Corporate Governance and Performance in Vietnamese Commercial Banks

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Abstract

The issue of corporate governance has been increasingly popular in recent years. Corporate governance is considered to be one of the most critical factors influencing firm performance and in banking sector it is particularly important as banks play a specific role in the economic system through the way it facilitates capital allocation and help minimize risk for businesses.

This paper is aimed at filling the gap by presenting the issue of bank corporate governance in terms of both theoretical framework and empirical study. In the theoretical framework, the research provides readers with the fundamental aspects of corporate governance in general and bank corporate governance in particular with two popular frameworks. The empirical study presents a selection of banks for the sample and uses econometric models to test the effect of several corporate governance variables on bank performance. From the result of the reseach, it has been found out that the number of members in Board of Director and the ratio of Capital Adequacy have great influence on the performance of the Vietnamese commercial banks.

Keywords: Bank performance, board size, capital adequacy ratio, corporate governance, board composition.

1. Introduction

Nowadays, corporate governance is a subject of paramount importance and utmost popularity. It is popular because recent scandals have proved that today's "state-of-the-art" mode of governance is indeed inadequate. If corporate governance is essential to the success of almost any firm in almost any country, that issue turns out to deserve much more special attention in the banking sector.

Given the ultimate goal of almost any business is to maximize shareholders' wealth; it cannot be denied that sound corporate governance is a prerequisite condition to ensure that the corporate objective is achieved. As a result, corporate governance in general and bank corporate governance in particular have inspired a great number of theorists and researchers. In fact, there has been a great deal of attention given to these interesting issues on various national and international levels.

Turning the point towards the Vietnamese economic environment, it must be accepted that the issue has not been addressed adequately and has received little attention for a long time. According to a recent survey carried out by the IFC (International Finance Corporation) in cooperation with Vietnam's State Securities Commission (SSC) in 2011, most Vietnamese companies at the moment just have "very basic knowledge of corporate governance".

Moreover, the integration process expressed by the Vietnamese banking system over the last decade has been accompanied by increased international competition and the need of structural changes in the sector. This situation, which has added extra pressure to a bank's profitability, constitutes an interesting scenario to examine the determinants of success from a corporate governance viewpoint.

Hence, by looking at the banking industry, this research seeks to examine the nexus between corporate governance and performance in Vietnam's commercial banks so as to raise the importance of the topic and proposed necessary solutions to increase bank efficiency and profitability.

This research paper is organized as follows: section 1 gives an introduction to the topic. Section 2 presents, first of all, the background of the study and its contribution to different parties, then it discusses all the theoretical frameworks relating corporate governance in general and bank corporate governance in particular. Especially, fundamental dimensions of bank corporate governance are illustrated by two principal frameworks (External – Internal Governance and Triangle framework) based on which an empirical study about the situation in Vietnam is built up. Section 3 proposes econometric models based on two theoretical frameworks to evaluate the influence of certain bank corporate governance variables on bank performance. We run a regression model to test the impact of three corporate governance variables: board size, foreign ownership proportion and capital adequacy ratio on Return on Equtiy as a proxy of bank performance. Another regression model has also been used to test the influence of board composition on bank performance. In the last section, a conclusion has been drawn following the research findings and several recommendations for further research and policy implications have been presented.

2. Literature review and theoretical framework on bank corporate governance

2.1. Theories on corporate governances

Definition on corporate governance

In this section, significant prior research and studies on similar topics will be covered briefly. One of the most standardized documents addressing the issue of corporate governance that should be taken into account is OECD[1] Principles of Corporate Governance produced by OECD in 1999 and then revised in 2004. The document has gained worldwide recognition as an international benchmark for good corporate governance. It is stated in the principles that "to remain competitive in a changing world, corporations must innovate and adapt their corporate governance practices so that they can meet new demands and grasp new opportunities".

The definition of Corporate Governance based on OECD principles can be summarized: "Corporate governance involves a set of relationships between company's management, its board, its shareholders and other stakeholders. It provides a structure through which objectives of a company are set as well as means of obtaining these objectives and monitoring performance is determined". (OECD Principles of Corporate Governance 2004)

Another famous definition of Corporate Governance in the academic field can be found in research by Shleifer and Vishny[2] (1997), who state that "Corporate governance deals with the ways in which the suppliers of finance to corporations assure themselves of getting a return on their investment".

In fact, there are multiple approaches in defining and understanding the concept of corporate governance basing on preferred orientations under specific circumstances. Nonetheless, considering all these definitions and following an integrated analysis of the same, we can infer the following main elements as qualifying and defining corporate governance:

- Corporate governance concerns the methods (structure) through which defining a corporation's goals and the methods for reaching those are monitored periodically.

- Corporate governance manages regulations among all corporation stakeholders, with the ultimate objective of resolving conflict of interest between owners and managers.

- Finally, corporate governance principles adopted in each country are the result of different complex systems of rules, acts, norms, traditions and procedures of the behaviors developed.

Agency theories

Agency theory is most frequently used to explore the subject of corporate governance, hence it is also discussed as the centerpiece among governance theories in this research. According to the agency theory, the shareholders (called principals) who are the owners of the companies delegate day-to-day decision-making authority in the company to the directors, who are the shareholders' agents. The starting point of the problem comes from the exact separation between control and ownership and as a result raises the situation that an owner's interest may be affected by the self-regarding actions of the agents. Sometimes, the issue of "on-the-job consumption" arises because CEOs manage firms in a way to satisfy their desire for status, power, job security or income rather than to protect long-term prof-

itability for shareholders (James and Houston, 1995).

Indeed, as far back as Adam Smith, it has been recognized that managers do not always act in the best interest of shareholders. This problem has been exacerbated in the Anglo-Saxon economies by the evolution of modern firms characterized by a large number of atomized shareholders whose delegation of multiple tasks as well as decision making to managers has set room for managers' engagement in moral hazard[3] and adverse selection[4] (Ciancanelli and Gonzalez, 2000). As a consequence, the divergence of goals and interests between agents and principals unavoidably generate costs. And the whole point behind agency theory is to come up with mechanisms that ensure an efficient alignment of interest of two counterparties involved, thereby reducing agency costs (Shankman, 1999).

According to Jensen and Meckling (1976), agency costs are the sum of (1) the expenses taken on by the principal (incentive, monitoring, and enforcement costs), (2) the agent's cost in signaling that he or she acts in the principal's interest ("bonding expenditures"), and (3) a residual loss capturing the remaining difference between the actual outcome of the agent's decisions and the desired outcome maximizing the principal's welfare.

