 2002). However, banks behave differently under different institutional settings (Berger et al., 2001; Berger and Udell, 2002; Haselmann and Wachtel, 2007) which implies that the results obtained for developed and developing countries may not apply to the transition ones. Secondly, banks are different in nature from other types of companies. Traditionally, banking research has taken one of two approaches. The first is that a bank undertakes financial intermediation between lenders with funds and borrowers who require funds for investment purposes (the intermediation approach) while the second considers the bank as a productive firm, which produces financial services using labor and capital (the production approach). In this paper we consider banks as financial intermediaries.

As traditional banking products and services are very similar worldwide, CSR, as a signal for product-service quality signal, may play important role to attract customers. Servaes and Tamayo (2013, p. 1048) states «Consumers realize that only firms that care about product quality are willing to invest in CSR activities because profit-oriented firms find these investments "too expensive."».

The contribution of this paper is threefold. Firstly, this is the first paper to focus on the link between CSR and bank performance for transition economies of the former Soviet Union and Central and Eastern Europe using panel data. Secondly, the relevant literature distinguishing the link between CSR and bank performance over stable and turbulent periods is limited. So, we analyze the link over stable (2002-2005) and turbulent (2008-2012) periods (Demirguc-Kunt, 1998) respectively using the data for 254 banks. Thirdly, the existing studies do not include bank specific variables such as concentration ratio, risk as well as technical efficiencies in the same model while investigating CSR and bank performance. For example, Wu and Shen (2013) consider concentration ratio (Herfindahl-Hirschman Index (HHI)) and Keffas and Olulu-Briggs (2011) use technical efficiency in their models to analyze corporate social responsibility. However, we believe that banking concentration (or level of competition), risk taking behavior as well as technical efficiency impact on banks' engagement in CSR and thus affect their performance.

Banks in transition countries started to engage in corporate social activities comparatively recently so it is interesting to investigate the impact of CSR on bank performance and whether CSR is aligned to bank strategies. Therefore, as a pioneering investigation this paper generates new evidence. Our data include 13 countries of former Soviet Union, namely, Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Tajikistan, Ukraine and Uzbekistan as well as 3 countries of Central and Eastern Europe (CEE) such as the Czech Republic, Hungary and Poland.

The structure of the paper is as follows: Section II reviews the existing literature, Section III describes the data and the methodology, Section IV discusses the results and Section V concludes.

2 Brief discussions on the relevant literature

2.1 Why Transition Economies

Over the last 25 years, a plethora of studies have focused on the transition of countries from CEE from a system of central planning to a market economy. The majority of socialist countries, especially the former Soviet Union have specific features of economic development associated with the rule of the Communist regime as for more than 70 years in which the state's role was crucial, with authoritarian governance, centrally planned economy, the transition to a market economy in late 1980 – early 1990 and, consequently, the rapid development of economies and their integration into the world economy. Also this resulted in the lack of a national collective memory of any other form of economic organization or institutions in these countries and no experience of managing a domestic market economy prior to the collapse of the Soviet Union in 1991.

There is a significant difference between the countries of the early (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland) and late (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Tajikistan, Ukraine, Uzbekistan) transition countries. Particularly, faster price liberalization, market reforms and macroeconomic stabilization provide a sharp contrast between early and late transition countries, where the first only had a system of central planning for the period following the Second World War until the 1990s. Moreover, some USSR former countries, especially those located in Central Asia, are geographically extensive and political instability from neighbors such as Afghanistan can be contagious and therefore ensuring economic growth and financial stability is vital to retain social cohesion and sustained development.

Even though the countries of the former Soviet Union and those of Central and Eastern Europe have been utilizing different approaches to a market economy, the first have grown significantly over the last decade converging CEE countries. Additionally, to consider cross bank and cross country differences we employ bank specific and macro variables in our models.

2.2 Recent studies on the link between CSR and firm performance

Over the last decades the role of CSR is growing (Bihari and Pradhan, 2011) and scholars explore its effect on various dimensions of firms. However, the existing studies have various conclusions. For example, McGuire et al. (1988), Roman et al. (1999) and Mohammad (2012) find positive correlation between CSR and financial performance variables (e.g. ROA, ROE, return on sales). Similarly, the results of the studies by Waddock and Samuel (1997), Cochran and Wood (1984) confirm the existence of positive correlation between CSR and bank performance. Moreover, the meta analysis by Orlitzky et al. (2003) based on 52 quantitative studies with a total sample of 33,878 observations conclude that financial successes of companies depend on companies' ability to adequately formulate corporate strategy development and maintain its full and timely implementation simultaneously addressing stakeholders interests.

Using non-parametric analysis of technical efficiency (Data Envelopment Analysis (DEA)) Keffas and Olulu-Briggs (2011) discover a correlation between the CSR and the financial performance of banks in the USA, the UK and Japan. In their study banks are divided into two groups, where the first are those that declare the presence of corporate social responsibility, while the second are those where CSR is absent. Their results confirm the existence of a positive relationship between CSR and financial performance, i.e. the banks with CSR in place have better asset quality and are more efficient in managing their asset portfolios and capital.

The scholars investigate the relationship between CSR and financial performance via such dimensions as employee attraction motivation and retention (Waddock et al, 2002; Turban and Greening, 2000), customer attraction and loyalty (Williams, 2005; Dawkins and Lewis, 2003), business reputation (Lancaster, 2004; Whooley, 2004) and easier access to capital (Roberts et al, 2002; Waddock and Graves, 1997). Sweeney (2009) finds a positive indirect relationship between CSR and banking performance and concludes that CSR directly influences financial performance mostly via easier access to capital and business reputation. Additionally, his findings show that CSR indirectly influences performance through social reputation.

However, the studies by Aupperle et al. (1985), Moskowitz (1972) as well as Alexander and Buchholz (1978) find the negative correlation between CSR and financial performance. The recent studies, moreover, extend the impact of CSR on other aspects of firms' activities. For example, Deng et al. (2013) investigate CSR and stakeholder value maximization and find that mergers by high CSR acquirers take less time to complete and are less likely to fail compared to low CSR acquirers suggesting that the acquirers' social performance is a crucial element of merger performance. Husted and Salazar (2006), on the other hand, compare the cases of altruism, coerced egoism and strategy examining the situation where firms have profit maximization and social performance.

In summary, the studies of the link between CSR and financial performance are still not conclusive. Particularly, many studies show positive link (Simpson and Kohers, 2002; Griffin and Mahon, 1997; Frooman, 1997; Waddock and Samuel, 1997), while other studies (Aupperle et al., 1985; Moskowitz, 1972; Alexander and Buchholz, 1978) find the negative correlation between CSR and financial performance. Some even state the absence of the link between CSR and financial performance specified (e.g. McWilliams and Siegel, 2000).

However, the nature of the results of the link between CSR and bank performance may depend on (1) methods and data used in analyses as well as on (2) driving motives of banks to engage in social activities as stated by Wu and Shen (2013) as well as Husted and Salazar (2006). Scholars (e.g. Wu and Shen, 2013) state that the link can be negative if banks conduct social activities based on *altruism* (where banks are engaged in CSR for their own sake and thus negatively impacting banks' financial performance). However, the relationship can be positive if banks' CSR activities come from *strategic motives* in which CSR improves banks' image and ultimately their financial performance (e.g. Husted and Salazar, 2006). The last option is *greenwashing*, where there are no obvious cost differences between banks with and without CSR and thus no clear link is evident between CSR and banks' financial performance.

3 Methodology and data

In the first stage of the analysis the variables to represent bank efficiency, market concentration, risk and performance are obtained, the first by estimating a profit function and retrieving the efficiency scores and the others by construction. These are then used in the second stage where the CSR-financial performance nexus is determined using structural equation model with maximum likelihood approach.

3.1 Efficiency

Numerous studies have focused on measuring the efficiency of different sectors and firms in a number of countries, most of which use a production function. Although many different methods have been used, all are based on the transformation function, particularly those that describe production technology at firm level. The aim is to maximize value under the available technology, prices or other limitations. Assuming a common set of constraints, the efficiency is measured as the distance between individual production units and the best practice frontier. Different methods used to measure the frontier with the two most popular approaches being parametric and nonparametric modelling. DEA is a non-parametric approach using linear programming, while stochastic frontier is a parametric approach. Both allow the calculation of firm level efficiency.

In this paper stochastic frontier (SF) estimation is used as DEA does not take account of measurement errors and other type of statistical noise, assuming all deviations from the frontier are due to technical inefficiency. The profit efficiency of the bank measures how well profits are maximized with respect to a benchmark, or industry best practice. Following the existing literature (e.g. Fries and Taci, 2005) an intermediation approach is used to identify input-output variables for the banks in the estimations. The specifying equation to estimate efficiency levels is the widely used translog functional form for the profit function:

$$\ln\left(\frac{Total\,\Pr ofit}{w_2}\right) = \alpha_0 + \sum{}_j \alpha_j \cdot \ln(y_j)_{it} + \frac{1}{2}\sum{}_j \sum{}_k \cdot \alpha_{jk} \cdot \ln(y_j)_{it} \ln(y_k)_{it} + \beta_1 \cdot \ln\left(\frac{w_1}{w_2}\right)_{it} + $$
$$+ \frac{1}{2}\beta_{11} \ln\left(\frac{w_1}{w_2}\right)_{it} \cdot \ln\left(\frac{w_1}{w_2}\right)_{it} + \sum{}_j \theta_j \cdot \ln(y_j)_{it} \cdot \ln\left(\frac{w_1}{w_2}\right)_{it} + \gamma_t \ln(control)_t + v_{it} - u_{it}$$

(1)

where:
i – the bank index
t – the year index ($\alpha_{jk} = \alpha_{kj}$)
y – two outputs (total loans and total interest bearing funds)
w – two input prices (total interest expenses and overheads)
v_{it} – statistical noise with a symmetric distribution,
u_{it} – bank level inefficiency that has non-negative distribution

The profit function is normalized using the input price (overheads) to ensure price homogeneity, following the literature. (e.g. Berger et al., 2009). The model has a control variable (GDP per capita) to account for cross-country heterogeneity. There are many assumptions regarding the distribution of u_{it} (e.g. Aigner et al., 1977; Stevenson, 1980; Greene, 1990). We follow Battese–Coelli (1995) parameterization of time effects, where the inefficiency term (u_{it}) is modelled as a truncated-normal random variable multiplied by a specific function of time.

3.2 Performance, CSR, Risk and Concentration Variables

Rowley and Berman (2000) were the first who discovered the relationship between CSR and financial performance using the structural equation model. As stated by Smith (2004) SEM is a multivariate technique, which allows for the examination of a set of relationships between multiple dependent and independent variables. Therefore, we aim to investigate the link using SEM. Our analysis comprises two models, where in the first we use ROA and in the second we employ ROE as a proxy for bank performance. Our aim is to check whether our results are robust. We need to note that in the second stage of our analyses (structural equation models) we use profit to calculate ROA and ROE. There are many negative values in Net Income, therefore a common amount was added to all observations to reach a minimum positive unit (which is called profit in this case) and avoid difficulties with the natural log of a negative value, consistent with the literature (Fang et al., 2011; Bonin et al., 2005). Additionally, SEM is sensitive to unbalanced panel data. All other variables remain the same across these two models.

Existing studies use various approaches to determine CSR:

1) investment approach is used in the case of relevant non-financial reports with detail the amount of money spent separately for each bank's initiative or during the filling in of specially designed questionnaires as evaluation respondents (senior executives of banks) contribution of CSR in banking performance (Sweeney, 2009; Wright and Vardiman, 2005);

2) index method – as an indicator of CSR using international indices such as: KLD 400 Social Index (Waddock and Graves, 1994; Becchetti et al., 2013; Servaes and Tamayo, 2013),

3) binary method – CSR is a dummy variable that identifies the presence of social initiatives in the bank's (given the "1") or absence (assigned parameter "0") (McWilliams and Siegel, 2000).

Considering the presence of limited data on transition countries our variable for CSR takes value of 1 if a bank has some social activities and 0 when it does not. However, this data is the best available to date for the banks of transition economies.

The recent studies use different risk measurements for the banking sector (e.g. credit risk, default risk). Following Boyd et al. (2006) and Marques et al. (2013) we use Z scores as the measure of bank risk as it is monotonically associated with a measure of a bank's probability of failure. Since the Z score indicates the distance to insolvency a higher Z score implies that a bank is less risky (Marquez et al., 2013). As the Z score is highly skewed we use the natural logarithm form following Marquez et al. (2013). ROA is calculated as Net Income divided by Total Assets and is taken from the bank financial statements retrieved using the Bankscope.

The existing literature uses various variables to proxy concentration and competition in a banking sector. Considering the heterogeneity nature of the banks we aim to use HHI as a concentration variable in our analyses following the studies by Boyd et al. (2006) and Marques et al. (2013). The index is equal to the squared sum of each banks' market share and thus a higher value implies a higher level of concentration.

3.3 Control variables

To account for cross-bank heterogeneity we use Loss (Loan Loss Provisions divided by Total Assets) and GDP deflators (a proxy for inflation) as well as growth of GDP (Table 1) are used to control for cross country heterogeneity respectively, following Marquez et al. (2013).

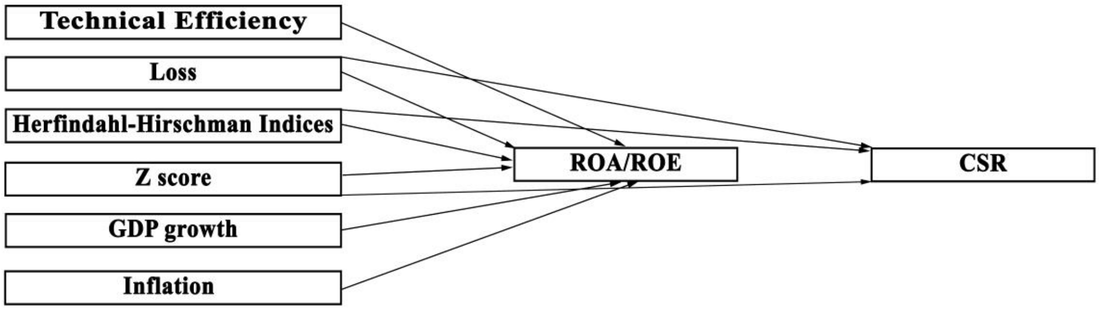
All figures of Table 1 are relative. Many recent studies ignore simultaneous effect between CSR and firm performance, however, following Wu and Shen (2013) we assume simultaneity effect between CSR and bank performance. Therefore, we use maximum likelihood approach for our SEM

Table 1. Definitions and Data Sources for Variables Included in the SEM

Variable name		Definition	Source
Basic	CSR	Banks' social activities / Index ranging from 0 to 1	Banks' web-site
	ROA	Profit divided by Total Assets	The Bankscope Database
	ROE	Profit divided by Total Equity	
Additional	Technical Efficiency	The efficiency is measured as the distance between individual production units and the best practice frontier	Own calculations
	HHI	Concentration variable / The index is equal to the squared sum of each banks' market share	The Bankscope Database
	Z score	The measure of bank risk / ROA plus equity-asset ratio divided by the standard deviation of return on assets	
Control variables	Loss	Loan Loss Provisions divided by Total Assets	
	GDP growth	Annual percentage growth rate of GDP at market prices	The World Bank Database
	Inflation	GDP deflator	

Although SEM encompasses a broad array of models (e.g. linear regressions, simultaneous equations, confirmatory factor analysis and so on), it is a way of thinking and estimating research objectives. Considering the philosophy of the existing literature (e.g. Wu and Shen, 2013; Simpson and Kohers, 2002; Soana, 2011), we estimate SEM for the link between CSR and bank performance as described in Figure 1.

Figure 1 SEM of Bank Performance and CSR



We investigate two models of SEM on the link between bank performance and CSR, where in the first the dependent variables are ROA and CSR, while in the second ROE replaces ROA

Considering the difficulties of SEM application with unbalanced panel data we include those banks which have at least one year financial statement at the Bankscope for the periods of our interest, i.e. 2002-2005 (stable) and 2008-2012 (turbulent).

3.4 Data

The sample includes 254 banks of 16 transition countries of the former Soviet Union and CEE. All the bank relevant data are in a common currency (US dollars) and taken from the Bankscope and the statistics for GDP deflator and growth of GDP are from World Banks' World Development Indicators (2013).

4 New evidence on the link between CSR and financial performance

4.1 Statistical description of variables

Table 2 provides the statistical description of the variables for two periods, 2002-2005 and 2008-2012, respectively. The table shows that ROA are quite similar in two periods. However, ROE has a negative mean with much larger standard deviation for the period 2008-2012. This is mainly due to the recent global crises (2008-2009) and to the changes at ForteBank JSC (Kazakhstan) during 2009-2010, namely, the bank's small equity in 2009 was significantly increased in 2010 and the presence of its large negative Net Income over 2009-2010.

Table 2. Statistical Description of Variables

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
2002-2005					
ROA	544	0.02	0.03	-0.61	0.11
ROE	543	0.14	0.19	-0.99	2.33
Technical Efficiency	496	0.44	0.21	0.05	0.91
Loss	499	0.01	0.06	-0.06	1.23
HHI	586	0.27	0.18	0.00	0.99
Z score	544	12.56	11.98	-7.20	76.11
GDP growth	587	7.65	4.11	-0.18	26.40
Inflation	587	8.25	7.48	-0.78	49.13
2008-2012					
ROA	1106	0.00	0.07	-1.11	0.78
ROE	1104	-0.10	3.51	-101.10	38.65
Technical Efficiency	810	0.42	0.21	0.03	0.90
Loss	1036	0.02	0.04	-0.07	0.53
HHI	1134	0.23	0.19	0.08	0.95
Z score	1106	16.26	26.82	-6.00	422.37
GDP growth	1136	2.73	6.85	-17.95	37.48
Inflation	1136	8.71	13.44	-18.93	74.85

The statistics show that the technical efficiency as well as Loss (Loan Loss Provisions divided by Total Assets) of the banks are quite similar in both periods. The concentration ratio is higher for 2002-2005 implying that the competition among the banks increased over 2008-2012, but the mean for Z score is smaller for 2002-2005 indicating that the banks tend to take lower risks over the turbulent period, 2008-2012 (i.e. higher Z score implies lower level of risk). While the mean for Growth (GDP growth) is smaller and that of inflation is higher during turbulent period

2008-2012, which could have been the possible cause of the recent financial crisis.

4.2 CSR and Bank Performance

We discuss only robust results, i.e. those significant in both models, where dependent variables are ROA and ROE respectively. Our results for SEM maximum likelihood show that the CSR positively impacts on ROA as well as on ROE in stable (2002-2005) and turbulent (2008-2012) periods (Table 3). This implies that the implication of CSR improves the banks' performance in transition economies, which is consistent with the results of recent studies (e.g. Wu and Shen, 2013).

Interestingly, technical efficiency negatively impacts on ROA as well as ROE over the stable period, but it has no affect during the turbulent period (Tables 3 and 4). This is perhaps due to the low efficiency levels of the banks during the early stages of transition to market economy (2002-2005). It should be noted that banks were actively increasing the profitability of scale in emerging markets during this period. Banks only increase the volume of active operations, especially mortgage lending. The quality of assets were not taken into account because the majority of loans were issued under the mortgaging scheme and real estate prices rising allow banks not to consider the quality of assets. This is what explains the rise in influence of technical efficiency. Another fact to support this thesis is the value of HHI, which positively affects ROA as well as ROE in both periods (e.g. Acharya et. al., 2001).

Table 3. SEM Results for the Link between CSR and Return on Assets

Variables	**2002-2005**	**2008-2012**
1st model		
Return on Assets (Dependent)		
Corporate Social Responsibility	3.1040 (1.0343)***	3.0670 (1.0229)***
Technical Efficiency	-0.638 (0.320)**	0.2649 (0.2039)
Loss	0.1585 (0.1151)	-0.2400 (0.1238)*
Herfindahl-Hirschman Index	0.4811 (0.1635)***	1.3165 (0.2767)***
Z score	0.5950 (0.1503)***	0.1276 (0.1387)
GDP growth	1.7008 (0.3942)***	0.2587 (0.1300)**
Inflation	0.8454 (0.2028)***	0.9482 (0.1617)***
Constant	-3.8293 (1.7225)**	-0.3981 (1.0604)
Corporate Social Responsibility (Dependent)		
Return on Assets	-0.1693 (0.0394)***	-0.1480 (0.0354)***
Loss	0.0154 (0.0254)	0.0561 (0.0202)***
Herfindahl-Hirschman Index	0.1026 (0.0408)**	-0.0766 (0.0519)
Z score	0.0920(0.0331)***	0.0042 (0.0262)
Constant	1.1330 (0.2307)***	1.0403 (0.1859)***
Probability >chi2	0.1288	0.5022
Stability Index	0.7249	0.6737
Number of observations	342	503

Structural Equation model with Maximum Likelihood approach is utilized. All variables are in a natural log form. The Probability >chi2 as well as the Stability Index show that the model is well fitted and stable.

Tregenna (2006) finds a positive link between concentration and profitability for the US banking sector over 1994-2005. Additionally, Ardianty Fadilla Dwi (2011) shows similarly results, HHI are positively affecting ROE.

In the second case, the effect of HHI on ROA and ROE in the turbulent period increases, that can be explained by the fact that banks use their monopoly position for even higher earnings. Although Loss does not effect in a stable period, it negatively impacts on ROA and ROE in the turbulent period. This is consistent with the economic theory as the influence of crises is associated with falling prices and foreclosure problems.

Table 4. SEM Results for the Link between CSR and Return on Equity

Variables	2002-2005	2008-2012
2nd model		
Return on Equity (Dependent)		
Corporate Social Responsibility	3.3638 (1.0405)***	3.1394 (1.0126)***
Technical Efficiency	-0.8196 (0.3126)***	0.0751 (0.1930)
Loss	0.0596 (0.1114)	-0.3290 (0.1179)***
Herfindahl-Hirschman Index	0.5026 (0.1582)***	1.2319 (0.2663)***
Z score	0.3081 (0.1454)**	-0.0882 (0.1307)
GDP growth	1.5349 (0.3856)***	0.2762 (0.1231)**
Inflation	0.8030 (0.1975)***	0.8571 (0.1554)***
Constant	-1.5519 (1.7026)	1.4726 (1.0208)
Corporate Social Responsibility (Dependent)		
Return on Equity	-0.2019 (0.0479)***	-0.1688 (0.0429)***
Loss	0.0009 (0.0254)	0.0413 (0.0211)**
Herfindahl-Hirschman Index	0.1225 (0.0455)***	-0.0800 (0.0540)
Z score	0.0530 (0.0320)*	-0.0238 (0.0274)
Constant	1.6901 (0.3518)***	1.4192 (0.2806)***
Probability >chi2	0.3665	0.2271
Stability Index	0.8242	0.7279
Number of observations	342	502

Structural Equation model with Maximum Likelihood approach is utilized. All variables are in a natural log form. The Probability >chi2 as well as the Stability Index show that the model is well fitted and stable.

Additionally, Z score positively affects ROA and ROE only in a stable period. This implies that lower risk taking (i.e. an increase in Z score) would improve ROA and ROE as Table 2 indicates that the banks of the transition countries are taking higher risks during a stable period. This result coincided with other scholars (e.g. Beck and Demirgüç-Kunt, 2009; Tabak et. al. 2012). Interestingly, the impact of Z score on ROA and ROE is insignificant for the turbulent period (2008-2012). Firstly, it can be explained by the fact that the data had a strong destructive influence by ROE of ForteBank JSC (Kazakhstan). Secondly, there is a higher level of stability to the crisis for the banking systems of developed countries than for the countries that made up the research selection.

Additionally, growth positively impacts on ROA and ROE, but the magnitude of the effect is higher over the stable period. This is consistent with the theory that economic growth during a stable period provides more opportunities for banks to expand. The same results were obtained by Demirgüç-Kunt and Huizinga (1999), namely, using bank level data for 80 countries in a global context the influence of GDP on bank performance is positive, but insignificant.

Interestingly, the level of inflation positively impacts on ROA as well as ROE in both periods (e.g. Demirgüç-Kunt and Huizinga, 1999). For example, the Ukrainian banking sector experienced the systemic banking crisis over the period 2008-2009 and the positive balance of deposits appeared only in the middle of 2009. The same situation was in other former Soviet Union countries. Additionally, ROA and ROE affect negatively CSR in both periods and this means, perhaps, that less profitable banks are more interested to engage in social projects.

However, Loss is significant and positive for the turbulent period implying that the banks have stronger willingness to participate in social programs when the economy is turbulent resulting higher Loss. Perhaps, the banks believe that improving their image through CSR strategy would ultimately provide higher profits and more resources over the turbulent period.

5 Conclusions

The results show that CSR is primarily a business strategy that has a positive effect on bank performance in transition countries, consistent with the situations in developed and developing countries. Therefore, CSR activities are necessary to set align with banks' strategies and focus on the long term.

Our results indicate that CSR activities would improve the financial performance of the banks of the transition countries in both, stable (2002-2005) and turbulent (2007-2010) periods. However, the impact of ROA and ROE on CSR is negative in both periods and this implies that financially less sound banks of the transition countries have comparatively stronger willingness to conduct social activities**.** The results also confirm that there is a simultaneous effect between corporate social responsibility and bank performance. Moreover, the presence of positive impact of CSR on ROA as well as ROE is consistent with the results of the study by Wu and Shen (2013). The latter also considers the endogenous problem in CSR-bank performance models utilizing a two-stage procedure developed by Heckman (1978). Our results, similar to those of Wu and Shen (2013), indicate a strategic choice to be the motive for the banks of transition economies to engage in social activities as their goal seems to increase their profits through improving their images by participating in CSR.

Additionally, the levels of concentration ratio as well as risk taking behavior do not impact on CSR, however, higher Loss would motivate the bank to increase their profits through improving their images participating in CSR in a turbulent period.

The use of SEM revealed a causal link between CSR and ROA, ROE. Thus, on the basis of the obtained results it can be concluded that CSR has a greater influence on the receiving profit of banks than making a profit for the implementation of social initiatives. This again allows confirming the conclusion that CSR is a business strategy and is able to bring real benefits to banks.

This paper has tried to provide an initial contribution to the study of the link between bank performance and corporate social responsibility for the transition countries comparing this relationship over the stable (2002-2005) and turbulent (2008-2012) periods. However, the future research may focus on more sophisticated variables of CSR to study the banking sectors of transition economies.

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CORPORATE GOVERNANCE PRACTICES IN EMERGING MARKETS: EVIDENCE FROM KAZAKHSTAN FINANCIAL SYSTEM

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Abstract

This research examines the influence of corporate governance practices on leverage and financial performance of firms in financial system of Kazakhstan. The research employs level data for financial institutions, listed on Kazakh Stock Exchange by using multivariate regression analysis under fixed effect model approach. Results of panel study showed that board size is significantly positively correlated with debt to equity ratio, and with the number of independent directors. Private investors' shareholding is significantly negatively correlated with debt to equity ratio. CEO/Chair duality is significantly positively correlated with the debt to equity ratio. The size of form has also significant effect on the leverage level. Analysis of the banking sector showed a negative relationship between managerial ownership (MO) and both market value (Tobin's Q) and performance (ROA and ROE). Moreover, there are statistically significant relationship between bank performance and stock market capitalization, scaled to GDP of country, and there is statistically significant negative relationship between Tobin's Q and net interest income to total operating income as a proxy for income diversity. The findings also show higher risk-taking behavior (capital market indicators as risk measure, Z-score and the percentage of non-performing loans in total loans as NPL/L). There is a positive relation between MO and Z - scores, and negative relationship between MO and NPL. Moreover, there are significant relationship between banking risk and development of the financial markets which is proxy by private credit and stock market capitalization, both scaled by GDP of country, and, there is statistically significant negative relationship between debt intensity and risk.

Keyword: Corporate Governance, Board Composition, CEO/Chair Duality, Ownership, Leverage, Financial Performance, Banking Risk, Non-Performed Loans, Z-Scores

JEL: G32, G34

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1 Introduction

Current financial crisis continues fall deeper in financial system of Kazakhstan. Managers of financial intermediaries have been more and more criticize by rating authorities and by public. The main criticisms relate to governance failures. The negative outlook for Kazakhstan's financial system is driven by expectations of a large overhang of problem loans requiring higher loan-loss reserves; poor profitability and capital adequacy; and modest credit growth. In these circumstances corporate governance issues become more and more challengeable. Good corporate governance practices may have significant influence on the strategic decisions of a firm, e.g. external financing, that are taken at board level. Therefore corporate governance variables like size of board, composition of board, and CEO/Chair duality, ownership structure may have direct impact on financial behavior and decisions in financial system of Kazakhstan. Corporate ownership concentration in Kazakhstan could be considered as a highest in the world, like in Russia, and in other post-soviet countries, and the transparency of ultimate control structures is typically low. Most of listed on Kazakh Stock Exchange financial institutions have high concentration of ownership. Argued from the agency perspective, the choice of the firm's optimal capital structure is closely related to the choice of corporate governance. Leverage can act as a substitute self-disciplining internal governance practice that mitigates agency costs by imposing fixed obligations on the use of corporate cash flow. The development of financial System of Kazakhstan depends on how its place and role in economy is determined based on the needs of the society and the country. The government expects the financial system to be able to provide sufficient volume of resources at a reasonable price to finance top-priority sectors of the economy as part of the economic development programs. Trends in the financial system development should also take into account the changes occurring worldwide. At the time, when integration processes are strengthening, coordinated common approaches to regulation of national financial markets (Basel III standards, Solvency II) have been established in Kazakhstan. Also, financial market of Kazakhstan does not stand aside from the global trends. Integration into the World Trade Organization and Common Economic Space creates pre-requisites for further liberalization of the financial services market. Strong competition in the financial market, on the one hand, should result in improved quality and expanded range of services. On the other hand, the financial system of Kazakhstan would be more vulnerable to external shocks. In these circumstances the financial system should not create new risks or increase the extent of existing risks in the economy. Over the recent years financial system has several next problems:

- bank lending priorities reflect disproportions in the structure of economic growth, which is based on consumer demand, not on investments;
- a limited range of services rendered to large businesses and inability of banks to independently accumulate a significant volume of resources required to finance large-scale investment projects determine that funding of top-priority areas in the development of the economy, including small and medium businesses, is to a large extent dependent on resources allocated by the government;
- a large volume of non-performing loans reduces possibilities of the banking sector to respond to changes in the macroeconomic environment or a situation in certain markets in a flexible manner; and
- mismatch in the structure of assets and liabilities of the banking system by types of currencies since bank lenders increase their preferences of foreign currency and borrowers prefer the domestic currency;

These problems require the development of an optimal regulation framework where possible consequences of risk realization could be minimized.

Generally corporate governance is associated with the existence of agency problem and its roots can be traced back to separation of ownership and control of the firm. Agency problems arise as a result of the relationships between shareholders and managers and are based on conflicts of interest within the firm. Similarly conflict of interests between controlling shareholders and minority shareholders is also main large area of the corporate governance literature. Argued from the agency perspective, the choice of the firm's optimal capital structure is closely related to the choice of corporate governance. Leverage can act as a substitute self-disciplining internal governance practice that mitigates agency costs by imposing fixed obligations on the use of corporate cash flow (Jensen and Meckling, 1976). This argument is further extended by Jensen (1986) in the context of leveraged buyouts, which force managers to disgorge the firm's free cash flow by replacing equity with debt. The reduction in equity increases the alignment of the interests of managers and shareholders by increasing managerial ownership (Jensen and Meckling, 1976). The outcome perspective of agency theory suggests the reverse. If strong corporate governance protects bondholders and leads to higher credit ratings and a lower cost of debt, we should observe higher leverage among better-governed firms. Therefore, the primary objective of this research was to investigate the financial system of Kazakhstan and find the relationship between Corporate Governance and debt to equity ratio of listed on Kazakh Stock Exchange (KASE) financial institutions over the period 2008-2013. The reduction of foreign funding and government subsidies after the deep financial crisis of 2006-2008 resulted in the accumulation of vast amounts of non-performing loans in domestic banks. At the same time, liberal licensing policies governing the entry of new banks, weak regulatory and supervisory laws and a lack of experienced specialists in the banking sector contributed much to a banking crisis recently in Kazakhstan. To avoid a complete collapse of the banking sector, government of Kazakhstan was required by world rating companies to oversee legislation and create new prudential regulations to facilitate the development of the financial system of Kazakhstan. Thus, following the agency theory, second objective of this research is to assess the impact of managerial ownership on the market value, performance, and risk of listed main Kazakh banks for the periods from 2008 to 2013years.

