

Corporate Governance and Bank Performance: Evidence from Zimbabwe

By Lance Mambondiani, Ying-Fang Zhang and Thankom Arun¹

FOR DISCUSSION PURPOSES ONLY

¹ Working Paper by Dr Lance Mambondiani and Professor Arun Thankom (University of Central Lancashire Business School) and Dr Yin-Fang Zhang at Institute of Development Policy and Management (IDPM, University of Manchester). For enquiries contact lancem@btinternet.com

Introduction

Interest in corporate governance has resurged since the Asian financial crisis in 1997 and following the highly publicised corporate failures of big US companies such as Enron and WorldCom. The 2008 global financial turmoil, which triggered widespread bank and financial institutions failures in developed countries and later spread to developing countries, has made the world, once again, become aware of the consequences of bad corporate governance. This time the attention is to governance issues in financial and banking institutions.

Despite abundant literature on corporate governance in general, not as much has been written on corporate governance of banks. Even in developed economies, corporate governance of banks has only recently been discussed in the literature (Macey and O' Hara, 2003). There is in particular a devoid of literature on governance issues of banks in developing countries. Research on how banks are governed in the context of developing countries is warranted in the wake of the 2008 financial crisis.

It is generally agreed that effective corporate governance assures protection on investment and generates return. The implication is that sound corporate governance leads to improved firm performance. However, empirical studies have failed to provide conclusive evidence on this theoretical link. Methodological issues associated with measures used for corporate governance and performance are sometimes used as explanation to the body of mixed results (Bhagat and Bolton, 2008). Recent thinking has taken the view of governance mechanisms being endogenously determined (Belkhir, 2009), raising doubts about the causality link.

Nevertheless, research on corporate governance and performance relationship has so far been concerned with non-financial firms. Only recently has a growing body of literature started emerging to relate corporate governance to performance of banks, with a predominant focus on developed countries. Corporate governance of banks is important for several reasons. Banks play an important role in the national and, increasingly, international payment system. As the main intermediates in the financial systems, they are important engines of economic growth (King and Levine, 1993; Levine, 1997). This is particularly true of developing countries where non-banking financial institutions are less developed. Given their role in financing firms in the real economy, banks can affect corporate governance of non-financial firms. Furthermore, failure of banks has far more negative externalities. Therefore the stability and health of the banking sector through effective sector regulation and supervision and sound corporate governance become vital.

The banking industry has particular idiosyncrasies which require a broader approach to corporate governance to encapsulate both shareholders and depositors. (Macey and O' Hara, 2003; Arun and Turner, 2004) Banking entities are characterized by high opaqueness or severe information asymmetries, unique capital structures in that depositors provide far more financial resources than shareholders, and peculiar contractual forms (Levine, 2004; Bhattacharya, *et al*, 1998; Macey and O' Hara, 2003). The special nature of banking means a more complex governance system to address more complicated agency problems. In many developing countries, the issue of bank corporate governance is further complicated by extensive political

intervention in the operation of banks through government ownership and restrictions on foreign bank entry (Arun and Turner, 2004). A related issue in developing economies which has determined how and in whose interests banks are governed is the activities of distributional cartels or entrenched interest groups (Oman, 2001; Haque, *et al*, 2011). In addition, many developing countries have subject their banking sector to liberalisation and other reforms, adding even more to the complexity of governance issues in the sector.

Given the importance and complexity of governance systems of banks and the gap in literature, research on bank corporate governance in developing countries is warranted. The paper attempts to contribute to literature by looking at corporate governance of banks in an Africa country – Zimbabwe, and associate corporate governance to bank performance. Although it suffered from data and resulting methodological limitations, the analysis presented in this paper attempts to add to sparse empirical evidence on the related issues and shed light on factors which affect bank corporate governance and performance in the context of a developing country like Zimbabwe, where the banking sector has undergone turmoil and reform. The paper is structured as follows. After the introduction section, a review of literature on corporate governance of banks and the relation between corporate governance and performance is presented. A brief overview of the Zimbabwean banking sector is provided before the discussion of data and methodology. The results of data analysis are then presented and discussed. The last section concludes.

Literature Review

Corporate governance can be broadly defined as the system by which companies are directed and controlled (Cadbury, 1992). Contemporary debate on the subject has been dominated by the agency theory. Based on this theory, the narrow approach to corporate governance is concerned primarily with how equity investors induce managers to provide them with an appropriate return on their invested capital. As far back as Adam Smith, it has been recognized that managers do not always act in the best interests of equity holders (Henderson, 1986). The agency problem between managers and shareholders is exacerbated in the Anglo-Saxon economies where there is substantial separation of ownership and control in firms (Jensen and Meckling, 1976; Fama and Jensen, 1983). Disciplinary effects can come from internal and external corporate control mechanisms (Shleifer and Vishny, 1997). Legal protection is also important when there are a large number of atomized shareholders.

However, separation of ownership and control is not as common in other countries, in particular in less-developed countries (La Porta, *et al*, 1999). This puts in question the usefulness of the narrow approach when looking at corporate governance in countries featured by ownership concentration (Arun and Turner, 2003). Unlike dispersed ones, large shareholders have incentive and, quite often, the resources to monitor the management. It's not rare that they can have outright control of the latter. Although the agency theory is still a useful analytical tool, attention is no longer centered only on agency problem between managers and shareholders. Instead, how to protect minority shareholders and other investors from expropriation of controlling shareholders presents the main challenge in corporate governance. If corporate governance is to reduce vulnerability of minority investors (including small shareholders), internal and external governance mechanisms can be expected to be

different from those in countries where separation of ownership and control is pervasive. Legal protection becomes even more needed. However, in countries where ownership concentration is dominant, legal protection available to minority investor is usually weak (La Porta, *et al*, 1999).

In fact, ownership structures which arise out of different degrees of concentration have evolved out of national traditions and institutional arrangements such as the country's legal system or taxation rules. Concentrated ownership has been developed as a response to weak legal protection available to minority shareholders. One advantage of concentrated shareholding is that it overcomes, to some extent, the problem with monitoring management. However, the entrenchment and expropriation hypotheses argue that block holding insiders most often become entrenched and expropriate outside owners and minority investors (Morck *et al*, 1988). Which effects dominate depends on the identity of shareholders as well as the institutional setting of a country (Shleifer and Vishny, 1997). In developing countries, concentrated ownership has been associated more with corporate governance weaknesses rather than strengths: controlling shareholders exploit minority investors for their personal benefits (Brownbridge and Harvey, 1998).