A summary of the agency theory is also provided for further reference:

Table 1: Fundamental Aspects of Agency Theory

AGENCY THEORY OVERVIEW	
Key idea	Principal-agent relationships should reflect efficient organization of information and risk-bearing costs
Unit of analysis	Contract between principal and agent
Human assumptions	Self interest, Bounded rationality, Risk aversion
Organizational assumptions	Partial goal conflict among participants Efficiency as the effectiveness criterion Information asymmetry between principal and agent
Information Assumption	Information as a purchasable commodity
Contracting problem	Agency (moral hazard and adverse selection). Risk sharing
Main Problem	Relationships in which the principal and agent have partly differing goals and risk preferences (e.g. compensation, regulation, leadership, impression management, whistle blowing, vertical integration, transfer pricing)

Source: Eisenhard (1989). Agency theory

Besides organizational, human and information assumptions sorted in the above-presented table, there is also a critical need to address other 3 primary assumptions applicable to the agency theory as they set an important base for the differentiation of special bank corporate features from normal corporate governance in later parts. These include:

- Normal/Competitive markets

- The nexus of information asymmetry is the principal-agent relationship between managers and owners

- Optimal capital structure requires limited gearing/financial leverage (Modigliani and Miller theorem), (Penney Ciancanelli, 2000)

However, one of the shortcomings of the agency theory is that only the needs of top executives and shareholders were taken into account, but not the justifiable needs of employees, customers, or the environment. A remedy theory of the agency theory that takes into account the mentioned shortcoming can be named as stakeholder theory.

Stakeholder theory

In general, most influential parties involved in corporate governance can be classified into two main types: internal and external. The main external stakeholder groups include shareholders, debtholders, trade creditors, suppliers, customers and regulatory agencies. The main internal counterparts comprise the board of directors, executives and employees.

All of these parties take part in the process of monitoring the performance of the business either directly or indirectly but at different levels of concern with different objectives. However, three parties get involved directly and play the central roles in governing the corporation to ensure all business goals are obtained and shareholders' wealth are maximized are: Shareholders, Board of Directors and daily in charge personnel often referred as CEOs or Executive Board (Barger, 2004).

Nevertheless, a highly democratic and participatory concept of corporate governance states that the firm is not merely a profit-making machine for elite investors and major executives. It is a profoundly social institution that is meant to serve more than its shareholders. The traditional definition of a stakeholder is "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman,1984). The general idea of the Stakeholder concept is a redefinition of the organization. In general the concept is about what the organization should be and how it should be conceptualized.

Friedman (2006) states that the organization itself should be thought of as grouping of stakeholders and the purpose of the organization should be to manage their interests, needs and viewpoints, based on some ethical principle. This stakeholder management is thought to be fulfilled by the managers of a firm. The managers should on the one hand, manage the corporation for the benefit of its stakeholders in order to ensure their rights and the participation in decision making and, on the other hand, the management must act as the stockholder's agent to ensure the survival of the firm to safeguard the long term stakes of each group. All the mentioned thoughts and principles of the stakeholder concept are known as normative stakeholder theory.

There are three approaches of stakeholder

theory: descriptive/empirical, instrumental, and normative found in the literature. However, Donaldson and Preston (1995) concluded that the three approaches to stakeholder theory, although quite different, are mutually supportive and that the normative base serves as the critical basis for the theory. So we will just give the definitions of the other auxiliary approaches.

The descriptive stakeholder theory is concerned with how managers and stakeholders actually behave and how they view their actions and roles. However, the instrumental stakeholder theory deals with how managers should act if they want to favor and work for their own interests. In some literature, personal self-interest is conceived as the interests of the organization, which is usually to maximize profit or to maximize shareholder value. This means if managers treat stakeholders in line with the stakeholder concept the organization will be more successful in the long run.

Stewardship theory

Stewardship reflects an ongoing sense of obligation or duty to others based on the intention to uphold the covenantal relationship. Hernandez (2012) defines stewardship as the extent to which an individual willingly subjugates his or her personal interests to act in protection of others' long-term welfare. Accordingly, stewardship behaviors are a type of prosocial action intended to have a positive effect on other people (Penner, Dovidio, Piliavin, & Schroeder, 2005).

Most theories of corporate governance use personal self interest as a starting point. Stewardship theory, however, rejects self-interest. Agency theory begins from self-interested behavior and rests on dealing with the cost inherent in separating ownership from control. Managers are assumed to work to improve their own position while the board seeks to control managers and hence, close the gap between the two structures.

Stewardship theory states that managers seek other ends besides financial ones. These include a sense of worth, altruism, a good reputation, a job well done, a feeling of satisfaction and a sense of purpose. The stewardship theory holds that managers inherently seek to do a good job, maximize company profits and bring good returns to stockholders. They do not necessarily do this for their own financial interest, but because they feel a strong duty to the firm. If a firm adopts a stewardship mode of governance, certain policies naturally follow. Firms will spell out in detail the roles and expectations of managers. These expectations will be highly goal-oriented and designed to evoke the manager's sense of ability and worth. Stewardship theory advocates managers who are free to pursue their own goals.

2.2. Theories on bank corporate governance

One of the most well-known pieces of literature giving standards to ensure good corporate governance for banking systems worldwide worth being mentioned is the New Basel Accord, called Basel II issued by the Basel Committee. It contains the first detailed framework of rules and standards that supervisors can apply to the practices of senior management and the board for banking groups. Pillar One of Basel II specifies capital requirement to ensure banks against risks. Pillar Two seeks to address the problem by

providing both internal and external monitoring of bank corporate governance and risk-management practices while Pillar Three addresses corporate governance by focusing on transparency and market-discipline mechanisms.

Besides Basel II there are several other comprehensive studies, and a recent one among those has been conducted by Caprio and Levine (2002), which discusses the special characteristics of banks that intensify the governance problem. Parallel with this, Macey and O'Hara (2001) identified four elements that distinguish banks from other firms which are also considered as strong arguments in favor of distinguishing corporate governance of banks and non-bank firms.

In addition to these theoretical studies, there are also a number of empirical studies considering the important influence of corporate governance on bank performance. Among these is "Corporate Governance and Performance in Banking Firms: Evidence from Indonesia, Thailand, Philipines and Malaysia" by Praptiningsih (2009) that centered on running a regression model to test the relationship between corporate governance and performance with a sample of 52 banks and data from 2003-2007. Another study with a similar research purpose is "Relationship between Corporate Governance and Bank Performance in Malaysia during the Pre and Post Asian Financial Crisis" by Kim and Rasiah (2010) with a sample of 12 banks in Malaysia. Both studies showed that corporate governance has a certain effect on bank performance though at different levels of statistical significance.