The structure of the paper is followed: section 2 describes the brief overlook of financial system in Kazakhstan; section 3 reviews the literature on modeling of corporate governance and performance of the firms in financial system. Section 4 presents the model and methodology, in followed section 5 the empirical results are presented, and last section presents the conclusions.

2 Overlook of the Financial System of Kazakhstan.

2.1 Banking sector

In transition to a market economy the financial system of Kazakhstan implemented two major reforms. The first was the introduction of a two-tier banking sector to separate the central bank (now as National Bank) from the commercial banking sector. This also included the division of large industrial banks into smaller firms to create competition in the banking sector. This system was inefficient in terms of resource allocation and the quality of banking supervision and risk assessment was poor. The second was the establishment of a system of financial intermediation to increase saving and investment. The importance of these reforms was recognized by the governments of all the transition economies of former Soviet Union countries (Djalilov and Piesse (2014). As of January 1, 2014, there were 38 banks operating in Kazakhstan, of which – 17 banks with foreign equity, 1 bank –100% -state owned and 3 banks with quasi-government equity participation. After several years of stagnation caused by the financial crisis, since 2011 certain growth pattern had been observed in the banking sector. However, financial intermediation indicators show insufficient effectiveness of banks in redistribution of resources in the economy and satisfaction of demand for loans on the part of economic agents; they also reflect strengthened regulation in the context of international initiatives to address the problems that led to the global financial crisis. One of the issues related to further development of the banking sector is to address existing problems related to a high level of nonperforming loans and a shortage of long-term funding sources, which discourage lending activity of banks. As of January 1, 2014, the share of non-performing loans accounted for 31.2% of the banks' total loan portfolio, the major portion of which falls on banks that restructured their liabilities. The National Bank of the Republic of Kazakhstan, as part of the early response measures, introduced limits for the share of non-performing loans in the loan portfolio of banks (from 2013 – 20%, from 2014 – 15% of the loan portfolio). In order to make the banks' effort on improving the quality of their loan portfolios more active, a mandatory maximum limit of 10% will be set for non-performing loans as a prudential ratio from January 1, 2016.

2.2 Insurance sector

As of January 1, 2014, 34 insurance organizations engage in insurance and reinsurance business, of which 7 organizations provide life insurance. At the same time, there is a clear trend that the number of general insurance companies is decreasing. During the last three years 6 general insurance companies ceased their operations and, if circumstances associated with possible mergers and acquisitions in 2014 are taken into account, the number of general insurance companies may decrease even more. Despite the dynamic growth of assets of insurance organizations, their share in GDP remains at quite a low level (less than 2%).

2.3 Securities Market

Before 2007, accumulation pension funds played the most active role in the establishment of the domestic securities market, in parallel with other institutional investors such as banks and investment funds. The global financial crisis of 2008 had negatively affected a further development of the securities market. As a result of the crisis, issuers defaulted on corporate bond issues, confidence in investment funds on the part of investors declined, such that a significant number of investment funds were closed and the overall number of issuers in the securities market decreased. Reduced investment activity (including as a result of legislative changes) of the major class of institutional investors represented by accumulation pension funds and pension asset managers, which created and maintained the demand for corporate securities of Kazakhstan' issuers, had a negative impact on liquidity position of the domestic stock market. Apart from that, opportunities for raising shareholder's equity and/or debt capital by issuers through the securities market as well as investment horizons for other investors narrowed; as a consequence, the capacity of the domestic organized market represented by the joint-stock company KASE decreased. The securities market of Kazakhstan is mainly oriented at institutional investors, since transactions with government securities and repo transactions prevail in the overall trading volume. Out of 102 issues of shares included in the official listing of the stock exchange, active trading is carried out only with 8 issues of shares included in the KASE Representative List of the Kazakhstan Stock Exchange. Out of those 8 issues of shares, 5 issues of shares are negotiable both in the domestic securities market and in foreign securities markets. Therefore, liquidity and pricing of this category of shares is ensured not only in the Kazakhstani securities market but also abroad. Thus, measures to increase liquidity of securities should be supported by attracting foreign investors to participate in securities trading in the domestic securities market.

2.4 Mutual funds

There is a downward trend in the number of existing issues of mutual investment funds; at January 1, 2014 there were 99 issues (at the end of 2010 – 162).

2.5 Global Competitiveness

According to the Global Competitiveness Report of the World Economic Forum for 2013 –2014, Kazakhstan takes the 103rd position out of 148 countries based on the factor of "Financial market development". The worst performance is demonstrated by such indicators as "soundness of banks" (100th position), "financing through local equity market"(100th position), and "legal rights index" (101st position). As compared to other CES member countries, Kazakhstan demonstrates virtually commensurable results. The Russian Federation occupied the 121st position in the rating for 2012 – 2013 (the Republic of Belarus is not rated by the World Economic Forum).

According to concepts for financial system of Kazakhstan, National Bank of Kazakhstan settled the next main goals for increasing soundness of the banking sector by:

1) Designing a System of Effective Shock Absorption through Implementation of Basel II and III International Standards. This objective will be accomplished by a stage-by-stage implementation of

recommendations of the Basel Committee on Banking Supervision (BCBS) in relation to capital adequacy, liquidity and financial leverage ratios as well as risk management.

2) Improve the structure of banks' assets and decrease the percentage of non-performing loans to an acceptable level which does not limit abilities of banks to provide credits to the economy. A high level of non-performing loans is the main obstacle for increasing soundness of the banking sector and implementing the BCBS's recommendations, since it decreases profitability of banks and their ability to build up capital from retained earnings; it also limits lending activity of banks. As National bank of Kazakhstan suggest, it is also necessary to establish the market of non-performing loans in order to determine fair value of such assets, thus providing opportunities to manage them. Any valuation methodology recognized by the market suggests a large degree of information disclosure about a loan portfolio. It should be mentioned that adequate valuation of assets under management of asset management companies and a high degree of transparency in corporate governance will allows attracting the funds of foreign investors including from international financial organizations in the international markets of stressed assets, in order to deal with non-performing assets.

3 Literature review

The literature review was structured into several areas related to differences in governance of financial institutions and management strategies: Corporate governance and leverage**;** board of directors; ownership and control; managerial ownership, bank performance and risk behavior according to research objectives of this paper.

3.1 Corporate governance and leverage

Argued from the agency perspective, the choice of the firm's optimal capital structure is closely related to the choice of CG. Leverage can act as a substitute self-disciplining internal governance practice that mitigates agency costs by imposing fixed obligations on the use of corporate cash flow (Jensen and Meckling, 1976). This argument is further extended by Jensen (1986) in the context of leveraged buyouts, which force managers to disgorge the firm's free cash flow by replacing equity with debt. The reduction in equity increases the alignment of the interests of managers and shareholders by increasing managerial ownership (Jensen and Meckling, 1976). The outcome perspective of agency theory suggests the reverse. If strong CG protects bondholders and leads to higher credit ratings and a lower cost of debt, we should observe higher leverage among better-governed firms. For a sample of Canadian firms, Aivazian et al. (2005) provide support for the theory that leverage plays a disciplining role. They find leverage is negatively related to investment and that the relationship is stronger for firms with few growth opportunities. Ortiz-Molina (2007) tests the hypothesis that leverage reduces manager–shareholder conflicts by examining pay-performance sensitivity as a function of leverage. He finds pay-performance sensitivity decreases in straight-debt, but is higher in firms with convertible debt. Stock options are the component of CEO pay that is most sensitive to differences in capital structure. John et al. (2010) propose CEO compensation is optimally designed to trade off two types of agency problem: the standard shareholder–manager agency problem and the problem of shifting risk between shareholders and debt holders. This gives rise to two predictions: (a) the pay-for-performance sensitivity of CEO compensation decreases with the leverage ratio; and (b) the pay-for-performance sensitivity of CEO compensation increases with the intensity of outside monitoring of the firm's risk choices. They test and find support for both hypotheses in the banking industry, where regulators and non-depository (subordinated) debt holders provide outside monitoring of risk. Entrenched managers avoid the disciplining role of leverage. Jiraporn and Liu (2008) find firms with staggered boards have lower leverage. Similarly, Berger et al. (1997) find entrenched CEOs seek to avoid leverage, with leverage increasing in the aftermath of entrenchment-reducing shocks to managerial security, including unsuccessful tender offers, involuntary CEO replacements, and the addition to the board of major shareholders. Using panel data for 611 firms listed on the Taiwan Stock Exchange from 2002 to 2006, Shyu and Lee (2009) find a robust negative link between excess control rights and short-term leverage in family-controlled firms. Wiwattanakantang (1999) finds, in Thailand, single-family-controlled firms with greater family ownership have higher leverage. Florackis and Ozkan (2009) report a significant non-monotonic relationship between insider ownership and leverage for their sample of UK firms, consistent with the alignment and entrenchment hypotheses. The nature of the relationship depends on the firm's Corporate Governance structure, with a significant relationship between leverage and insider ownership holding mainly for weak governance firms. To address potential endogeneity between Corporate Governance and leverage, Agrawal and Knoeber (1996) use a complex simultaneous equation framework. For a sample of 383 large US firms for 1987, they find leverage is positively related to insider ownership and the proportion of outsiders on the board. However, the relationship runs from leverage to ownership and board structure, rather than the reverse. Jiraporn and Gleason (2007) find firms adopt higher leverage ratios where shareholder rights are more restricted. This is consistent with other results in that adoption of anti-takeover provisions, although detrimental to shareholders, is viewed favorably by bondholders, resulting in a higher credit rating and a lower cost of debt (Ashbaugh-Skaife et al., 2006;). Hence, the direction of this relationship may run from corporate governance to leverage. Leverage can be used by controlling shareholders to fund resources to expropriate. Faccio et al. (2010) examine the expropriation of outside shareholders' interests by controlling shareholders in East Asian and European economies. They propose that the role of leverage in CG may depend on the structure of firm ownership and control. Whereas leverage could constrain managers' expropriation of the resources belonging to dispersed shareholders in say the United States, it could facilitate the expropriation of minority shareholders' rights by the controlling shareholders of the business groups that are prevalent in Europe and Asia. Their findings suggest European capital market institutions are sufficiently effective so that competition for external capital from informed suppliers restricts the leverage of firms that appear more vulnerable to expropriation through being lower down a corporate pyramid. Asian institutions appear ineffective, allowing controlling shareholders of firms lower down a pyramid to increase leverage to acquire more resources to expropriate. They suggest that these contrasting outcomes are reflected in regional differences in access to related-party loans. In another study, Faccio et al. (2003) has regress leverage on an index of firm exposure to expropriation by the controlling shareholder: the ratio of his ownership rights (O) to his control rights (C) and on an index of creditor rights. Among firms that can access related party loans, a lower O/C ratio leads to increased leverage when creditor protection is weak, but reduces leverage when it is strong. In the first case, higher leverage gives the controlling shareholder access to more resources to expropriate. In the second case, minority shareholders and external lenders constrain the leverage of group affiliates that seem more vulnerable to expropriation. They account for endogeneity between O/C and leverage using a dummy equal to 1 if the firm's name includes the name of any of its top officers (CEO, chairperson of the board, president, a vice-president, or secretary of the board) and zero otherwise. This variable is independent of leverage. Greater bank concentration may substitute for creditor protection and asset tangibility to reduce the agency cost of leverage between shareholders and debt holders. Evidence that supports this contention is provided by Gonzalez and Gonzalez (2008), who find leverage increases with greater bank concentration and stronger protection of creditor rights, but decreases with stronger protection of property rights. Sarkar and Sarkar (2008) highlight the role of ownership structures and institutions in debt governance. They estimate simultaneously the relation between Tobin's Q and leverage using a large cross-section of listed manufacturing firms in India for 3 years: 1996, 2000 and 2003. While in the early years of institutional change debt did not have any disciplinary effect on either standalone or group affiliated firms, there was an effect in the later years as institutions became more market oriented. They find limited evidence of debt being used as an expropriation mechanism in group firms that are more vulnerable to such expropriation. However, the disciplining effect of debt is found to persist even after controlling for such expropriation possibilities. For a sample of Australian firms, Brailsford et al. (2002) report a positive relation between outside block holders as monitors and leverage. Likewise, Mehran (1992) finds a positive relationship between the percentage ownership by large individual investors and a firm's leverage ratio. Du and Dai (2005) provide evidence among East Asian firms that controlling shareholders with relatively small ownership tend to increase leverage out of the motive of raising external finance without diluting their shareholding dominance. They propose that such risky capital structure choices serve as one potential channel through which weak corporate governance contributed to the severity of losses during the Asian financial crisis. Piot (2001) tests two agency cost hypotheses: (1) ownership diffusion is a proxy for shareholder–manager conflicts; and (2) ownership diffusion is a proxy for shareholder–manager conflicts and leverage in high-investment-opportunity-set (IOS) firms, supposing an increased expropriation risk for debt holders. Results do not support the ownership hypothesis and corroborate the leverage-IOS one, suggesting that the Anglo-American principal-agent model has little explanatory power in the concentrated ownership framework of the French corporate governance system. To sum up, the evidence indicates leverage has an important role to play in disciplining management, with the governance role of leverage being sensitive to ownership and control structures.

3.2 Board of Directors

Evidence from recent studies of international bank boards confirmed that the average US bank holding company(BHC) board became smaller, and had more independent, less busy, and somewhat less competent directors(Ferreira et al., 2010). Also, US banks always exceeded the NYSE independence requirement: The percentage of independent directors was already 51 percent in 2000 year but increased further to 67 percent in 2007 year. The average board size decreased from 15 to 11.6 members. The average bank board outside the United States did not adopt the US reforms. The number of independent directors was consistently smaller than 50 percent; boards were larger than in the US and populated by directors with more outside appointments. However, a larger percentage of directors had previous banking experience (36 per cent compared to 18 per cent in the United States in 2006). Independence has, however, correlated with losses at the bank level. Independence was associated with greater shareholder losses, even when controlling for other factors, such as institutional ownership (Erkens et al.,2010) , and studies of only deposit taking banks found that banks with more shareholder-friendly boards fared were distinctly worse during the crisis (Beltratti and Stulz ,2010).

3.3 Ownership and control

Did concentrated shareholders encourage managers to take on more risk and/or more leverage? Evidence from US banks showed that institutional shareholders did not oppose risk-taking, but no direct evidence that they encouraged it. Two studies (Beltratti and Stulz, 2010; Erkens et al., 2010) found a positive relationship. The question arisen here is: What would have happened if bank boards had proposed pay packages linked to debt rather than to equity remains an open question. Studies of outside the US banks showed that banks are frequently controlled by block holders. The block holder is typically a family or the state and often appoints representatives to the board, and the attitude to risk-taking by block holders is ambiguous. A widely cited pre-crisis study found that the presence of a 10 percent block holder correlates with more risk-taking, as measured by Z-scores (Laeven and Levine, 2009). In contrast, many countries dominated by block holder banks which had low Z-scores, such as Brazil, India, and Korea, withstood the crisis very well. A more recent cross-country study found a small positive effect of ownership concentration that is dominated by an 'anti-director-rights index' country dummy that correlates very strongly with ownership dispersion; the net effect suggested that losses were greater for widely held banks. The largest losses were incurred at (widely held) bank holding companies, but the losses at investment banks were reported as not significant (Gropp and Kohler, 2010). Theory predicts that 'ownerless banks', such as mutual or cooperative banks that are 'owned' by depositors, take fewer risks than corporate banks. This proposition found some support in the US S&L crisis. Casual inspection of the list of failed institutions in 2008 indicated that with the exception of the one in Spain, one UK case, and two Irish cases, most failures occurred at corporate banks, cooperative and mutual banks suffered small, and savings banks much larger, losses (Gropp and Koöhler , 2010). Investigation in China showed that compared to privately controlled firms, state-owned enterprises had greater access to long-term debt and used less short-term debt sample period. Evidences also indicate that the on-going financial reform has increased the motivation of banks to consider company profitability in their lending decisions. However, state-owned banks still discriminate private firms in allocation of financial resources, particular in less-developed regions (Ruan et al. (2014)). Another study shows, that with a measure of financial performance (ROA), and 4 types of ownership (ownership concentration, public ownership, private ownership, foreign ownership), there was no impact of ownership structure to the financial performance of banks in the Tunisian context (Ben (2014)). Testing on five categories of ownership structure such as insider, family, government, institutional and foreign ownership influence on bank performance of Malaysian commercial banks during the period of 2000 to 2011, showed that bank performance varies with different types of ownership structure. (Rahman and Reja (2015)).

3.4 Managerial ownership, banks performance and risk behavior

The theoretical foundation of this part is agency theory based on the work of Jensen & Meckling (1976), which opened the important research area concerning the separation of ownership and control in the modern corporation. According to agency theory, strong corporate governance mechanisms better align the interests of managers and shareholders and subsequently enhance firm performance. Results extended Larcker et al. (2007), especially regarding the concave relationship between board size and performance, and the role of leverage. It would be interesting to answer for the question: Does corporate governance explain Kazakh bank performance during the period from the start of the financial crisis? In recent research in this area agency theory was applied to the banking industry and it was expected that the governance performance linkage might differ due to the unique regulatory and business environment. Given the lack of support for agency theory predictions, it was suggested that alternative theories are needed to understand the performance implications of corporate governance at banks. It was found that:

1. Corporate governance factors explain financial performance better than loan quality. Strong support for a negative association between leverage and both financial performance and loan quality.
2. CEO duality is negatively associated with financial performance.
3. The extent of executive incentive pay is positively associated with financial performance but exhibits a negative association with loan quality in the long-run.
4. There is a concave relationship between financial performance and both board size and average director age.
5. Was provided a weak evidence of an association of anti-takeover devices, board meeting frequency, and affiliated nature of committees with financial performance.

To follow our first objective in this paper we investigate the corporate governance influence on the Financial Institutions performance in Kazakhstan during the period of 2009- 2011.We state several hypotheses to test:

Hypothesis 1 Board size is significantly associated with debt to equity ratio in financial institution industry.

Hypothesis 2 Ownership concentration is significantly negatively correlated with debt to equity ratio.

Hypothesis 3 The ownership structure and CEO/Chair duality play important role in determination of Debt to Equity ratio.

Hypothesis 4.The level of ownership structure is negatively associated with bank performance.

Hypothesis 5 CEOduality is positively associated with firm size and debt to equity ration in banking industry.

To follow our second objective we analyze the influence of managerial ownership of main Kazakh banks on performance and risk taking. Corporate governance theory predicts that effective governance mechanisms enhance firm value and ensure accountability by insiders, the managers; this in turn motivates managers to act in the interest of shareholders, an issue that is at the crux of agency theory (Kroszner, 2004). Corporate governance theory also predicts that firm ownership influences risk-taking (Bhimani (2009) and Kroszner (2004)).A review of the literature shows that, unlike manufacturing firms, it is only recently that academics have turned their attention to the agency relation (and corporate governance in general) in banking. Most studies pertain to ownership (block-holdings, family and managerial ownership (MO)), board structure (external and internal directors, diversity, size, and turnover), and executive compensation (fixed and variable pay modes) and their relation to market value and performance. The specific interest in the influence of MO on market value and performance in banking firms is also relatively recent (Mohamed et al.(2012), Iannotta et al. (2013)), but, like nonbanking firms, the results do not always coincide. In manufacturing firms, for example, Agrawal and Knoeber (1996, United States), Yermack (1996, United States), and Short and Keasey (1999, United Kingdom) find a positive relation between MO (percentage of equity held by managers) and market value (Tobin's Q) and accounting performance (ROA), but Himmelberg et al. (1999, various countries) and Demsetz and Villalonga (2001, United States) find a positive but non-significant relation. According to the literature review there is a statistically significant (negative) relation between MO (percentage of equity owned by the company directors and top executive officers, including the CEO) and market value (Tobin's Q) (Belkhir (2004) for US banks. There is also statistically significant (positive) relation between MO and accounting performance (ROA and ROE) (Westman (2011)) for European financial companies. Concerning the risk-taking behavior of banks Saunders et al. (1990) showed significantly higher risk-taking (capital market indicators as backward-looking risk measure, Z-SCORE) behavior. There is a positive relation between their proxy for MO and risk-taking, but the relationship is not significant in statistical terms fir US banks. Barry et al. (2010) found a negative and statistically significant relationship (although at 10 per cent level of confidence) between MO and risk-taking for European banks.

Several reasons may be reflect these mixed findings on the influence of MO on market value, performance, and risk-taking:

1. The U.S. context is quite different from that of Europe and, more significantly, the rest of the world.
2. The data and variables differ from one study to another inhibiting direct comparisons and the generalization of findings.
3. Finally, heterogeneity in the activity of banks, country, and coverage may be producing inefficient estimators.

In the presented research we assess the theoretical predictions and qualify the influence of MO on bank market value (Tobin's Q), accounting performance (ROA, ROE), and risk-taking (NPL/L and Z-scores) across the main Kazakh banks controlling for bank-specific characteristics and macroeconomic factors trough multivariate regression of a forward-looking measure of performance. This study is relevant in the context of the on-going financial crisis in the emerging market as Kazak banking system: agency issues are most often studied in a non-crisis context. This research contributes to the literature by extending agency theory (and the broader corporate governance literature, Tirole (2006)) to a globally integrated financial crisis context. Second, most studies focus on the regulatory and macroeconomic conditions that deep the recent financial crisis. We study why some banks were more affected than others to identify a key agency factor that covered the way for some banks to perform better and take fewer risks than others before and during the crisis. Some of the public experts say that agency relations are at the root of the on-going financial crisis. This study is shown, which managers can be held responsible for the on-going crisis. And finally, this study could be effective in immunizing financial systems and the economy as a whole in a future crisis.

Among the huge empirical studies of corporate governance impact on firm performance still no study has been conducted to investigate the relationship between corporate governance and capital structure of the banks and other financial institutions in emerging markets as Kazakhstan.

Kazakh Stock Exchange is a largest emerging market in Central Asia and in recent years has shown remarkable performance, attracting considerable direct foreign investment. This paper explores the influence of corporate governance on capital structure and performance of Kazakh financial institutions. The study examines the influence of three groups of variables on debt to equity ratio in capital structure. The first group includes the corporate governance measures presented by Board Size, structure of the Board and CEO/Chair Duality. The second group is represented by two variables of Institutional Shareholding and Managerial Shareholding according by percentage of shares belongs to the Board of directors or other Institutions. The third group is consisting from two control variables of Size of the FI and Return on Assets. The capital structure as a dependent variable is represented by Debt to Equity ratio. The empirical studies in this research suggested above five hypotheses. This research has important implication for the effective corporate governance of Kazakh financial institutions listed on KASE.

The results, obtained in this research, highly support the Hypothesis 1. In all three cases with different composition of financial institutions the board size is significantly positively related to the debt to equity ratio. Another result is, that debt to equity ratio is positively relates to institutional shareholding, but negatively relates to the managerial shareholding and private investor shareholding, which consistent with the findings in literature and supports the Hypothesis 2. We found also that the firm size for all cases has positive and significant relationship with the debt to equity ratio. That result is also consistent with theory of corporate governance and support the Hypothesis 5. And finally, CEO/Chair duality has important role in decision of the institutions on leverage. In all cases the relationship between CEO/Chair duality is positive significantly to the debt to equity ratio, and supports the Hypothesis 3. Concerning financial institutions' performance we found one significant result that ROA significantly negatively relates to the institution' size. All these results are shown in section 5. Analyzing the MO influence on main Kazakh bank's market value, performance and risk behavior, it was found the next results. First, the data showed very low levels of MO in Kazakh banking industry; Secondly, analysis of bank characteristics and macroeconomic conditions showed a negative relation between managerial ownership and both market value (Tobin's Q) and performance (ROA and ROE). This finding is consistent with the finding of Belkhir (2004) in the context of U.S. bank and savings- and-loan holding companies (1995–2002).Third, moreover, the findings showed a negative relation between managerial ownership and risk (NPL/L) in 2013 and positive relationship between MO and Z-scores in 2008 and 2013. This finding is consistent with the finding of Saunders et al. (1990).

The rest of the paper is organized as follows. In section 4, we describe the data, variables, model and the methodology used to test our hypotheses. In section 5 we present and interpret the empirical results. Section 6 contains a summary and conclusions of the research.

4 Data, variables, methodology and models

4.1 All financial institutions listed on KASE

In the first part of this research it was applied an explanatory quantitative research type of data in order to test the causal relationships between the Corporate Governance and Capital structure of the firm. As the scope of research work already exists on this topic mostly for developed countries, I would like to determine if the same causal relationships between corporate governance and capital structure are held in emerging economies, particularly in Kazakhstan. I will rely on the deductive approach by, first, stating hypotheses from existing theories, then, collecting and analyzing data and, finally, accepting or rejecting hypotheses. In the first part examined the totally forty six financial institutions listed on KASE, and in the second part I have examined only twelve main Kazakh banks to assist the managerial ownership influence on bank performance and risk taking. This study in the first part examines the impact of three groups of variables on capital structure. The first group of variables includes corporate governance variables represented by Board Size, Composition of Board and CEO/Chair Duality. The second group comprises ownership variables represented by Managerial Shareholding, Institutional Shareholding and Private Investors' shareholding. The third group consists of control variables which include Size of Financial Institutions and Profitability as ROA. All these three groups of variables are considered as independent variables. The capital structure is represented by Debt to Equity Ratio, and is considered as dependent variable. Total data consists of 46 Financial institutions, listed on KASE in October of 2012. Monthly data observations across companies traded on KASE are limited to the period of October, 2009 to October, 2012 and available from the KASE' reports. For the first part I data include 1656 observations, including 25 commercial banks, 6 insurance companies, 6 investment funds and 2 mortgage companies, 4 accumulated pension funds, 2 brokerage companies and one government fund " Samruk-Kasyna", which is also serves as financial institutions for the small and medium business in Kazakhstan. Board Size, Board Composition, Proportion of Non-Executive Directors (or independent directors), CEO/Chair Duality, Institutional Shareholding, Managerial shareholding (or Shareholding of Board Members), and private investor's shareholding are used as measures of Corporate Governance. Similarly, impact of control variables like Return on Assets and Financial Institution's Size on capital structure has also been studied. Variables included in study have been measured as follows.

4.1.1 Dependent variable: leverage (or Debt to Equity Ratio)

Leverage is the dependent variable and it is quantified by using debt to equity ratio. Debt to equity ratio can be calculated either by using market value or by using book value. The use of book value measure of leverage is preferred in this study. The reason is that optimal level of leverage is determined by the trade-off between the benefits and costs of debt financing. It is an established fact that prime benefit of leverage is debt-tax shield and it is available on book value of the debt. Secondly, leverage can be calculated either by using total debt or by using long term debt as a percentage of total equity. Long term debt is better option but in this study total debt to total equity ratio was used because in Kazakhstan a tendency to use short-term financing even for longer term funding needs is fairly prevalent. There are number of institutions that do not have long term debt at all. There are a number of causes for this state of affair. The first is unwillingness of commercial banks to extend longer term facilities, especially after the prolonged financial crisis. The second is relative absence of financial institutions specializing in long term financing, except Kazakh Investment Bank. But this bank finances only the long-term government projects .The third reason is the pure state of capital market for long term debt. The only institution for that purposes is the government fund"Samruk-Kazyna", which is strongly regulated by government bodies. Most companies find it quite difficult to access the capital market for debt financing. Under these circumstances, we will consider to take the total debt figure for measuring the companies' gearing level.

4.1.2 Independent variables

Board size

The board of directors is top body in the corporate set up, playing central role in a institution's strategic decisions like financial mix. It will therefore be considered an important variable to study the impact of corporate governance on capital structure. The variable Board size is measured as logarithm of number of board members. It is hypothesized that Board size influences on ownership structure and CEO/Chair duality.

Board composition

Presence of Independent directors on a company's board gives signal to the market that company is being monitored efficiently so lenders consider company more credit worthy. In turn, this makes it easier for the company to raise long term funds through debt financing. Variable Board composition represents the proportion of independent directors on board and is calculated as the number of independent directors divided by total number of directors. It was examined the influence of this variable on the leverage level.

CEO/Chair Duality

If a person holds both positions of chief executive officer and chairman than it may create agency problems. Higher level of control by CEO may lead to managerial opportunistic behavior and can lead to lower gearing levels, as supposed to be analyzed in this study . It is tested that CEO/Chair duality is positively related to leverage levels. The variable CEO/Chair duality is included as a dummy variable. It is taken as 1 if CEO is chairman; otherwise it is taken as 0.

Institutional Shareholding

Presence of institutional shareholding in a company helps it to raise long term finance at an advantageous cost. In the first place, these institutional investors themselves act as a source of long term debt as they are willing to provide debt to a company over whose board they enjoy an influence. Secondly, these institutional investors serve as an effective monitoring device over the company's strategic decisions. They bring down the company's agency costs and also reduce managerial opportunism. This gives confidence to general public and other lenders – resulting in favorable terms of borrowing by the company. It is therefore suggested that firms with higher Institutional Shareholding are likely to have a higher debt to equity ratio. Institutional Shareholding is measured as percentage of shares held by institutions as disclosed in annual financial reports to KASE.

Managerial Shareholding

Large debt increases the threat of bankruptcy so higher managerial self interests in long term sustainability of the company may induce managers to reduce gearing levels. Therefore it is suggested that relationship between managerial equity holding and gearing levels is negative. Managerial shareholding is measured as percentage of shares held by members of board disclosed in annual financial reports to KASE.

Private investor's Shareholding

If the financial institutions have private investors in valuable size of shareholding, it also can be rise opportunity to get long-term financing at advantageous cost. There are cases where only few private investors, which are not included in the board of directors, but own the essential large part of shares in the financial institutions. Here it is suggested that relationship between private investor's equity holding and gearing levels is negative.

Control Variables

Size of firm

Large institutions generally have close links with their lenders and find it easy to arrange debt on favorable terms. So it is suggested that there exists a positive relationship between the Size of institutions and leverage level of the firm. The variable FI Size is measured as logarithm of total assets.

Profitability as Return on Assets

It is well known from the Pecking Order Theory of capital structure that companies use internally generated funds as first priority to finance project. Then as second priority debt is used and finally option of equity is exercised to finance company projects. Therefore it is assumed that profitability of institutions have negative or zero relationship with leverage levels. In this study Return on Assets (ROA) will be used as measure of profitability and it will be calculated by dividing a company's net earnings by its total assets

4.1.3 An Econometric Model 1

This study employs multivariate regression analysis in a panel data framework to measure the dependence of capital structure on corporate governance variables. The panel data analysis explores cross-sectional and time series data simultaneously. Pooled regression is used with assumption of constant coefficients. Constant coefficient model assumes intercept and slope terms are constant. Debt to Equity Ratio is not only the result of the various financial characteristics of the financial institutions; it is also determined by the decision-makers' choice. Both managers and significant outside owners may influence on decision-making in the firm and, consequently, on financing decisions of the institutions. To investigate whether or not the structure of a firm's ownership has a significant impact on leverage, and to test five hypotheses it was chosen the followed by many authors, presented in literature review, the following general form of model:

$$D_{it} = \alpha_0 + \alpha_1(\log BS)_{it} + \alpha_2(\%ID)_{it} + \alpha_3(\%IS)_{it} + \alpha_4(\%MS)_{it} + \\ + \alpha_5(\%\Pr S)_{it} + \alpha_6(ROA)_{it} + \alpha_7(SZ)_{it} + \alpha_8(DLT)_{it} + \varepsilon_t \quad (1)$$

In (1) D_{it} = Leverage or Debt to Equity Ratio, BS = Board size, ID = Independent Directors, IS = Institutional Shareholding, MS = Managerial Shareholding, Pr S =Private Investors' Shareholding, ROA = Return on Assets, SZ = Size of Financial Institution, DLT= CEO/Chair Duality,ε = Error Term, α_0 = Intercept of the equation and α_i = marginal effect of variable on debt to equity ratio.