As a special type of firm, corporate governance of banks deserves special attention. Part of the uniqueness of banks lies in their capital structure and associated information asymmetry. Banks tend to have far less equity than debt in their capital, with the bulk of the funding from depositors. This creates more complicated agency problems: conflicts in interests and risk perception among more than two parties simultaneously. Dispersed depositors have little incentive to monitor the managers and equity owners in operating the bank, due to the free-riding problem. It is difficult for them to know the true value of a bank's loan portfolio as such information is incommunicable and very costly to reveal (Bhattacharya *et al.*, 1998). Severe information asymmetry gives bank managers and equity holders an incentive to invest in riskier assets than promised *ex ante*. In the presence of the agency problems between managers and shareholders and those between depositors and managers (sometimes in collusion with shareholders), it is more appropriate to adopt a broader view of corporate governance for banks to encapsulate depositors as well as shareholders (Macey and O'Hara, 2001).

Due to the peculiar contractual form of banking, the external market for corporate control potentially fails to discipline the managers and owners of banks. It has been argued that competition in the product or service market may act as a substitute for corporate governance mechanisms (Allen and Gale, 2000). However, the banking sector may be a lot less competitive than other business sectors, partly due to its information-intensiveness (Caprio and Levine, 2002). Under such circumstances, government intervention has often been used in attempt to overcome the agency problems and the lack of competitive pressure. Government intervention may take the forms of government-ownership and regulation and supervision over the sector. Government ownership of banks is an extreme, though largely unsuccessful, way to deal with the governance problem. In terms of regulators exerting governance, the government is virtually removed as an effective monitor in the case of government owned banks. When the government is both the owner and regulator, there is a conflict of interest in its two roles. In terms of market competition, the link is again broken with government owned banks, in that regulators tend to enact policies that restrict competition and

protect government-run banks. Evidence indicates that those countries with a higher share of state ownership in banking experience worse outcomes on average (Barth, *et al.*, 2004).

Government-provided guarantees in the form of implicit and explicit deposit insurance have been used to encourage economic agents to deposit their money with a bank. Such schemes transfer a substantial part of the moral hazard cost to the government. Regulation and supervision can be used to ameliorate this moral hazard problem by imposing asset restrictions, interest rate ceilings, separation of commercial banking from insurance and investment banking, and reserve requirements. Assuming that governments have both the ability and the will to overcome market and institutional failures, regulation, as an external governance mechanism, can enhance the corporate governance of banks. However, countervailing views argue that governments regulate banks for reasons other than public interests (Buchanan and Tullock, 1962; Stigler, 1971). In the case of political capture, politicians and regulators may induce banks to divert the flow of credit to politically connected firms; in the case of regulatory capture, regulators act in the interests of banks rather than in the best interests of society (Becker and Stigler, 1974; Rajan and Zingales, 2003). In either case, regulation and supervision of banks may actually reduce the efficiency of corporate governance of banks.

Firms as complex as banks rely not just on external corporate governance to discipline managers, but also on the internal governance mechanisms to show the commitment of bank managers and equity owners to depositors. The Basel Committee on Banking Supervision emphasizes the role of the board of directors in the internal governance system. Literature suggests that board size, composition and activity affect the board's effectiveness, which in turn affects bank value (Nam and Lum, 2006). Given their particular idiosyncrasies and special agency problems, banks tend to have bigger and more independent boards than nonfinancial sectors, in order to play the dual role as advisor and monitor (Adams and Mehram, 2008; Andrés and Vallelado, 2008). Recently, research has begun to follow the lead of nonfinancial studies to explain governance mechanisms as endogenously determined. When substitute governance mechanisms such as the legal protection for investors and concentrated ownership can provide effective monitoring to reduce agency conflicts and ease the governance problem between investors and managers, the board does not need to increase its size or/and include more outsiders (Li, 1994; Bathala and Rao, 1995; Bak and Li, 2001; Belkhir, 2009).

The discussion so far on corporate governance of banks holds for developing countries as well. However, the peculiar contexts of such countries should also be taken into consideration. Ownership concentration is pervasive in developing countries, in particular in the banking sector. Governments and powerful families are the two major controlling shareholders. As discussed earlier on, government ownership in banks impedes the effectiveness of regulation as an external governance mechanism and breaks the link between competition and bank efficiency. From the perspective of the agency theory, government-owned banks are a perfect example of widely-held firms, with the principals (the public) having no power to monitor the banks. From the political economy perspective, state-owned banks may be intervened to serve the interests of elite groups (Shapiro and Willing, 1990; Shleifer and Vishny, 1994). In sum, state-ownership in banks tends to serve as an obstacle for sound

corporate governance. This is confirmed by the findings of some empirical studies on developing countries (e.g. Levine, 2004, Mishkin, 2005).

Another type of major controlling shareholders in banks in developing countries are powerful families who have close ties with the government. In theory, concentrated shareholders have more power to monitor the firm to maximize shareholders' value. However, with poorly-defined property rights, weak enforcement of contract, weak judicial systems and pervasive clientelism, what has often been observed in developing countries is that powerful families have outright control of the management of banks to serve the private interests of their own or related elite groups at the expenses of depositors and other investors. Oman (2001) calls the corporate insiders and related government elite 'distributional cartels', and notes that their existence undermines the credibility of investor legal protection and prevents any reform of the banking sector which will endanger their interests. Therefore, ownership concentration in banks in developing country may present an obstacle to good corporate governance.

Compared with developed countries, regulation and supervision over the banking sector tend to be less effective in developing countries, partly due to their institutional weakness, capacity and resource constraints and problems with the political system. Enforcement of regulation and other rules is further weakened by government ownership of banks and the existence and activities of entrenched interest groups or 'distributional cartels' (Arun and Turner, 2004). Regulation may not be implemented uniformly across banks and it is not rare that banks with close ties with the government can tread on rules and regulatory requirements (Llewellyn, 1999). In developing countries, regulatory forbearance has often been characterised by delays due to budgetary and political considerations (Allen and Saunders, 1993). It is therefore not surprising that, in many developing countries, regulation and supervision over banks fails to serve as an effective external governance mechanism on the one hand and to prevent banking crisis on the other (Brownbridge, 2002).

In theory, effective corporate governance assures protection on investment and generates return. It is argued that managers and owners of firms who show efforts in implementing good corporate governance will increase market credibility and subsequently collect funds at lower cost and lower risk (Nanka-Bruce, 2009). The implication is that sound corporate governance leads to improved firm performance. However, empirical studies in general have yielded mixed results. Some studies have found a positive correlation between corporate governance and performance (e.g. Klapper and Love, 2004; Drobetz, 2004). There are researches that have gone a step further to conclude a causality running from corporate governance to firm performance (e.g. Drobetz, et al, 2003). However, there is abundance of studies which failed to lend an a positive support (Gompers, et al, 2003). Bauer, et al, 2004 argued that initially an insignificant relationship was reported which afterwards turned to a significantly and statistically negative relationship. A similar observation was made by Beiner et al. (2004). Other studies (see Park & Shin, 2004 and Prevost et al., 2002) do not find evidence of any relationship between corporate governance and performance.