Specific bank corporate governance dimensions

Framework 1: External – Internal Bank Corporate Governance Mechanism

The narrow approach of bank corporate governance views the subject as mechanisms which should encapsulate not only shareholders but also depositors (Macey and O'Hara, 2001). Hence, two broad dimensions of bank corporate governance should be summarized in Figure 1.

Internal Bank Corporate Governance

In common practice, depositors are willing to select banks which have credible commitment to them. Hence, depositors rely on the intention of bank managers and owners to inform the market about their intention to implement good corporate governance. This intention focuses more on the internal side of the bank, so-called internal corporate governance.

Internal corporate governance is about mechanisms for accountability, monitoring and control of a firm's management with respect to the use of resources and risk taking (Llewellyn and Sinha, 2000). In the specific case of the banking sector, management structure and ownership structure are two principal components that determine the quality of bank governance.

Management structure

The Basel Committee on Banking Supervision (1999) relies on the responsibility of the board of directors and bank management to implement good corporate governance. As illustrated in the previous parts, the management structure of a firm consists of all

parties involved in the process of leading, controlling and monitoring bank operations to ensure banks commit successfully to all requirements of stakeholders. Nevertheless, considering this issue in banking sector, there is a vast body of literature which particularly addresses relations between Board Characteristics of a bank (including Board size and Board composition) and its performance.

However, there has been no conclusive result from empirical studies about the relation between these two factors as there is mixed evidence from different analyses. There are studies in the US, which do not find any significant nexus between the board size and composition and the performance (Belkhi, 2006). Other studies report that board size is positively related to performance (measured by Tobin's Q) and, even though the presence
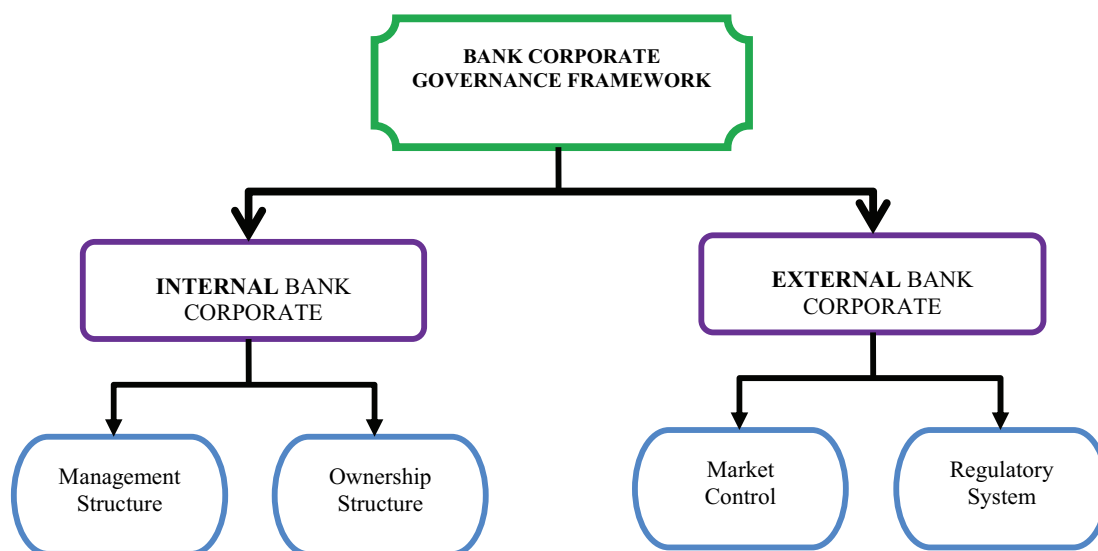
of independent members does not show a significant relationship with performance, companies with boards dominated by outsiders show a better performance (Adam and Merhan, 2008). In addition, the type of relationship between board size and bank performance in Vietnamese banks will examined later in the empirical part of this research.

External Bank Corporate Governance

Virtually, depositors are not always ensured that bank managers will not take any excessive risk-taking behavior that can lower liquidity of banks. In common practice, depositors still have to rely on external mechanisms through which they are assured that bank managers will act in their interest.

In terms of external bank corporate governance mechanisms, market control and regulatory system become central roles in the stage. However, in the banking context, mar-

Figure 1: Internal and External Framework of Bank Corporate Governance

Source: The Corporate Governance of Bank; (Macey and O'Hara, 2001)

ket control with competition forces related to financial products and the takeover activity are less frequently discussed due to the opaqueness of banks as well as the personal relationships that banks establish with their clients.

In contrast, much more attention is focused on the role of the regulatory system in which government regulations serve as a key determinant in limiting the ability of bank managers to engage in expropriating behaviors. Ciancanelli and Gonzalez (2000) state that in the banking sector the regulation and regulators represent external corporate governance mechanisms.

But how do countries regulate their banks? Normally, Central Banks has a significant role in regulating the banking system. According to Healey (2001), the involvement of the Central Bank as lender of last resort role and monetary policy objectives has led it to be intrinsically interested in the stability and general health of the whole financial system.

Regulation in the banking industry is also enhanced by the intervention of international supervisory bodies, such as the World Bank, IMF (International Monetary Fund), ECB (European Central Bank), etc. In practice, major regulatory impediments to the banking activity refer to:

- Entry of new domestic and foreign banks

- Capital requirement

- Restrictions on bank activities

- Safety net support

- Disclosure of accurate comparable information

- Ownership structure

In summary, bank regulations represent the existence of interests different from the private interests of banks. As a governance force, regulation aims to serve the public interest, particularly the interest of customers enjoying banking services.

Framework 2: Triangle model

This model is concentrated in exploring the effect of bank corporate governance on risk management and bank performance.