The first result of investigation of this model 1 (1) is the descriptive statistic shown in Panel A. The second result is the correlation matrix in Panel B, and the third result is multivariate regression analysis, shown in Panel C.

4.2 Main listed banks

The second part of this empirical research includes the quarterly data for 12 main listed banks from 2008 to 2013 with 288 observations. All data to compute Q for each bank were collected from Bloomberg, as follows: market value, historical market capitalization; book value, total shareholder equity; debt, total liabilities; and assets, total assets. ROA and ROE, the second and third performance variables, were also collected directly from Bloomberg. We collected these accounting data from the site of agency of Financial control of NB of RK. The author of this research analyzed the theoretical predictions and qualified influence of MO on bank market value (Tobin's Q), accounting performance (ROA, ROE), and risk-taking (Z- scores, NPL/L) across 12 main Kazakh banks controlling for bank-specific characteristics, regulatory restrictions, and macroeconomic factors trough multivariate regression of a forward-looking measure of performance.

4.2.1 An Econometric Model 2

It was used the linear regression model (OLS) for these cross-sectional analyses, deploying alternative measures of the dependent variable both for market value and risk in the baseline specification (Agrawal and Knoeber (1996), Holderness et al. (1996), Belkhir (2004), Kaserer and Moldenhauer (2008), and Yermack (1996)). For example, the closed form for Q, one of the alternative dependent variables, is as follows:

$$Q_j = \alpha + \beta * MO_j + \gamma * controls + \varepsilon_j \quad (2)$$

and

$$Q_j = \frac{MarketValue}{BookValue}_j + \frac{Debt}{Asset}_j \quad (3)$$

In (3) α is a constant; β and γ are coefficient estimates; controls pertain to bank and country characteristics; j refers to a specific bank; and ε_j is the error term. We hold the right-hand side of equation (1) in the closed forms for the other alternative dependent variables pertaining to performance and risk-taking.

4.2.2 Dependent variables

Bank's market value and performance variables are Q - Tobin's Q (Demsetz and Villalonga, (2001); ROA - Return on assets (Mehran, 1995); and ROE - Return on equity (Short and Keasey, 1999). They are expressed by equations (2) and (3). Joh (2003) contended that accounting profitability indicators are better performance measures than stock market-based indicators because, unlike the latter, the former relate directly to firm survival. All data to compute Q for each bank were collected from data bases of NBK and KASE, as follows: market value, historical market capitalization; book value, total shareholder equity; debt, total liabilities; and assets, total assets. ROA and ROE, the second and third performance variables, were also collected directly from NBK.

Risk variables are NPL/L and Z – scores (Barry et al. (2010). NPL / L as proxy of loan portfolio risk is the alternative risk variable and Z-score expressed by (2). Z-score captures the probability of default, and compares a bank's buffers (capitalization and returns) with the volatility of those returns. Q and Z-score for each bank were calculated by author. The sample of 12 main banks in Kazakhstan for 2008-2013 years a homogeneous set of banks dedicated to the provision of a set of financial services consisting of retail banking, loans, and money transmissions. Thus, we not only avoid confounding effects that would amplify the sample variance and most probably hinder the efficiency of the regression coefficient estimates but also contribute to a more focused analysis of the influence of MO on the market value, performance, and risk of listed banks listed on KASE and included in a market index of Bloomberg. In Table 1 are shown, for example, Kazakh bank's characteristics for only 2013 year.

4.2.3 Independent variables are:

MO - managerial ownership; there are several bank control variables that are significantly related to our dependent variables: SIZE – logarithm of gross operating revenue; AGE - number of years since incorporation ;GO – revenue growth; DI – Debt intensity – debt divided to total assets; CI – Capital Intensity – total shareholders equity divided by revenues; NII_ OI – proxy for income diversity – net interest income, divided to total operating income; and proxies for development of financial market in Kazakhstan: PC_ GDP – private credits to GDP; SMC_GDP – stock market capitalization- total value of shares traded on KASE to GDP. It was hold the right-hand side of equation (2) in the closed forms for the other alternative dependent variables pertaining to performance and risk-taking. For regression analysis were used three equations (4, 5 and 6) to analyze the relationship between banks performance variables, MO variables and control variables:

$$\begin{aligned} ROE_j &= \alpha+\beta*\mathrm{MO}_j+\gamma_1*Size_j+\gamma_2*Age+\gamma_3*GO_j+ \\ &+\gamma_4*DI_j+\gamma_5*CI_j+\gamma_6*NII\_OI_j+ \\ &+\gamma_7*PC\_GDP_j+\gamma_8*SMC\_GDP_j+\varepsilon_j \end{aligned} \tag{4}$$

and

$$\begin{aligned} ROA_j &= \alpha+\beta*\mathrm{MO}_j+\gamma_1*Size_j+\gamma_2*Age+\gamma_3*GO_j+ \\ &+\gamma_4*DI_j+\gamma_5*CI_j+\gamma_6*NII\_OI_j+ \\ &+\gamma_7*PC\_GDP_j+\gamma_8*SMC\_GDP_j+\varepsilon_j \end{aligned} \tag{5}$$

$$\begin{aligned} Q_j &= \alpha+\beta*\mathrm{MO}_j+\gamma_1*Size_j+\gamma_2*Age+\gamma_3*GO_j+ \\ &+\gamma_4*DI_j+\gamma_5*CI_j+\gamma_6*NII\_OI_j+ \\ &+\gamma_7*PC\_GDP_j+\gamma_8*SMC\_GDP_j+\varepsilon_j \end{aligned} \tag{6}$$

Then were used two equations (7 and 8) to analyze the relationship between MO and bank risk using the percentage of non-performing loans in total loans (NPL/L), and the Z-Scores.

$$\begin{aligned} NPL\_L_j &= \alpha+\beta*\mathrm{MO}_j+\gamma_1*Size_j+\gamma_2*Age+\gamma_3*GO_j+ \\ &+\gamma_4*DI_j+\gamma_5*CI_j+\gamma_6*NII\_OI_j+ \\ &+\gamma_7*PC\_GDP_j+\gamma_8*SMC\_GDP_j+\varepsilon_j \end{aligned} \tag{7}$$

$$\begin{aligned} Zscores_j &= \alpha+\beta*\mathrm{MO}_j+\gamma_1*Size_j+\gamma_2*Age+\gamma_3*GO_j+ \\ &+\gamma_4*DI_j+\gamma_5*CI_j+\gamma_6*NII\_OI_j+ \\ &+\gamma_7*PC\_GDP_j+\gamma_8*SMC\_GDP_j+\varepsilon_j \end{aligned} \tag{8}$$

Table 1. Bank's characteristics for 2013*

BANK	MO	Q	Z	ROA	ROE	NPL / L	SIZE	AGE	GO	DI	CI	NII_ OI	PC_ Y	SMC _Y
Kazkommertsbank	0.64	4.00	3.79	0.01	0.00	0.40	18,32	21.00	0.10	0.88	3.57	0.00	1.11	8.13
Halyk Savings Bank	0.74	2.05	16.61	0.01	0.00	0.22	18.35	90.00	0.11	0.86	3.82	0.00	0.80	23.20
BTA Bank	0.97	3.74	0.76	0.01	0.00	0.87	21.31	88.00	1.73	0.82	0.16	0.00	0.17	90.55
Bank CenterCredit	0.73	1.60	3.09	0.00	0.00	0.16	20.53	25.00	0.12	0.92	0.11	0.00	0.48	1.92
ATFBank	1.00	2.52	0.67	-0.01	0.00	0.41	19.68	18.00	0.11	0.91	0.19	0.00	0.39	1.51
SB Sberbank of Russia	1.00	1.42	7.73	0.01	0.00	0.05	18.19	5.00	0.10	0.90	1.20	0.00	0.34	2.93
Tsesnabank	0.74	4.47	4.89	0.01	0.00	0.04	18.65	21.00	0.06	0.91	0.51	0.00	0.30	4.27
Alliance Bank	0.67	16.81	0.00	0.00	0.00	0.45	20.17	19.00	0.10	0.99	0.02	0.00	0.21	0.62
Kaspi Bank	0.89	2.80	20.42	0.00	0.00	0.18	20.08	16.00	0.12	0.91	0.12	0.00	0.27	4.53
Eurasian Bank	1.00	1.94	8.71	0.01	0.00	0.09	19.11	19.00	0.07	0.95	0.15	0.00	0.23	2.01
Temirbank	0.99	4.02	-0.32	-0.02	-0.02	0.47	18.62	21.00	0.10	0.81	0.46	0.00	0.11	0.55
Nurbank	0.79	3.23	2.55	0.00	0.00	0.50	18.85	21.00	0.13	0.75	0.47	0.00	0.09	11.01

**) Source was constructed by author*

5 Empirical Results

5.1 The empirical results of econometric model 1

Panel A in Table 1 shows the descriptive statistics. Results show that size of board in Kazakh listed financial institutions is 11 with largest number of board members (for government fund

" Samruk-Kasyna") and minimum board size is 1 (which is the statutory lower limit for a public company as Insurance company). In table 1.1 the mean is shown as logarithm of number of board members. Independent directors (IDs) constitute in average of 33% of boards which is a fairly good representation for Kazakh companies. Managerial ownership is approximately 7% which is significantly low in the companies which present the financial industry. Institutional shareholding is more than 50% which is reasonable, since most of the Kazakh listed financial institutions belong to the bank holding companies and their affiliate's holdings, and shareholding is distributed between national companies, pension funds and banks. Average rate of return on assets is 4%.

Table 2. Panel A - Descriptive statistics

	Minimum	Maximum	Mean	Std. Deviation
DE ratio	-6.34	26.48	3.2368	4.41810
Board Size	.00	1.11	.6645	.20575
Indep Dir	.00	.83	.3327	.17287
Inst Shr	.00	1.00	.5305	.43874
Mng Shr	.00	1.00	.0731	.22275
Prv Shr	.00	1.00	.1164	.25794
ROA	-3.28	2.80	.0408	.39973
FI Size	.71	13.13	10.1385	1.64361
CEO/Chair Duality	.00	1.00	.2921	.45603
N=1656				

Average debt to equity ratio is 3.93% representing a fairly reasonable overall debt to equity ratios for financial institutions which is more than 2 as is reasonable for non-financial companies.

Panel B in Table 3 shows the results of correlation analysis.

1. Profitability is almost zero correlated with debt to equity ratio which is not consistent with pecking order theory that firms use internally generated funds as first option to finance projects before resorting to debt. This

result is contract to the result with non-financial companies in the previous research

Table 3. Panel B- Correlations Matrix

	DE ratio	Board Size	Indep Dir	Inst Shr	Mng Shr	Prv Shr	ROA	FI Size	CEO/Chair Duality
DE ratio	1								
Board Size	**.232****	1							
Indep Dir	.061	**.273****	1						
Inst Shr	.088	-.041	**-.166***	1					
Mng Shr	-.040	.104	.133	**-.306****	1				
Prv Shr	**-.140***	.004	.074	**-.317****	-.059	1			
ROA	.038	.089	-.079	-.051	-.030	-.038	1		
FI Size	**.315****	.037	.035	.025	-.054	-.109	**-.222****	1	
CEO/Chair Duality	**.252****	.078	-.114	.119	-.029	**-.273****	-.028	**.279****	1
N= 1656									
**) Correlation is significant at the 0.01 level *) Correlation is significant at the 0.05 level									

2. There is a positive relationship between size of board and the size of financial institutions. This appears rational as larger institutions have more assets for collateral; they need a large board in order to negotiate better terms and easier for them with lenders. Also, after the crisis in 2007-2008 most commercial banks become very conservative in their lending policies. Prudential Regulations of AFC under the National bank of Kazakhstan make it extremely difficult for commercial banks extent their lending policies. Hence, presence of a large board is necessary for large assets base.

3. Correlation analysis indicates that managerial shareholding and private investor's shareholding are negatively correlated with debt to equity ratio. This is consistent with other studies which argue that as managers' shareholding in a company increases, they tend to bring down the size of firm's debt to reduce the risk and costs of bankruptcy. But for Kazakh financial institutions, management controlled companies are generally those whose majority equity is held by families, which are always averse to bankruptcy. Also correlation matrix indicates significant negatively relationship between private investors shareholding and debt to equity ratio, where private investors also are always averse to bankruptcy. Board size and debt to equity ratio are significantly positively correlated, which might be explained by fact that most of Kazakh listed companies with prevailing shareholding by the board of directors usually only who take the decision about the leverage of financial institutions.

4. Negative significant correlation between institutional shareholding and managerial (and private investors shareholding) might be explain by competition for the influence on the company management.

5. The size of board is found positively correlated with debt to equity ratio indicating larger boards may apply pressure on managers to follow higher leverage and improve firm performance. An example of this observation is that larger companies have larger boards – and larger companies with larger assets are more motivated to acquire debt at favorable terms.

6. Relationship between percentage of independent directors and institutional shareholding is negative which shows that concentration of ownership leads to reduce the presence of independent directors on boards. This results in evidence of stronger control on firms. This phenomenon is common in government owned businesses in Kazakhstan and it can be said that equity market in Kazakhstan is dominated by government related trough families or close affiliates owned companies. This works against the spirit of good corporate governance. These practices unfavorably affect the performance of company as shown by the negative relationship between Return on Assets and ownership structure. But these results are insignificant.

7. CEO/Chair duality is significantly positively correlated with the capital structure and the Institutional size, and insignificantly negatively correlated with the private investor's shareholding. This evidence is common for Kazakh companies, where when the Chair of the board is represented also as a CEO, than the interests of board and CEO coincide in decision about the financing the firm. The negative correlation might be explained by the resistance of the private investors to the increasing of power of the board of directors by imposing them as CEO.

Panel C in Table 4 presents results of multivariate regression analysis of the leverage level using multiple regressions (1) for all financial institutions.

Table 4. Panel C. Multivariate Regression Analysis

	Coefficients	**t-Statistics**	**P-value**
Intercept	-7.996	-3.150	**.002**
Board Size	4.915*	2.695	**.008**
% of Independent Directors	1.197	.614	.540
% of Institutional shareholding	.628	.764	.446
% of Managerial shareholding	-.632	-.420	.675
%of Private investors shareholding	-1.041	-.764	.446
ROA	.503	.586	.559
Size of Financial Institution	.681*	2.947	**.004**
CEO/Chair Duality	1.496*	2.008	**.046**
*) significant at α= 0.05			
N= 1656			

Results of multivariate analysis show that:

- Multivariate regression analysis provides that an increase of 1% in the size of institution leads to 0.68% increase in leverage and this relationship is significant at α= 0.05. Results have economic relationship and consist with other studies that large firm have a grater debt to equity ratio.
- Debt to equity ratio is significantly affected by board size and CEO/Chair duality. Correlation analysis indicates the presence of significant relationship, and regression analysis provides evidence about existence of this significant relationship at α = 0.05.

Presence of independent directors on the board has no significant impact on leverage. It may be due to fact that in family owned business independent directors are generally representatives of financial institutions; no statistics are available how these businesses choose the independent directors, or whether they have any relationship to these businesses. The Code of Corporate Governance has made it mandatory to have independent directors in the board of directors.

5.2. The empirical results of the econometric model 2

Table 5 shows the correlations between pairs of variables in years: from 2008 and 2013.We observed that:

1) MO negatively relates to performance variables: Q, ROA, and ROE

2) MO negatively relates to Risk variables: Z-scores and NPL/L

3) MO significantly negatively relates to SIZE, AGE, and PC/GDP

4) Z- scores significantly negatively related to DI, and

5) NPL/L significantly positively relates to CI.

Table 5. Correlation Matrix

In period of 2008-2013	MO	Q	Z-scores	ROA	ROE	NPL_L	SIZE	AGE	Growth	DI	CI	NII_OI	PC_GDP	SMC_GDP
MO	1	-.072	-.020	-.001	-.042	-.018	-.282*	-.251*	-.054	-.072	-.124	-.022	-.428**	-.096
Q		1	-.097	-.108	.396**	-.039	.092	-.241*	-.149	-.062	.066	.003	-.163	-.582**
Z-scores			1	.371**	-.047	-.262*	-.109	-.038	.004	-.502**	.358**	-.230	.150	-.207
ROA				1	-.561**	.027	-.105	-.094	.020	-.716**	.306**	-.518**	-.303**	.012
ROE					1	-.072	.159	-.116	.274*	.180	-.112	.145	.043	-.437**
NPL_L						1	.219	.321**	.258*	-.020	-.204	-.145	-.201	.329**
SIZE							1	.387**	.291*	.231	-.455**	.027	.435**	.183
AGE								1	.078	.236*	-.056	-.101	.353**	.576**
Growth									1	-.059	-.142	-.090	-.006	.239*
DI										1	-.424**	.668**	.368**	.281*
CI											1	-.226	-.016	-.161
NII_OI												1	.090	-.070
PC_GDP													1	.291*
SMC_GDP														1
N=288 observations														
**. Correlation is significant at the 0.01 level.														
*. Correlation is significant at the 0.05 level.														

The results for linear regressions (OLS) are presented in the left-hand column of Table 6 for the dependent variable Q and MO as the variable of interest, controlling for bank and country-specific traits deployed in the literature. As we can see from these results, the coefficients of MO are negative for Q, and ROA and statistically insignificant. But we can see also that Q significantly (at 1%) positively depends from size and debt intensity, and statistically negatively relates to NII/OI, PC/GDP and SMC/GDP. Also, ROE significantly negatively relates to SMC/GDP. The results reveal the negative relation between MO and bank market value (Q) but insignificantly. These results suggest that MO increases the agency costs, which means that managers are misaligned with shareholders in creating value for the bank in which they hold a stake.

Table 6. OLS regression results for the impact of managerial ownership (MO) on Q, ROA and ROE

	Q	**ROA**	**ROE**
	From 2008 to 2013	**from 2008 to 2013**	**from 2008 to 2013**
(Constant)	**-9.953***	.070	-.019
MO	-2.156	-.098	.000
SIZE	**.588*****	.028*	.000
AGE	-.004	.000	9.064E-5
Growth	-.033	**-.005***	**.001*****
DI	**4.202****	-.551***	**.031*****
CI	.171	.008	-9.605E-5
NII_OI	**-47.682***	-.018	-.213
PC_GDP	**-.181****	**-.010****	.000
SMC_GDP	**-.012*****	**.000*****	**-8.593E-5*****
R2	.460	.612	.532
N of obs.	288	288	288
Significance at the 1, 5 and 10% levels is denoted by ***, ** and *, respectively. Values in bold denote that significance level respectively.			

This finding is consistent with the finding of Belkhir (2004) in the context of U.S. bank and savings- and-loan holding companies (1995–2002).Finally, as shown in Table 7, we analyzed the link between MO and bank risk using the percentage of non-performing loans in total loans (NPL/L), and the Z-scores. The results suggest that the negative coefficients of MO are associated with lower bank risk, as NPL/L, and the positive coefficients of MO are associated with Z-scores, and they reflects the direct influence of MO on the risk. This finding is consistent with the finding of Saunders et al. (1990). There are several control variables that are significantly related to our dependent variables. NII/OI and PC/GDP are positively related to Z-scores and statistically significant at 1% and 5% levels. But PC/GDP and SMC/GDP are significantly negatively related to our risk variables NPL/L and Z scores, and DI significantly negatively relates to Z-scores.

Table 7. OLS regression results for the impact of managerial ownership (MO) on NPL/L and Z-scores

	NPL/L	**Z - scores**
	from 2008 to 2013	**from 2008 to 2013**
(Constant)	-.231	**48.989*****
MO	-.128	9.340
SIZE	.030	-1.248
AGE	.002	**.077***
GO	.003	.131
DI	.005	**-33.118*****
CI	-.006	-.024
NII_OI	-1.290	**210.884****
PC_GDP	**-.025*****	**1.300*****
SMC_GDP	**.000***	**-.014***
R2	.348	.497
N of obs.	288	288
Significance at the 1, 5 and 10% levels is denoted by ***, ** and *, respectively. Values in bold denote these significance levels respectively.		

The development of financial markets in Kazakhstan, which is proxies by private credit (value of claims on the private sector by deposit money banks and other financial institutions) and stock market capitalization (the total value of shares traded in a country's stock exchange), both scaled o GDP of RK, negatively relates to the risk default measures.

The use of banks listed on the Bloomberg index guarantees comparability in terms of stock market capitalization, free float, transparency, and reporting standards that usefully reduce sample variance in a cross-banking analysis. The narrow definition of MO, a homogenous set of banks operating in Kazakhstan, and an analysis over a period during the on-going financial crisis with an appropriate econometric method could extent the mixed findings observed in previous studies and enable the generalization of findings.

6 Conclusions

This research employs level data for financial institutions, listed on KASE by using multivariate regression analysis under fixed effect model approach. Measures of corporate governance employed in this study are board's size, board's composition, and CEO/Chair duality. Also this study examines the impact of shareholding on financing decisions by using three ownership parts: managerial shareholding, institutional shareholding, and private investor's shareholding. Influence of controlled variables such as financial institution size and profitability (as a ROA) was also examined in this research. Results of this part of panel study showed that board size is significantly positively correlated with debt to equity ratio and with the number of independent directors, and only private investor's shareholding is significantly negatively correlated with debt to equity ratio. CEO/Chair duality is significantly positively correlated with the debt to equity ratio. The control variable, a financial institutions' size, has also significant effect on capital structure. Therefore, the found results suggest that corporate governance variables like board size, ownership structure and CEO have important role on decision about the leverage of the financial institutions in Kazakhstan.

Banks and their managers have been in the first view since the financial crisis was deepened. Governance failures in banking system and is now in the criticism. The agency costs arising from misalignment of shareholder and managerial interests have long been considered important and empirically relevant in the context of mainly manufacturing enterprises. Agency theory is most often applied to a non-crisis context. The on-going financial crisis has reinstated the critical importance of the costs of misalignment of interests of shareholders and managers in the banking industry. The Literature Review findings, however, do not cover the financial crisis' period. This study was done as extension to the agency theory to assess the influence of managerial ownership on the market value, performance, and risk in crisis. First, our data showed very low levels of MO in Kazakh banking industry; Secondly, analysis of bank characteristics and macroeconomic conditions showed a negative relation between managerial ownership and both market value (Tobin's Q) and performance (ROA and ROE). This finding is consistent with the finding of Belkhir (2004) in the context of U.S. bank and savings- and-loan holding companies (1995–2002).Third, moreover, the findings showed a negative relation between managerial ownership and risk (NPL/L) and positive relationship between MO and Z-scores from 2008 to 2013. This finding is consistent with the finding of Saunders et al. (1990). Our findings suggest that management shareholdings resulted in better market value, performance, and risk-taking for banks and these findings do not weaken during the on-going financial crisis. In their effort to intertwine governance and regulation to immunize the financial system from a future financial crisis, National Bank of RK may find the role of MO as relevant.

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PERFORMANCE MEASUREMENT: FROM INTERNAL MANAGEMENT TO EXTERNAL DISCLOSURE

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Abstract

This work aims at understanding, first of all, the origin of the interest doctrine and companies have demonstrated in the so called performance "measures". For this reason, we try to focus on the enormous changes which characterized the latest decades and to understand their consequences on firm management. Once the relevance of new parameters as internal information is recognized, we wonder if it is worth including them in officially disclosed information. Some theoretical models are presented, in order to describe the use of performance "measures" and to define the main information categories to be given to external parties.

Keywords: Integrated Reporting, Non-Financial Information, Fordism, Post-Fordism, Performance Measures, External Disclosure

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1 Performance "measures": to the origins. From fordism to post-fordism

In the pre-fordistic era, the manufacturing system was based on the presence of a steam power machine, hampering and expensive, to which every other machine of the plant was linked. Therefore, each plant was conceived as a unique large machine, formed by the power plant and a limited number of machines working synchronously. Its functioning was based on theoretical principles, more or less directly derived from science and technology; it was not easy to adapt it to different and changing resources and to customer expectations. The basic knowledge had a theoretical nature. On the contrary, everyday practice was not relevant, because machines were not able to considerate it.

The discovery of electrical power allows the separation of single machine: the turbine motion is not directly transmitted to the machines, but it is converted into electrical power that can immediately circulate through a wide network, at low costs. This means that it is possible to operate an industrial plant virtually everywhere and not only in a specific place. The layout of the single plant can be modified, too: machines don't need to be all linked to a central power center. They operate in a more autonomous way and once merely mechanical schemes can now be adopted to specific contexts. Technological progress thus allows adaption to practical and specific needs: the ability in combining different machines in new and original ways now becomes critical. Thus, the fordistic firm can partially recover the "practical knowledge" characterizing the old handcraft laboratory. On one hand it standardizes micro operations splitting basic operations, but on the other it designs macro processes by considering individual skills. Practical knowledge allows differentiation and the firm can build its own competitive advantage. In fact, while theoretical knowledge is not so valuable because everybody can have it, practical and contextual knowledge is specific, cannot be copied in a short time and in a cheap way, and therefore it can be defended. It depends on the entrepreneurial idea implemented within the firm and it is valuable only if the firm and it is valuable only if the firm itself is successful (Amigoni 1997).

The development of a contextual knowledge is feasible if the firm chooses among all the possible alternatives it must physically decompose complexity, by selecting specific opportunities and not other ones. Choices are irreversible because so are investments made and product characteristics. The selected course must be strictly followed, according to the decision taken. This is particularly true also because the existence of a specific know-how produces real benefits for the firm only if completely utilized. Therefore there is an incentive to exploit relevant investments made, in other ways not recoverable, by pursuing economies of information replication - i.e. economies of scale - and of information integration - i.e. , economies of scope. A strong tendency to dimensional growth is evident at this stage.

This is possible by utilizing a hierarchical organizational structure, based on centralization and co-ordination of the single parts of the firm through planning. In this period, hierarchical planning and budgeting systems, financial and cost accounting become the main tools. Remote control archetype is developed. It applies the assignment of objectives, based on accounting parameters to managers of different decentralized company units, given by the top management of the firm (Johnson, Kaplan 1987). These parameters constitute the foundations of evaluation and rewarding systems (Vancil 1979). Planning and control systems ensure efficiency to the firm, so that it moves towards the expected direction. In a relatively steady situation, in fact, "arbitrary changes represent dangers, constantly threatening business that do not have a plan. The weakest opposite wind can make a boat change its route, if it is not able to resist (..), *unpleasant route changes* can be decided under the influence of a serious but temporary disturbance (..), *planning protects the business* (..) against unwanted route changes, caused by serious events, but also against diversions, imperceptible at first, which end in turning it aside from its objectives" (Mintzberg 1996). The creation of an electrical power network allows to split physical operations: single locations where electricity is used become independent from each other. However, it is not possible to share the information needed to compose single operations as a system, through a network. For this reason, information is managed in a centralized way in large firms.

Transition towards a post fordistic system starts when technological advances allow the development of an information system to split information, too. Information technology tools, such as personal computers, Internet and Intranet communication systems, when utilized on a broad scale, allow the codification of knowledge developed in a certain place and its use by many people located in different sites (Amigoni-Ditillo, 1997). There are many implications of this phenomenon, because it allows to go beyond the fordistic model. New information technology allows: a) a virtual decomposition of complexity (of products, manufacturing processes, working stages and job tasks), obtained through the use of modular virtual objects representing single components of a product/process; b) a new composition of single parts through virtual components, in order to build tailored solutions using the same samples of virtual objects" (Rullani 1997). Information, like electrical power, should circulate within the system: as the latter allowed having separate manufacturing centers, the former allows having independent knowledge creation centers. Complexity is not a problem anymore, because the firm is not obliged to choose one solution once and forever, taking the risk to make hardly recoverable investments, aimed at following binding decisions with uncertain results. Instead, the firm is pushed towards the continuous generation of new complexity, by creating very different new alternatives. This is possible because manufacturing is not the focus of the entire process of creation any more, but it is only the final stage. On the contrary, the most important stage is represented by the use of "pieces of information" circulating "through the network", in order to try new possible solutions. As nothing "physical" is really created and "pieces of knowledge" are available within the network, investment in new tests is very cheap, virtually equal to zero, and it is possible to simulate different solutions to meet the expectations of different stakeholders, especially of customers. Firms must generate value for customers, by designing more and more tailored solutions, based on the analysis of their expectations. Firms nowadays pursue economies of differentiation (Rullani-Di Bernardo 1990, Beretta 1995). They originate from the fact that tailored products generate a larger amount of value for the user. What makes the new *modus operandi* possible and revolutionary is the reversibility of products; everything is possible until it remains in the "world of ideas" and is not concretely implemented. Therefore, the opportunity to generate new ideas and to create "new things" is systematically pursued: it is not a threat anymore, and it becomes a new lifestyle and a new aim for the modern firm.

2 The effects on the measurement system: from value "measures" to performance "measures"

Discontinuity, dynamism, chaos take the place of predictability and relative steadiness of the previous era. It is not important to control the present time anymore: the influence on future becomes strategic, instead. In this "upside-down world", managerial theories are relentlessly swept away and must be radically thought over.

2.1 Value "measures" (or interprétation valeur): definition and limits

The firm is a resource-consuming organization, aimed at supplying products and services (Lorino 1995). Products have an economic value if they are able to satisfy potential customers' needs. This is possible if products have one or more functional elements, that is if they can satisfy a specific need. Each product can be considered a "bundle of functional elements" having a value only if there is a specific social group whose needs can be satisfied by those elements. Value is therefore generated by a subjective opinion expressed by a group, concerning the opportunity to transform some resources into functional elements. It is not an objective measure: it can be expressed by a price, but it is not only a price. Resources are worth being irreversibly transformed into functional elements. It is not an objective measure: it can be expressed by a price, but is not only a price. Resources are worth being irreversibly transformed into functional elements only if somebody believes that the value generated by the conversion is higher than the opportunity cost deriving from all other possible alternative use of the same resources.

The *interprétation valeur* or "value measures" (Lorino 1995) is therefore a judgment on the irreversible transformation which generated a specific combination of functional elements from a potential basket of resources, but it directly refers to the outcome, not to the transformation process.

This means that is not possible to use the idea of *intérpretation valeur* or "value measures" within the firm. In fact, the judgment, and therefore its manifestation through price, is formed when the firm relates with the market. When activities take place, value judgments are not certain, because they are based on functional elements that do not exist yet. It is crucial, for the firm, to understand if designed and engineered products, that is the expected resource utilization, will be appreciated by the market or not. In other words, the firms must be able to investigate how resources are converted into value. This need faces serious problems because no simple and direct relationship between the two elements, resources and value-generating functional elements, exist. The phenomenon of complementary resources makes the measurement of the contribution of a specific resource to value generation theoretically complex. The missing link through which the conversion of inputs takes place is represented by how activities are carried on and, moreover, by how processes – activity systems aiming at value generation – are structured.