Mixed evidence has also been found when the impact of individual corporate governance mechanisms on performance is concerned. Whether ownership matters for

firm performance has long been debated. In the classical paper by Berle and Means (1932), dispersed ownership is argued to have the advantage of enabling operations large in scale and scope and allowing most skilled managers to control the business. Firms with diversified ownership can thereby compensate for agency costs with improved efficiency and profitability (Lauterbach and Vaninsky, 1999). However, difficulty in monitoring managers may increase agency costs to such a point to offset any efficiency gains associated with the separation between ownership and control. The impact of concentrated ownership on performance is not clear-cut either. The argument that large shareholders reduce agency costs associated with monitoring management predicts the relationship between ownership structure and performance in the opposite direction to the entrenchment and expropriation theses. So far, empirical studies have not lent insights into the theoretical ambiguity in the ownership-performance relationship.

Board size is hypothesized to have a relationship with firm value and/or corporate governance ratings (Drobetz, *et al*, 2003). Inclusion of non-executive directors for purposes of board independence tends to increase the board size. However, it can be argued that larger boards may be ineffective due to problems such as free-riding, conflicts in interests and retarded decision making. Evidence from empirical studies is at large inclusive.² Controversy also exists when it comes to the impact of board independence on firm performance. The benefits of independent boards lies in the expectation that external directors would serve as checks and balances on executive directors and bring in expertise, objective judgment and other valuable resources (Lawrence and Stapledon, 1999). Baysinger and Hoskisson (1990) and Ezzamel and Watson (2002) challenge such benefits by emphasizing lack of commitment from external directors and likelihood of collusion between executive and non-executive board members. The link between CEO/board chairman duality and firm performance is ambiguous both theoretically and empirically. Duality and separation of the two roles do not seem to substantively differ in their effects on financial performance (Coles and Hesterly, 2000, Conyon and Murphy, 2000).³

Inclusive empirical evidence is often attributed to methodological and data issues, in particular measures used for corporate governance and performance. Bohren and Odegaard (2004) points to the difficulty in obtaining good quality data for analysis, which may consequently rule out the use of certain measures of the variables and superior analysis methods (a setback also shared by our study). As corporate governance embodies too many mechanisms for a holistic interpretation of the effects on performance, aggregating the mechanisms into one or a few governance measures dampens the effects of any single mechanisms (Nanka-Bruce, 2009). There has been no agreement on how to measure performance as well. Many studies have used measures based on market valuation of firms, in justification that investors perceive well-governed firms as less risking and apply a lower expected rate of return, thereby leading to higher firm valuation. Such measures can account for the value of a firm's intangible assets, but make little attempt to calculate the replacement cost of tangible capital. They also lead to the exclusion of unlisted firms from the sample. Other

² Studies that find a negative relationship between board size and performance include Eisenberg et al, (1998), Carline, et al (2002), Mak and Yuanto (2002). Aggarwal, et al (2007) and Hothausen and Lurckrer (1993) find on significant link between the two.

³ A comprehensive review of empirical studies is presented by Kang and Zardkoohi (2005), which that empirical research has produced mixed results.

widely used measures are constructed from accounting data, which are argued to be able to reflect yearly fluctuations in underlying business conditions (Demsetz and Lehn, 1985). Unlike market valuation measures, accounting measures are readily comparable between listed and unlisted firms. However, it has been noted that accounting data are subject to the discretion of managerial accounting choices (Renneboog, 2000). Many studies have combined market-value and accounting-based measures, in attempt to offset each other's drawbacks. As corporate governance may impact on the firm value and operating performance in different ways and the two types of measures capture different aspects of firm efficiency, it is not surprising that mixed results are found across various measures in single studies (e.g. Gompers, *et al*, 2003).

Recently, the causality from corporate governance to firm performance has been challenged by the view that corporate governance is endogenously determined. One of the examples of the endogeneity is that a growing firm with a great need for outside financing has more incentive to adopt better governance practices in order to lower its cost of capital. The proposition has been supported by empirical evidence in Klapper and Love (2004). Demsetz and Lehn (1985) postulates that ownership concentration is the result of equilibrating operating characteristics of individual firms and that diffused ownership emerge as a response to value maximization. For reasons related to performance-based compensation and insider information, firm performance could be a determinant of ownership (Bhagat and Bolton, 2008). Supporting evidence comes from Cho (1998), which has found that corporate value affects ownership structure while the latter has no effect on the former. Demsetz and Villalonga (2001) finds that the relationship between ownership structure and corporate performance become statistically insignificant once endogeneity is controlled for.

In contrast with the abundance of empirical studies on developed countries, much less attention has been put to corporate governance in developing countries. Studies focused on banks in such countries are even sparser. Given the fact that banking in these countries is usually under-developed, corporate governance may be an issue critical to the health of the sector as well as the development of the whole economy. This paper attempts to fill in the gap in literature by focusing on banks in one African country – Zimbabwe.

Zimbabwean banking sector

When Zimbabwe gained independence from Britain in 1980, the banking sector was dominated by foreign-owned banks until 1991 when the financial sector was liberalised as part of the Economic and Structural Adjustment Programme. The IMF prescribed liberalisation measures were adopted to open up and de-regulate the sector in attempt to promote financial development in particular and economic growth in general (Harvey, 1995). For the first time in Zimbabwean history, indigenous banks were allowed and subsequently encouraged. In fact, all new licenses were issued to such banks in the 1990s, with the first indigenous commercial bank established in 1997 (Mumvuma, *et al*, 2003). The number of banking institutions increased rapidly and by 2002 they had more than doubled. The emergence and expansion of indigenous banks was in line with the political zeal to break up the dominance of foreign banks which used to serve the white population. Issuing of licenses to those with political connections was lax, enabling the elite group to use newly-licensed

banks as an avenue to accumulate wealth (Chikukwa, 2004). There was ownership concentration in newly-licensed indigenous banks, with the founders and their families as controlling shareholders and represented in top management and the board of directors (Mumvuma, 2003).

In the late 1990s and at the turn of the 21st century, the Zimbabwean economy was troubled by hyperinflation, resulting in declining savings from depositors and forcing many banks to use other sources to fund their lending. Banks, in particular indigenous ones, were encouraged by negative real interest rates resulting from government policies to borrow from the central bank to fill in the gap in reduced interest incomes. Arrangements like the so-called overnight accommodation window further opened avenues for banks to borrow from the central bank. However, the use of such borrowed money was not closely and properly supervised. Banks were alleged to use the funds to invest in speculative and non-core activities and even, in some cases, to support daily transactions (RBZ, 2003).