Developed by Tandellin et al. (2007), this model shows that corporate governance can have an influence on bank performance either directly or indirectly through forcing risk management.
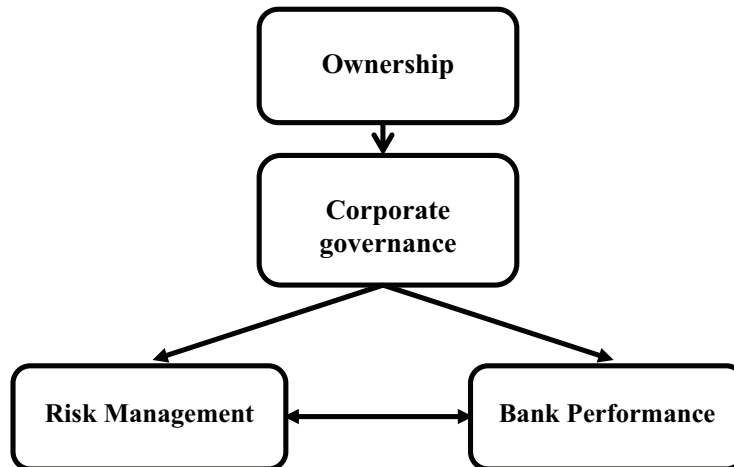
Relationship between corporate governance and bank performance:

Managers and owners of banks who show efforts and intention to implement good corporate governance will increase market credibility. Subsequently, they will collect funds at lower cost and lower risk. It can be argued that better corporate governance will lead to higher performance. Many empirical studies have supported this argument. Black, Jang and Kim (2003) have investigated the relationship between corporate governance and bank performance and find a positive relationship. Parallel with this study, Klapper and Love (2003) use firm-level data from 14 emerging stock markets and document that better corporate governance is highly correlated with better operating performance and higher market valuation.

Relationship between corporate governance and risk management:

Banks as interest intermediaries are also

Figure 2: Triangle Framework on Bank Corporate Governance

Source: Corporate Governance, Risk Management and Bank Performance;
Tandelillin et al. (2007)

useful to explain the relationship between corporate governance and risk management. The interested parties are not only concerned about earning better return on their investment but are also concerned over how the bank risk exposure is distributed to them. Thus, better implementing good corporate governance is not only attached to raising expected return but also better risk management. Banks face various risks such as interest risk, market risk, credit risk, technological and operational risk, liquidity and insolvency risk. Management of these types of risk are determined by mechanisms of corporate governance in the banking sector through different points of views, most of which focus on the role of regulations and regulators. One famous measure of risk management, regulated banks is the Capital Adequacy Ratio (CAR), which measures bank capital over the risk-weighted assets.

Interrelationship between bank performance and risk management:

Both bank performance and risk management are dependent on implementing good corporate governance; hence, the two constructs are interrelated by nature. Interrelationship between the two represents the risk and return trade-off. When bank managers manage their risk better, they will gain an advantage to increase their performance. As a consequence, better bank performance will likely increase bank reputation and public image, allowing banks to take advantage of the lower cost of risky capital and other sources of funds

3. An econometric model for corporate governance analysis in Vietnamese banks

3.1. Research methodology

In this section, we aim to analyze the nexus between corporate governance and performance in Vietnam's banking sector. Although literature on corporate governance involves a number of theories such as agency theory,

stewardship theory and stakeholder theory, the scope of our research is narrowed down to focus on the agency aspect, i.e., our focus is on the Board of Directors (Principals) and the Performance, working result of of Managers (Agents).

We also base the current study on the structure of two main theoretical frameworks in bank corporate governance discussed in previous part (Internal and External by Macey and O'Hara (2001) and Triangle Framework by Tandelilin et al. (2007)). In addition, this study is also partially based on the complex regression model by Praptiningsih (2009).

The focus we take in the model of Macey and O'Hara (2001) is on the internal control aspect, the management structure, meaning that we consider the relationship between Board Characteristics of a bank (including Board size and Board composition) and its performance.

Our model based mainly on the Triangle Framework by Tandelilin et al. (2007), which is related to all three triangles: Board of Directors, Risk Management and Bank Performance.

Selection and measurement of variables used in the model

Based on our previous discussion on the relevant variables for our model in section 2, we summarize our choice of variables as follows:

Bank performance: We use Vietnamese banks' corporate performance as a dependent variable with Return on Equity (ROE[5]) as its proxy since it represents profitability of the bank in the banking sector. Though there may

be other relevant proxies to measure performance of banks such as Tobin's Q or Return on Assets (ROA), ROE is the closest measurement of return to shareholders' investment, calculated by taking net income available to common shareholders divided by common equity. Furthermore, ROE accounts also for the leverage ratio, in other words, the risk appetite of shareholders.

Risk management: We use one regulated measure for risk management, which is Capital Adequacy Ratio (CAR). CAR is calculated approximately by the total equity over estimated risk weighted assets (on and off balance sheet). The data related to CAR normally should be available in the bank's annual report but sometimes it is not available due to SBV regulation that the CAR publication is not compulsory. Therefore, in several cases, CAR has been collected from other sources such as bank analysis reports of certain security companies, or estimated by authors based on official data in the annual reports.

Shareholder characteristics: Almost one third of Vietnamese commercial banks have foreign strategic partners or foreign investors. So we take foreign ownership as one proxy for shareholder characteristics. It is also due to fact that since the Vietnamese banking system is considered as a young and inexperienced market, it is a common consensus that the association between Vietnamese banks and foreign banks with more than a hundred years of experience will help to improve the bank's governance and performance. That is the reason why we want to add the foreign ownership into our regression model as a

proxy for the governance in term of shareholder characteristics.

- *Percentage of foreign ownership (FOWN):* The part taken by foreign investors and foreign strategic partners, measured in percentage of the common shares.

Board of Directors: Measured by the following proxies:

- *Board size (BS):* Board size is the number of people elected by the annual shareholder meetings to be in the Board of Directors. This information is extracted from the annual report of banks.

- *Board characteristic and composition:* The number of male and female members, number of Vietnamese and non-Vietnamese members and the non executive ratio[6]. In reality, there are other proxies regarding board characteristics or ownership structure such as political director ratio[7], non-executive director ratio and ratio of large-block shareholders. However, these proxies can be considered in our future research.

In summary, our model is mainly aimed at testing the influence level of each governance variable on bank performance, from which we can determine the link between previously mentioned theoretical frameworks and the actual situation in Vietnam.

3.2. Population and sample

Until late 2011, there were 42 Vietnamese commercial banks composed of 4 state-owned commercial banks, 38 joint-stock commercial banks, 1 bank for social policy, 1 for development, 5 wholly owned foreign-owned banks, 5 joint-venture banks and 47 branches of for-

eign banks. This research chose Vietnamese commercial banks as the subject to study. As a result, 42 commercial banks in total were considered as the population in selecting a sample for testing. A list of 42 banks was recorded based on their different asset values and a sample of 11 banks from the list was chosen randomly.

A sample combined of the information within the period of 2008 and 2010 was gathered, after a check of extreme value, we obtained a sample of 30 data with a combination of cross-sectional and time-series data. This is still considered as the rational time frame as this period witnessed plenty of typical advancements and adjustments to bank regulations in Vietnam.

Most of the data in the sample, with the above variables were collected from these banks' annual reports and financial statements.

Regression methodology is applied in the research to evaluate the relationship between corporate governance monitoring mechanisms and bank performance. More specifically, the ordinary least square (OLS) method is used in the testing and we assume that all the assumptions of the classical multiple linear regression hold.