2.2 Performance "measures" (or interprétation performance): the evolution of the concept

2.2.1 In Fordism, activities are black boxes and performance "measures" are directly connected with value "measures"

According to remote control paradigm, the issue is solved through the introduction of hypotheses about the working mechanism of the firm. They are thought to be simple, transparent and steady. In this way it becomes possible to predispose a model describing both the operational knowledge (activities) and the organizational knowledge (connections of activities). This model should simultaneously "describe" and "prescribe". Therefore, the consequent representation identifies the best decisional rules and suggests future behavior. In this "steady world", control does not need to understand specific situations, but to know the rule and to verify its application. Control basically means variance analysis between actual an standard amounts, the latter determined during planning and budgeting.

Variances are not value "measures", because they relate to internal circumstances. They basically represent performance "measures" – *interprétation performance* i.e., judgments on the ability of resources to contribute to value generation. In fact, variance analysis immediately and clearly points out relationships between each operating unit and income generation. The choice to express variances in absolute and not in relative terms stresses the wish to represent relationships in an explicit form, too. The actual content of activities (generating functional elements and, therefore, value) in terms of "knowledge and actions" is completely ignored in the analysis, because it is not considered interesting. In fact it is thought to be steady and describable in a model. Activities are still a black box.

Therefore, the control paradigm concretely becomes a managerial system, concerning resources and flows. Only measurable elements entering and exiting the black box are taken into account. None of all possible qualitative remarks on knowledge and transferred information is relevant, because they are not quantitatively measurable. This is the reason because, for instance, experience accumulation, changes in personnel motivation, new knowledge acquisition are ignored as non-events, as they do not leave any track on resources. The focus is exclusively on: a) transactions, that is resource transfer; b) allocations, that is resource distribution; c) exchanges with external parties.

2.2.2 In post-fordism, activity investigation is needed, because of complexity and unsteadiness

In previous paragraphs, we showed how simplifying hypotheses of control paradigm become absurd in post-fordism. Post-fordism radically changes fordistic logical categories – to which control paradigm is linked – because information sharing concretely eliminates space, reduces time, increases the speed of communication among individuals.

It is difficult to defend the simplicity of the old firm model, in a world where complexity continuously increases. First of all complexity shows "in terms of system opening" (Lorino 1995), because more and more often, external elements become a constitutional part of the firm. This certainly happens in mergers and in explicit agreements (such as joint ventures), but, above all, through the creation of networks among firms through the internet. A network is formed by a certain number of subjects, by relationships existing among them and by shared information. The network existence is not necessarily dependent on a physical place, because it makes the most of virtual communication highways and therefore can connect different subjects located very far from each other. The membership of a certain subject in the network is represented by the generation, in conjunction with other members, of specific meanings and by the sharing of a common language. Within this new organizational form, a new job division scheme takes place: the knowledge based one. Basically, each network junction specializes in a specific function and the related knowledge is introduced in the network, so that other members can use it. The information and the communication potential of the network therefore continuously increases.

Entering a network has become a vital need for each firm, because none of them is able to generate sufficient knowledge to survive in post fordistic continuously changing and hyper-competitive scenarios. It is crucial to point out that entrance in a network is a necessary condition to survive but that it is not sufficient, though. No granted elements exist in post-fordism: everything is changing, including the network.

This situation implies a second kind of complexity so called "combinatorial" (Lorino 1995). This term indicates the trend to multiply the constitutional elements of the firm system. Information technology allows firms to obtain data, information, knowledge in a very short time and at low costs. This also allows the firm, but simultaneously condemns it, to increase the number of products offered, of technologies utilized, of markets entered. This is an opportunity , but also a need, because a hyper-competitive environment is created. The existence condition is therefore constituted by the ability of each firm to present itself to other network partners and to customers as an innovative subject. The firm must be able to continuously generate new ideas, because this is the only ability that makes it different from its competitors. In this sense, it is possible to state that post-fordism, on one side, generates energies and opportunities never thought before. On the other side, it is a source of anguish, though. The above described conditions clearly make the second hypothesis of remote control archetype – the steadiness of the system- difficult to be defended, too.

2.2.3 The focus on activities and processes

Dynamism stems from knowledge generation (Nonaka-Takeuchi, 1995). Learning means increasing the number of ways to face complexity and creates a potential source of progress. A contraries, new knowledge does not come from perfectly "structured and controllable" organizations, but from disorder and chaos. This implies to abandon certainties coming from the simplifying hypotheses of the control archetype, even if this generates anguish. On one side, the reduced possibility to make correct forecasts must be recognized. On the other side, the compression of the ability to generate new knowledge, characterizing the firm and allowing its survival, must be avoided. Activities cannot be considered black boxes any more: internal processes – creating, destroying and transforming resources – must be investigated. In order to understand how resources are transformed into value – generating functional elements, the concrete functioning of the "converter" must be studied. In other words, activities and processes, and how they really take place, must be considered as the basic analytic unit.

The word "activity" does not mean "physical effort", nor "action". The idea of activity is created by actors through a cognitive process – of acquisition and creation - consisting in knowledge codification. To make knowledge explicit, an interactive process among several parties is needed. Through this process, "the elementary parts" of activities (their most relevant elements) are individuated according to a judgment on how significant and communicable they are (Nonaka 1994). Actors choose only a part of their knowledge, in order to codify and communicate it. Metaphorically speaking, the concrete activity can be considered a complex image in which particularly meaningful and evocative characteristics are individuated. These characteristics, which according to the actors, distinguish the image and allow its reproduction-even though not perfect- are individuated through an interactive social process and constitute the new idea of activity. Therefore, the new representation of activities is not a steady, objective and universal model, as it was in the control archetype. The representation is a result of the interpretation: a) of several subjects (not of top management, but of operative people); b) specific for each activity (not universal); c) subject to modifications, in order to take changes into account (not steady).

Only individuated and codified activity parts can be analyzed and constitute firm management matters. The not expressed part of knowledge is implicit in behavior and constitutes the actors' silent knowledge (Nonaka 1994). The existence of silent knowledge, on one side, and the need that actors give an interpretation and a codifications of activities, on the other, put into evidence the central role of single people and state how impossible is to exert a deterministic and absolute control on activities. Each actor, through his interpretative abilities and his specific knowledge, takes part in activity management.

2.2.4 Performance "measures" as a new logic category

The effectiveness of measurement in terms of inflows and outflows is reduced, in the cognitive independence of actors is recognized and activities- and their interpretation-become the focus of the analysis. The traditional role of economic and financial measures is modified. The most important thing is now "to look into the black box", in order to understand the cause of resources conversion into activities. They are not "the Alpha and the Omega of Control" any more, but they are now one among other useful diagnostic instruments. The ability to interpret activities and process is now critical. For this purpose, financial measures are not enough, though. I fact: a) a system of indicators has to be created; b) each indicator, financial or not, must be recognized the same importance. We are clearly facing a real revolution (Eccles 1991).

This particularly true if we think that the idea of performance "measure", or, better, of *interpretation performance* (Lorino 1995), becomes complex. According to the object of analysis: as it is not possible to establish a universal model to represent activities and processes we are not even able to objectively and absolutely individuate valuable indicators to evaluate all the aspects of the firm. The peculiarity of the indicator system depends on firm characteristics and strategic and organizational profile. They influence how each activity and process is carried on.

According to the subject of analysis: the recognition of cognitive autonomy induces to negate the existence of a unique way, universally accepted, to interpret the course of each activity and process observed and put into existence. Semantics, that is the concrete meaning attributed to each activity and to each indicator used to describe it, will be at last partially specific of each actor. Therefore, the choice of indicators to express a judgment on performance will be different in different situations. However, it is possible and necessary to put in evidence that judgment on performances have a general characteristic. They must be expressed while considering that, even though they refer to internal situations, they represent the attempt to anticipate another judgment of value: the customers' one at the moment of the purchase. Activity and process potentialities should therefore be appreciated, taking into consideration their aim: to satisfy customers' needs. All the attempts to give an understandable representation of the contribution of activities and processes to the generation of value are considered potentially relevant: they can be numbers, words, drawings, charts, gestures, actions. These expressions can be formally individuated or not. As far as the management of the firm is concerned it is necessary to identify some formal indicators . The need to add them to the traditional economic and financial analytical instruments does not imply at all that they must have an exclusively qualitative nature. The criticism to economic and financial indicators is in fact not related to their quantitative nature, but to the universal semantic meaning attributed to them.

3 Role of performance "measures" in internal information

So far, our considerations stated an important perspective change. Firm strategy cannot be decided first and then communicated to a reliable group of executors. The firm jeopardizes its market position every day. Day-by-day circumstances, single operational decisions, single actions of people operating at each level are important, because it is within each activity that knowledge needed by the firm to dominate its competitive arena is created, so that the target costumer segment is satisfied (Amigoni 1989). The relevant strategic meaning of daily work, transferred on operational details, becomes clear (Wheelright 1981). Therefore, a very detailed control system, verifying that goals established *ex ante* by the top management are achieved, is not useful anymore (Dearden 1969). Famous is the expression: "the use of financial measures to improve performance can be compared to watching the scoreboard during a football match: even if the board indicates who is winning and who is losing, it does not indicate how to play" (Eccles-Ryburn 1994). A system giving useful signals to let the firm understand "how to play" is needed. It should be able to learn, to generate new knowledge, to interact with external parties and in particular with customers, in order to identify the right direction to move to. It has already been pointed out that the design of a measurement system must be each time referred to the specific case. Nevertheless, firm theories proposed some general reference models (Tonchia 1996). Among them: the balanced scorecard or *tableau de board* approach (Kaplan and Norton 1993, 1996) separately considers different kinds of performance, corresponding to different analytical views, with no outcome aggregation; the pyramidal model (Lynch and Cross 1991), tries to create different synthetic levels of measurement. In the following paragraphs, we aim at identifying the main characteristics of these approaches, in order to understand how the already identified ideas are implemented. In other words, we try to understand which kinds of measures are concretely used for internal control. The choice to limit the analysis to these two models is driven by the aim of this paragraph. It does not intend to be a complete treaty of performance measurement issues, but it is necessary to introduce the subsequent observations on the ways to transfer the same measures in documents disclosed to external parties.

3.1 The balanced scorecard model

The balanced scorecard approach (BSC) gives a useful framework, by translating the firm's vision in a set of performance indicators (Kaplan 1984, Norton Kaplan 1993, 1996). According to it, traditional economic and financial measures, representing outcomes of already taken actions, must be integrated by other measures that indicate factors generating future performance: customer satisfaction, internal processes, innovative and improving activities. The observation of such different indicator categories allows the identification of four complementary perspectives, through which management can determine control. The adjective "balanced" indicates a lack of hierarchy among different perspectives. They are equally relevant for control and they are synthesized through the "vision". A strong link among the four dimensions still exists, though, Moreover, they have the same dignity. As the financial perspective includes traditional value measures, attention is driven to the other three dimensions.

The first step towards the definition of performance measures according to customer's perspective is represented by the transformation of fundamental strategy into objectives the market can refer to. In other words, a process of demand segmentation, aimed at individuating customer groups with homogeneous needs, becomes necessary. The model identifies a group of performance measures – fundamental – which can be used in every firm, regardless of production peculiarities. First of all, market share. This indicator integrates financial perspective, because potential variances in sales amount can be understood, through a comparison with the competitors". On its own, the indicators does not give a sharp image of the ability of the firm to carry on activities and processes in the right direction, that is to full satisfaction of the individuated customer segment. Beyond this, other more direct indicators of customer satisfaction must be used. Those defined by the theory of the firm belong to two categories: field and desk. The former ones – field ones – are based on direct on-the-field investigation, such as interviews, questionnaires and other research methods. Their utilization lets the firm understand the perception customers have of the product utility and of its ability in satisfying their needs. These measures are focused "on the causes" of the achievement of a certain sales amount: the satisfied customer develops trust and tends to repeat the purchase. The latter indicators - desk ones - have a less informative relevance because they generate a less detailed knowledge sales, that is customer satisfaction, but "the quality of concretely obtained sales". These indicators only indirectly show customer satisfaction, because they measure the degree of customer loyalty to the firm – e.g., customer retention measures. They also give a quantitative determination of loyalty – such as life-time value and average ageing of accounts receivable. Even if desk indicators originate from the customer data base, that is from easily available quantitative data, this does not mean that they are more relevant than field indicators, for the construction of the balanced scorecard. The model identifies a second category of performance measures - called "off customers' proposition" – investigating the value attributed by the customer to the firm products. It is possible to achieve this result only through the analysis product service should be defined. That is: a) the functional elements off the supplied product; b) it is price; c) it's perceived quality. Secondly, the customer relationship attributes, that is the set off final activities off the value chain, must be identified. This are represented by shipping services, according to customers' needs. The emphasis off measures is on the temporal dimension, in order to monitor and to reduce, if possible, the so called lead time, which starts from the identification off customers' needs and ends with their satisfaction. Thirdly, the attributes linked to the imagine of the product- i.e., the set off intangible elements which generate a purchase- must be considered. We are now discussing several concepts, not new characterizing marketing activities of most firms. The recognition of a different role for them is new, though. Measures do not only relate to a specific function, but they are necessary for the firm being able, in the future, to transform its own resources into functional elements, appreciated by final customers and therefore convertible into value measures.

The balanced scorecard implies the identification of several measures to monitor processes – as system of activities aiming at value generation – mostly critical for the satisfaction of financial and customer perspectives. It is necessary to underline the great relevance of this analytical dimension - the internal process perspective - and of its systematic links with other ones. Some parameters allowing to express a judgment about activities and about processes must be evidenced. The final goal is always customer satisfaction. BSC implementation is characterized: on one side, by the width of the review of value chain processes; on the other side, by the preparatory role of goals set under this perspective towards other ones, thus representing the main operational translation of the strategy. BSC model proposes a classification of the processes into three categories, wishing to represent a generic value chain: innovative, operational and service processes. A great relevance is given to innovative processes. Focus on the definition of performance measures for this category of processes has always been limited, because structurally not clear. In R&D processes, the relationship between inputs and outputs is not foreseeable and therefore it does not allow a control through variance analysis, as proposed under the remote control paradigm. It is possible to state that a firm innovation ability, which is the ability to generate new knowledge to better satisfy customers' needs, represents a critical element of BSC. It is the only signal of the real competitive advantage of the firm. Some categories of the measures are individuated: a) performance measures (e.g., the number of projects generated by some basic ideas compared to the total number; the percentage of sales deriving from a new product); b) time measures (e.g., the duration of the product life); c) cost measures (e.g., the total cost of a complete development process of a new product); d) stage measures, verifying the implementation of projects vs. the related plan (e.g., introduction of a new product vs. operating plan). A central role is obviously attributed to operating processes. This is the category of measures contemplated in the balanced scorecard, which mostly allow to put into practice the ideas previously expressed. The consideration of "operational processes" means directly taking into account activities and activity systems. Performance measures proposed by the model are inevitably different from traditional accounting techniques – such as variance analysis – classified within a different economic and financial perspective. As no simplifying hypothesis on the real work is allowed, because this is the object of the analysis, the entrance in the activity black box becomes necessary. Measures proposed to express a judgment on how activities and processes create functional elements and, therefore, value for the final customer, are represented by quality measures, on one side, and by time measures on the other. If we refer to the former ones, the consideration of quality does not imply the verification of the correspondence of a certain activity or of a certain product to specifications individuated *ex ante*. This would go back to a flow logic, typical of variance analysis. The consideration of quality, on the contrary, implies an evaluation of the ability to always satisfy customers' expectations, through the supply of zero defect products. This idea is connected to features, performance, durability, reliability, aesthetics, perceived quality, etc. The main measures of the process quality generally refer to specific firm quality programs, such as ISO conformity. The best known quality measures of operational processes are: the defective items per process rate, the performance rates (i.e., percentage of products ready for sale out of the total), waste, scarps, reworks, sales returns and the percentage of processes undergoing a continuous control. The use of time measures allows to understand how the way of carrying on activities and processes reduces lead time, starting from the receipt of a customer order and ending with his receipt of the product. This element is very relevant because firms shifted from warehouse logic to a just-in-time logic, allowing an increase in manufacturing flexibility and a decrease in working capital investments. Manufacturing cycle effectiveness is a measure used to understand this dimension. It is the ratio between effective manufacturing time and total cycle time. Total cycle time represents a sum of manufacturing, transfer, inspection, wait and warehousing times. Only manufacturing time, according to this logic, is value-generating. The last stage of the generic value chain identified by the model is service. Service includes repairs under warranty, return and substitution of products, technical assistance for the utilization of the product and whole automatic payment systems. All the activities performed by the firm to keep their customers – through continuous contacts – are included in this category, too. After sale services are particularly critical when the technological content of the product is remarkable, but they are however very important in all other industries, too. Service, in fact, represents a key element to link the firm activity to the customer's, so that a partnership is almost created. Performance can be evaluated in this case through time, quality and cost measures, similar to operative ones.

The last perspective considered in the balanced scorecard aims at individuating the strategic goals and the related measures linked to learning and growth of the organization as a whole. This is_the learning and growth perspective. Giving separate evidence to this perspective, the model recognizes the renewed importance of people and of their specific knowledge (explicit and implicit) for the success of the firm. It is a choice consistent with the post-fordistic scenario, where the competitive advantage of the firm is based on the ability to pursue differentiation and therefore on the ability of internal personnel to generate new ideas. Learning and growth of people concretely constitute the basic structure for the satisfaction of goals under the other three perspectives. The simplifying logic of control does not exist anymore and it is not possible to individuate a group of mere executors and a small *elite* of wise bosses, either. Therefore, it is not useful to put emphasis on the pure achievement of fixed targets. Measures must stimulate research and exploitation of new opportunities, at all organizational levels. In other words, ideas to increase process efficiency and performance for customers should come from front-line workers, i. e., from those who materially processes and directly relate with the customers (Simons 1995). A first category of measures aims at individuating personnel abilities. In particular, it is necessary to understand the degree of employees' satisfaction, because it represents a basic element to increase productivity. This result is usually obtained through an enquiry destined to all or to a part of the labor force. The enquiry aims at understanding the involvement degree of people in the decision process, the degree of encouragement to be creative and to utilize personal initiative, the effectiveness of a specific performance evaluating system, the general degree of satisfaction relating to the job environment. Measures of personnel retention are added to this qualitative judgment. They express the ability of the firm to retain benefits coming from investments made to increase personnel skills. Measures of labor productivity – such as sales per person – which should, even if approximately, express the average contribution of people to the firm, are added, too. Moreover, the model puts in evidence investments made by the firm in order to increase individual abilities. On one side, quality and level of information instruments available to individuals should be monitored, as those instruments constitute potential “tools”. On the other side, the need for training to increase specific skills should be put in evidence, so that the related available instruments are fully exploited. Initiatives related to the satisfaction of training need should also be monitored. Finally, useful measures to monitor the degree of acceptance and implementation of balanced scorecard control process should be predisposed. The introductions of a new evaluating system of strategic performances, accompanied by the use of performance measures according to different perspectives, certainly represent a factor for change, compared to the traditional context. However, it is desirable to verify that the balanced scorecard is not a sterile document, but that it really represent an instrument of *pilotage de l’enterprise*.

3.2 The pyramidal model

The balanced scorecard considers different analytical perspectives and places them side by side, without explicit stressing links among separate performance measures. The “pyramidal” approach, on the contrary, gives evidence to links, by gradually structuring a hierarchy of measures. In particular it implements the firm vision through three analytical levels (Lynch and Cross 1991). The first level defines market and financial goals for each business unit and strategies showing how to reach these goals are formulated. The second level defines goals for each operative system supporting the firm strategy, in terms of customer satisfaction, flexibility and productivity. Finally, the third level converts goals into specific operational criteria – quality, shipping, cycle time and waste – for each department or component of the firm system. The different structure of the measure performance system (MPS) aims at evidencing casual relationships among separate performance measures, collected at a lower level – “measures collected in trenches” – and more and more synthetic results, in order to show a detailed picture of the situation to the directors’ board. The aim, though, even in this case, is not to bring everything back to economic and financial measurement, but to focus attention to parameters with different nature by recognizing them the same relevance. In fact, the firm vision is implemented at a first stage both through the consideration of financial aspects (mainly: profitability, ROI, cash flow), and through the consideration of “external measures driven by the customer” (among which: absolute and relative market share, distance from the main competitor, sales of new products, R&D expenses, etc.).

4 Role of performance “measures” in external disclosure

Changes described so far induced to wonder if the relevant parameters pointed out in management models, should constitute a *private property* of the firm or if they could be somehow included in external disclosure. Such question did not necessarily imply that the accounting model and indeed financial statements were useless to show the true and fair view of the situation of the firm in compliance with legal requirements and with generally accepted accounting principles. Academics started thinking that relevant performance measures could have been added to financial information with no substitutions. The idea that companies’ values have been influenced to a greater extent by elements that are not properly represented in the annual report becomes common, together with the consideration that annual reports disclose too much financial performance and too little non-financial performance. Effectively they do not describe nor measure determinant aspects such as quality, customer satisfaction and environmental and social performance.

An important issue taken in consideration in this context was and still is to what extent third parties should be informed about the actual firm abilities. If performance measures, organized in different models such as the balanced scorecard, constitute the instrument allowing the implementation of vision and strategy, it can be wrong to reveal its content to third parties and, among others, to competitors. In other words the point is to understand to what extent a right of third parties to know and a convenience of the firm to disclose exist. The hope to succeed in creating a better relationship with the counterparts has been for long time slowed down by the fear to reveal critical information to competitors. More than this a too detailed information on future evolution could create great difficulties if forecasts do not come true. These certainly constitute strong and not disposable disincentive towards transparent and complete disclosure. On the other side the need of the firm to communicate in a transparent way, in order to obtain the maximum level of trust in its interlocutors, represent an incentive to insert all the useful information in the report, so that a better judgment on the firm can be expressed.

Academics and Standard Setters have gradually promoted benchmarks which show the relevance of the introduction of non-financial information in annual reports. Performance measures have therefore officially been recently introduced in external disclosure. The process took some decades and the debate is still ongoing. We will here try to consider some of the main milestones which characterized the path towards the recognition of the role of *performance measures* or *non-financial information* in traditional financial reporting and in the other new or renewed forms of reporting.

a. "Basic qualities" in the financial statements. A focus on the Italian academic tradition

Since the beginning of last century Italian Scholars clearly declare that financial statements constitute the main tool available to external parties and to internal parties not directly involved in the management of the firm to understand the firm profitability. The word *profitability* here does not only indicate the achievement of a financial result sufficient to remunerate the share capital. The firm is profitable if the expectations of all institutional stakeholders are satisfied with internal resources, with no need to turn to external parties. This classical definition concentrate on three elements: a) the pursue of institutional interests; b) the autonomy; c) the duration in a changing environment, subject to a continuous evolution. Again, this concept is implemented on one side by evidencing that a firm is profitable if more than one goal is pursued: the competitive one, the social one, the economic one. On the other side, through the widening of the idea of institutional stakeholder, in order to include all the subjects able to give contributions to the firm an then not only stockholders, and employees, but also, among others, creditors, customers, suppliers and the public administration (Masini 1970, Coda 1988, Airoldi 1993).

The selection of goals to attribute to the financial statements, in fact, can be reasonably made in considering their relevance, in terms of knowledge, for those parties having a wide range of interests that deserve protection. These interests have a convenient representation only – or, anyway, mainly – in the financial statements official data. Such parties are: minority shareholders, commercial and financial creditors, co-operators and employees, customers, some private and public institutions involved in research, data processing and economic decisions. They expect from the analysis of the official financial statements and of other integrative data, and from their history, to find indications of the present and future situation, concerning every function of the firm, such as the profitability of the firm as a whole and of the core business administration, the liquidity situation and, in general, the monetary and financial conditions, the symptoms of the degree of effectiveness in achieving the combination of manufacturing process as a derivation of managerial and organizational circumstances, the equilibrium of financial and asset structures, in relationship with the expected economic results and with the industry and environmental conditions (Provasoli 1974, Riva 2001, Quagli Teodori 2005).

This means that financial statements should not only quantify the economic result achieved in the past, but that they should give sufficient information to appreciate its quality. The ultimate users of the document should be able to appreciate the ability of the firm to create or destroy wealth. This is essential for them, in order to satisfy their information needs and to subsequently interact with the firm in different ways – such as making decisions on investment, liquidation, stockholding, granting of credit, purchasing, co-operation, etc. – being aware of the firm position (Riva 2003, 2005). The aim of financial statements is therefore to "make quantitative and also qualitative representations, in order to facilitate their users to satisfy their *forecast* (…) and *judgment* needs about the ability of the firm to generate income" (Provasoli 1974). The financial statement is the tool used by the firm to convey to external parties its ability to generate value. From the financial statement, they can understand if such ability derives from exploiting casual opportunities or from superior skills in dominating selected market segments.

A fixed goal cannot be achieved only through the monitoring of quantitative measures, i.e., through accounting representations. A "financial statement system", in fact, cannot be considered only as a quantitative tool for income calculation and for asset and liability evaluation, even though these elements are still fundamental. As the financial statement system goal is to satisfy the ultimate users needs and the aim of the latter is to understand the situation of the firm in present and future times, economic and financial data have to be integrated. Qualitative information has to be added. This is represented by all extra-accounting collected data, such as statistical data and qualitative information in a strict sense. It is important to remember that the need to, add other information to the accounting data had already been clearly pointed out in the seventies in the Italian tradition. Masini, one of the founder of business Italian studies at that time declares, "business administration has much to do with quantities, but qualities have their relevance, too. Quantitative and qualitative analyses are complementary. The appropriate choice of elementary quantities and of *basic qualities* is the foundation of a firm information system" (Masini 1970). Performance "measures" are extra-accounting information and belong to the above definition of qualitative analyses or *basic qualities*. Therefore, they represent a natural complement to accounting information. The description of the *tableau de board* models in previous paragraphs allowed us to individuate the main performance "measures" used for internal purposes. In particular, the discussion on the balanced scorecard evidenced that other data must be added to economic and financial information, describing the customers' attitude towards the firm, monitoring the most critical firm activities and processes, evidencing employees' potential and knowledge. Nevertheless, even after considering the very "aggregated" pyramidal model added to financial measures, some indicators of the firm market position must be considered. Indicators proposed by the two models aim at investigating the causes of value achievement by the firm, as they represent judgments on single activities and on process, that is on the converter of resources into functional value-generating elements.

4.2 Performance "measures" as information to be included in the "social report" in the seventies

The opportunity to include performance "measures" within a separate document has been deeply studied by supporters of social report. The aims of this document are however different from those pursued by inserting the same data in the financial statements. In order to support this idea, we must understand the origins and the goals of the social reports and which form they can have.

Social reports have inappropriately been called "reports". In Italy, they were formalized in the Seventies. In that period the social responsibility of the firm was noticed. This responsibility was towards all the subjects the firm interacts with: public administration, citizens, trade unions, employees, customers. The firm must demonstrate its social utility, that is, it must be able to demonstrate not to be managed against the above mentioned subjects, but, on the contrary, to act in their favor, respecting their needs. In other words, the firm management must not be in contrast with life quality of subjects operating within it or of those directly and indirectly influenced by the implementation of a specific manufacturing activity, but on the contrary, it must facilitate it. The meaning associated with social report was therefore in contrast with the meaning generally recognized to financial statements by the law in the same period as it was considered a tool necessary to show the economic results to stockholders.

Composing social reports, the firm does not supply a tool to give a better interpretation the quality of the result by indicating the strategies pursued and the ways pursued to reach them, but tries to demonstrate to each internal party that the firm is also managed to reach their interests and mainly that the outcome – regardless of its quality – is fairly distributed.

Social statement tradition developed at the end of the Seventies in France and Germany, thus originating two different models. In France, the yearly preparation of a social report was mandatory, according to law (Law no. 77/769). The social report was an autonomous document, summarizing "the main data allowing an evaluation of the firm situation under the environment point of view, the realization of what has been done and the measurement of changes happened in the closing year in comparison to the two previous years". Concretely, the French model did not aim at evaluating actions taken by the firm towards all the stakeholders: the main target group was constituted by the employees. The document therefore shows information concerning employment, salaries, fringe benefits, hygienic and safety conditions, other job conditions, training, industrial relationships, and also employees' and their families' life conditions, if they depended on the firm actions. The aim was basically to give a quantitative foundation of the dialogue among firm partners, allowing to measure the effort in social terms and to a better individuation of goals".

In Germany too, the social report was an autonomous document incorporating information concerning internal and external parties. It was divided into three complementary parts: social report which was a description enriched by statistics concerning goals and firm performances, and as far as it is possible, concerning output, achieved by social activities; value-added calculation which represented the link between the document and the traditional income statement; social accounting, the expression in amounts of quantifiable social expenses.

The acceptance of the preparation of the social report as an autonomous document – according to these two models – French and German – implies the radical discussion of the ability of financial statements to represent the satisfaction of stakeholders' needs. For this purpose, a specific tool predisposed according to a different logic appears to be necessary. Financial information seems to represent "technical considerations, hardly understandable" and that they are a result of a somehow "not reliable and not clear alchemy". The preparation of an autonomous social report seems to bring to the idea of the firm as a supportive organization which has to give back something to every interested part, but, isolating one of the aspects of the firm's life, the risk to lose the systemic vision gets higher.

The English approach was different from the French and German ones and closer to what the idea of an integrated reporting. The social responsibility of the firm is considered here not only in terms of "internal social" – relationship with employees – but above all in terms of "external social" - relationship with customers, suppliers, the environment. In 1937, the Confederation of British Industry predisposed a report on public firms social responsibilities. The document stressed the permanent validity of the profit parameter in judging the success or the failure of a company and therefore it considers the pursue of profit as one of the main firm goals. It is specified, though, that it does not represent the only one and even if others are not specified, it is pointed out that firms and individuals, too, have functions, moral obligations and duties going beyond the pursue of profit and of specific legal requirements. The success in pursuing these different obligations and functions is therefore not necessarily measurable in terms of profit. The overall success of the firm must be evaluated by referring to the ability to achieve a balanced set of goals. In order to evaluate this kind of ability, the AASC (Accounting Standards Steering Committee) suggests the need to introduce other *indicators of behaviors* in firm reports, so that its social behavior towards community and national interest is expressed. AASC also stresses the existence of the right of an increasing number of social groups to receive information about the firm. A global approach to economic and social issues and to the substitutions of profit with the idea of maintenance of activities and of the elimination of waste in developing. The balance system based on this approach in structured into three fundamental parts (Douman 1975): an environmental section, concerning resources, physical working conditions, internal and external pollution; the traditional economic and financial section; a social and employees section, concerning attitudes and human relationships and including considerations on community welfare. The English approach, too, stressed the need for adding *behavior indicators* to report about the initiatives taken in favor of stakeholders. Focus is therefore again on value distribution.

b. The position of the US accounting bodies.

4.3.1. The "Model of Business Report" by AICPA in mid-nineties

It is important to examine the position of official accounting institutions about the issue we are here examining. American institutions paid remarkable attention to it.

The American Institution of Certified Public Accountants (AICPA) constituted in 1991 a specific Committee to predispose a report on disclosure (financial statements), evidencing the ways to increase its quality. The Committee did not represent an autonomous standard-setting body, but its relevance was remarkable, because it worked in conjunction with the Financial Accounting Standards Board (FASB – the American accounting standard-setting body), the SEC and other important institutions.

The Committee completed the document "Improving business reporting. A customer focus" at the end of 1994. According to it, the business report, that is the financial statements, has a central role in supporting the capital allocation decisions. For this reason, the related financial information is certainly critical. The Committee undertook a comprehensive study to determine the information needs of users to identify the types of information most useful in predicting earnings and cash flows for the purpose of valuing equity securities and assessing the prospects of repayment of debt securities or loans. The Committee designed the study to ensure that the findings were representative of a broad group of users and to distinguish between the types of information users really need and the types that are interesting but not essential.