With the deepening of the crisis and imminence of the collapse of the banking sector, a temporary withdrawal of its function as the lender of last resort was announced by the central bank in December 2003. The departure of the central bank from its previous approach of forbearance put a number of banks into liquidity crisis. Subsequently, 13 banking institutions collapsed, all of which were indigenous, licensed after the financial liberalisation from 1991. Following the banking crisis, tough measures were taken under Presidential powers and many bank owners and managers were accused of or arrested for frauds and/or abuse of depositors' money. Some of the bank owners/founders simply fled to other countries fearing arrest.

The distress experienced by individual banks and the turmoil of the sector led to a review of the regulatory environment and significant amendments to the laws governing the financial sector (Makoni, 2010). The Troubled Financial Institutions Resolution Act (2004) was enacted, under which seven of the 13 collapsed banks were placed under curatorship, one under liquidation, one closed, and the other four under the Troubled Bank Fund. At the time, the government put the failure of distressed banks down to capricious greed of alleged owner managers and associated corporate governance issues. Consequently, new laws and regulations were introduced intended to empower the central bank to swiftly enforce ownership changes and restructure the financial sector. Bank founders in private indigenous banks were required to reduce their shareholding and some were forced out of their companies under varying pretexts. New regulation requires that shareholding by any individuals must not exceed 10 percent of the bank's shareholding. The ownership regulations have not always been forcefully enforced and it is unsurprising that some banks have found ways to get round this regulation.⁴ The regulations were intended to improve corporate governance through a shift from owner-controlled to manager-controlled banks.

The Zimbabwean banking sector has undergone restructuring through closing down some distressed banks, and A&Ts. In the cases of mergers, the licenses of individual merging institutions were withdrawn and a new one was issued to the merged bank, supposedly on the ground that the new regulatory limit on ownership was abided by.

⁴ – see the evidence of one of the case studies – as a footnote???)

By the time of January 2010, there were 17 commercial banks, of which eight was private indigenous (listed or unlisted), six foreign owned, and three state-owned.

Methodology and Data

The paper focuses on Zimbabwean commercial banks, which have undergone changes and turmoil over the years. Attention is put to corporate governance of the banks and how it relates to bank performance, against the background of the introduction of the new regulation which puts restriction on individual investors' shareholding. Descriptive analysis of the performance of the banking sector and of individual commercial banks is presented, followed by summary statistics of the corporate governance variables of sample banks. The corporate governance variables are then correlated to bank performance indicators. The rest of the section details the measures of the variables, data sources and the way the variables are analysed.

Corporate governance variables are constructed based on data from a questionnaire survey which was conducted in 2010. Among the 17 commercial banks at which the survey is targeted, 12 completed and returned the questionnaire.⁵ This gives a sample of 12 banks for the analysis of the paper. There is no basis to believe that the exclusion of the other five banks has produced marked bias in sampling. Generally speaking, it is a small sample, but not surprisingly so given the total number of commercial banks in the sector. Due to infeasibility in collecting longitudinal data on corporate governance mechanisms through a single questionnaire survey, it is impossible to construct a panel data set. The small number of observations – 12 in total – rules out the use of regression analysis, and leads to the employment of less sophisticated methods. This is a main limitation of the study.

Two sets of corporate governance variables are constructed. Firstly, variables of individual corporate governance mechanisms are constructed along four dimensions: ownership, the board of directors, risk control, and disclosure. The dimensions are identified in line with literature on corporate governance of both financial and non-financial firms. Certainly, corporate governance is of multi-facet that goes far beyond the four dimensions (or the dimensions used by any empirical studies), and each dimension is so rich that any specific measures tend to over-simplify. Nonetheless, the dimensions and specific measures/proxies adopted in the paper are justified and widely used by existing literature. Table 1 listed the variables.

For ownership attributes, dummy variables are used to distinguish among ownership types, namely foreign-owned, indigenously private-owned, and government-owned banks. There is also a dummy variable to show whether the bank is publicly listed or not. Ownership structure is measured by shares held by executive directors, insider board members, institutions, the largest five blockholders. The purpose is to measure ownership concentration and identify the controlling shareholder(s). Board characteristics include board independence measured by the number of non-executive directors divided by the total number of board members,⁶ the board size measured by the total number of directors, directors' qualification measured by the percentage of

⁵ Three other banks sent back incomplete questionnaires and were therefore excluded from the sample.

⁶ A better measure would be the number of unaffiliated independent directors divided by the total number of board members. However, there is no information for us to tell whether non-executive directors are affiliated or not.

directors with a university degree or above, and CEO/Chairman duality measured by a dummy variable which take the value 1 if the two positions are occupied by one persona and 0 otherwise. Most empirical studies measure risk with the standard deviation of monthly stock return for a number of preceding years for listed companies. The standard deviation of return on asset over a period can be used for non-listed firms.

Given the dramatic changes over the last ten years during which many banks in Zimbabwe were merged and some new banks were licensed rather recently, it is impossible to construct such measures which are comparable across individual banks. Therefore, the paper instead uses a proxy for this attribute. We look at whether there has been reported insider lending, based on the responses from informative banks together with data from other sources.⁷ It's noted that the proxy is rather one of the results of poor risk control than the mechanisms which are used in practice. This limitation calls for caution when interpreting the results of analysis.

Table 1. List of Corporate Governance Variables

Variables	Description
Ownership	
OWTF	Dummy variable – ‘1’ for banks with a foreign shareholder as the majority shareholder, and ‘0’ otherwise
OWTP	Dummy variable – ‘1’ for banks with private indigenous investors as the majority shareholder, and ‘0’ otherwise
PUB	Dummy variable – ‘1’ for publicly listed banks and ‘0’ otherwise
EXEOWN	Shares controlled by executive directors, measured by percentage of shares controlled (directly and indirectly owned) by executive directors
OCON	Shares controlled by inside board members (including executive directors and CEO), measured by percentage of shares controlled (directly and indirectly owned) by inside board members
INSTOWN	Institutional share ownership, measured by percentage of shares owned by institutional shareholders excluding government and governmental owned bodies such as the National Investment Trust
LCON5	Ownership concentration, measured by the percentage of shares owned by the five largest shareholders
Board of Directors	
PROPNEED	Board independence, measured by the number of non-executive directors divided by the total number of board members
BDSZ	Board size, measured by the total number of directors
LBQL	Directors’ qualification, measured by the proportion of directors with a university degree or above
DUALITY	CEO/Chairman duality – a dummy variable which takes ‘1’ if there is such duality and ‘0’ otherwise
Risk Control	
ISLD	Inside lending, measured by using a total of 4 questions from the QS expressed as a percentage, with the lower % indicating a high ratio of ISLD.
Information Disclosure	
LDSC	Voluntary disclosure by banks, measured as an index

⁷ data are drawn from internal documents of individual banks, website of and documents from the central bank, newspapers, and interviews with bank managers and central bank officers.

The last dimension is concerned with information disclosure. Following the crisis of the banking sector in 2003, Zimbabwean central bank introduced stringent regulation requiring disclosure of information by banks to stakeholders. An index is constructed to capture the extent of compliance using standard questions regarding the different bank's level of disclosure.