3.3. Regression results

The correlation matrix between our variables both independent and dependent is presented in Table 1 in the Appendix. After checking the correlation, we conducted the regression test. We first conducted the test with the general model of one dependent variable ROE and the three main independent variables namely: board size, CAR and FOWN. After that, we discuss the results of

the general model. We then conducted the second test to check the board composition and ROE relationship.

3.3.1. General model

Our general model is composed of one dependent variable ROE – Return on Equity and three independent variables BS – Board Size, CAR – Capital Adequacy Ratio and FOWN – foreign ownership. Concerning the last independent variable, there are two ways to test . Firstly, if we just want to test the importance of foreign ownership presence in the shareholding, then this variable can be treated as a dummy variable. Secondly, if we want to test the real impact of level of FOWN in the performance, then we can use the actual percentage.

We denote DF, a dummy variable which is equal to 1 if there is the presence of foreign ownership in the bank and equal to 0 otherwise. We test the impact of DF at intercept

level in equation (1) and both intercept level and slope level in equation (2). In the equation (3), we use the actual foreign ownership percentage in each bank (FOWN) into the general equation.

In general, all the models (1), (2), (3) that have the two variables BS (Board Size) and CAR (Capital Adequacy Ratio) are statistically significant, and only variables concerning foreign ownership such DF, DF.BS, DF.CAR and FOWN are not statistically significant as the t-statistic (the number in bracket below the coefficients) all lower than 2.1 (critical value). For this we have dropped the variable concerning foreign ownership and obtained our main equation as in equation 4.

All the three models (1), (2), (3) have the R-squared higher than the R-squared in model (4) as they have a higher independent variable. However, the adjusted R-squared in all three models (1), (2), (3) are all lower than

$$\text{Estimated ROE} = 11.645 + 1.33*\text{BS} - 0.33*\text{CAR} + 0.48*\text{DF} \tag{1}$$

t-stat   (3.54)   (3.02)   (-3.61)   (0.26)

$$R^2 = 49.42\%, \text{Adjusted } R^2 = 43.58\%$$

$$\text{Estimated ROE} = 7.172 + 1.95*\text{BS} - 0.33*\text{CAR} + 6.87*\text{DF} - 0.82*\text{DF.BS} - 0.068*\text{DF.CAR} \tag{2}$$

t-stat   (1.05)   (2.04)   (-0.79)   (0.81)   (-0.75)   (-0.15)

$$R^2 = 50.78\%, \text{Adjusted } R^2 = 40.52\%$$

$$\text{Estimated ROE} = 9.811 + 1.67*\text{BS} - 0.33*\text{CAR} - 0.08*\text{FOWN} \tag{3}$$

t-stat   (2.91)   (3.78)   (-3.14)   (-1.15)

$$R^2 = 51.77\%, \text{Adjusted } R^2 = 45.30\%$$

$$\text{Estimated ROE} = 11.396 + 1.39*\text{BS} - 0.37*\text{CAR} \tag{4}$$

t-stat   (3.68)   (3.75)   (-3.72)

$$R^2 = 49.2\%, \text{Adjusted } R^2 = 45.5\%$$

the one in equation (4). It means that the participation of foreign ownership adds no value to the bank performance and our proposal to drop the variable FOWN is relevant.

Further technical explaination of the equation (4) is as follows:

The intercept value of about 11.396 is just a technical number, and has no economical meaning.

The positive coefficient of BS shows the positive relationship between board size and bank performance. The value of estimated = 1.39 implies that as board size increases by one person, holding other variables unchanged, the estimated increase in average ROE amounts to about 1.39%. However, it is better just to consider the positive relationship between two variables rather than exact numerical interpretation as it is not always true in practice.

The negative coefficient of CAR shows a negative relationship between capital adequacy levels and return on shareholders' investment. Notably, this relationship is not strong enough with estimated coefficient of only 0.37 which indicates that a 1% increase in this ratio (cetaris paribus) leads to the decrease in ROE by 0.37% on average.

The R-squared value of 49% means approximately 49% of the variation in ROE can be explained by variation in BS and CAR. As the data in our research is classified as cross-sectional data, R-squared value of 49% can be considered corrected. The level of Adjusted R-square is at 45.5% rather high.

As a result of various tests presented in Tables 2, 3 and 4 in the Appendix, there is no possible error namely multicollinearity, heteroskedasticity and autocorrelation that can make the result violate assumptions made before testing.

3.3.2. Discussion of the results

Now, we will focus on discussing contribution levels of each explanatory variable to the entire equation as well as make the comparison with previously related research.

Firstly, it is quite understandable that BS has a certain positive relationship with bank performance represented by ROE. There are a number of possible advantages associated with a larger board such as an enlarged provision of valuable advice and networks. A larger board could also favor better decisions since it is likely to be based on diversified competencies and experiences. In Vietnamese banks, this positive relation between board size and bank performance would likely support the resource-based viewpoint that appreciates complementary skills and diversified knowledge from different directors in the board. Furthermore, besides promoting open and constructive engagement within board discussions and decision-making process, board diversity can be a good element in the lower probability of power concentration into the hands of a small number of directors.

In fact, there are also a set of studies which are relevant to the investigation between board size and corporate peformance. The result of this positive relationship in Vietnamese banks is also consistent with a number of empirical studies in the world. As the study of Cheng (2008) indicates, the variability of corporate performance changes positively with board size independent of the existence of agency problems with a larger board, which means that board size is an important determinant of the volatility in corporate profitability. In addition, another study by Adam and Mehran (2005) shared similar conclusions by the finding that board size is positively correlated with performance, as measured by Tobin's Q.

Nonetheless, it cannot be denied that there are also contradictory conclusions by other studies. The research by Praptiningsih (2009) concluded a statistical insignificance of board size on corporate performance while others quoted by Weisbach (2003) or Belkhir (2006) report a negative relationship between the two.

The lack of universal evidence on "ideal" board size in different markets and nations could stem from the fact that there is no "one size fits all" in the field of corporate governance.

Secondly, a negative but quite small coeffcient of CAR signifies a negative relationship between capital adequacy and return on shareholders' investment. In fact, this may be rational in the short run considering the three year period of the data taken. As discussed earlier, CAR minimum requirement is a tool to protect banks and their depositors against credit risk. A higher capital ratio tends to reduce risk on equity and therefore lowers equilibrium expected return on equity required by investors. Moreover, business grows mainly by taking risk as the greater the risk, the higher the profit and hence, banks must strike a trade-off between the two.