The fast-paced changes in the firm environmental conditions and their width make financial statements obsolete, because they are not able to supply the requested information. According to the AICPA Committee, this is a big challenge. Firms are learning that flexibility is important to survive and that continuous change is becoming the new rule (AICPA 1994).

Therefore, even the business report – and the firm it describes – should be modified, in order to be updated according to continuously evolving needs of the users and to concretely face them. Anyway, Jenkin's study indicated that financial statements are an excellent model for capturing and organizing financial information. They package information in a structured fashion that permits analysis of a wide range of trends and relationships among the data. These trends and relationships, in turn, provide considerable insight into a company's opportunities and risks, including growth and market acceptance, costs, productivity, profitability, liquidity, collateral and many others. It is relevant the conclusion of the Committee: "no user suggested that financial statements should be scrapped and replaced with a fundamentally different means of organizing financial information".

The Committee document puts in evidence that people preparing financial statements would obtain a better result in forecasts of changes if:

a) they focused on information needs of third parties, whom information is destined to, by looking for efficient solutions to align them with the information contained in the financial statements;

b) they developed a reference model to supply such information and to maintain it constant in time;

c) they adopted a long-period logic, trying to understand the possible future evolution of third parties' needs, whom the document is directed to.

It is extremely interesting for us to describe the very operative rules suggested in mid-nineties by AICPA to modify financial statements towards the above direction. It is said that a larger number of piece of information on the future firm plans should be given. Opportunities, risks and uncertainties, characterizing the firm management, should be illustrated, the attention of analysts is focused on the future, but financial statements focus is on the past. Even though information concerning the past can constitute a good indicator of future evolution, analysts need forward-looking information. Basically, the Committee recommends to disclose some indications on the pursued strategy, so that reasonable forecasts on future scenarios are made possible. In this way, the users' need to "see the firm through management's eyes" and, therefore, to understand the point of view of people governing the firm and the direction where they will drive it, is satisfied.

Moreover, it is necessary to better focus on long-term value-creating factors, through non financial measures indicating the "performance" of most critical firm processes. For instance, the inclusion of customer satisfaction indicators is encouraged. This is a critical step because it stresses the idea coming from management tradition that performance measures evaluating the ability of the firm to confers resources into functional elements – using Lorino's terminology – are relevant and therefore should enter the disclosed financial statements. Winners in the marketplace are the companies that are focusing on the customer, stripping away low value activities, and forming new alliances with suppliers, customers (and even competitors). They are setting the pace for others that must, in turn, re-examine their business in light of the increased competition.

It is suggested to try to better align the level and completeness of disclosed information to internal information, reported to senior managers for corporate governance purpose. In the United States the balanced scorecard and other measurement models are widely used for corporative governance purposes. It is therefore desirable that other indicators, concerning different perspectives – customers, internal processes, growth – are also communicated to external parties wishing to express a judgment on the future of the firm. Management should identify measures it believes are significant and meaningful to its business and that are leading indicators of a company's future.

In 1994 AICPA Jenkins' Committee presents a *"Model of Business Report - Major Components"* (Fig. 1) which is intended to be a proposal to compose annual reports useful to the readers. To reach the goal financial information should represent only a part of the story told and non-financial data represented by performance measurements and high-level operating data that management uses to manage the business need to be disclosed together with: management analysis of the information given, a set of forward looking specific information about plans, risks, opportunities, information about management and shareholders, and the background of the company.

I. FINANCIAL AND NON FINANCIAL DATA

A. Financial statements and related disclosures;

B. High-level operating data and performance measurements that management uses to manage the business.

II. MANAGEMENT'S ANALYSIS OF FINANCIAL AND NON FINANCIAL DATA

A. Reasons for changes in the financial, operating, and performance-related data, and the identity and past effect of key trends.

III. FORWARD LOOKING INFORMATION

A. Opportunities and risks, including those resulting from key trends;

B. Management's plans, including critical success factors;

C. Comparison of actual business performance to previously disclosed opportunities, risks, and management's plans.

IV. INFORMATION ABOUT MANAGEMENT AND SHAREHOLDERS

A. Directors, management, compensation, major shareholders, and transactions and relationships among related parties.

V. BACKGROUND ABOUT THE COMPANY

A. Broad objectives and strategies;

B. Scope and description of business and properties;

C. Impact of industry structure on the company.

Figure 1. Model of Business Report (AICPA 1994)

High-level operating data and performace measurements that management uses to manage the business will vary by industry and company. Management should identify those measures that it believes are significant and meaningful to its business, and that are leading indicators of the company's future. Non-financial information is important to understanding a company, its financial statements, the linkage between events and the financial impact on the company of those events, and predicting the company's future. Generally the disclosure of non-financial would be of quantitative measurements, assuming those measurements are sufficiently reliable for external presentation; however, companies should supplement quantitative measurement disclosures with qualitative discussions where meaningful. They help users identify trends affecting a business and thereby provide users with a forward looking perspective. Operating data are statistics about a company's business activities, excluding data reported in financial statements and related disclosures, which the Committee considers to be financial data. Operating data may be denominated in terms of a currency or in terms of units of products or service, number of employees, units of time, and others. Performance measures are data about a company key business processes. For example, they relate to the quality of products and services, the relative cost of activities and the time required to perform key activities, such as new product development. The distinction between operating data and performance measurements is unimportant and some measures may fall in both categories. For example, productivity measures, such as the ratio of outputs to inputs, are both an operating statistic and a performance measure.

4.3.2 The document "Improving business reporting: insights into enhancing voluntary disclosures" by the FASB at the beginning of the new century in 2001

The publication of the document "*Improving Business Reporting – A customer focus*" in 1994 represented the starting point for the subsequent FASB research. In fact, in 1998 the body appointed to establish the US accounting standards initiated the *Business Reporting Research Project* with the purpose of continuing and extending the research of the Jenkins Committee, endorsing its suggestion whereby a further study of the voluntary information provided by companies would be appropriate. This project resulted in the publication of the FASB document entitled "*Improving business reporting: insights into enhancing voluntary disclosures*" in March 2001. The importance and at the same time the delicacy of this document may be better illustrated by referring to the process that led to its publication. It should, in fact, be noted that the examination of the Jenkins report in 1994 first resulted in the drafting and dissemination of an "*Invitation to comment. Recommendations of the AICPA Special Committee on Financial Reporting and the Association for Investment Management and Research*" in 1996, whereby the FASB itself disseminated the AICPA document and requested comments with reference to certain specific questions. The first and most important topic brought to the attention of the business community was the following: "*Should the FASB broaden its activities beyond financial statements and related disclosures to also address the types of non-financial information that would be included in a comprehensive business reporting model? Respondents' preliminary views about the committee's suggested concepts, elements, constraints, or other aspects of the Committee's model will be important input to the Board's consideration of the Committee's recommendations*". The responses obtained were for the most part negative: the information was certainly considered useful, but the rigid regulation of non-financial disclosures was not considered appropriate, nor was the obligation to adapt to new and probably very complex rules (FASB 2001) viewed favourably. Despite this, those in charge of the FASB, convinced of the need to oversee a topic deemed significant also by respondents, decided to do something new and different. Instead of moving, as usual, towards the drafting of a document having normative value, a broad research project involving many parties and concerning a large number of companies in various sectors was planned. At the end of the research, the publishing of a report without the value of an accounting standard but that would in any case represent a useful point of reference for companies was proposed. The 2001 document thus assumes a very particular role since it was issued by the FASB as an accounting standard, while the contents provide simple "examples of good communication" that therefore have no normative value. The document states that: "*The objective of this Report is to help companies improve their business reporting. By providing evidence that many leading companies are making extensive voluntary disclosures and by listing examples of those disclosures, the Steering Committee expects that more companies will undertake or expand their efforts of providing voluntary disclosures. The examples in this Report provide helpful illustrations of such voluntary disclosures. They do not present a list of recommended disclosures. Individual companies will need to determine their own appropriate, relevant, and useful voluntary disclosures*." Once again, the FASB encourages companies to improve disclosure and attempt to provide the categories of information illustrated in the document, information considered useful for current and potential investors to decide whether to invest or continue investing in the company.

The document "*Improving business reporting: insights into enhancing voluntary disclosure*" is not a FASB accounting standard and therefore does not require companies to provide non-financial information. On the contrary, the FASB wishes: on one hand to provide an example to follow, a possible "specific reference model for the sector"; on the other hand to suggest to companies a method for defining their own voluntary disclosure model.

The research conducted by the FASB involved sixty five experts cautiously selected and concerned between six and nine major companies each belonging to the following eight sectors: automotive, chemical, IT, food, petroleum, pharmaceutical, banking and textile. They were organized into five working groups responsible for the analysis of financial statements, as well as other documents issued by the companies in various situations (for example, quarterly reports, SEC filings, press releases, fat books, transcripts of presentations to shareholders, analysts and potential investors, websites). The groups worked under the coordination of the Steering Committee. The non-financial information contained in the documents examined was classified under six categories, five of which (the first) taken directly from the *Comprehensive business reporting model* of the AICPA: Business data; Management's analysis of business data; Forward-looking information; Information about management and shareholders; Background about the company and Information about intangible assets. In the report, best practices for each sector and each of the categories of analysis are provided, that is examples of particularly significant non-financial information found in the financial statements analysed and therefore considered useful for the reader are shown in specific tables.

The Report provides a "*framework for providing voluntary disclosures*", i.e. it suggests to companies a logical process for identifying information material for investors or in other words that may be useful for investors and deciding whether the communication thereof is advisable or not. This framework is described in the following terms: "*1) identify the aspects of the company's business that are especially important to the company's success; these are the critical success factors for the company; 2) identify management's strategies and plans for managing those critical success factors in the past and going forward; 3) identify metrics (operating data performance measures) used by management to measure and manage the implementation of their strategies and plans; 4) consider whether voluntary disclosures about the company's forward-looking strategies and plans and metrics would adversely affect the company's competitive position and whether the risk of adversely affecting competitive positions exceed the expected benefit of making the voluntary disclosure; 5) if disclosure is deemed appropriate, determine how best to voluntarily present that information; the nature of metrics presented should be explained, and those metrics should be consistently disclosed from period to period to the extent they continue to be relevant"*. The committee suggests proceeding by identifying the critical success factors of the company and understanding the relevant operative data performance measures used by the management to oversee the same. The non-financial measures used to govern the company and therefore for internal management purposes should be externally communicated consistently with the need to protect the competitive position of the company itself.

The document gives attention to the relevant topic of the competitive value of external communication. This is a highly interesting passage as it shows in summary the main benefits and costs of voluntary disclosure. Among others, the following main potential benefits are pointed out: "*lower average cost of capital; enhanced credibility and improved investor relations; likelihood that they will make better investment decisions (as user of other companies financial statements); lesser danger of litigation alleging inadequate informative disclosure and better defences when such suits are brought."* Then, the following main potential costs are identified: "*competitive disadvantage from their informative disclosure; bargaining disadvantage from their disclosure to suppliers, customers, and employees; litigation from meritless suits attributable to informative disclosure"*. The subject of loss of competitiveness of companies that voluntarily provide non-financial information is expressly addressed by the FASB. In particular, three factors resulting in this undesired effect are identified, these being the type of information, the level of detail in which the information is provided and the criticality of the moment in which the information is communicated. Although it is pointed out that this is a problem with no simple solution, which requires the judgement of the company, the need to improve and increase voluntary disclosure is clearly endorsed: "*In any case, the ability to limit disclosures of competitively sensitive information should not be used as an excuse to avoid making required disclosures"*. Such improvement will certainly be necessary in order to compete in the changing context of the XXI century as: "*...business environment is changing dramatically, and at an accelerating pace. These rapid changes, some of them massive in nature, will manifest themselves as increasing and changing demands for business information and a larger role for voluntary disclosures. Accompanying this will be an increasing ability to supply more information. In addition, the existing regulatory and standard-setting systems will in all likelihood struggle to keep up with the changes. (...) One result will certainly be a demand for more thorough and reliable disclosure of information that will be helpful to investors in an increasingly complex and confusing marketplace"*.

4.4 The introduction of non-financial information in European Financial Reporting provided by Directive 2003/51/EC

Policymakers have taken the issue into serious consideration. On 13 February 2001, the European Commission presented a proposal for a regulation (COM 2001/0044/EC) on the application of international accounting standards. The regulatory instrument was chosen since, unlike directives, it is binding in its entirety and directly applicable in all Member States without the need for implementing measures and without the option of introducing national variants.

The obligations arising from the regulation being issued, in relation to the consolidated financial statements of listed companies, would be added to the requirements of the Accounting Directives, which ensure a basic level of comparability for all European Union companies. At the same time, also thanks to the power granted to individual Member States to require or allow the use of IAS/IFRS for the unconsolidated financial statements of unlisted companies, the latter would also be incentivised to transition from the minimum requirements of the Accounting Directives to more sophisticated forms of financial reporting.

In implementation of the proposal of the Commission, on 19 July 2002 the European Parliament and the Council issued Regulation EC No. 1606/2002, which provided for: the *obligation* to adopt IAS/IFRS and the related SIC Interpretations for the *consolidated financial statements* of *companies listed* on regulated markets in Europe; the effective date of this requirement for reporting periods starting from 1 January 2005; the *possibility* for Member States to allow or require the use of IAS/IFRS for the *annual financial statements* of *listed companies* as well as the *consolidated and/or annual financial statements* of *unlisted companies*. Following the approval of EC Regulation No. 1606/2002, a scenario was outlined whereby certain financial statements would be prepared in accordance with IAS/IFRS, while others would continue to consider the EU directives as the normative source. The European Parliament and the Council deemed it necessary to reduce the differences between the accounting information provided by the companies applying IAS/IFRS and that provided by the companies applying the EU standards and the related implementing provisions. For this purpose, on 18 June 2003, Directive 2003/51/EC was issued amending Directives 78/660/EEC (IV Directive), 83/349/EEC (VII Directive), 86/635/EEC (already amended by Directive 2001/65/EC) as well as 91/674/EEC, on the annual and consolidated accounts of insurance companies, to make them consistent with international accounting standards.

In particular, Directive 2003/51/EC: a) enables Member States to change the presentation of the profit and loss account and balance sheet in accordance with IAS/IFRS, with particular reference to the substance of the transaction or agreement recorded as well as the distinction between current and non-current items; b) enables Member States to allow or require the application of revaluations and fair value in accordance with IAS, also for assets other than financial instruments; c) *enables Member States to require the inclusion of non-financial information in the management report, such as environmental and social information;* d) requires common content of the audit reports of financial statements; e) enables Member States to allow or require insurance companies to use valuation at fair value for certain assets.

For the purposes of this study, it is of great interest to point out that also in Europe, precisely on the occasion of the introduction of international accounting standards to the national legislation of all Member States, the concept of "non-financial information" was expressly introduced for the first time. Even an EU Directive sanctions the importance thereof, including the same as one of the key points of change needed in order to make the annual and consolidated accounts consistent with international accounting standards. More than a decade of study abroad thus finally achieved official recognition even in the old continent.

It should be noted that in addition to recognizing the usefulness of non-financial information, explicitly listing this among the essential elements each Member State were required to focus its attention on, the EC Directive also suggests where the same should be reported. Not in a voluntary annex, as is sometimes suggested by practice and doctrine, but rather in the Directors Report or Management Commentary(Riva 2001). As an example of implementation we can consider legal information requested by the Italian law in the Directors Report after the introduction of the directive. Art. 2428, c 1 c.c. clearly ask directors to disclose in a balanced, fair and complete way about the company actual situation and forecasted performance if necessary referring the analysis to different sectors and describing main risks and uncertainties the firm is exposed to. Art 2428, c 2 c.c. highlight the importance of the request to directors making it plain that the report must be "customer oriented" giving to readers all the information necessary to understand firm condition. To reach the goal the law asks to disclose not only "finance" information but also "non-finance" information adding that these will certainly be specific for the firm activity and recalling directly among the others the measures giving details about environment and employees. More than this art.2428, c 3, n. 6 c.c. asks again to disclose about "the conditions of the firm, their evolution…and a reasonable forecast" and finally art. 2428, c 2, n. 1 c.c. request to put in evidence "research and development activities" carried out in the accounting period which is actually to give an evidence of the internal innovative processed.

4.5 The position of the International Accounting Standard Board

4.5.1. The "Conceptual framework for the Financial Reporting" by IASB and FASB in 2008

Historically, the IASB has focused its activities on the development of global accounting standards relating to financial statements. However, the *Constitution* of the IASC Foundation – paragraph 2 - provides for a broader focus in its first objective, which is to develop, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and *other financial reporting* to help participants in the world's capital markets and other users make economic decisions. This objective is repeated in the *Preface* to International Financial Reporting Standards (IFRSs), which states within the section entitled '*Scope and authority of International Financial Reporting Standards*' that other financial reporting comprises information provided outside financial statements that assists in the interpretation of a complete set of financial statements or improves users' ability to make efficient economic decisions.

In September 2008 an Exposure Draft "*An improved Conceptual Framework for Financial Reporting*" has been prepared as part of a joint project by the International accounting Standard Board together with the US Financial Accounting Standards Board and it sets out the boards' proposals for two chapters (*Chapter 1 "The Objective of Financial Reporting" and Chapter 2 "Qualitative Characteristics and Constraints of Decision-useful Financial Reporting Information"*) of their proposed common framework. It is worth add that the process started in July 2006 when the Board published for public comment a discussion paper on the topic and that same paper was also published by the FASB.

The two Boards jointly point out – in paragraph OB25 of the 2008 Exposure Draft – that financial reporting should include *Management's Explanations* and other information needed to enable users to understand the information provided. The Boards acknowledges that Management's Explanations of the information in financial reports enhance the ability of capital providers to assess the entity's performance and form expectations about the entity. Management knows more about the entity than external users and can often increase the usefulness of financial reports by identifying and explaining particular transactions and other events and circumstances that have affected or may affect the entity. In addition, financial reporting often provides information that depends on, or is affected by, management's estimates and judgments. This is why capital providers are better able to evaluate financial information when they are provided with management's explanations of underlying assumptions or methods used, including disclosure of significant uncertainties about principal underlying assumptions or estimates.

IASB and FASC published separately in June 2010 the final Document "*Conceptual Framework for the Financial Reporting*". In both editions of it published on International Accounting Standard and US Financial Accounting Standard websites, paragraph OB25 has been omitted, but meanwhile a specific Document dedicated to "*Management Commentary*" was on his way to be issued. This last was prepared on the basis that Management Commentary lies within the boundaries of financial reporting because it meets the definition of "*other financial reporting*".

4.5.2. The IFRS Practice Statement "Management Commentary. A framework for presentation" by IASB in 2010

The international Accounting Standard Board at the end of the first decade of the century – exactly on December 2010 - has issued a document called "*Management Commentary. A framework for presentation*" following the path used for standards even if it is a Practice Statement and not an IFRS. Indeed the process started with the release in October 2005 of the "*Discussion Paper. Management Commentary. A paper prepared for the IASB by staff of its partner standard-setters and others*" and then in June 2009 of the "*Exposure Draft ED/2009/6. Management Commentary*". The final 2010 Practice Statement provides a broad, non-binding framework for the presentation of management commentary that relates to financial statements that have been prepared in accordance with International Financial Reporting Standards (IFRSs). Consequently, entities applying IFRSs are not required to comply with the Practice Statement, unless specifically required by their jurisdiction. Furthermore, non-compliance with the Practice Statement will not prevent an entity's financial statements from complying with IFRSs, if they otherwise do so.

It is convenient to start the analysis by first considering the contents of the "Discussion Paper". It recalls "*IASB Framework for the Preparation and Presentation of Financial Statements par 13"* which clearly declares that financial statements are not, of themselves, sufficient to meet the objectives of financial reporting. To bridge the gap between what financial statements are able to achieve and the objectives of financial reporting it may be necessary for the financial reports to include additional information (IASB 2005, par 6). The Board considers requiring the disclosure of "*other information"* to help the financial reports meet their objective. However, the Board point out that this will be achieved only if companies provide clear and meaningful information, and avoid boiler-plate disclosures. The Board points out that the term boiler-plate in this context means a unit or section of writing that can be reused over and over without change. An entity could, for example, make a statement that 'it operates strong corporate governance practices'. This would be considered a boiler-plate statement because it is generic and does not relate the practices to the circumstances of the entity (IASB 205, par 7).

The role of *Notes accompanying the financial statement* is discussed and it is cleared out that they provide an investor with information that is essential to an understanding of the primary financial statements and their elements, whether recognised or not. On the contrary *Management Commentary – or MC* – provides an investor with information that puts the financial statements into the context of the entity and its operating environment. *Management Commentary* supplements and complements financial information, providing insights into an entity's performance that financial statements cannot, and should not, be expected to achieve on their own. This might be achieved through the presentation of non-IFRS financial information and non-financial information *tout cour*. IASB views Management Commentary as the primary component of the information within the term "*other financial reporting provided outside the financial statements*". It is information that accompanies financial statements as part of an entity's financial reporting. It explains the main trends and factors underlying the development, performance and position of the entity's business during the period covered by the financial statements.

It also explains the main trends and factors that are likely to affect the entity's future development, performance and position (IASB 2005, par 19).

The Discussion Paper clears out that Financial Reporting is a system of documents and it is composed by:

- the *Financial Statements* including Primary Financial Statements which comprise a balance sheet, an income statement, a statement of changes in equity and a cash flow;
- and the *Management Commentary*.

The 2010 Practice Statement finally defines the Management Commentary as *a narrative report that provides a context within which to interpret the financial position, financial performance and cash flows of an entity. It also provides management with an opportunity to explain its objectives and its strategies for achieving those objectives. Users routinely use the type of information provided in management commentary to help them evaluate an entity's prospects and its general risks, as well as the success of management's strategies for achieving its stated objectives. For many entities, management commentary is already an important element of their communication with the capital markets, supplementing as well as complementing the financial statements.*

To reach the goal management are requested to provide management's perspective of the entity's performance, position and progress, disclosing those information that is important to management in managing the business. These include *non-financial factors* which have influenced the information presented in the financial statements. Such information explains management's view not only about what has happened, including both positive and negative circumstances, but also why it has happened and what the implications are for the entity's future. More than this the statement asks explicitly to disclose *forward-looking information* aimed at communicate management's perspective of the entity's direction. This last are defined as information about the future as prospects and plans that may later be presented as historical information. This is why management is asked to explain also how and why the performance of the entity is short of, meets or exceeds forward looking disclosures made in the prior period management commentary.

Information in Management Commentary should possess the fundamental qualitative characteristics of relevance and faithful representation. Information in management commentary should also maximise the enhancing characteristics of materiality, comparability, verifiability, timeliness and understandability. It should be clear and straightforward focusing on the most important information and avoiding to be immaterial giving boiler-plate discussion and to duplicate disclosures already made in the Notes.

The IASB asks to include five elements in the structure of the Commentary.

- Management should provide a description of *the nature of the business* to help users of the financial reports to gain an understanding of the entity and of the external environment in which it operates. That information serves as a starting point for assessing and understanding an entity's performance, strategic options and prospects.
- Management should disclose its *objectives and strategies* in a way that enables users of the financial reports to understand the priorities for action as well as to identify the resources that must be managed to deliver results. For example, information about how management intends to address market trends and the threats and opportunities those market trends represent provides users of the financial reports with insight that may shape their expectations about the entity's future performance. Management should also explain how success will be measured and over what period of time it should be assessed.
- Management commentary should include a clear description of the most important *resources, risks and relationships* that management believes can affect the entity's value and how those resources, risks and relationships are managed. Management commentary should set out the critical financial and non-financial resources available to the entity and how those resources are used in meeting management's stated objectives for the entity. Management should disclose an entity's principal risk exposures and changes in those risks, together with its plans and strategies for bearing or mitigating those risks, as well as disclosure of the effectiveness of its risk management strategies. This disclosure helps users to evaluate the entity's risks as well as its expected outcomes. Management should identify the significant relationships that the entity has with stakeholders, how those relationships are likely to affect the performance and value of the entity, and how those relationships are managed.
- Management commentary should include a clear description of the entity's *financial and non-financial performance*, the extent to which that performance may be indicative of future performance and *management's assessment of the entity's prospects*. Useful disclosure on those matters can help users to make their own assessments about the entity's performance, position, progress and prospects. Management should provide an analysis of the prospects of the entity, which may include targets for financial and non-financial measures. This information can help users of the financial reports to understand how management intends to implement its strategies for the entity over the long term. When targets are quantified, management should explain the risks and assumptions necessary for users to assess the likelihood of achieving those targets.
- *Performance measures* are quantified measurements that reflect the critical success factors

of an entity. *Indicators* can be narrative evidence describing how the business is managed or quantified measures that provide indirect evidence of performance. Management should disclose performance measures and indicators (both financial and non-financial) that are used by management to assess progress against its stated objectives. Management should explain why the results from performance measures have changed over the period or how the indicators have changed. This disclosure can help users of the financial reports assess the extent to which goals and objectives are being achieved. The performance measures and indicators that are most important to understanding an entity are those that management uses to manage that entity. The performance measures and indicators will usually reflect the industry in which the entity operates. Comparability is enhanced if the performance measures and indicators are accepted and used widely, either within an industry or more generally. Management should explain why the performance measures and indicators used are relevant. Consistent reporting of performance measures and indicators increases the comparability of management commentary over time. However, management should consider whether the performance measures and indicators used in the previous period continue to be relevant. As strategies and objectives change, management might decide that the performance measures and indicators presented in the previous period's management commentary are no longer relevant. When management changes the performance measures and indicators used, the changes should be identified and explained.

It results clear that the *2010 IFRS Practice Statement on Management Commentary* recall and refers to the management tradition and quotes many of the aspects already highlighted in 1994 by the AICPA with the "Model of Business Report" and in 2001 by the FASB with its focus on Voluntary disclosure in the document "Improving Business Report". We can indeed say that it represent a clear result of the process here described which changed the role of "*performance measures*" from a strictly private tool to an essential set of information to be necessarily disclosed to be fully compliant with the international Standards and to what is more important to compose decision-useful Management Commentaries (Riva 2001, Menicucci 2012).

4.6 The IASB Management Commentary as a form of Integrated Reporting in accordance to the "IR Framework" by IIRC in 2013

In 2010 starting from the idea of the UK Prince's Accounting for Sustainability Project (A4S) and of the Global Reporting Initiative (GRI) the International Integrated Reporting Committee (IIRC) was launched with the aim to compose new guidelines, sharing the view that communication about value creation should be the next step in the evolution of corporate reporting. A Discussion Paper was distributed in 2011, a Consultation Draft of the document was released in April 2013 open to comment up to July 2013 and finally in December 2013 the *International Integrated Reporting Framework* was issued. The Document defines an Integrated Report as a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term. The primary purpose of an Integrated Report is indeed to explain to providers of financial capital how an organization creates value over time. It therefore contains relevant information both financial and other. In the context of the IIRC framework the focus is on the measurement and evaluation of capitals, where the term capitals refers to any store of value that an organization can use in the production of goods and services. The six capitals the IIRC framework proposes are the following: financial, manufactured, intellectual, social and relationship, human, natural. All the capitals are fundamental for the company to operate, as the capitals are ultimately the input of an organization's business model. Through its activity the company is increasing, decreasing or transforming the capitals (Busco Frigo Riccaboni Quattrone 2013).

It is interesting for our purposes to consider that the process which took to the final version of the document investigated the perceived interaction of the proposed Integrated Reporting with other reports and communications. Many respondents expressed concern about whether an Integrated Report is an additional report or whether the Framework applies to existing reports, as an enhancement of annual or regulated reports. Respondents requested that the relationship between integrated and other reports such as sustainability and financial reports be clarified (Summary of Significant Issues, 2013) to understand how an Integrated Report aligns with, refers to and avoids duplication with other reports and disclosures.

As a result some contents of the Framework have been changed to deal with the requests. In particular paragraph 1E "*Form of report and relationship with other information*" first recall that an integrated report *should be a designated, identifiable communication* and that it is intended to be more than a summary of information in other communications (e.g., financial statements, a sustainability report, analyst calls, or on a website) as, rather, it makes explicit the connectivity of information to *communicate how value is created over time*.

Immediately after it is clarifies that integrated report may be prepared in response to existing compliance requirements. For example, an organization may be required by local law to prepare a *Management Commentary* or other report that provides context for its financial statements.

In those cases the Framework plainly acknowledges that *if that report – i.e. the Management Commentary - is also prepared in accordance with the IR Framework it can be considered an Integrated Report.* If the report is required to include specified information beyond that required by this Framework, the report can still be considered an integrated report if that other information does not obscure the concise information required by this Framework. In other words an Integrated Report may be either a standalone report or be included but as a distinguishable, prominent and accessible part in another report or communication. For example, it may be included at the front of a report that also includes the organization's financial statements.

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THE EFFECT OF THE TYPE OF CONTROLLING SHAREHOLDERS AND CORPORATE GOVERNANCE ON REAL AND ACCRUALS EARNINGS MANAGEMENT

Surifah*

Abstract

This research investigates the relationship between corporate governance and preference of earnings management selected by Indonesian banking controlling shareholders. This study uses all banks listed on Indonesian Stock Exchange from 2006 until 2011 as samples.
The result shows higher real earning managements and lower accruals discretionary in family-controlled banks and private institution compared to government-controlled banks. Government-controlled banks prefer accrual-based earnings management and real activity-based earnings management through operating cash flow. In the other hand, family-controlled banks and private institutions prefer real earnings management through interest expense and discretionary expenses. Foreign-controlled- banks choose earnings management through discretionary expenses.
The implementation of corporate governance in Indonesia banking is high and giving negative impacts both to accrual and real-based earnings management. Concentrated ownership gives positive influences toward the accrual earning management and real earning management through discretionary expenses. The bank size has a positive and significant influence on accrual earnings management, yet its effect is negative and significant on real earning management through interest expenses.
The findings contribute to the development of financial accounting literatures because there are small numbers of previous research on accrual discretionary on family-owned companies. Company does not indicate the increase of earnings quality, but it is indeed indicating that controlling family pays more attention on choosing the real activity-based earnings management to cover the expropriation. Accrual discretionary-based earnings management is intra-period reversely thus it cannot cover the permanent expropriation of controlling owners. The research also contributes to the studies of real-based earnings management measurement in banking system which has not been become a concern of research on previous studies.

Keywords: Corporate Governance, Earnings Management, Type of Controllers

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1 Introduction

Except of United States (US) and United Kingdom (UK), almost all corporations all over the world have a structure of concentrated-ownership and controlled by family (La Porta et al., 1999). The similar structure is also found by Faccio and Lang (2002) in West Europe, except of England and Finland, Latin America, especially Brazil (Roger et al. 2007), and in East Asia, except of Japan (Claessens et al. 2000; and Du and Dai 2005). Indonesia has the similar structure of corporation ownership that is concentrated and controlled by controlling shareholders (Claessens et al. 2000; Fan and Wong 2000; Lukviarman 2004; Siregar 2006; and Sanjaya 2010).

The ownership pattern of corporation which is concentrated and controlled by the controlling shareholders causes agency conflict. It happens because the controlling shareholders tends to give a strong incentive to expropriate corporation's source on minority of non-controlling shareholder (Villalonga and Amit, 2006). The controlling shareholders in Mexico expropriate more than one third of corporation value (Gilson, 2006). This phenomenon also occurs in Indonesia banking case, for example the liquidation of 16 banks in November 1997 and 7 banks suspended its operations in April 2008, Summa Bank liquidated on December 2000, and Century Bank is considered as a failed bank on November 20, 2008 (BPK RI 2009).