Secondly, corporate governance scoring which aggregates the four dimensions is constructed. Rating agencies have developed various corporate governance scoring or indices to assess corporate governance of companies. Some empirical studies have also used corporate governance scoring (CGS) or scorecard to examine mechanisms used to govern corporations (e.g. Black, 2001; Black, *et al*, 2003; Gompers, *et al*, 2006; Brown and Caylor, 2006; Cheung and Jang, 2008). Because no rankings or indices have been developed by rating agencies for Zimbabwean companies, the paper constructs its own CGS based on responses from the questionnaire survey, following the method used by Cheung and Jang (2008).⁸

Table 2: Corporate Governance Scoring

Questions	Desirability
<i>Ownership</i>	
Is there ownership concentration?	Yes as desirable
Is the controlling shareholder a foreign investor (or institutions)?	Yes as desirable
Is the bank state-owned?	No as desirable
Is the bank listed?	Yes as desirable
Is the founder (if any) the CEO or one executive director?	No as desirable
Is the CEO or any of executive director one of the top five shareholders (direct and indirectly owned shares)?	No as desirable
Is there any institutional investor (other than government or government-owned institutions)?	Yes as desirable
<i>Board of Directors</i>	
Does the board have nomination committee?	Yes as desirable
Does the board have Audit Committee	Yes as desirable
Do executive directors all have university degree or above	
Is the CEO the board chairman?	No as desirable
<i>Risk Control</i>	
Has any member of the board borrowed or attempted to borrow from the bank in the past five years.	No as desirable
Has the bank ever extended a loan or financial support to subsidiaries or bank holding over the past five years	No as desirable
Has any member of the board recommended or influenced	
Has the bank ever extended a loan to either CEO or members of senior management of members of the board over the past 5 years	No as desirable
Has the bank ever written off as bad debt a loan extended to the CEO	No as desirable
<i>Information Disclosure</i>	

⁸ Cheung and Jang (2008) constructs corporate governance scores for emerging economies in East Asia. There is no ground to believe that the application of the method to firms is problematic.

The four aforementioned dimensions used for individual corporate governance variables are employed for constructing CGS. Responses to questions in the questionnaire survey are examined and converted to numeric values. A value of 1 is assigned to answers considered desirable and 0 to those undesirable. A sub-index is then constructed for each of the dimensions by dividing the total score by the total number of questions in that dimension. A final CGS is obtained by taking sum of the four sub-indices with an equal weight. Table 2 lists the questions for the construction of CGS. In regard to ownership,

The purpose of scoring the corporate governance dimensions is to determine which of them are necessary to ensure good practices. It is important to note that the scores do not reflect the quality of corporate governance of individual banks. In addition, the outcomes of the scoring depend heavily on which questions are included in the scoring and how much weight is assigned. In this sense, the scores are subjective judgments and may not necessarily reflect the true state of the quality of corporate governance of individual banks.

This paper adopts accounting-based indicators to measure performance. The choice is made because of the presence of non-listed banks in the sample which rules out the use of market value based measures. Two indicators of profitability are employed, namely ROE and ROA.⁹ We also use NIM, CIM, NPL and LLR ratios to measure operational efficiency and asset quality. Data are drawn from the Global Credit Rating Company for the year 2010.

Correlation analysis between bank performance and corporate governance, complemented by descriptive analysis of each of the two variables. Corporate governance is firstly disaggregated into four aspects each of which correlate to bank performance. CG is then measured by a more aggregated way, CGS (capture four categories?), and relate to CG. Descriptive analysis on the change of performance indicators in general, among different ownership types; correlation between different CG variables (in particularly the shareholding of executives and directors, ownership concentration; ownership types; ownership variables and insider trading variables; etc).

Empirical Results

The empirical results have been organised into two significant periods in the Zimbabwean banking sector. That is, the period (1999-2003) from the financial sector liberalisation to the banking sector crisis in 2003 and then the period (2004-2008) after the banking sector crisis and the introduction of regulatory changes by the central bank in 2004. In addition to analysing the aggregate performance data for the two periods, a performance trend analysis of individual banks between 2004 and 2008 is also made with the objective of observing the performance measures of these individual banks after the introduction of the 2004 regulatory changes.

⁹ ROE and ROA are two widely used indicators of performance. Studies which used such measures include Hassan and Bashir (2003); Antwi-Asare and Addison (2000); Bothwell (1980); Demsetz and Lehn (1985); abd Joh (2003)

Profitability and operational efficiency (1999 to 2008).

Changes in the profitability of the banking sector can indicate whether the performance of the sector as a whole has improved or not following the 2004 regulatory reforms. A paired *t test* was carried out to see whether there is a significant difference in the sector's profitability between the two periods (1999-2003 and 2004-2008). The results are summarised in Table 3 indicating an upward positive change in the ROA ratio from 5.31 percent to 18.11 percent, whilst ROE indicators also showed an upward movement from 49.38 percent to 92.80 percent. Over the 8 years, both ROA and ROE variables showed a continuous increase year on year (y-o-y) except for a decline in both indicators between 2003 and 2004. This decline may have been a result of the banking sector crisis during this period.¹⁰

In view of the regulatory reforms introduced in 2004, both ROA and ROE ratios are expected to improve. When tested for significance, the changes in both ROA and ROE in Table 3 over the two periods are statistically significant at 1 percent and at 5 percent respectively suggesting an increase in ROA and ROE over time.¹¹ ROA shows how well a bank is performing using the resources at its disposal to generate additional resources for the bank and ROE measures how much profit a bank generates with the money shareholders have invested. Positive growth in these indicators is considered necessary for bank viability (Dziobek and Pazarbasioglu, 1977:8-9). Good earnings performance enables a bank to fund its expansion, remain competitive and replenish or increase its capital.

When Cost to Income Ratio (CIR) and net interest margin (NIM) ratios are considered, literature suggests that the lower the CIR, and the higher the NIM ratio, the more profitable a bank will be (Reaz, 2005). The results in Table 3 indicate an increase in the CIR ratio from a mean of 18.24 percent in the first period to 57.74 percent in the second period. The NIM mean decreased from 236.33 percent to 66.1 percent in the second period. In both cases, the results show negative signs from expected outcomes. However, the differences in the means for both *p* values for the *paired t* test on CIR and NIM ratios over the two periods were not statistically significant. The reduction in the NIM ratio over the two periods may have been a result of negative real interest rates and a decline in interest bearing assets following a collapse of the Zimbabwean economy between 1999 to 2003.

¹⁰ Between 2003 and 2004, ROA fell from 15.58 % to 10.94, whilst ROE also retreated from 72.33% to 59.28% indicating the severity of the banking sector crisis.

¹¹ The significance level used in this analysis is .05 which is the level used in social science studies.