To maintain a moderate CAR, banks need to carefully evaluate all requested loans as well as strengthen capital utilisation efficiency, which affects bank profit. For example, a local bank's CAR equivalent to 8% if its total capital reaches VND 3,000 billion while its risk-weighted assets are equal to VND 37,500 billion. However, if the bank wants to improve this ratio, it needs to reduce the level of risk-weighted assets if it is difficult for bank to increase capital amount and this requires the bank to stop and lower the extent of credit. Hence, this adjustment leads to a certain reduction in return from credit activity which is perceived to contribute approximately 60%-70% in profit structure of Vietnamese banks during the 2008-2010 period.

However, this negative relationship may not necessarily be true in the longer term when a suitable capital structure and sufficient CAR can help to raise public confidence in the bank and therefore lead to better

profitability.

Thirdly, with reference to an insignificant effect of foreign ownership on bank performance, the possible argument is that not only the mere existence of foreign shareholders having influence on ROE but the extent of foreign ownership levels such as composition and area of contribution also have a comprehensive analysis as well. That means that if foreign shareholders only contribute capital without providing know-how, technology, experience and expertise (human resource) management for invested banks, ROE does not necessarily increase accordingly.

This may be true in some local banks where leaders still worry about the conflict of interest possibly arising when having foreign shareholders take a seat in their board. A local bank's leader expressed his concern over this problem: " How will our bank compete with the foreign partners if they are or will be 100 percent foreign owned banks in Vietnam? And whether we will lose our own customers from this type of competition".

In the case of foreign strategic holders who contribute both funds and experience in management, experts, technology, etc, there is a possibility that certain differences in Vietnamese financial markets from those in developed counterparts can cause obstacles for the strengths of foreign shareholders to be fully exploited. And last but not least, it is only a few years since Vietnam opened its door to allow foreign shareholders to make investments into Vietnamese banks. This short time span in asociation with specific restrictions of the State Bank of Vietnam on a maximum of 15% capital held by foreign shareholders (20% only in case of acceptance by authority) make the impact of foreign ownership on ROE not visible enough. Also, it is worth noting that the impact of the world financial crisis during 2008-2009 on the local economic and banking sector may be another explanation for the insignificant influence of foreign strategic holders. It is expected that a certain impact of foreign ownership on ROE as proxy for bank performance may be more clearly observed when the period is longer than 10 years or more.

Generally, influence of these corporate governance variables on ROE as measurement of bank performance is considered only in a short time span with the occurence of world financial crisis and therefore may change in the long run when time series is expanded. Additionally, the result of the model suggests that there are some similarities and differences in the situation of Vietnamese banks compared with others in the world, which indicate the complexity of corporate governance issues and its different impact levels on diffferent markets.

3.3.3. Board composition model

The last question is to test the board composition to see whether it has influence on

the Performance ROE.

We substitute the variables in our main equation with EB, a variable representing the board size, to analyze its impact on the performance of banks in equation (5). Subsequently, we examine how the composition of the board of directors contributes to determine ROE, by adding EM (number of male members), EF (number of female members), EV (number of Vietnamese members), ENV (number of non-Vietnamese members) and NER (non-executive ratio) into the equation (5) with different combination of those variables. The resulting regression models are expressed in equations (6) to (10).

It can be clearly seen that none of the substituting variables in the general equation with EB, EM, EF, EV, ENV, and NER is statistically significant as the t-statistics (the numbers in bracket below the coeffi-

Estimated ROE = 11.694 + 0.82*EB   (5)

   t-stat   (2.31)   (1.30)

                   R^2 = 8.26%, Adjusted R^2 = 3.43%

Estimated ROE = 14.30 + 2.43*EB − 0.99*EM − 0.64*EV − 0.046*NER   (6)

   t-stat   (1.67)   (1.16)   (-0.89)   (-0.35)   (-0.50)

                   R^2 = 14.25%, Adjusted R^2 = -7.19%

Estimated ROE = 10.064 + 1.73*EB − 0.80*EM   (7)

                   (1.84)   (1.36)   (-0.82)

                   R^2 = 11.62%, Adjusted R^2 = 1.80%

Estimated ROE = 10.064 + 0.92*EB + 0.80*EF   (8)

   t-stat   (1.84)   (1.43)   (0.82)

                   R^2 = 11.62%, Adjusted R^2 = 1.80%

Estimated ROE = 12.094 + 0.75*EB +0.195*ENV   (9)

   t-stat   (1.98)   (0.85)   (0.12)

                   R^2 = 8.34%, Adjusted R^2 = - 1.84%

Estimated ROE = 12.094 + 0.94*EB - 0.195*EV   (10)

   t-stat   (1.98)   (0.80)   (-0.12)

                   R^2 = 8.34%, Adjusted R^2 = - 1.84%

Estimated ROE = 15.247 + 0.91*EB − 0.05*NER   (11)

   t-stat   (1.90)   (1.38)   (-0.57)

                   R^2 = 9.95%, Adjusted R^2 = - 0.55%

cients) are all lower than 2 (critical value). Both the R-squared and Adjusted R-squared in these equations are lower than those in equation (4). The adjusted R-squared in equations (6), (9), (10), and (11) are even negative. It reveals that the composition of the Board of directors has very little influence on the bank performance in Vietnamese banks.

4. Conclusion

The model has suggested that board size and capital adequacy ratio have a significant effect on bank performance ROE in our model. On the other hand, the compositions of the board and the foreign shareholders have an insignificant effect on bank performance.

For future research, the characteristics of an effective board should be considered as it can also add strength to the corporate governance of a bank. As mentioned above, the Board of Directors is ultimately responsible for the operations and financial soundness of the bank. Thus, it should be ensured that board members are qualified for their positions, have a clear understanding of their role in corporate governance and are not subject to undue influences from management or outside concerns.

The board structure should be designed in a way that the interests of all stakeholders are considered and protected as until now,

in Vietnam, only the interests of the main owners/shareholders are considered.

In terms of ownership structure, though results from our regression model showed an insignificant relationship between foreign ownership and bank performance in the short run, it is highly possible that foreign ownership will be beneficial to bank performance in the long run. However, at this moment, Vietnam Law on credit institutions still restricts the proportion of foreign shareholders at a cap of 30%, which restrains the rights of foreign shareholders in making a thorough change in bank governance mechanisms. This quantitative restriction may also make it difficult for SOCBs to attract foreign investors and could also mean that the objective of enhancing banking management to international standards through involvement of strategic investors would be difficult to realize.

In terms of risk management with lots of safety requirements in which CAR is one type, banks should develop a strong internal control system with clear policies and procedures that help ensure that necessary actions are taken to address risk at the right time. Vietnamese banks should learn from other foreign counterparts that have a great deal of experience in risk management.