Agency conflict between controlling and non controlling shareholder bank has a potential to influence the practice of earnings management. Previous researches find that family control has a negative influence on accrual discretionary-based earnings management (Ali et al. 2007; Atmaja et al. 2011; Bhaumik and Gregoriou 2010; Jiraporn and Dadalt 2009; and Tong 2008), but a strong notion on shareholder entrenchment exists (Achmad et al. 2009; Oswald et al. 2009; and Sanjaya 2011).

Controlling shareholders probably prefers concealing its private benefits by employing real activity-based earnings management than to use accrual discretionary because accrual-based earnings management is intra-period reversely, thus it cannot conceal permanent private benefits taken by controlling shareholder. Therefore, this research assumes that the type of controlling shareholders have an effect on earnings management practice.

However, the crisis which began in the middle of 1997 caused most of Indonesia public corporations facing disadvantages. The disadvantages appeared due to the non-existence of good corporate governance (Nam and Nam 2004). Therefore many regulations were issued on corporate governance[14]. The implementation of various regulations on corporate governance is expected to be able to protect expropriation by controlling-shareholder and restrict the action of opportunistic earnings management.

Previous researches find the inconsistency on the relationship between corporate governance and earnings management. Corporate governance can restrict earnings management, as stated by (Atmaja et al. 2011; Chtourou et al. 2001; Kang and Kim 2011; Machuga and Teitel 2007; Xie et al. 2002). Corporate governance has a positive influence on earnings management, this statement is investigated by Shah et al. (2009) and Zhao and Chen (2008). Based on the results of previous researches and government's efforts to improve corporate governance, this research assumes that the implementation of corporate governance can restrict the earnings management in Indonesia banking.

This paper contributes to the literature on earnings management, specifically on: 1) the measurement of real activity-based earnings management in banking system and 2) issues about the preference of controlling shareholders on banking industry in selecting earnings management (accrual discretionary or real activity) which have not earned sufficient attention from previous researches.

2 Literature Review and Hypothesis Development

This research based on type 2 of agency theory. This theory explains that agency conflict can occur between controlling shareholders and non controlling shareholders (Lukviarman 2004; Rogers et al. 2007; Zhu and Ma 2009). If controlling shareholders want to maximize their interest, they will expropriate company resources by sacrificing the interest of non controlling shareholders. Therefore this research assumes that there is a relationship between controlling shareholders, corporate governance, and earnings management.

2.1 Controlling Shareholders and Earnings Management

The main issue on corporate governance in spread ownership is agency conflict between the principal and agent (Morck and Steier 2005), whereas the issue of corporate governance in concentrated ownership and control is agency conflict between controlling shareholder and non-controlling shareholder (Achmad et al. 2009; Almeida and Wolfenzon 2006; Claessens et al. 2002; Giovannini 2010; La Porta et al. 2002; Morck and Yeung 2003; Oswald et al. 2009; Villalonga and Amit 2006; and Zhu and Ma 2009). This agency conflict has a potential to influence financial report in the form of earnings management.

Earnings management is a choice of accounting policies or actions affecting earnings made by a manager, so as to achieve some specific earnings objective (Scott 2012). Earnings management consists of the selection of accounting policy and real activity. The example of earnings management with accounting policy are the selection of depreciation and amortization method, the timing income recognition, and accrual discretionary policy such as recognition of guarantee expense and research and development expenses.

Earnings management based on real activity covers the activities such as advertising expense, research and development, maintenance, and purchase and disposal permanent assets (Scott 2012). Roychowdhury (2006) defines real earnings management as departures from normal business practice aims to meet reporting goals. Manipulation on real activity can be conducted by discounting price and reducing discretionary expenses.

Previous research on the relationship between controlling shareholders and earnings management indicates the inconsistent result. Tong (2008) study on family-owned corporations in US indicates that the companies have 1) lower absolute discretionary accrual, 2) smaller positive earnings surprises, 3) relatively higher earnings information, and 4) lower restating earnings compared to non-family corporations. Jiraporn and Dadalt (2009) support Tong's finding (2008) that family-owned corporations in US have lower abnormal accruals levels compared to those non-family owned corporations. Atmaja et al. (2011) investigates the managers of family-owned corporation in Australia, and find that the managers are less aggressive in managing earnings by employing long term accrual discretionary compared to non-family owned corporations.

Siregar and Utama (2008) use accrual earnings management and find that earnings management types chosen by corporations listed in Indonesia Stock

14) Regulation on CG for example Minister Decree of State-Owned Enterprises Number 5 of 2006 about the audit board for State-Owned Bank of Indonesia regulation No8/14/2006 on the implementation of GCG for general banks, Capital Market Executive Agency Decree No. Kep-29/pm/2004 on the establishment and guideline to the implementation of audit board performance.

Exchange tends to adopt the efficient earnings management than to opportunist earnings management. Corporations controlled by controlling shareholders relates to the high level of financial report misclassification Haw et al. (2011). Insiders' ownership has significantly positive influences on accrual discretionary-based earnings management in Jordan Al-fayoumi et al. (2010). Based on above literatures, this research assumes that the type of controlling shareholders has an effect on earnings management. Therefore the first hypothesis of this research is: the type of controlling shareholders has an effect on earnings management.

2.2 Corporate Governance and Earnings Management

Brickley and Zimmerman (2010) state corporate governance in a large scope as a law system, regulation, institution, market, contract, policy, and corporation procedure (like internal controlling system, policy guide, and budget) that directly influences the actions of decision makers (shareholder, boards of directors, and management).

Atmaja et al. (2011); Chtourou et al. (2001); Kang and Kim (2011), and Xie et al. (2002), found that audit committee and boards of directors activities, and members' of boards financial experiences are important factors to limit the tendency in performing earnings management. Machuga and Teitel (2007) observe that earnings quality increases after the implementation of corporate governance code. This finding shows that corporate governance can restrict the earnings management behaviors which commence the increase of earnings quality. Huang et al. (2008) prove that strong and independent board of directors may act as a sign that corporations' earnings is qualified. Zhao and Chen (2008) find that weak board of director may cause the managers to enjoy a good life and discourage them to increase corporation value. As a consequence, managers are not motivated to manage earnings. In another case, Shah et al. (2009) indicate positive relationship between corporate governance and earnings management.

Sivaramakrishnan and Yu (2008) indicate that it is a sufficient corporate governance, not the power, that determines the quality of financial report (accrual quality, earnings persistency, and earnings predictability). Jaggi and Tsui (2007) exemplify a positive relationship between earnings management and insider trading after the end of fiscal year. The presence of family members with major ownership in corporation board of director significantly reduces the effectiveness of independent board of director supervision. Therefore the appointment of family members with major shares ownership in the board of director must be avoided in order to increase the independency in the effectiveness of board of director supervision.

A research conducted by Cahan et al. (2008); Chtourou et al. (2001); Huang et al. (2008); Machuga and Teitel (2007); Shah et al. (2009) Xie *et al.* (2002); and Zhao and Chen (2008) employ accrual-based earnings management and find inconsistent evidence on the influence of corporate governance on earnings management. The inconsistency is probably caused by the use of the part of corporate governance mechanism. For example, the use of individual corporate governance mechanism element such as board of directors or audit committee, thus the assessment of corporate governance is less comprehensive. This research measures corporate governance implementation by using index of corporate governance which is more conprehensive (see appendix 1)

Kang and Kim's research (2011) measures corporate governance using index to find evidences that corporate governance can limit the actions of real activity-based earnings management in non-banking and non-financial corporations. This study assumes that corporate governance measured with index in banking will also be able to restrict the action of earnings management. Therefore, the second hypothesis of this research is corporate governance has a negative influence on earnings management.

3 Research Method

This research took a sample from all banks listed in Indonesia stock exchange from 2006 to 2011. Data were collected from annual report, Indonesian Banking Directory, and website of the banks. Data on corporate governance were collected by filling score of corporate governance index.

Research variables consist of earnings management as a dependent variable, types of controlling shareholders, and index of corporate governance as an independent variable. Research control variable used were: 1) percentage of largest shares ownership and 2) size of the bank, which is measured with log asset total.

Earnings management is measured using accrual discretionary and real activity-based earnings management. Real earnings management measurement is derived from Roychowdhury's model (2006), adjusted with banking business. Real earnings management is calculated by regressing operating cash flow, interest expenses, and discretionary expenses, as follow:

$$CFO_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1(IR_t/A_{t-1}) + \beta_2(\Delta IR_t/A_{t-1}) + \epsilon_t \quad (1)$$

$$DE_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta(IR_{t-1}/A_{t-1}) + \epsilon_t \quad (2)$$

$$IE_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1(IR_t/A_{t-1}) + \beta_2(\Delta IR_t/A_{t-1}) + \beta_3(\Delta IR_{t-1}/A_{t-1}) + \epsilon_t \quad (3)$$

Notes:

CFO_t/A_{t-1}	:	Operating cash flow in the year t which is scaled with total assets in the year t-1
$\alpha_1(1/A_{t-1})$	:	Intercept scaled with total assets in the year t-1, thus operating cash flow does not have value 0 when trading and lag trading value 0.
IR_t/A_{t-1}	:	Interest Revenues in the year t scaled with total assets in the year t-1.
$\Delta IR_t/A_{t-1}$	:	Interest revenue in year t minus interest revenue in the year t-1 scaled with assets in year t-1.
IE_t/A_{t-1}	:	Interest Expenses in the year t scaled with total assets in the year t-1.
DE_t/A_{t-1}		Discretionary expenses in the year t scaled with total assets in the year t-1.
α_0		constanta.
ϵ_t		error term in the year t.

From the regression above, the researcher can obtain a normal operating activity cash flow, normal interest expense, and normal discretionary expenses. Earnings management came from operating cash flow, interest expenses, and abnormal discretionary expenses. Therefore, earnings management was calculated by deflating cash flow from real operating activities, actual interest expenses, and real abnormal discretionary expenses with previous year total assets after deducted by operating cash flow, interest expenses, and normal discretionary expenses. Operating cash flow, interest expenses, and normal discretionary expenses are obtained from the equation 1,2 and 3 above.

Accrual discretionary-based earnings management is measured by specific accrual model Beaver and Engel (1996). Non Discretionary Accruals (NDA) is counted with steps:

$$TA_{it} = \alpha_0 + \alpha_1 CO_{it} + \alpha_2 LOAN_{it} + \alpha_3 NPA_{it} + \alpha_4 \Delta NPA_{it+1} + e$$
$$DA_{it} = TA_{it} - [\alpha_0 + \alpha_1 CO_{it} + \alpha_2 LOAN_{it} + \alpha_3 NPA_{it} + \alpha_4 \Delta NPA_{it+1}]$$
$$NDA_{it} = TA_{it} - DA_{it}$$

Notes:

TA_{it}	:	Required regulatory provision on productive total assets of bank i In the year t.
DA_{it}	:	Accrual managed by bank i in the year t.
CO_{it}	:	Loan charge–offs .
LOAN	:	Outstanding loans.
NPA	:	Non performing assets consists of productive assets based on collectability levels: a) Specific oversight, b) Sub Standard, c) Doubtful, and d) loss.
ΔNPA	:	Difference in non performing assets t+1 and non performing assets t + all variables deflated with book value of equity plus provision for doubtful debt. Thus to calculate accrual earnings management for proxy: $Da_{it} = TA_{it} - NDA_{it.}$
NDA_{it}	:	Non discretionary accruals of bank i in the year t.

Corporate governance as an independent variable is measured using corporate governance index (appendix 1). The higher the index score, the better is the corporate governance. The index corporate governance consist of 15 items, that are the independence of the board of directors, the independence of the president director, accounting and financial competences of the independent board of directors, remuneration and other facilities received by the management, the financial relationships and family relationships between board of directors members, management members, and the controlling stockholder, about the auditing committee, nominating committee, corporate governance committee, about related party transaction, company group structure, and internal auditing.

The type of controlling shareholders consisted of family control, domestic private institution control, foreign institution control, and government control. This variable is measured using dummy variable, with government control as an excluded group. The control by Government of Indonesia is the control by central government and regional government. Bank controlled by a private institution is a bank that belongs to private classification and is not classified as a bank controlled by family. The bank controlled by foreign organization or company is a bank owned by a foreign institution and grouped as foreign bank in Indonesian Bank Directory. The bank controlled by family is a bank with individuals or family as the biggest owners and it is mentioned by Bank Indonesia that the bank ultimate ownership is an individual or a group.

The research used panel data multiple regression analysis. The research model can be formulated into:

$$AEM = \alpha + \beta_1 D\_Fam + \beta_2 D\_Priv + \beta_3 D\_Forg + \beta_4 ICG + \beta_5 Largest + \beta_6 Size + \epsilon$$
$$RCFO = \alpha + \beta_1 D\_Fam + \beta_2 D\_Priv + \beta_3 D\_Forg + \beta_4 ICG + \beta_5 Largest + \beta_6 Size + \epsilon$$
$$RIE = \alpha + \beta_1 D\_Fam + \beta_2 D\_Priv + \beta_3 D\_Forg + \beta_4 ICG + \beta_5 Largest + \beta_6 Size + \epsilon$$
$$RDE = \alpha + \beta_1 D\_Fam + \beta_2 D\_Priv + \beta_3 D\_Forg + \beta_4 ICG + \beta_5 Largest + \beta_6 Size + \epsilon$$

Note:

The excluded group is: government control.

AEM	: Accruals earnings management
RCFO	: Real earnings management through cash flow from operation
RIE	: Real earnings management through interest expenses
RDE	: Real earnings management through discretionary expenses
α : Constanta.	
D_Fam	: Dummy family control.
D_Priv	: Dummy private institution control.
D_Forg	: Dummy foreign control.
D_Gov	: Dummy government control
ICG	: Index of corporate governance.
Size	: bank size or log total assets.
Largest	: Largest ownership percentage:Ownership concentration

4 Results

4.1 Descriptive Statistics

Table 1 of descriptive statistics indicates that the largest control respectively are family 73 (41.95%), private institution 58 (33.33%), government 24 (13.80%), and foreign 19 (10.92%). Family-controlled banks including individual is the biggest portion among all types of control.

The maximum value of corporate government index is 14 (93.33%) and the minimum value is 11 (73.33%). This index consists of 15 questions, the higher ICG score the better is the Good Corporate Governance (GCG) implementation. The average score of 13.37 exemplifies that the implementation of GCG in banking system is pretty high i.e. 89.13% (13.37/15). Minimum value, 11 banks, demonstrates the lowest GCG value is 73.33% (11/15). There is no absolute ICG score 100% (15).

Table 1. Descriptive Statistics

Notes	D_Fam	D_Gov	D_Priv	D_Forg	ICG (%)	Largest
Mean	0.425	0.138	0.333	0.109	89.13	0.596
Median	0	0	0	0	90.00	0.573
Maximum	1	1	1	1	93.33	100%
Minimum	0	0	0	0	73.33	0.154
Std. Dev.	0.496	0.346	0.473	0.313	3.068	0.207
Skewness	0.302	2.100	0.707	2.506	-0.914	0.137
Kurtosis	1.091	5.410	1.500	7.281	4.236	2.588
Sum (N)	73	24	58	19		
Sum of N (%)	41,95%	13,80%	33,33%	10,92%		
Observations	174	174	174	174	174	174
Cross sections	29	29	29	29	29	29

Note	SIZE	AEM	RCFO	RIE	RDE
Mean	13.248	-0.065	-0.017	0.029	-0.051
Median	13.213	-0.181	-0.072	0.101	-0.144
Maximum	14.949	2.965	2.983	2.974	2.991
Minimum	11.621	-1.312	-2.923	-2.973	-0.719
Std. Dev.	0.781	0.544	0.932	0.828	0.528
Skewness	0.098	3.234	0.423	-1.176	3.204
Kurtosis	1.950	18.357	5.031	7.363	17.416
Observations	174	174	174	174	174
Cross sections	29	29	29	29	29

Note: AEM: Accruals earnings management, RCFO: Real earnings management through cash flow from operation, RIE: Real earnings management through interest expenses, RDE: real earnings management through discretionary expenses, largest: ownership concentration.

Ownership concentration level, which is measured with the largest ownership percentage, indicated maximum value of 100% and minimum value of 15.4%. This means that ownership structure of banks in Indonesia is mostly concentrated in the controlling owner. La Porta et al. (1999) employs ownership cut off 10% and 20% to be able to control the corporation. The average value of ownership is 59.58% and the median value is 57,3% increasingly support previous findings stating that Indonesia ownership structure is concentrated (Claessens et al. 2000; Fan and Wong 2000; Lukviarman 2004; Siregar 2006; and Sanjaya (2010). Corporation size is proxied using log total assets with the minimum value of 11.62, maximum value of 14.95, average 1value of 3.25, and median value of 13.21.

4.2 The Relationship Between Type of Control and Corporate Government on Accrual Earnings Management

Regression result in table 2 shows that accruals earnings management (AEM) performed by banks controlled by family, private, and foreign institution is significantly lower than AEM of banks controlled by government. This finding indicates that banks controlled by family, private, and foreign institution do not prefer accrual-based earnings management whereas government bank prefers to accrual earnings management.

Table 2. The Effect of Type of controlleers and CG on Earnings Management

Independent Variable	**Dependent Variable**			
	AEM	**RCFO**	**RIE**	**RDE**
Constant	-1.060	2.802	4.708	-1.256
	(-2.58)	(2.36)	(5.97)	(-2.09)
D_fam	-0.286	-0.429	0.335	0.223
	(-3.41)***	(-2.65)***	(2.69)***	(2.43)***
D_Priv	-0.279	-0.546	0.276	0.216
	(-3.44)***	(-3.42)***	(2.46)***	(2.44)***
D_Forg	-0.286	-0.545	0.129	0.219
	(-3.39)***	(-2.69)***	(0.254)	(2.06)**
ICG	-0.012	-0.043	-0.044	-0.006
	(-1.76)*	(-1.93)**	(-3.81)***	(-0.71)
Largest	0.150	-0.159	-0.047	0.487
	(1.66)*	(-0.51)	(-0.27)	(3.91)***
Size	0.131	-0.082	-0.186	0.074
	(5.86)***	(-0.85)	(-3.28)***	(1.83)*
N	174	174	174	174
Adj. R^2	0.238	0.104	0.313	0.074
F-statistic	10.022***	1.609**	14.141***	3.305***

, **, * Indicate significance at the 10, 5, and 1 percent levels, respectively.*
The "t" statistics are identified in parenthesis.

There are several possibilities explaining the lower AEM in family control, private, and foreign institution as follows: **first,** AEM has been an old issue for accountants, thus it possibly draws a lot of auditors and regulators' attention. Financial executives perform a strong urge to manipulate earnings by preferring real activity to accrual, the reasons are: a) accrual manipulation has a big possibility to attract auditors or regulators attention than decisions on costs and productions, b) relying on merely accrual is risky. Low level of income below the minimum limits in the end of the year can be manipulated using accrual. However, if the end of the year's revenue drops below the limits, real activity cannot be manipulated in the end of the year (Graham et al. 2005 and Roychowdhury 2006). **Second**, accrual manipulation is reverse inter-period which is in consequence it cannot cover permanent expropriation conducted by the family, private, and foreign institution-owned corporations.

Government-controlled bank that use AEM is significantly larger than family, private, and foreign institution -controlled bank. This exemplifies government preference to use AEM. The high use of AEM in government banks is assumed to have some reasons:

a) Professional managers in government bank have a stable career, thus they tend to be loyal with their career. Their accrual manipulations are not for opportunistic reasons but tend to provide signals for a better performance in the future. This situation is in line with (Gunny 2010) who shows that corporations involved in earnings management only to meet the earnings benchmark have higher performances in next years compared to corporations not involved in earnings management and lose their earnings benchmark. Therefore, earnings management performed is not for opportunistic reasons but more for giving signals about a better performance in the future.

b) Real activity manipulation has a long term economic consequence. Roychowdbury (2006) suggests that real activity manipulation can reduce corporation value due to the actions is performed in ongoing year to increase revenue. This may give negative effects on next period cash flow. For example, aggressive discounts to increase trading volume and to fill short term earnings target may cause customers to wish similar discount in the future. Customer expectation of discounts in the future can be defined as a lower margin in trading. Overproduction generates over supplies that means corporation has to sell more and to charge bigger supply expenses in the next period.

Corporate governance index has a negative influence (sign. < 10%) on AEM which means that if the good corporate government is well-implemented, the lower the AEM. The finding shows that corporate governance implementation can restrict AEM actions. Ownership concentration has a positive influence (Sign. < 10%) on AEM which means the more concentrated the ownership, the bigger AEM will be. Corporation size has positive (Sign. < 1%) influences on AEM, it means the larger the corporation, the bigger its AEM.

This result is appropriate with finding from Xie *et al*. (2002), Chtourou *et al*. (2001), Kang and Kim (2011), and Atmaja *et al.* (2011) that shows that the mechanism of corporate governance, which consist of audit committee and boards of directors activities and members' of boards financial experiences are important factors to limit the tendency in earnings management.

4.3 The Relationship between Type of Control and Corporate Governance to Real Earnings Management

Based on the result of regression in table 2, it is known that family, private, and foreign institution control have a significant lower real earnings management through operating cash flow compared to government control as an excluded group. The result indicates that government-owned banks prefer to use real activity-based earnings management through RCFO whereas family, private, and foreign institutions control prefer not to employ this type of earnings management.

Family control and private institutions apparently choose real earnings management through interest expense and discretionary expense. Family and private institution control have a significantly higher RIE and RDE (sign. 1%) compared to RIE and RDE in government controlled banks. Foreign control prefers earnings management through discretionary expenses (*Sign*. < 5%) compared to government control as an excluded group.

Corporate governance index has negative and significant influences on real earnings management through RCFO and RIE. It means the better good corporate governance implementation, the lower real earnings management through RCFO and RIE. It indicates that the implementation of corporate governance can restrict the earnings management through RCFO and RIE.

Ownership concentration level does not significantly influence RCFO and RIE but has a positive and significant influence on RDE, which means the more concentrated an ownership, the bigger the real earnings management through discretionary expenses. Corporation size has a negative and significant influence on RIE, meaning that the larger the corporation size, the lower the real earnings management through interest expense. The size has a positive and significant influence on RDE, meaning that the larger the corporation, the higher the RDE.

Based on the findings above, it can be concluded that government control prefers accrual-based earnings management and real activity based-earnings management through RCFO, while family and private institution control tends to choose real earnings management through RIE and RDE. Foreign control takes RDE. Corporate governance index has a negative and significant influence on AEM, RCFO, and RIE and does not influence RDE. Ownership concentration has positive and significant influences on AEM and RDE but does not influence RCFO and RIE. Bank size has positive and significant influences on AEM and RDE but has negative and significant influences on RIE.

5 Conclusion

These research findings indicate that most of Indonesia banking is controlled by family (41.95%) and private institution (33.33%). Private institution control has the same preference with family control in choosing earnings management. This is possibly caused by the fact that behind private institution control, family control occurs. However, this research does not uncover the facts because of limited data on indirect bank ownership.

Corporate governance implementation presents a high result, 89%, means that banks in Indonesia have implemented corporate governance rules and principles well. The result indicates that corporate governance has negative and significant influences on AEM, RCFO, and RIE but does not influence RDE. It means that the better the good corporate governance, the AEM, RCFO, and RIE implementation will be lower. Corporate government can restrict earnings management actions through AEM, RCFO, and RIE.

Government control prefers accrual-based earnings management and real activity-based earnings management through RCFO, whereas family and private institution control prefer real earnings management through RIE and RDE. Foreign control prefers RDE. This research finds that ownership structure of Indonesia banks is strongly concentrated, with the largest ownership average 59.58%. The findings support previous research conducted by (Claessens *et al.*, 2000; Fan and Wong, 2000; Lukviarman, 2004; Siregar, 2006; and Sanjaya, 2010). Ownership concentration does not influence RCFO and RIE but has positive influence on AEM and RDE which may mean the more concentrated the ownership, the bigger AEM and RDE will be.

Bank size has positive and significant influences on AEM and RDE which means the larger corporation is the larger AEM and RDE. Bank size has negative and significant influences on RIE means that the larger the bank size, the lower the possibility of real earnings performed by management through interest expenses.

The limitation of this research lies in the sample, in which this research only take samples from the banks listed in IDX. Therefore next research can enlarge the samples into all Indonesia or Asia banking. This research does not study the reasons why each of controller types has diverse preferences in earnings management. Thus, the future research can examine this issue.

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Appendix1. Corporate Governance Bank Index

No.	Questions	Scoring
1	The number of independent directors is divided by all board of directors (BI 2006), (BI 2007)	≥50% 1, < 50% 0
2	The president director is independent (BI, 2007).	Yes 1, no 0
3	Accounting and financial competences of the independent board of directors (BI, 2006 &2007).	Yes 1, no 0
4	Board of Directors members has financial and family relationships to other board of director members, of management and/or controlling stockholder disclosured (BI, 2006)?	Yes 1, no 0
5	Are remuneration and other facilities received by the management disclosed? (BI, 2007)	Yes 1, no 0
6	All members of management stated their financial and family relationships to board of directors members, to management members and/or to the controlling stockholder (BI, 2007).	Yes 1, no 0
7	Is the auditing committee led by an independent person? (BI, 2007)	Yes 1, No 0
8	Are roles and responsibilities of committees clearly described? (BI, 2007).	Yes 1, no 0
9	Did the auditing committee monitor and evaluate the auditing plan and realization and the follow-up of the auditing result to judge internal controlling sufficiency and the process of financial report? (BI, 2007).	Yes 1, no 0
10	Do the executive member of nominating committee understand a bank nominating system and succession plan? (BI, 2007).	Yes 1, no 0,
11	Are the roles and responsibilities of CG committee clearly described? (Ananchotikul, 2007)	Yes 1, no 0
12	Does the bank have a clearly written policy, system, and procedure on how to provide fund to related party and provide big fund and the monitoring and problem solving? (BI, 2007).	Yes 1, no 0
13	Does the bank disclose the company group structure? (Ananchotikul, 2007)	Yes 1, no 0
14	The bank has an internal auditing standard operating procedure (SPFAIB) (BI, 2007).	Yes 1, no 0
15	The bank made a task force of internal auditing and a manual for internal auditing (BI, 2007).	Yes 1, no 0

USING E-COMMUNICATION IN THE MOBILE TELECOMMUNICATIONS INDUSTRY

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Abstract

This article examines how e-communication is used in the mobile telecommunications industry and the impact it has on relationship marketing. The use of new electronic media such as the Internet, e-mail, websites, cellular technology, blogs and social networking sites for communication purposes is called e-communication. Relationship marketing is about creating and maintaining long-lasting, profitable relationships with customers. E-communication makes it possible for the organisation to personalise their interactions with their customers which is one of the major benefits of relationship marketing. Allowing an organisation to identify their most important customers, aids in recognising the lifetime value of these individual customers. The aim of this pilot study was to examine the way in which e-communication is being utilised in the mobile telecommunications industry and evaluate how it can lead to creating and maintaining satisfied customers over the long term. This research was descriptive, cross-sectional and quantitative in nature. Since this study is a precursor to a full study, only 20 respondents participated. The majority of the respondents were mobile phone users for 6-10 years. 85% of the respondents indicated that their service provider uses e-communication while 15% indicated that they do not use it. There were majority positive responses regarding trust, commitment and loyalty.

Keywords: E-Communication, Relationship Marketing, Mobile Telecommunications

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1 Introduction

Since 1994, the mobile telecommunications industry in South Africa has grown into a vast, exceedingly lucrative business. Vodacom and MTN were the first two cell phone network providers who were given a license to operate in the country in 1994. Cell C, the third cell phone network provider entered the South African market in 2001. This industry has grown at an exceptional rate and was given another boost when Telkom with its 8ta ICT provider joined the industry in 2013.

The fundamental aim of relationship marketing is to build and maintain a base of committed customers who are profitable for the organisation. E-communication refers to the use of new electronic media such as the Internet, e-mail, websites, cellular technology, blogs and social networking sites for communication purposes.

This enables marketers to identify understand, remember and respond to individual customers faster and at a lower cost.

Whilst research has been done on relationship marketing, there is no substantial study on how e-communications can influence relationship marketing in the mobile telecommunications industry. Therefore, it was the intention of this pilot study to assess the way in which e-communication is being employed in the mobile telecommunications industry and evaluate how it influences relationship marketing.

2 Literature review

Telecommunications is one of the fastest growing sectors of the South African economy because of the extreme growth in the use of mobile telephones and broadband connectivity. South Africa has a network that is 99.9% digital and includes the latest in fixed-line, wireless and satellite communication. This makes South Africa the most developed telecoms network in Africa (South Africa's telecommunications 2012). According to South Africa. info (2012), mobile phone use by adults in South Africa has increased from 17% to 76% in 2010. Currently, more South Africans use mobile phones rather than radio, television or personal computers. Mobile penetration in South Africa is estimated at more than 10%, one of the highest rates in the world. MTN, Vodacom, Cell C, Telkom Mobile and 8ta are the licensed mobile operators in South Africa. These mobile operators provide telephony to over 39 million subscribers or 80% of the population. South Africa is the fourth fastest growing mobile communications market in the world ((IEEE Communications Society 2011).

The speed at which the use of mobile phones is changing, together with the Internet, provides a huge platform for online communication and the use of technology. Of South African adults, 62% with an average per capita income of less than R5 a day personally own, rent or have the use of a mobile phone. Of the middle phone users, 8,5 million are capable of accessing e-mail on their phones, and 9,5 million are able to browse on their phones (du Plessis, Strydom and Jooste 2012).Organisations now have a great opportunity to use e-communications to customise their exchanges with their customers. They can also identify their regular customers and have strategies in place to maintain these profitable relationships into the future.

Harwood, Garry and Broderick (2008) explain that both the organisation and their customers benefit from relationship marketing. The organisation enjoys increased profits, an advantage over their competition and loyal customers. Customers benefit through reduced risk and reduced uncertainty since the organisation is aware of and satisfies their specific needs and wants. The difference between relationship marketing (RM) and traditional marketing is that RM focuses on developing relationships with customers and maintaining them over the long term. Traditional marketing is about acquiring new customers for once off business. Therefore, relationship marketing focuses on improving relationships with their customers rather than merely on securing new customers. It is based on the concept that customers will prefer having a relationship with one organisation instead of continually switching between different service providers to satisfy their needs and wants. The main aim of relationship marketing can therefore be viewed as creating and maintaining relationships with committed customers who are profitable for the organisation to serve (du Plessis, et al 2012).

Berndt and Tait (2012) view relationship marketing as enabling the management of relationships between the business and its customers. According to Baron, Conway and Warnaby (2010), relationship marketing considers retaining as well as attracting customers as very important since it leads to the development of long-term relationships with those customers. Palmer (2011) classifies relationship marketing into three broad approaches: it is used as a sales promotion tool at a tactical level; at a strategic level, relationship marketing has been seen as a process by which suppliers seek to 'tie-in' customers through legal, economic, technological, geographical and time bonds and at a philosophical level, relationship marketing goes to the heart of the marketing philosophy as it refocuses the marketing strategy away from products and their life cycles and towards customer-relationship life cycles. Baron, et al (2010) see the building of a relationship based on four key elements: chances for friendship, the ability to inspire and attract potential customers into a relationship, skills and knowledge about the way in which relationships are helped to develop and grow and skills that help to repair and maintain relationships. A relationship implies interaction and can be seen as providing reciprocal support to help define the degree and type of relationship.

The most important enabler of customer relationship development has been the declining cost, increasing performance and, now, growing relevance of technology. Most notable for marketing is the ability technology provides companies to identify, understand, remember and respond to individual customers, engaging each for mutual benefit (Gordon 2013). du Plessis, Bothma, Jordaan and van Heerden (2008) define e-communications as using the Internet, mobile phones, interactive television and other electronic media in marketing communication campaigns.