Table 3: Paired t test for Profitability Ratios of All Zimbabwean banks (1999-2008). *

Variable	Obs.	Mean	Std. Error.	Stnd. Dev.	[95% Conf]	t-
ROA	5(1999-2003)	5.316	2.599588	5.812855	-1.901612	
	5(2004-2008)	18.11	3.363914	7.521941	8.770276	-
	8.8026.					
ROE	Ha:mean (diff)<0		Ha:mean(diff)!=0			
	Pr(T<t)=0.0005		Pr(T>t)=0.0009			
	5(1999-2003)	49.386	9.179717	20.52647	23.89902	
	5(2004-2008)	92.806	10.86921	24.30429	62.62824	-
	3.0767					
CIR	Ha:mean (diff)<0		Ha:mean(diff)!=0			
	Pr(T<t)=0.0185		Pr(T>t)=0.0370			
	5(1999-2003)	18.24	3.010581	6.731865	9.881286	
	5(2004-2008)	57.742	27.570661	64.974	-18.80627	-1.3337
NIM	Ha:mean (diff)<0		Ha:mean(diff)!=0			
	Pr(T<t)=0.1266		Pr(T>t)=0.2532			
	5(1999-2003)	236.33	96.82188	216.5003	-32.49065	
	5(2004-2008)	66.1	30.14519	67.40668	-17.59645	
	+1.6191					
	Ha:mean (diff)<0		Ha:mean(diff)!=0			
	Pr(T<t)=0.9096		Pr(T>t)=0.1807			

Source: Statistical Analysis based on RBZ Annual Reports.

*Profitability data is for all banks for two periods (between 1999-2003 and 2004-2008). T-statistic is for the difference in means between pre-regulatory reform and post regulatory reforms. Under one tailed test, significance at 0.5% level. CIR, refers to Cost to Income Ratio. The observation refers to the total number of years in each period whilst the particular period is indicated in brackets.

Profitability Ratios by bank ownership types (2003-2008).

We also conduct a trend analysis of the profitability ratios between 2004 and 2008 (period after introduction of regulatory reforms) using data at bank level. The purpose is to examine the performance of the individual banks and then by ownership type. The expectation is that after the corporate governance reforms, profitability indicators should improve (Reaz, 2005). The full consolidated results for all banks in respect of these profitability indicators between 2004 and 2008 are summarised in Table 2 and Figure 1 below. The results show that private indigenous banks recorded the lowest ratios in ROA and ROE between 2004 and 2005 compared to foreign banks with the highest ratios and state banks with the second highest.

Figure 1 which highlights the results of a trend analysis for the ROA ratio between 2004 and 2008 show that indigenous banks were outperformed by state banks between 2004 and 2005. The trend is however reversed between 2006 and 2008.

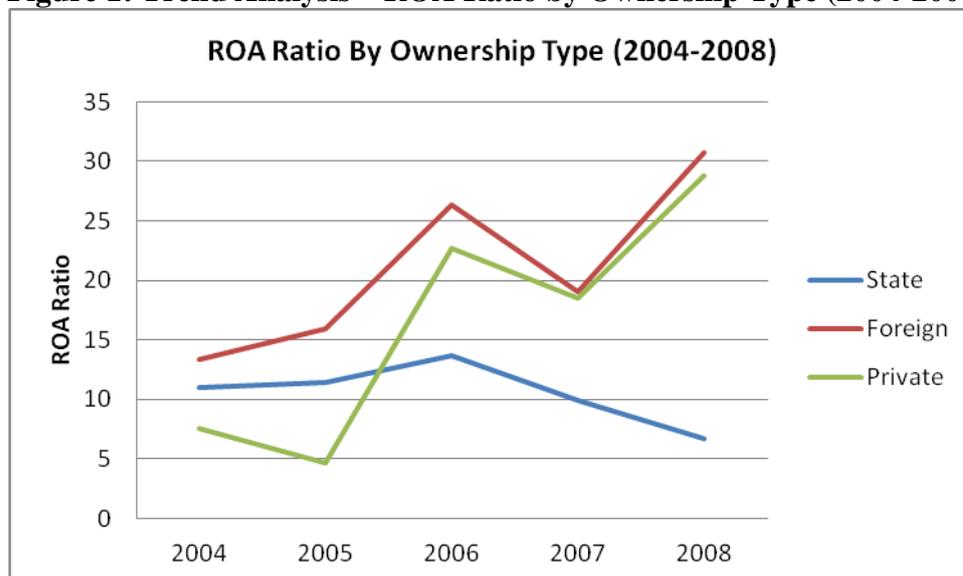
Table 4: Measures of Bank Profitability by Ownership Type (2003-2008).

Bank Type	2004		2005		2006		2007		2008	
	ROA	ROE	ROA	ROE	ROA	ROE	ROA	ROE	ROA	ROE
State owned	11	117	11.45	116.45	13.7	106.43	9.9	58.5	6.7	19.03
Foreign	13.33	109.48	15.88	123.45	26.35	114.45	19	69	30.76	94.81
Pvt Indig.	7.6	-17.2	4.7	93.37	22.65	118.03	18.53	88.07	28.8	173.77
All Banks	10.94	59.28	13.86	110.58	16.25	99.46	19.04	76.99	30.46	117.93

Source: Bank Annual Reports and Global Credit Rating, GRC (2009).

Foreign banks remained top performers for the whole period between 2004 and 2008. The results for NIM and CIR ratios between 2004 and 2005 show a similar pattern, with indigenous banks reporting the lowest NIM ratio in 2004 of 35.7 percent, compared to foreign banks (45.28 percent) and state banks (63.95 percent). A similar pattern is also repeated in 2005. Between 2006 and 2007 there was a slight improvement in the NIM ratios for all banks, although the ratio retreated to -10.7 percent in 2008. The decrease could have been a result of a reduction in bank deposits due to market uncertainties resulting from dollarization of the economy.

Figure 1: Trend Analysis – ROA Ratio by Ownership Type (2004-2008)



Source: Author's own compilation

One of the reasons why private indigenous banks had the lowest ratios may be attributable to the reconstruction of the sector through mergers and acquisitions. The introduction of the regulatory changes in 2004 could also have been a factor since it only affected indigenous banks. A further analysis of the cost to income ratio (CIR) provides an insight into the cost efficiencies of the different bank ownership types. The cost efficiency of banking firms is predicted to be positively associated with bank performance and specifically with bank profitability. The standard analysis of cost to income ratio, which is employed in other studies such as Pasiouras and Kosmidou

(2006), reflects the ability of bank's management to cover operating expenses by the generated bank income.

Table 5: Measures of operational efficiency by Ownership Type (2004-2008).