APPENDIX

**Table 1: Matrix of Correlation between main independent variables
and dependent variables**

	ROE	BS	CAR	FOWN
ROE	1.000000	0.482341	-0.476751	-0.001981
BS	0.482341	1.000000	0.066704	0.547362
CAR	-0.476751	0.066704	1.000000	0.313305
FOWN	-0.001981	0.547362	0.313305	1.000000

Main Equation of the Model

Dependent Variable: ROE
Method: Least Squares
Date: 07/27/12   Time: 16:51
Sample: 1 30
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.39657	3.094194	3.683210	0.0010
BS	1.392769	0.370450	3.759670	0.0008
CAR	-0.378868	0.101804	-3.721522	0.0009

R-squared	0.492815	Mean dependent var	16.82233
Adjusted R-squared	0.455245	S.D. dependent var	5.428494
S.E. of regression	4.006636	Akaike info criterion	5.708420
Sum squared resid	433.4345	Schwarz criterion	5.848540
Log likelihood	-82.62630	Hannan-Quinn criter.	5.753246
F-statistic	13.11749	Durbin-Watson stat	1.915842
Prob(F-statistic)	0.000105		

Table 2: Test of Multicollinearity – Auxiliary Regression – NO ERROR of Multicollinearity

Dependent Variable: BS
Method: Least Squares
Date: 07/27/12   Time: 16:50
Sample: 1 30
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.734531	0.678563	9.924692	0.0000
FOWN	0.091632	0.026389	3.472336	0.0018
CAR	-0.031931	0.046201	-0.691137	0.4954

R-squared	0.311781	Mean dependent var		7.500000
Adjusted R-squared	0.260801	S.D. dependent var		2.012889
S.E. of regression	1.730615	Akaike info criterion		4.029470
Sum squared resid.	80.86578	Schwarz criterion		4.169590
Log likelihood	-57.44206	Hannan-Quinn criter.		4.074296
F-statistic	6.115837	Durbin-Watson stat		2.246624
Prob(F-statistic)	0.006446			

Table 3: Test of Autocorrelation – NO ERROR of Autocorrelation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.004255	Prob. F(2,25)	0.9958
Obs*R-squared	0.010207	Prob. Chi-Square(2)	0.9949

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 07/27/12   Time: 16:45
Sample: 1 30
Included observations: 30
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.042245	3.329286	-0.012689	0.9900
BS	0.007233	0.424795	0.017028	0.9865
CAR	-0.001081	0.112710	-0.009592	0.9924
RESID(-1)	0.019222	0.211269	0.090986	0.9282
RESID(-2)	-0.001783	0.228688	-0.007797	0.9938

R-squared	0.000340	Mean dependent var		-2.56E-15
Adjusted R-squared	-0.159605	S.D. dependent var		3.866008
S.E. of regression	4.163109	Akaike info criterion		5.841413
Sum squared resid	433.2870	Schwarz criterion		6.074946
Log likelihood	-82.62120	Hannan-Quinn criter.		5.916122
F-statistic	0.002127	Durbin-Watson stat		1.947531
Prob(F-statistic)	0.999990			

Table 4: Test of Heteroskedasticity – NO ERROR of Heteroskadasticity

F-statistic	1.692527	Prob. F(2,27)	0.2030
Obs*R-squared	3.342157	Prob. Chi-Square(2)	0.1880
Scaled explained SS	2.250656	Prob. Chi-Square(2)	0.3245

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 07/27/12   Time: 16:48
Sample: 1 30
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.46696	14.29599	-0.732161	0.4704
BS	2.431109	1.711575	1.420393	0.1669
CAR	0.504262	0.470363	1.072068	0.2932

R-squared	0.111405	Mean dependent var	14.44782
Adjusted R-squared	0.045583	S.D. dependent var	18.94862
S.E. of regression	18.51171	Akaike info criterion	8.769323
Sum squared resid	9252.449	Schwarz criterion	8.909443
Log likelihood	-128.5398	Hannan-Quinn criter.	8.814149
F-statistic	1.692527	Durbin-Watson stat	1.588422
Prob(F-statistic)	0.203002		

Notes:

1. OECD (The Organization for Economic Cooperation and Development) is inter-governmental body with 30 member countries and another 70 committed to democracy and a free market economy.

2. Shleifer and Vishny (1997) are authors of one of the most comprehensive reviews of theoretical and empirical research on similar topic, where they take account for different governance models across countries. They adopt an agency perspective by focusing on the problem of separation between ownership and control to make an analysis on corporate governance efficiency

3. Moral hazard refers to the danger of agents not putting forth their best efforts or shirking from their tasks

4. Adverse selection refers to the possibility of agents misinterpreting their ability to do the work agreed, in other words, agents may adopt decisions inconsistent with contractual goals that embody their principals' preferences (John Fontrodona, 2006)

5. ROE is measured in percentage (%) and equals to Net Income/Total Equity.

6. Non-executive ratio is measured by 1-(number in the board members exercise the management position/board size).

7. Political directors are those board members that have or have had a job position in politics or bank regulation and supervision (Ilduara Busta, 2008)

References

Adams, R.B. and Mehran, H. (2008), 'Corporate Performance, Board Structure, and Their Determinants in the Banking Industry', *Federal Reserve Bank of New York Staff Reports*, No.330, revised October 2011.

Arun, T.G. and Turner, J.D. (2004), 'Corporate Governance of Banks in Developing Economies: Concepts and Issues', *Corporate governance: An International Review*, Vol. 12, No. 3, pp. 371-377.

Asian Development Bank (2010), 'A Consolidated Report on Corporate Governance and Financing in East Asia', *ADB publication*.

Bank for International Settlements (2010), 'Principles for Enhancing Corporate Governance', *BIS publication*, Switzerland.

Belkhir, M. (2008), 'Board of Directors' Size and Performance in the Banking Industry', *forthcoming in the International Journal of Managerial Finance*.

Black, B., Jang, H & Kim, W. (2003), 'Does Corporate Governance Affect Firm Value?', *Working Paper*, University of Amsterdam.

Brown, M. (2010), 'Legal Update Finance and Banking Vietnam', *Mayer Brown JSM Report*, pp. 21, Hanoi.

Caprio, G. & Levine, R. (2002), 'Corporate Governance of Banks: Concepts and International Observations', *Working Paper* presented in the Global Corporate Governance Forum Research Network Meeting, April 5.

Cillanelli & Gonzaler, (2000), 'Corporate Governance in Banking: A Conceptual Framework', *Social Science Research Network*.