According to Gordon (2013), technology can serve multiple customer relationship roles within a company and between a company and its customers, including the following: external communications, internal communications, computing and content. External communications can help organisations to facilitate two way interaction between customers and the company, provide prompt and/ or informed communication, open new communications channels with customers that can provide them with additional benefits and communicate more efficiently and effectively with customers.

The Internet allows organisations to communicate, advertise, promote the organisation, do online sales, deliver digital products, facilitates electronic payments, supply information to and support their customers. E-mail is a powerful, fast and cheap way in which to communicate with customers. Koekemoer (2011) explains that email marketing can be a very valuable communication tool. It assists in marketing the organisation and its offerings, to broadcast special offers and other important information and to support relationships with existing customers and potential customers. According to du Plessis, van Heerden and Cook (2010), a common purpose for all websites is marketing communications. Customers often visit a site to learn more about the organisation and its products and/or services, even if the organisation has a different objective in mind such as transacting sales or providing customer support. Websites should therefore provide a clear overview of the organisation and its offerings. It needs to be well designed, interactive, regularly updated and easy to navigate. Gordon (2013) states that mobile technologies typically have a number of characteristics in common: providing users immediate access to the technologies; permitting users to initiate contact with whomever they want, whenever they want; having intelligence resident in the local communications terminal to augment and enrich communications; having multiple input options including voice, photography and typing which facilitates a deeper and more personal interaction with each individual user. Social networking sites are applications that allow users to connect by creating personal information profiles, inviting friends and colleagues to have access to these profiles, and sending e-mails and instant messages between each other. Any type of information such as photos, videos, audio files and blogs can be included in a personal profile (du Plessis, et al 2012).

3 Methodology

This pilot study was descriptive, cross-sectional and quantitative in nature. It was conducted with 20 respondents from Durban, KwaZulu-Natal in South Africa. 20 individual mobile phone users were selected to participate in this pilot study. This gave the researcher a chance to establish if the chosen methods would work for a larger study, assist in refining the questions if necessary and anticipate other challenges. Based on the results of the pilot study, no changes were made to the final questionnaire. Non-probability sampling was used. Individual mobile phone users were chosen using convenience sampling. This is most appropriate since the individual mobile phone users are in the best position to provide the information required for this pilot study. Self-administered questionnaires were given to 20 individual mobile phone users. The questionnaire items were adapted from different sources. Biographical data will be obtained using nominal scaling. Attitudes and opinions will be measured using interval scaling, specifically the 5-point Likert scale.

4 Results

Table 1. Biographical Information

Characteristic	Percentage
Age	
18 – 25	10
26 – 35	15
36 – 45	35
46 - 55	30
56 – 65	10
Over 65	0
Gender	
Male	35
Female	65
Race	
Black	5
White	0
Asian	90
Colored	5
Other	0
Marital status	
Married	65
Single	25
Divorced	10
Widowed	0
Home Language	
English	95
Afrikaans	0
Zulu	5
Other	0
Residence	
Suburb	75
City	25
Township	0
Village	0
Rural	0
Highest Educational Level	
Below matric	10
Matric	15
Diploma/Degree	50
Honours/BTech	5
Masters	20
PhD	0
Other	0
Gross salary per month	
Under R5000	15
R5000 – R9999	10
R10000 – R14999	10
R15000 – R19999	20
R20000 – R24999	10
R25000 – R29999	15
R30000 – R39999	20
R40000 and more	0
Reason for having a cellphone	
Personal	75
Business	25
Both	0
Contract or prepaid	
Contract	65
Prepaid	35

As reflected in Table 1, the majority of the respondents (35%) were in the age group 36 - 45, 30% were in the age group 46 - 55, 15% were 26 - 35 years old. For the age groups 18 - 25 and 56 - 65 it was 10%. There were no respondents over 65 years. With regards to gender, there were 65% females and 35% males. The majority of the respondents were Asian (90%), Blacks and Coloreds were 5% each. 65% of the respondents were married, 25%were single and 10% were divorced. When asked about their home language, 95% of the respondents indicated that they are English speaking and 5% Zulu speaking. 75% of the respondents reside in a suburb while 25% reside in the city. The majority of the respondents (50%) have a degree/diploma. 20% have Masters, 15% have matric and 5% have Honours as their highest qualification. 10% indicated below matric. When asked about their gross salary per month, 40% of the respondents earn between R5000 – R19999 and 45% earn between R20000 – R39999. 15% earn under R5000 per month. 75% of the respondents have a mobile phone for personal reasons while 25% have it for business. The majority of the respondents (65%) have a mobile phone contract while 35% are on prepaid.

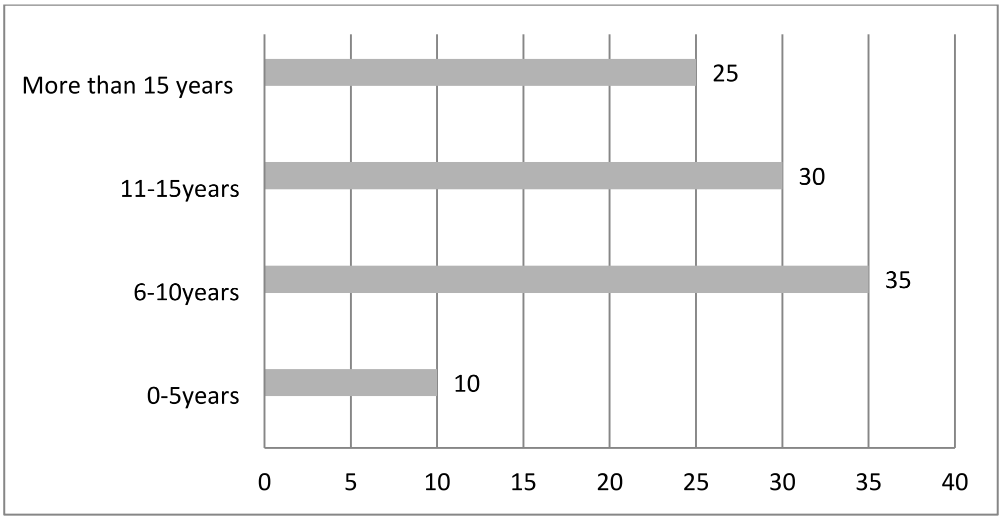

Figure 1. Number of years of being a mobile phone user

Figure 1 indicates that 35% of the respondents were mobile phone users for 6-10 years, 30% were users for 11-15 years, 25% were users for more than 15 years and only 10% were users for 0-5 years.

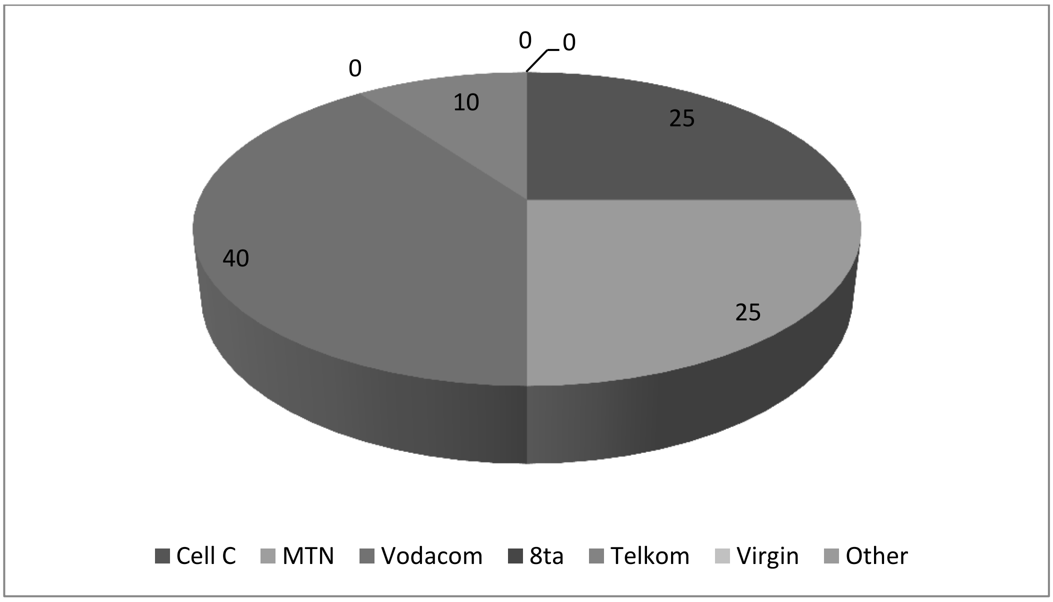

Figure 2. Choice of service provider

The majority of the respondents (40%) are with Vodacom, followed by 25% each with MTN and Cell C as per Figure 2. Only 10% of the respondents are with Telkom Mobile.

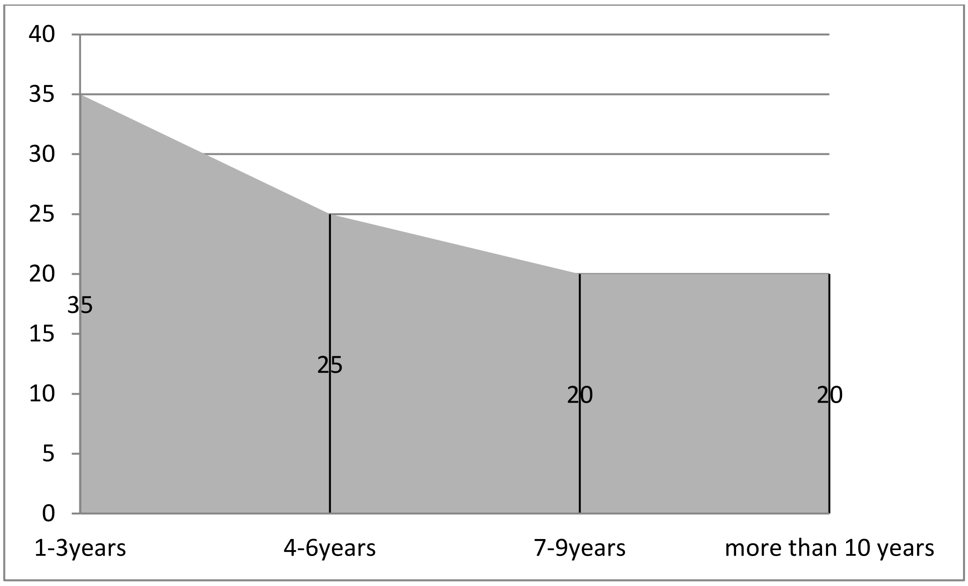

Figure 3. Number of years with same service provider

When asked about how long they were with the same service provider, 35% of the respondents indicated 1-3 years, 25% indicated 4-6 years, 20% indicated 7-9 years and 20% indicated more than 10 years as shown in Figure 3. This finding implies that the majority of the respondents were satisfied with their service provider since they have remained with them for 4 years and more.

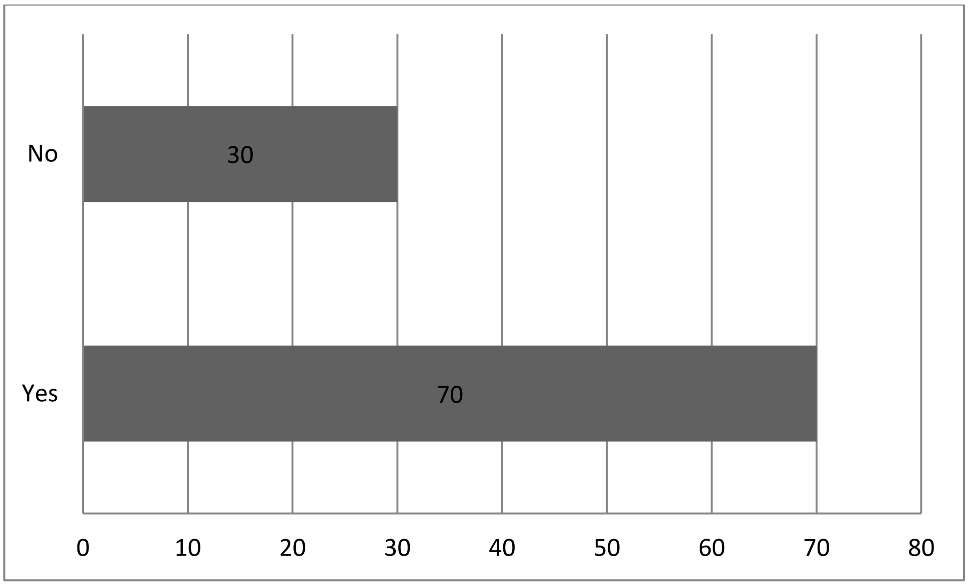

Figure 4. Changing of service provider

70% of the respondents indicated that they changed their service provider while 30% did not change their service provider as shown in Figure 4. Some of the reasons for this change are indicated in the figure below.

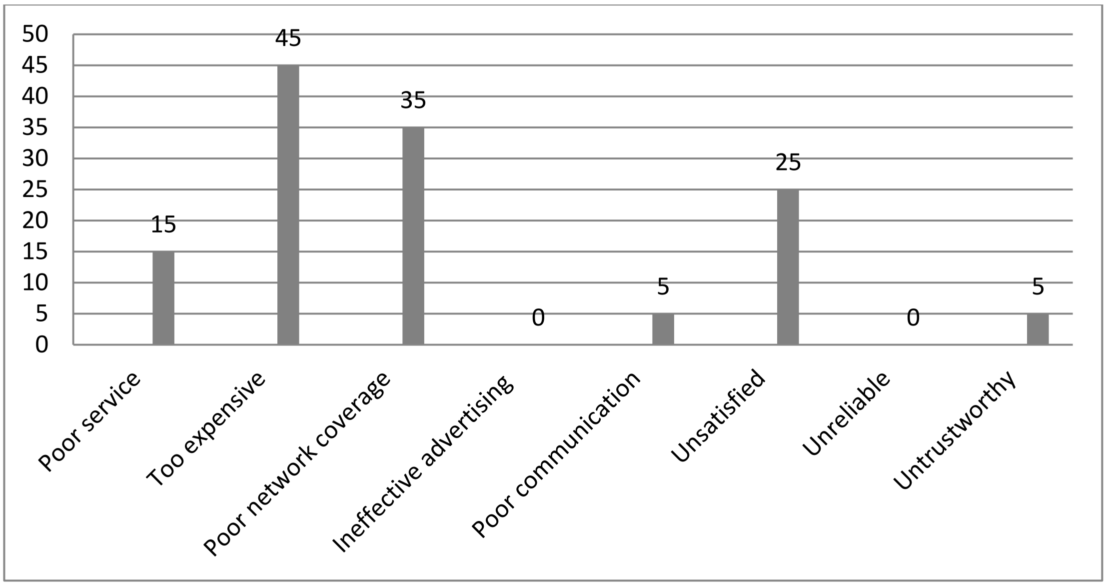

Figure 5. Reasons for changing service provider

Figure 5 indicates the reasons respondents gave for changing service provider. The majority (45%) said it was too expensive, 35% cited poor network coverage, 25% were unsatisfied, 15% cited poor service whilst poor communication and untrustworthiness was 5% each.

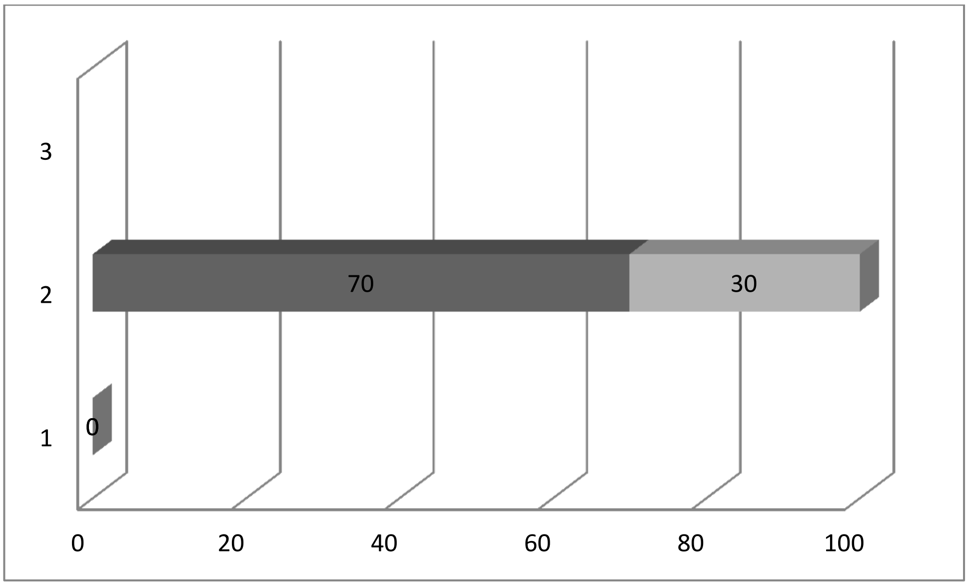

Figure 6. Smartphone ownership

With regards to smartphone ownership, Figure 6 shows that 70% of the respondents said that they own a smartphone while 30% do not own a smartphone.

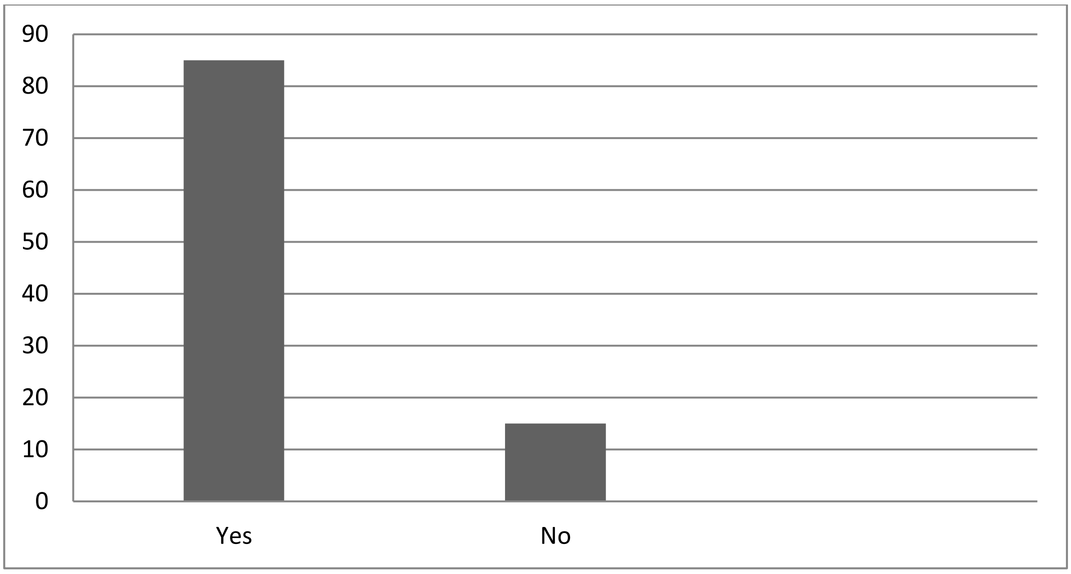

Figure 7. Use of e-communication by service providers

85% of the respondents indicated that their service provider uses e-communication while 15% indicated that they do not use it as shown in Figure 7.

Table 2. Multiple response for how service providers use e-communication

		n	Percentage
	SMS	16	24%
	MMS	13	19%
	E-mail	4	6%
	Blogs	12	18%
	Internet	1	1%
	Website	11	16%
	Social Networking Sites (SNSs)	7	10%
	All of the above	3	4%
Total		67	98%

When asked how their service providers use e-communication, the majority of the respondents (24%) indicated via sms, followed by 19% via mms, 18% said they used blogs, 16% indicated websites, 10% cited SNSs, and 6% said e-mail while 4% indicated that their service provider used all the methods mentioned as indicated by Table 2.

Table 3. Items of Trust

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
My service provider's employees are professional and dedicated to customers	0	0	2	10	1	5	14	70	3	15	20	100
My service provider responds caringly when I share my problems	0	0	2	10	2	10	13	65	3	15	20	100
My service provider is always honest with me	0	0	2	10	4	20	12	6	2	10	20	100
I feel that I can trust my service provider	0	0	1	5	4	20	13	65	2	10	20	100

Respondents were asked whether their service provider's employees are professional and dedicated to customers – 85% agreed with the statement, 5% were neutral, while 10% disagreed. When asked whether their service provider responds caringly when they share their problems, 80% of the respondents agreed, 10% were neutral and 10% disagreed. The next question asked whether the service provider is always honest and the majority of the respondents (70%) agreed with this statement while 20% were neutral and 10% disagreed.75% of the respondents agreed that they felt that they can trust their service provider, 20% remained neutral while 5% disagreed with this statement as shown in Table 3.

Table 4. Items of Commitment

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
My service provider ensures that promises are kept	0	0	2	10	5	25	10	50	3	15	20	100
My service provider treats all information shared by customers confidentially	1	5	1	5	5	25	9	45	4	20	20	100
My service provider's employees provide efficient customer care/service	0	0	3	15	2	10	12	60	3	15	20	100
My service provider has proper mechanisms in place for recovery	0	0	2	10	6	30	9	45	3	15	20	100

Table 4 indicates that when asked whether their service provider ensures that promises are kept.65% agreed with this statement, 25% were neutral and 10% disagreed. The majority of the respondents (65%) agreed that their service provider treats all information shared with them confidentially while 25% were neutral and 10% disagreed. When asked whether the service provider's employees provide efficient customer care/service, the majority (75%) agreed, 10% remained neutral, while 15% disagreed. 60% of the respondents agreed that their service provider has proper mechanisms in place for recovery, 30% were neutral while 10% disagreed.

Table 5. Items of Loyalty

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
I intend to continue using this service provider for a long time	0	0	1	5	6	30	7	35	6	30	20	100
If I want an additional service, I am willing to continue selecting this service provider	1	5	1	5	6	30	7	35	5	25	20	100
Even if another service provider's price is lower; I will go on using this provider	0	0	6	30	2	10	7	35	5	25	20	100
I am willing to say positive things about this service provider to other people	0	0	3	15	2	10	9	45	6	30	20	100
I will encourage friends and relatives to use this service provider	0	0	3	15	4	20	7	35	6	30	20	100
To me, this service provider is clearly able to provide the best service	1	5	3	15	3	15	7	35	6	30	20	100
This service provider offers very attractive and exciting promotions	0	0	2	10	6	30	8	40	4	20	20	100
The promotional offers from this service provider were worth the money	0	0	3	15	5	25	8	40	4	20	20	100
It was easy to get benefits from the promotional offers	0	0	1	5	6	30	8	40	5	25	20	100
I wish to always participate in the promotions offered by this service provider	0	0	4	20	5	25	6	30	5	25	20	100

When asked if they intend to continue using this service provider for a long time, more than half of the respondents (65%) agreed, while 30% remained neutral and 5% disagreed with this statement. 60% of the respondents agreed that if they want an additional service, they are willing to continue selecting this service provider, 30% were neutral and 10% disagreed. When asked the question even if another service provider's price is lower; I will go on using this provider, 60% of respondents agreed, 10% were neutral and 30% disagreed. 75% of the respondents agreed that they are willing to say positive things about this service provider to other people while 10% were neutral and 15% disagreed with this statement. 65% of the respondents agreed with the statement I will encourage friends and relatives to use this service provider, while 15% disagreed and 20% remained neutral. The majority of the respondents (65%) agreed with the statement, to me this service provider is clearly able to provide the best service and 15% were neutral and 20% disagreed. This service provider offers very attractive and exciting promotions received a positive response from 60% of the respondents while 10% disagreed and 30% remained neutral. More than half of the respondents (60%) agreed with the statement that the promotional offers from this service provider were worth the money, 15% disagreed while 25% remained neutral. The statement that it was easy to get benefits from the promotional offers was received positively by 65% of the respondents, 5% did not agree with this statement and 30% were neutral. 55% agreed with the statement I wish to always participate in the promotions offered by this service provider while 20% disagreed and 25% were neutral as indicated in Table 5.

4 Conclusions

The findings of the pilot study revealed that the majority of the respondents were in the age category 36-45 years and more females than males participated. Most respondents have a mobile for personal reasons and smartphone ownership is high. Findings also revealed that there were a high percentage of respondents (70%) who had changed their service provider. Some of the reasons for this were high cost, poor network coverage and poor communication. Another finding was that e-communication is being widely used by service providers, and this creates an opportunity for them to create and maintain relationships with their current and potential customers. However, the findings also revealed that e-mail, internet and SNSs as a means of e-communication is being underutilised. Findings in terms of the items of trust, commitment and loyalty were positive.

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QUESTIONING THE CONTEXT OF CORPORATE PERFORMANCE MEASURES IN BENCHMARKING CEO COMPENSATION

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Abstract

The purpose of the study was to reflect on existing practices in studying the CEO pay performance issue, with special reference to the context wherein the financial performance measurements were employed. In total, an in-depth content analysis of 40 published articles was done. Some flaws were identified in prior research, namely some studies only use either market-based or accounting-based measurements, only a single performance measurement, measurements without the context of the subjacent risks, monetary values without substance as performance measurements and without the context of a theory. The contribution of this study is that a framework is developed to guide future studies with regard to the context wherein financial performance measures should be employed and that some theories, additional to the agency theory, were identified that should be tested more frequently in pay performance-related studies.

Keywords: Accounting-Based Performance Measurements, CEO Compensation, Market-Based Performance Measurements, Motivation Theories, Risk-Return

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1 Introduction

This study follows the route of a meta-analytical approach questioning the context that performance measurements and subjacent theories are selected in studies benchmarking CEO compensation. There is globally a growing appetite for corporate governance (PwC, 2012) and the issue concerning CEO compensation has received a great deal of negative media attention, questioning whether it is out of control (Lamprecht, 2014). Stakeholders are especially concerned with regard to the discrepancy between CEO compensation and corporate performance (Gentry, 2012). The actuality of this issue had led to a stream of academic papers and the majority of them investigated the relationship between CEO compensation and corporate performance (Geiger and Cashen, 2007). In one of the earlier papers, Jensen and Murphy (1990) identified the core problem of researching the pay performance issue, namely that it leads to inconsistent results. Today, this issue is still controversial providing a stream of inconsistent results (Hussain et al., 2014). For example, researchers such as Bussin et al. (2013), Canyon (2013), Scholtz and Smit (2012) and Griffith et al. (2011) mainly found a positive relationship between CEO compensation and corporate performance, while researchers such as Farmer et al. (2013) found mixed results and Crespí-Cladera and Pascual-Fuster (2014), Bradley (2013), Theunissen (2010) and Grinstein and Hribar (2004) could not find a positive relationship.

Due to the complexity of the pay performance issue, it is understandable that research results are not always infallible and absolute and there is appreciation for the epistemic interest of researchers who continuously strive to find truthful descriptions, models and theories to shed light on the relationship between CEO compensation and corporate performance (Mouton, 2011). Our argument is that we as academics must direct the practice; however, in our opinion, the streams of mixed results from academia only contribute to confuse the practice. Therefore, executing one more correlation study will only further contribute to the confusion. The importance of this study is that this is rather a critical reflection of existing research, questioning firstly the selection of pay performance-related theories and secondly the selection of performance measurements that are used, and comment thereupon, to reveal new knowledge that may provide an enhanced basis for future research.

Performance measurement is a topic often discussed and defined as the process of quantifying action, where measurement is the process of quantification and action leads to performance (Neely et al., 2005). Otley (1999) is of the opinion that management accounting and performance measurement practices need to be evaluated not just from an economic perspective, but also from a social, behavioural and managerial perspective and that it is these social, cross-national and cultural aspects that make the study of management control systems a fascinating topic for academic research. After studying relevant literature, Nita (2008) came to the conclusion that management accountants are the specialists dealing with the design, implementation and maintenance of performance management systems and the process of performance management and therefore the modern approach to performance management can be perceived as a result of the process of the evolution of management accounting.

Money is a very powerful motivator and it is so powerful that boards must make sure that their compensation system is not motivating the wrong kind of CEO behaviour (Rynes et al., 2005).There are many claimed advantages for performance-related pay, although its primary purpose in an organisation is to recruit, retain and motivate the workforce, including the CEO, as it is believed that high quality workers are attracted to an organisation where they believe their ability will be rewarded, while the current workforce is given the message that good performers are valued and poor performers are not (Chamberlin et al., 2002). Lawler (2003) found that performance appraisal systems are more effective when there is a connection between the results of the performance management system and the reward system and that organisations will err when they separate performance appraisals from determining pay changes. Atkinson (2007) sees incentive compensation, or pay-for-performance systems as reward systems that provide monetary rewards on achieving or exceeding some measured performance. Although there is support for and objection against performance-related pay schemes and it is widely accepted that such schemes have limitations, Rynes et al. (2005) suggest that such schemes should contain a balance between their sorting and incentive effects, their incentive intensity and risk, their use of behaviours versus results, and their emphasis on individual versus group measures of performance, so that the advantages of each scheme can be captured, while the disadvantages are minimised.

Problem statement, purpose and methodological preferences

This study has been conducted against the backdrop that corporate performance is linked to CEO performance, which is studied within the context of the subjacent theories of motivation. Furthermore, the measurement of corporate performance is studied from a management accounting context.

The problem is that this study firstly questions the dominance of the agency theory in CEO pay performance studies and wants to find out what other theories were the foundation in prior research studying CEO compensation. The agency theory, which presumes shareholders as principles, and managers as agents, "is the golden thread that runs through past research on executive compensation and performance" (De Wet, 2012). Therefore, many researchers only focused on the agency theory in their CEO pay performance studies. For example, researchers such as Ozkan (2011), Sigler (2011) and Gunasekaragea and Wilkenson (2002) mentioned the agency theory; Hou et al. (2014), Geiger and Cashen (2007) and Nwaeze et al. (2006) discussed it and Chourou et al. (2007) discussed and tested it. Many alternative theories have been developed by researchers who have studied human behaviour to explain what motivates behaviour and what the effects of incentives on effort are. However, according to Atkinson (2007) and Bonner and Sprinkle (2002), the following four theories represent the dominant explanations offered for the effects of monetary incentives on effort direction, duration and intensity, or performance: Vroom's expectancy theory; agency theory; goal-setting theory; and social-cognitive theory. Vroom's expectancy theory also helps to provide a framework for a review of the literature on compensation systems, and the role of the management accountant in supporting those systems. This theory is not necessarily the most widely accepted, but it provides a good framework for a discussion on compensation systems and performance-related pay (Atkinson, 2007).

A second problem is that this study questions whether the performance measurements that are applied to measure corporate performance are within an appropriate managerial accountancy context, namely a variety of different ratios should be employed and they should be interpreted in conjunction with other relevant management accounting data and perspectives, such as risk factors. The literature reveals many different determinants of CEO compensation. Van Essen et al. (2012) and Doucouliagos et al. (2012) did meta-analytical studies, summarising 219 US-based and 44 UK-based studies and identified a number of different categories of determinants (16 and 26, respectively), including performance measurements, both accounting based and market based. Researchers used a variety of accounting-based performance measures, *inter alia*, return on equity (ROE), return on assets (ROA) and net profit margin (NPM) (Nulla, 2013; Van Essen et al., 2012). A variety of market-based performance measures are also used, *inter alia*, ratios such as return to share (RTS), market-to-book value (MB) and Tobins Q (Croci et al., 2012; Ozkan, 2011). These mentioned examples are all financial estimates, deduced from readily available companies' financial statements and market reports.

Analysts should employ a variety of the financial performance ratios since these ratios measure different performance aspects and the literature is unclear with regard to the importance of the different measures (Oberholzer, 2012). Unfortunately, it is evident from the literature that researchers sometimes only use a single financial ratio as a proxy for corporate performance (Hearn, 2013; Sigler, 2011; Stanwick and Stanwick, 2001). In addition to the above-mentioned concern, another significant weakness is that ratios can be deceptive, for example when comparing two equally performing companies, the one may have a relatively high ROA as a result of using old and depreciated assets, whereas the other uses relatively new assets (Correia et al., 2011). Therefore, additional management accounting data and perspectives should be combined with financial ratios, which should be interpreted within their own context. Refinement of ratios should also be considered to make it more useful and comparable; for example, to calculate for the above-mentioned companies' returns before depreciation may partly move their ratios to a level closer for comparability.