Bank Type	2004		2005		2006		2007		2008*	
	CIR	NIM	CIR	NIM	CIR	NIM	CIR	NIM	CIR	NIM
State owned	48.2	63.95	42.7	44	38.15	53.4	49.55	27.73	-	10.4
Foreign	39.53	45.28	32.61	32.8	26.21	84.1	23.16	33.71	-	10.55
Pvt Indig.	65.92	35.7	70.3	31.74	39.92	71.97	36.87	49.83	-	-10.7
All Banks	53	43.67	52.71	33.46	35.79	76.62	33.54	42.92	-	0.9

Source: Bank Annual Reports and Global Credit Rating, GRC (2009).

*CIR data for 2008 were not available.

The results in Table 5 show that foreign banks with an average cost to income ratio of 24.89 percent were the most cost efficient whilst indigenous banks with an average ratio of 41.80 percent outperformed state owned banks. The high CIR ratio of state owned banks could be attributed to a proportionately larger branch network in the rural areas compared to other banks, due to the government's desire to provide banking facilities to the rural population.

Demirguc-Kunt and Huizinga (1999) who analysed the determinants of commercial bank interest margins and profitability for 80 countries between 1988-1995 period show that, in developing countries, foreign banks have higher net interest margins (NIM) and profits than domestic banks, while the opposite is true for developed countries. The reasons noted for this superior performance of foreign banks is their technological edge which is relatively strong to overcome any informational disadvantages.¹² Macroeconomic factors are also found to explain variations in interest margins across countries since inflation is believed to be associated with higher realised interest margins and higher profitability.¹³

Aggregate profitability ratios for the banking sector before and after the introduction of the 2004 regulatory changes show an upward movement in ROA and ROE. This improvement was found to be statistically significant. There is also indication of a general increase in the CIR and a reduction in the NIM ratio over the same period although this was statistically insignificant. The trend analysis between 2004 and 2008 in suggest that foreign banks performed better than both indigenous and state owned banks during this period. The results also indicate poor performance by indigenous banks between 2004 and 2005 which may have been the result of the 2003 banking crisis.

¹² See Demirguc-Kunt and Huizinga (1999)

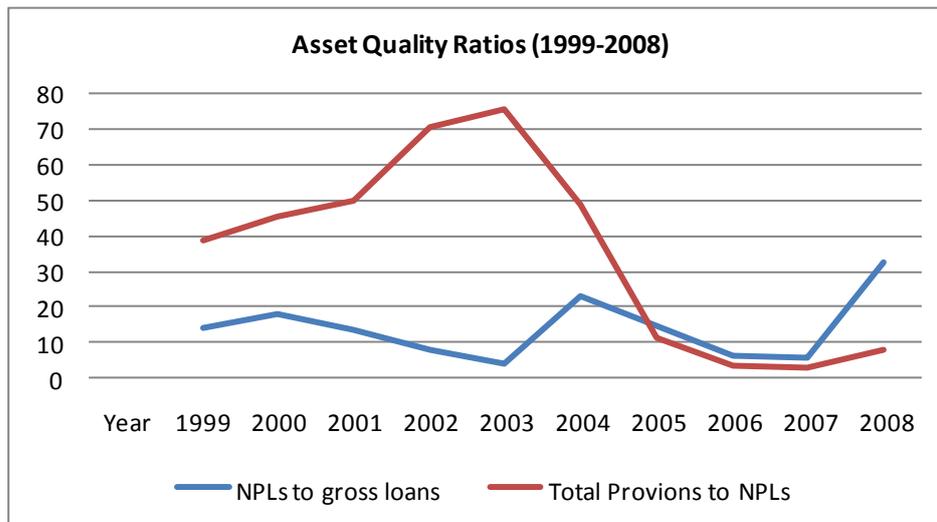
¹³ Ibid. (The positive relationship between inflation and bank profitability implies that bank income increases more with inflation than bank costs. Further, high real interest rates are associated with higher interest margins and profitability, especially in developing countries)

Asset Quality Ratios (1999-2008).

Credit risk exposure is used across literature as an indicator of asset quality, which can be measured by the ratio of non-performing loans (NPLs) to loan-loss provisions (Demirguc-Kunt and Huizinga (1999)). Since loan-loss provisions indicate the probability of loans to become non-performing, higher provisions are taken to be negatively related to bank profitability. Different authors capture this effect by using different indicators. Athanasoglu *et al* (2006) uses loan-loss provisions to non performing loans ratio, whilst Kosmidou *et al.* (2006) use loan-loss provisions to total assets ratio as an indicator.¹⁴ In our analysis we use loan loss provisions to non performing loans ratio to measure credit risk exposure of Zimbabwean banks.

Asset quality is an important performance measure since the solvency of banks is at risk when their assets become impaired due to over exposure to non-performing loans. Non Performing loans (NPLs) have been identified in literature as one of the primary causes of bank collapses (Llewellyn, 1998; Brownbridge, 1998).¹⁵ The banking sector reforms, introduced by the central bank in 2004, were expected to enhance the efficiency of banks and strengthen their profitability and solvency by reducing the NPL ratio.¹⁶ The data used to analyse NPL ratio and loan loss provisions are aggregate data for the banking sector as a whole. Figure 2 shows the changes in the two indicators for the banking sector over the period between 1999 and 2008.

Figure 2: Aggregate asset quality of the banking sector (1999-2008)*



Source: Author's own compilation

*Figures in the vertical Axis are in percentages.

¹⁴ Regardless of the indicator used, the relationship between loan loss provisions with bank profitability is expected to be negative.

¹⁵ According to Brownbridge (1998), the single biggest contributor to the bad loans of many of the failed local banks was insider lending. In at least half of the bank failures, insider loans accounted for a substantial proportion of the bad debts

¹⁶ In this case, higher NPL would be associated with less efficient banks.

The results show the NPL ratio peaking in at the height of the financial sector crisis in 2003, whilst the NPLs to gross loans ratio recorded the lowest result in the same year. After 2003, both ratios indicate a downwards movement although they start to move upwards again after 2007. Table 6 analyses the results of a paired t test for NPLs to gross loans and loan loss to gross loans provisions ratios between the two periods (1999-2003 and 2004-2008).

Table 6: Paired t test for Asset Quality Ratios of All Zimbabwean banks (1999-2008). *

Variable	Obs.	Mean	Std. Error.	Std. Dev.	[95% Conf]	t-
NPLs	5(1999-2003)	11.62	2.47657	5.5377	4.743939	
	5(2004-2008)	16.452	5.098978	11.40166	2.294968	-
	0.7491.					
	Ha:mean (diff)<0		Ha:mean(diff)!=0			
	Pr(T<t)=0.2477		Pr(T>t)=0.4954			
LLR	5(1999-2003)	56.06	7.18071	16.05656	36.12315	
	5(2004-2008)	14.762	8.594926	19.21884	-9.101341	
	2.8985					
	Ha:mean (diff)<0		Ha:mean(diff)!=0			
	Pr(T<t)=0.9779		Pr(T>t)=0.0442			

Source: Statistical Analysis based on RBZ Annual Reports.