Cristina, M. (2008), 'Effective Systemic Players in the Corporate Governance of Banks', *Working Paper,* University of Genoa, Genoa Centre for Law and Finance.

Dao Binh and Nguyen Van, (2011), 'Bank Corporate Governance: International Framework and Vietnamese Case study', *Thesis*, Hanoi University.

Donalson, L & Preston L. (1995), 'The Stakeholder theory of the Corporation: Concepts, Evidence and Implications', *Academy of Management Review*, Vol. 20, No. 1, pp. 65-99.

Donaldson, L & Davis, J. (1991), 'Stewardship Theory or Agency Theory: CEO Governance and Shareholder Return', *Australian Journal of Management*, Vol.16, No.1, pp.49-64.

Eisenhardt, K. M. (1989), 'Agency Theory: An Assessment and Review', *The Academy of Management Review*, Vol. 14, No. 1, pp. 57-74.

Freeman, R. E. (1984), 'Strategic management: A Stakeholder Approach', *Boston: Pitman*.

Frick, B. and Bermig, A. (2009), 'Board Size, Board Composition and Firm Performance: Empirical Evidence from Germany', *Working Paper*.

Friedman, A.L. and Miles, S. (2006), Stakeholders: Theory and Practice, *Oxford University Press.*

Fontaine, C, Haarman, A & Schmid, S (2006), 'The Stakeholder Theory', Available at http://www.edalys.fr/documents/Stakeholders%20theory.pdf*,* Accessed on 25 July 2012

Fontrondona, J. and Sison, A. (2006), 'The Nature of the Firm, Agency Theory and Shareholer Theory: A Critique from Philosophical Anthropology', *Journal of Business Ethics*, Vol. 66, pp. 33-42.

Healey, J. (2001), 'Financial Instability and the Central Bank – International Evidence', *Centre for Central Bank Studies*, Bank of England.

Hernandez, M (2012), 'Toward an understanding of the psychology of stewardship', *Academy of Management Review*, Vol. 37, No. 2, pp.172-193

Hill, C. W. L. and Jones, T. M. (1992), 'Stakeholder –Agency Theory', *Journal of Management Studies*, Vol. 29, pp. 131-154

Hudgin S.C., (2000), Corporate Governance in Banking, *The Mc Graw-Hill.*

IFC, SSC and GCGF, (2011), 'Corporate Governance Scorecard Report', *Pennsylvania Ave. NW*, Washington.

Ilduara, B. (2008), 'Corporate Governance in Banking', *Samfundslitteratur*, Copenhagen.

James, C. and Houston, J. F. (1995), 'CEO compensation and bank risk: Is compensation in banking structured to promote risk taking?', *Journal of Monetary Economics*, Vol. 36, pp. 405-431.

Jensen, M. C. and Meckling, W. (1976), 'Theory of the Firm: Managerial Behaviour, Agency Costs and Capital Structure', *Journal of Financial Economics*, Vol.3, pp. 305-360.

Kim, P. K. and Rasiah, D. (2010), 'Relationship between Corporate Governance and Bank Performance in Malaysia during the Pre and Post Asian Financial Crisis', *European Journal of Economics*, Finance and Administrative Sciences.

Klapper, L. and Love, I. (2003), 'Corporate Governance Investor Protection, and Performance in Emerging Markets', *Journal of Corporate Finance*, Vol. 10, pp. 703-728.

Llewelly and David, (2003), 'A concise discussion of Concepts and Evidence', Global Corporate Governance Forum, Washington DC.

Llewellyn, D. & and Sinha, R. (2000), *Monitoring and Control of banks: The Role of Regulation and Corporate Governance*, Tata Mc Graw-Hill Publsihing Co.Ltd, New Dehli.

Macey, J.R. & O'Hara, M. (2001), 'The Corporate Governance of Banks', Federal Reserve Bank of New York Economic Policy Review.

Milind, S. & James, B. (2003), *Credit Analysis and Lending Management*, John Wiley and Sons Australia, Ltd, Sydney and Melbourne.

Nguyen Hien (2010), 'Bank profit from credit activity', Available at http://www.tin247.com/loi_nhuan_ngan_hang_ky_vong_tu_hoat_dong_cho_vay-3-21619280.html, Accessed on 20 May 2011.

OECD, (2004), *OECD Priciples of Corporate Governance*, Paris.

Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005), 'Prosocial Behavior: Multilevel Perspectives', *Annual Review of Psychology*, Vol. 56, pp. 365-392.

Peoong Kwee, K. (2003), 'Relationship between Corporate Governance and Bank Performance', *European Journal of Economics, Finance and Administrative Sciences*, pp.50-75.

Polya, L (2007), *Vietnam allows more foreign ownership*, Available at http://www.marketwatch.com/story/vietnam-allows-more-foreign-ownership-in-banks, Accessed on 24 April 2011.

Porta, L, Vishny, A & Shleifer, R. (2002), 'Investor Protection and Corporate Valuation', *Journal of Finance*, pp. 57.

Praptiningsih, M. (2009), 'Corporate Governance and Performance of Banking Firms: Evidence from Indonesia, Thailand, Philipines and Malysia', *Jurnal Manajemen dan Kewirausahaan*, Vol.11, No.1, Maret, pp. 94-108.

Rose P. (1995), 'Corporate Governanve Code', Available at http://www.accountingnet.ie/law_regulation/ Corporate_Governance_Code_for_Credit_Institutions_and_Insurance_Undertakings.php, Accessed on 27 March 2011

Ross, L. (2000), *The Corporate Governance of Banks: The role of regulations and corporate governance*, Tata McGraw Hill Publishing Co. Ltd.

Shankman, A. (1999), 'Reframing the debate between agency and stakeholder theories of the firm', *Journal of Business Ethics*.

Shleifer, A. and Vishny, R. (1997), 'A Survey of Corporate Governance', *Journal of Finance*, Vol.52, pp. 737-783.

Sudipto, B., Boot A., and Thakor, A.V., (1998), 'The economics of bank regulation', *Journal of Money, Credit and Banking*, No.30 (4), pp.745-770.

Tandelilin, E., Kaaro, H., Mahadwartha, P.A., and Supriyatna (2007), 'Corporate Governance, Risk Management and Bank Performance: Does type of Ownership matter?', *Final Report of an EADN Individual Research Grant Project*, No.34, Indonesia.

Tran Thuy, (2010), 'Vietnam needs to improve corporate governance in banks', Available at http://www.vietfinancenews.com/2010/09/vietnam-needs-to-improve-corporate.html, Accessed on 20 November 2011.