The purpose of the study was to reflect on existing practices in studying the CEO pay performance issue, with special reference to the context wherein the financial performance measurements were employed. In this regard, the study found that some flaws in prior studies that urged the study to present a demonstration to enhance the employment of the different measurements and to develop a best practice framework. Set against the backdrop of a number of theories, especially pay performance and other motivational theories analysts used to measure their findings and conclusions against, the study also aims to reflect on the appropriateness of these theories within the context of benchmarking CEO compensation.

To fulfil the purpose, a meta-analytical approach was followed that firstly has a positivistic dimension where a content analysis was done by an in-depth content analysis of 40 randomly chosen published papers that investigated the relationship between CEO compensation and corporate performance. This study also has an interpretive dimension, including a discussion to evaluate the appropriateness of the performance measures and its links to the different theories. The study contributes to the existing literature by providing a framework emphasising the context of preferred financial performance measurements, namely how they complement each other and what additional information should be used in conjunction with these measurements. Furthermore, the study emphasises the existence of different theories that should be considered within the context of the CEO pay performance issue.

The remainder of the study will evolve as follows: The next section provides the conceptual scope, including a literature review, theories of motivation and performance measurements. This is followed by a section explaining the data, method and results of the content analysis. The next section is a discussion to demonstrate best practices and to develop a best practice framework. The study will be finally concluded thereafter.

2 Conceptual scope

Our main argument is that we as academics must direct the practice and not confuse them. This study is conducted from the researchers' perspective as management accountants, but certain concepts from the perspective of human resource management need to be incorporated to gain a better understanding of performance-related pay, specifically the theories behind the use of pay as a motivator. Our first claim is that when the CEO pay performance issue is investigated, the researcher must understand the subjacent theories. The second claim is that when performance measurements are selected, it should be done with care and in conjunction with other factors.

Literature review

This literature review serves as a basis to get a better perspective on the pay performance issue and to get an idea of variables that should be coded in our content analysis. When prior research is evaluated and evidence appears that corporate performance only accounts for less than five percent of CEO pay (Alves et al., 2014; Tosi et al., 2000), we may have one of two reactions: Ignore the pay performance issue as a result of the insignificance thereof, supported by the fact that results are anyway inconsistent (Hussain et al., 2014); or see the actuality of the issue and solve the problem by questioning how performance is measured and the theoretical context wherein it is measured.

It is evident from prior research that there are many determinants of CEO pay. Some authors organise them into sensible groupings such as firm, CEO and governance characteristics (Brick et al., 2005), or size, performance and governance (Nulla, 2013), or performance, risk, size, leverage and ownership (Gunasekaragea and Wilkenson, 2002). From prior literature, firm size is indicated as the most significant determinant of CEO compensation and proved to be constant with a positive relationship (Sigler, 2011; Fulmer, 2009; Geiger and Cashen, 2007).

In the literature, it seems to be important for researchers to break CEO compensation up into different components, such as salary, benefits and pension, bonus, stock options and long-term incentive plans (Theunissen, 2012). The reason is that researchers have hypothesised that separate components of CEO compensation are differently related to determinants. For example, bonuses are more related to performance measurements than a fixed salary (Griffith et al., 2011); firm performance is significantly related to total pay, including long-term incentives, while it is not related to cash compensation (Gunasekaragea and Wilkenson, 2002); salaries are a function of firm size, while bonus is a function of performance (Stanwick and Stanwick, 2001).

As already indicated, firms' performances are measured with ratios such as RTS, ROE and ROA. Performance should always be evaluated with the subjacent risks in mind. Market-based performance measurements should not be seen in isolation, but together with firm-specific risk. Executives are risk adverse in comparison with well-diversified investors (Chourou et al., 2007). Therefore, as a result of the risk that may lead to negative performance outcomes, CEOs would have job security in mind and avoid exposure to be terminated, which forces them to make conservative decisions (Abraham et al., 2014). These decisions may not be in the best interest of well-diversified investors. To encourage CEOs to take on some risk, they should be compensated therefore (Sigler, 2011). Therefore, a positive relationship between CEO pay and firm risk is hypothesised (Faleye et al., 2013).

The returns measured by accounting-based performance measures should also be interpreted within the context of risks. For example, O'Connell and Sullivan (2013) included leverage for the potential influence of financial risk, and Alves et al. (2014) included leverage and hypothesised a negative relationship between debt and agency cost.

Finally, the agency theory seems to be dominant in prior studies investigating the CEO pay performance issue (Chen and Jermias, 2012; Callan and Thomas, 2012). Kuo et al. (2012) found in prior studies that the pay performance relationship is only weekly associated with the agency theory, but they still support this theory by hypothesising that especially bonuses should be highly related to performance. Chourou et al. (2007) also tested this theory in their study. Questioning the dominance of the agency theory will help to find other pay performance-related theories that should be brought within the context of CEO compensation (Geiger and Cashen, 2007).

Theories of motivation

The four most significant pay performance theories, as identified by Atkinson (2007) and Bonner and Sprinkle (2002), will next be explained. It must be noted that this is not a critical evaluation and discussion of motivational theories, but merely an attempt to place the concept of performance-related pay and motivation in perspective for use in a performance management system and an understanding of the impact thereof on the analysis of CEO compensation. A number of mechanisms have been proposed to explicate the incentives-effort link, including expectancies, self-interest, goal setting, and self-efficacy.

Vroom's expectancy theory

People act to maximise expected satisfaction with outcomes. People are motivated, firstly, by what they think the payoff is for a particular behaviour (in the case of performance-related pay, it is money), and secondly, how much they value that payoff (people value monetary payoff over non-monetary payoff). The combination of these two factors is what motivates people. People make more effort when performance-based incentives are used because they believe they will get money when they perform as expected and they really like money. Therefore, an individual's motivation and subsequent effort likely are significantly higher when compensation is based on performance, due to both an increased expectancy about the effort-outcome relationship and an increased valence of the outcome (Atkinson, 2007; Bonner and Sprinkle, 2002; Vroom, 1964).

Agency theory

Agency theory assumes that people are rational and will make choices on the choice's ability to increase either their wealth or leisure. Agency theory therefore suggests that individuals will evade a task unless it somehow contributes to their own economic well-being. Therefore, similar to expectancy theory, agency theory suggests that incentives play a fundamental role in the motivation and control of performance, because individuals have a need to increase wealth (Bonner and Sprinkle, 2002).

Goal-setting theory

Goal-setting theory proposes that personal goals are the primary determinant of, and immediate precursor to, effort. Therefore, personal goals are the stimulant of incentive-induced effort (Bonner and Sprinkle, 2002). Research has shown that challenging and specific goals are most effective at increasing effort because they require more effort to be achieved (Bonner and Sprinkle, 2002). According to Locke et al. (1981), there are three ways in which incentives can affect effort via goal setting: firstly, monetary incentives may cause people to set goals when they otherwise would not; secondly, they would set more challenging goals that they otherwise would; and thirdly, they may lead to higher commitment and therefore greater effort (Bonner and Sprinkle, 2002). Goal-setting theory provides an explanation of the effect of incentives on effort that goes beyond their effects on expectancies and outcomes (Bonner and Sprinkle, 2002).

Social-cognitive (or self-efficacy) theory

Self-efficacy expands both expectancy theory and goal-setting theory by explicating the cognitive factors that affect effort and therefore the possible mechanisms by which monetary incentives can affect effort. An individual's belief about whether he/she can execute the actions needed to attain a specific level of performance in a given task is an important determinant of effort. The belief that one can achieve a task affects effort via goal setting such as when people who believe they are able to accomplish much, set high goals for themselves, which according to goal-setting theory would immediately precede effort (Bonner and Sprinkle, 2002).

Performance measurements

Einstein once said: "Not everything that can be counted counts, and not everything that counts can be counted" (Albert Einstein quotes, s.a.). This quote is relevant to performance evaluation, which is one of the most crucial functions of organisational life, but also one of the least understood (Szeto and Wright, 2003). When designing a performance management system, a clear understanding of exactly what is meant by performance should be developed, as one cannot measure performance if one does not know what is meant by it (Bae, 2006). The choice of performance measures is one of the most critical challenges facing organisations, as performance measurement systems play a key role in developing strategic plans, evaluating the achievement of organisational objectives and compensation (Ittner et al., 1998). Most economic theories analysing the choice of performance measures indicate that performance measurement and reward systems should include any financial or non-financial performance measures that provide additional information on managerial effort (Ittner et al., 1998). Unfortunately, the problem of using non-financial data for this study is that this is not readily available in the public domain.

Financial data are used in several ways, i.e. market based and accounting based. Market-based and accounting-based ratios are used as performance measurements, ROA/ ROE and RTS, respectively (Van Essen et al., 2012). All these ratios include a common variable, namely return. Return must be valued relative to underlying risks, because when risks are high, a high return is expected to compensate for that level of risk, and *vice versa* (Correia et al., 2011). Furthermore, financial data are used, accounting and market items, as proxies for firm size, e.g. sales revenue (Hearn, 2013) and total assets (Grinstein and Hribar, 2004), respectively;

To summarise, considering the theories and performance measurements, the open question is whether they are selected by researchers and employed within a sensible context?

3 Data, method and results

Data and method

The material for the study consists of 40 published studies on CEO/executive pay that were randomly selected. Searches on Google Scholar and EBSCOHost were helpful to select studies that investigate, *inter alia*, the relationship between CEO compensation and corporate performance. Therefore, this research is classified as an empirical study using content analysis of secondary textual data. The researcher is the measurement instrument who is responsible for the coding and the textual analysis is a non-reactive method. Therefore, the level of control is low with no specific theoretical (meta-theory) approach as a conceptual framework (Mouton, 2011).

This study has a positivistic dimension where the 40 published articles were coded to detect frequencies of specific variables such as components of CEO pay, market-based performance measurements, accounting-based performance measurements, risk factors including leverage, motivation to select performance measurements, proxies for firm size, number of determinants of CEO pay, lag times, and theories. All 40 articles are discussed in this section and included in the list of references. Each article was twice analysed by the researcher and an assistant. This double process was followed to ensure that the study is reliable, i.e. that the data are correctly extracted from the articles. This study also has and interpretive dimension where the appropriateness of performance measurements that were found in the articles is evaluated, within the context of the measurements relative to risk factors and theories. To ensure that the study is valid, the final draft was given to experts in corporate governance and performance management for comments.

Results

Theories

The first focus of this study is concerned with theories used in prior research. Table 1 exhibits in the last column that 24 (60%) articles mentioned/discussed subjacent theories for their studies and seven thereof clearly discussed and tested theories. From the four most significant pay performance theories identified earlier, only the agency theory features in the sample of studies. A further analysis of the data revealed that the 24 articles can be broken up into 17 (42.5%) that included the agency theory. The agency and expectancy theories are closely related. A possible reason why researchers prefer the agency theory is that it is probably easier to find a link between CEOs' pay and performance than to find a link between their pay expectations for an increased performance effort. Opposed to the agency theory is the shareholder theory; the principles of a firm are also owners, which eliminates the principle-agent conflict that arises in the agency theory (Callan and Thomas, 2012). This theory appears in one article (2.5%).

Table 1. Analysis of 40 articles

No	CEO pay		Market-based					Accounting-based				Lever-age	Moti-vation	Size	Det	Lag	Theory
	Multi	LT	RTS	M-B	Other	Q	Risk	ROA	ROE	EPS	Other						
1	yes	yes					yes		yes					yes	4		yes
2	yes	yes	yes					yes	yes					yes	5		yes
3	yes	yes							yes				prior	yes	3		
4	yes	yes	yes				yes	yes						yes	11	yes	test
5	yes	yes	yes					yes						yes	7	yes	
6	yes	unc.					yes	yes						yes	8		yes
7	yes	yes		yes			yes					yes	yes	yes	11		test
8		unc.									yes		yes	yes	8		
9			yes				yes	yes						yes	14		
10	yes	yes		yes			yes	yes				yes		yes	14		
11	yes	yes	yes				yes	yes				yes	prior	yes	13	yes	
12		yes				yes	yes	yes			yes		yes	yes	14		test
13	yes	unc.						yes	yes	yes	yes			yes	17		
14	yes	yes	yes			yes						yes	partly	yes	8		yes
15			yes											sev.	4		yes
16			yes									yes	prior		3		yes
17	yes	yes		yes				yes						yes	5		
18	yes	yes	yes				yes						yes	yes	9	yes	yes
19	yes	yes	yes			yes								yes	13	yes	yes
20		unc.							yes					yes	9	yes	
21	yes	yes	yes				yes			yes				yes	12	yes	test
22	yes	yes	yes					yes					prior	yes	10	yes	
23		unc.	yes	yes			yes	yes					prior	yes	14	yes	
24	yes	yes					yes				yes		prior	yes	12	yes	test
25	yes	yes				yes	yes	yes				yes		yes	6		yes
26		yes	yes		yes		yes					yes	yes	yes	27	yes	yes
27	yes	yes		yes								yes	yes	yes	9		test
28	yes	yes	yes		yes	yes	yes						yes	yes	10	yes	
29	yes	yes	yes	yes			yes	yes					prior	yes	13		yes
30	yes	yes					yes	yes						yes	8	yes	yes
31	yes	yes	yes			yes	yes	yes				yes		yes	18		yes
32		yes			yes			yes	yes			yes	partly		5		yes
33							yes	yes	yes	yes			yes		9	yes	
34	yes	unc.							yes	yes		yes		yes	6		
35	yes	yes	yes	yes			yes			yes			partly	yes	13		test
36	yes	yes	yes				yes			yes			yes	yes	5	yes	yes
37	yes	yes		yes			yes	yes						yes	13	yes	yes
38	yes	yes				yes	yes	yes				yes	partly	yes	19	yes	
39		yes	yes	yes			yes						yes	yes	7	yes	yes
40		yes	yes			yes		yes				yes		yes	16		

Another theory that is concerned with both pay and performance is the relative performance evaluation (RPE) theory. Two articles (5%) refer to RPE that postulates that CEOs' performances should be benchmarked against their peers who are exposed to similar risks. Compensation is then determined relative to the performance (Farmer et al., 2013; Farmer et al., 2010). Theories that include pay as a component are firstly the human capital theory. Four articles (10%) refer to this theory, which stipulates that CEO characteristics such as education increases over time and that leads to higher compensation (Alves et al., 2014; Abraham et al., 2014). Secondly, the economic theory, where demand and supply of CEOs determine compensation, appears in two articles (5%) (Faleye et al., 2013; Core et al., 1999). Thirdly, two articles mention the managerial power theory, i.e. where CEOs aim to control factors such as firm size that are linked to pay (Farmer et al., 2010). Fourthly, two articles mentioned the tournament theory, i.e. CEOs with additional responsibility such as CEO/chairman duality receive higher compensation (Ntim et al., 2013; Lee et al., 2008). A theory that includes performance is the stakeholder theory, i.e. people with high ethical standards will not harm the performance of the firm (Alves et al., 2014). Another theory that is related to the motivational theories of goal setting theory and the social cognitive theory is the stewardship theory, included by de Wet (2012), where personal goals and challenges are more dominant than pay for performance.

CEO compensation

The second focus of the study is mainly on performance measurements and related aspects. Table 1 exhibits that the majority of articles (28/70%) break CEO pay up into multiple components, i.e. they use multiple dependent variables (Multi). The majority (30/75%) also clearly indicated that they include long-term (LT) incentives, i.e. stock option gains, as part of CEO pay. Studies such as Abraham et al. (2014), Faleye et al. (2013), Conyon (2013), Callan and Thomas (2012) and Geiger and Cashen (2007) use a simple, but very sensible analysis by splitting CEO pay into long-term and short-term components, where the short-term pay combines components such as salary/base pay and bonus. It is a sensible practice to keep these two components separate, since the stock option gains are a function of the number of stock units and the prevailing stock price at the time when the option is exercised. A CEO's performance may influence the stock price to a limited extent, but it is mainly affected by company-specific and market factors that cannot be controlled by the CEO (Theunissen, 2012). Studies such as Hou et al. (2014), Farmer et al. (2013), Schultz et al. (2013), Ozkan (2011), Walker (2010), Farmer et al. (2010) and Chhaochharia and Grinstein (2009) also include long-term and short-term components, where the short-term pay is broken up into components such as base pay and bonuses. It is also sensible practice to keep these two components separate, since short-term pay mainly consists of a fixed salary and a bonus that may be performance based; the hypotheses stated that these different components relate differently to firm performance (Hou et al., 2014; Farmer et al., 2010).

Performance measurements

A number of performance measures were used in the articles, i.e. market based and accounting based. The main reason to include performance measures as independent variables to CEO pay is the result of the agency theory, which assumes that a firm's performance relates to shareholders' wealth maximisation and the latter is an incentive for CEOs to improve their performance (Croci et al., 2012). Half of the articles (20/50%) used both market-based and accounting-based performance measurements; 10 (25%) only used the former and 10 (25%) only used the latter. Studies such as Farmer et al. (2013) prefer market-based performance measures because they "have a clear and intuitive link to shareholder interests." Nevertheless, both market-based and accounting-based performance measurements provide important information. Therefore, the best practice would be to include both measurements, because the former reflects the market's future expectations of a firm, while the latter reflects the historical performance and financial position of a firm.

Market-based performance measurements

A number of market-based performance measurements were used; RTS was used by 20 (50%) articles and another article only used share price as a proxy for market performance. RTS, the annual stock return plus dividend pay-outs, is included because stock price performances support the agency theory (Alves et al., 2014). The articles mainly used a one-year RTS. The best practice would be to use the method found in two studies that used a three-year average RTS and argue that CEO pay is influenced by the immediate and medium-/long-term performance. A three-year average was chosen because it is proved to be more significant than a one-year or five-year RTS (Conyon, 2013; Griffith et al., 2011). Furthermore, two studies applied both a one-year and a three-year return to take the short-term and medium-/long-term performance into account (Farmer et al., 2013; Gunasekaragea and Wilkenson; 2002).

Nine articles (22.5%) applied MB. The stock market price to its book value is a performance measurement based on how a firm is regarded by the market (investors). Studies such as Chourou et al. (2007), Faleye et al. (2013), Croci et al (2012), Kuo et al. (2012), and Walker (2010) clearly indicate that MB is used as a proxy for firm growth, and similarly, Crespí-Cladera and Pascual-Fuster (2014) and Core et al. (1999) emphasised MB as a proxy for investment opportunities. Another alternative measure of market performance is Q/Tobins Q. Q or Tobins Q is a variation of MB. This differs from MB, market value of equity to its book value, while Tobins Q is the market value of equity to the total asset value of a firm at replacement cost (InvestingAnswers, 2015). When debt is included, it is known as Tobins Q, and only Q when debt is excluded from the calculation (Smithers, 2015). Q/Tobins Q can be used as a proxy for firm growth (Ozkan, 2011) or a proxy for future performance (Gunasekaragea and Wilkenson, 2002). Eight articles (20%) applied Q or Tobins Q.

Alves et al. (2014) includes dividend yield, not as a performance measure, but as a firm characteristic. Finally, Griffith et al. (2011) included market value added (market value of capital less capital invested) as one of four performance measures. De Wet (2012) applied both MVA (present value of future EVA) and EVA, which are value-based measurements of the creation of shareholders' wealth. De Wet's motivation is that these two value-based measures are superior to the traditional executive performance measures such as ROE, ROA and EPS, which do not include risk measurements.

Twenty-one of the 30 articles that used market-based performance measurements also took market-related risk factors into consideration. Another three that did not use market-based performance measurements also used market-related risk factors. These risk factors vary from measures such as beta (Sigler, 2011), standard deviation of returns (Core et al., 1999), market- or industry-related measures, mainly using peer, industry or market indices (Farmer et al., 2013; Grinstein and Hribar, 2004). It is sensible to use market-related risk factors in conjunction with market-based performance measures, because when performance is measured by some kind of return, the risk factor should be controlled.

Accounting-based performance measurements

An analysis of the accounting-based performance measurements revealed that ROA, ROE and earnings per share (EPS) are the most used ratios, i.e. 21 (52.5%), eight (20%) and six (15%), respectively. Some articles indicated the equation for ROA (profit to total assets) differently, i.e. profit after tax (Bradley, 2013; De Wet, 2012; Zhou, 2000), net income (NI) before extraordinary items (Chhaochharia and Grinstein, 2009), operational income after depreciation (Faleye et al., 2013), operating profit (Ntim et al., 2013; Lee et al., 2008), net income plus interest, net of taxes (Crespí-Cladera and Pascual-Fuster, 2014), and industry-adjusted ROA, i.e. net income (NI) to total assets minus median industry ROA (Croci et al., 2012). The best practices seem to define return rather as EBIT (earnings before interest and taxes) (Schultz et al., 2013; Core et al., 1999) or EBITDA (earnings before interest, taxes, depreciation and amortization) (Brick et al., 2005; Grinstein and Hribar, 2004) instead of return after tax (NI). Assume two similar firms with exactly the same operating income (EBIT) performance may have different net incomes as a result of differences in the firms' leverage, which result into different finance costs and finance risks. Therefore, EBIT is more suitable to compare CEOs' performance, which has no or little influence on the financing structure and tax rates. Using EBITDA as the return is even better, since the effect of depreciation is also excluded.

Some articles used a year's average assets (Bradley, 2013; Zhou, 2000), and prior year's assets (Faleye et al., 2013; Crespí-Cladera and Pascual-Fuster, 2014; Core et al., 1999). These articles are in line with the argument that CEO pay is more likely to be influenced by performance based on previous periods. Other articles used year-end total assets in their ROA calculation, but took a one-year lag time into account (Chhaochharia and Grinstein, 2009; Lee et al., 2008), and some articles only used year-end total assets (Schultz et al., 2013; Ntim et al., 2013 Brick et al., 2005). The study by O'Connell and Sullivan (2013) calculated a three-year average ROA.

In total, eight (20%) articles applied ROE as performance measurement. Some articles exhibit the equation, e.g. income before extraordinary items to average equity at book value (Sigler, 2011); after tax income to average equity (Zhou, 2000); after tax profit (De Wet, 2012); and net income to equity, also taking a one-year lag into account (Bradley, 2013). The best practice can be found in two studies that control the effect of the capital structure (financial risk), namely De Wet (2012) and Bussin et al. (2013), who also took WACC and leverage, respectively, into account.

Six (15%) articles used EPS, defined by two articles as the earnings (profits) to the number of shares in issue (Bradley, 2013) and headline EPS (Bussin et al., 2013). Nulla (2013), Bradley (2013), Bussin et al. (2013) and Farmer et al. (2010) indicate clearly that EPS is a performance measurement. Gregory-Smith and Main (2014) used EPS in a sensible way to calculate a relative EPS. The problem with firms' EPSs is that they are not comparable between firms, since they indicate the monetary yield of shares of different values.

Some studies employed other accounting-based ratios, i.e. Lee et al. (2008) used several ratios, Nulla, (2013) used net profit margin and cashflow per share and Callan and Thomas (2012) also used net profit margin. The study by Chen et al. (2008) did not use ratios, but accounting line items to determine, by means of data envelopment analysis, the relative efficiency of how inputs, e.g. assets and equity, are converted into outputs, e.g. revenue and profit.

Chourou et al. (2007) used free cashflow as a measure, but did not indicate clearly whether this is a performance measure. Since it is not relative to 'something', this is merely a measure of size in conjunction with their size measure of total assets. Nulla (2013) indicates common stock outstanding (issued) and the book and market value thereof as performance measures in conjunction with size measures, total assets and total employees. Scholtz and Smit (2012) indicate clearly the following as firm performance measures: total assets, turnover, EBITDA and share price. Theunissen (2010) indicates profit and turnover growth as performance measures and used total assets, total equity and total turnover as size measurements. Griffith et al. (2011) used change in funds from operations as a performance measure and motivate it well that this measure is extensively used in the literature studying real estate investment trusts. Bussin et al. (2013) used profit after tax and EBITDA as firm performance measurements in conjunction with total assets as a proxy for firm size. The problem of all these performance measurements is that they are expressed in monetary terms without any substance.

Except for De Wet (2012), who measured capital structure risk by WACC, 11 other studies also employed leverage (debt-to-equity), and Gunasekaragea and Wilkenson (2002) employed a variation, i.e. debt-to-assets. Leverage is a measure of financial risk and studies have different hypotheses in this regard. For example, it is hypothesised that leverage has a positive or negative influence on CEO pay (Nwaeze et al., 2006; Alves et al., 2014; Chourou et al., 2007). It is sensible to include financial leverage to control for potential capital structure influences (O'Connell and Sullivan, 2013).

Sundry

Only ten (25%) articles provided a clear motivation why they selected their specific performance measurements, while another four (10%) partly motivated their selection. Seven (17.5%) justified their selection by indicating that prior studies have used those measurements and 19 (47.5%) did not provide any explanation for their selection.

Thirty seven (92.5%) articles included one or more proxies to control for size in their regression lines. Most of the studies used accounting line items, i.e. 19 sales (revenue), 12 total assets, one total expenditure and one book value of equity. Market-based data are also used, e.g. five used market capitalisation. Non-financial data are also used, e.g. four used number of employees. Most of these values are converted to logarithms to avoid heterogeneity problems.

The complexity of studying CEO compensation is confirmed by the analysis that the 40 articles used on average 10.3 determinants (Det) of CEO pay. This analysis was only done to present the performance measures used within context with other determinants of CEO compensation. The following three meta-analytical studies can be consulted for an extensive list of determinants: Van Essen et al. (2012), Doucouliagos et al. (2012) and Tosi et al. (2000).

In total, 18 (45%) articles lagged performance measures, i.e. to bring a year's performance in relationship with the next year's CEO compensation. This is sensible, since the pay of CEOs is probably based on previous performances.

4 Discussion

This section firstly summarises the results, comments thereupon and demonstrates the context wherein performance measurements should be employed. Secondly, in this section, a best practice framework is developed to deal with variables in studying the CEO pay performance issue.

To summarise the findings, the study mainly found: Firstly, the agency theory is dominant in the sample of articles, which makes sense because money is probably the most significant motivator for performance. Other theories are probably also relevant, because money is not the only motivator, and for some people probably not the primary motivator; secondly, in most of the articles, the CEO compensation is broken up into sensible components; thirdly, almost half of the studies employed both market-based and accounting-based performance measurements; and fourthly, some flaws were identified with regard to the employment, and the context wherein performance measurements were employed. A brief demonstration follows.

The study found that RTS is the most frequently used market-based performance measurement, followed by a proxy for growth/investment opportunity in the form of MB or Q/Tobins Q. It is important to judge these performances (share values) relative to their subjacent risks, i.e. the volatility of share values. For example, assume two companies, one in the commodity industry (e.g. a gold mining company) and one in the food retail industry. The former's share is probably relatively more volatile as a result of its higher price elasticity, while the food retailer operates in a more stable industry. Say the gold price drops severely, which may affect a gold mining company's share price dramatically negatively, while the share price of the food retailer would stay unchanged. The CEO of the gold mine will compare unfavourably to the retailer's CEO, while the first CEO's performance has no influence on the changes in the global market price of gold. (The opposite will be experienced when there is a severe increase in the global gold price).

ROA was indicated as the most frequently used accounting-based performance measurement. It is important to calculate ROA in such a manner that CEO performances are fairly compared. Assume two hypothetically similar firms with equal performance, but the one has a relatively higher asset value and also a relatively higher depreciation cost that will result in a lower profit. Even when these two companies and

CEOs perform equally, the one with the new asset's ROA will compare unfavourably to the other as a result of its relatively high asset value and lower profit. Employing EBITDA, which excludes depreciation, as a proxy for return will help to bring the ROA ratios of the two firms closer to each other.

ROE was indicated as the second most frequently used accounting-based performance measurement. It is important to use ROE in conjunction with the firm's financial risk. Assume two similar and equally performing firms with the same EBITs, but the only difference is in the way they are financed. The first is relatively higher levered, which will result in a higher volatility in ROE (NI/book value of equity). When the EBIT of both firms decreases, the first CEO will compare unfavourably with the other, but will be favoured when the EBITs increase. To compensate for this unequal volatility in ROE, leverage (debt to equity) should also be used in conjunction with ROE in the regression equation.

EPS was also indicated as a frequently used measurement. The problem of using EPS is that it indicates the yield of shares of different values. Assume two similar firms need $100, where the first has issued one share of $100 and the other ten shares at $10 each. The profit performance of the two firms is exactly the same, say $12; the EPS for the first is $12 and for the second $1.2 per share. Using EPS gives the impression that the first firm performed ten times better than the second. EPS can only be used if it is expressed as a percentage, in this case 12 percent for each of the companies.

Except for EPS, it was also found that researchers used other performance measurements that are in monetary terms. It is important that a performance measurement should be sensible, for example the monetary value of say sales (or the growth in sales) can be used to indicate performance, but such an amount, e.g. $1 million, only has substance if it is compared to another firm or to previous sales amounts. For a big firm, $1 million is a poor performance, but for a small firm it is an excellent performance. Obviously, a relatively big firm will produce relatively high monetary values such as sales, assets, equity at book or market value, and profits, e.g. NI, EBIT and EBITDA. This implies that monetary values can only be used as a proxy to control for firm size. Furthermore, assume there is no change in a firm's performance and the real CEO pay, but both the monetary values used as performance measurements and the CEO pay increase with exactly the same percentage, which only compensates for inflation, an analysis will indicate a 100 percent fit that a change in firm performance leads to a change in CEO pay.

The best practices that are learned from the study are indicated in the framework exhibited in Table 2.

Table 2. Best practice framework

Theories • Studying CEO pay performance should be done within the context of a theoretical framework. • The agency theory is the most dominant pay performance theory. • Other theories should also be considered, such as shareholder, RPE, human capital, economic, managerial power, tournament, stakeholders and stewardship theories.
CEO compensation • The compensation should be broken up into components, such as short-term and long-term; fixed and performance-based pay.
Performance measurement • A combination of market-based and accounting-based measures is more powerful than only one of them. • Lag times should be included as CEO pay relates more to previous performances.
Market-based performance measurements • RTS is the most prominent measurement. • MB or Q/Tobins Q can be added as a proxy for growth/investment opportunity. • These measurements should be used in conjunction with the relevant risk of share volatility.
Accounting-based performance measurements • ROA is the most prominent measure, but EBITDA should be a proxy for return. • ROE can only be used in conjunction with financial risk, i.e. leverage. • EPS and other monetary values (e.g. sales or profit) can only be used in terms of a percentage.
Firm size • Monetary values, e.g. sales, assets, equity and profits, or changes in those values cannot be used as performance measures, but only as proxies to control for firm size.

5 Conclusions

The purpose of the study was to reflect on existing practices in studying the CEO pay performance issue, with special reference to the context wherein the financial performance measurements were employed. In total, an in-depth analysis of 40 published articles was done. The study found that a variety of financial performance measurements, market based and accounting based, were employed in the prior studies and within the context of different theories, mainly the agency theory. To answer the open question, some flaws were identified in prior research, namely some studies only used either market-based or accounting-based measurements, only a single performance measurement, measurements without the context of the subjacent risks, monetary values without substance as performance measurements and without the context of a theory. Therefore, the study concludes that these flaws contribute to the mixed results that academia provides to the practice. The contribution of the study is that a framework is developed to guide future studies with regard to the context wherein financial performance measures should be employed and that some theories, additional to the agency theory, were identified that should be tested in pay performance-related studies. The value of the study is that researchers with limited accounting/management accounting experience can make use of the framework to select a sensible combination of variables in future pay performance-related studies.

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