*Profitability data is for all banks for two periods (between 1999-2003 and 2004-2008). T-statistic is for the difference in means between pre-regulatory reform and post regulatory reforms. Using a one tailed test at 5 percent significance level. NPLs, refers to Non Performing Loans Ratio, whilst LLR refers to Loan Loss Provisions. The observation refers to the total number of years in each period whilst the particular period is indicated in brackets.

When the means for the two periods are compared, the results show a decline in loan loss provisions from 56.06 to 14.76 percent although the NPL ratio records a marginal increase over the same period, from 11.62 percent to 16.34 percent between the two periods. However, the Paired t test for both ratios shows that the changes over the two periods were not statistical significant.

Asset Quality Ratios by Ownership type (2004-2008).

Data on asset quality ratios at the bank level are used to make a trend analysis from 2004 and 2008. Table 7 summarises the results by ownership types.

Table 7: Asset Quality Ratios by Ownership Type (Average, 2004-2008). *

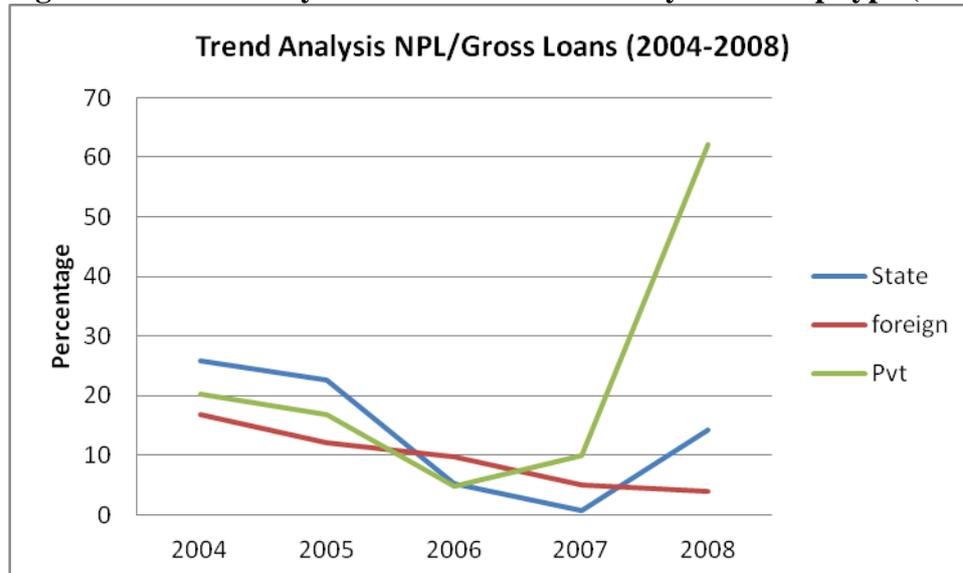
Bank Type	2004		2005		2006		2007		2008	
	NPL	LLR	NPL	LLR	NPL	LLR	NPL	LLR	NPL	LLR
State owned	25.95	8.3	22.7	17.15	5.2	2.83	0.83	1.73	14.3	3.12
Foreign	16.87	15.96	12.01	11.53	9.80	5.31	4.93	2.60	3.93	3.12
Pvt Indig.	20.23	17.4	16.92	10.75	4.85	1.65	9.86	4.21	62.21	15.55
All Banks	18.41	11.94	14.75	11.17	6.45	3.14	5.94	3.14	34.36	7.81

Source: Researcher’s compilation from fieldwork data.

*The figures in this analysis are the averages for each ownership type over the five year period.

The results indicate that NPLs had been declining across different ownership types before making a sharp increase in 2008. In general, the results reveal that foreign banks had lower NPLs and LLRs ratios compared to other bank types. The high NPL and LLRs averages among indigenous banks should however take into consideration the results in a few indigenous banks with recorded higher NPL ratios compared to others.¹⁷

Figure 3: Trend Analysis of NPL/Gross Loans by ownership type (2004-2008)



Source: Author’s own compilation

One explanation for a high NPL ratio could be high levels of insider loans and default rates in indigenous banks reported by the central bank. Indigenous banks attracted poor quality loans and high default clients due to their comparatively small sizes. Loan Loss Reserve/Gross loans ratio suggests that indigenous banks also had higher provisions (12.05 percent) compared to other bank types. The sharp increase in 2008 in both NPL and LLR indicators which may have been a result of the panic and apprehension initially caused by the dollarization of the economy which resulted in increased loan defaults.

¹⁷ For example, CFX Bank had an NPL ratio of 462.7 percent in 2007 when the rest of the indigenous banks in the same sector had NPL ratios below 10 percent. In 2004-5, FBC Bank had higher NPL ratios of 64.9 percent and 44.8 percent respectively compared to other banks which averaged 15 percent NPLs.

Liquidity Ratios by ownership type (2004-2008)

Liquidity management is another important dimension of banks and one that is closely related to corporate governance. This is because solvent financial institutions may be driven towards insolvency by poor management of short-term liquidity. Generally, the liquidity of banks is a necessary condition for ongoing banking operations and any severe liquidity challenges can lead to a bank failure.¹⁸ One of the ratios used to measure liquidity is loan to asset ratio defined as a ratio of the total outstanding loans to total assets. A high ratio indicates that a bank is loaned up and its liquidity is low which exposes the bank to higher defaults. Another ratio which can measure liquidity is the loan to deposit ratio (LTD). This is the percentage of a bank's loans against its deposits which is used as a gauge of a bank's solvency. The higher the ratio, the more the bank is relying on borrowed funds which are generally more costly than deposits. By international standards, healthy LTD ratios typically fall between 95 percent to 105 percent.

There are two opposing considerations when determining any bank's LTD ratio. First, there is the risk element arising from issues such as economic performance, quality of bank management, the deposit base and lending opportunities (Aryeetey, 1994). Zimbabwe's general economic decline and the liquidity crisis in the banking sector in 2003 may be due to some reason that banks were sceptical to increase borrowing. The effect of these combined factors would lower the LTD ratio. Secondly, banks have to consider the earnings factor, which would result in a higher ratio.¹⁹ Financial reforms tend to focus banks on increasing their earnings potential, thereby expecting a higher LTD ratio.

A trend analysis of the loan to total asset ratio by ownership type between 2004 and 2008 is presented in Table 8.

Table 8: Loan to Asset Ratio by ownership type (2004-2008)

	2004	2005	2006	2007	2008	Average
Ownership Type						
State Owned	36.35	33.5	28.25	30.20	0.95	25.85
Foreign Banks	39.14	19.15	24.50	26.5	16.20	25.25
Indigenous Banks	56.73	41.91	46.16	40.87	36.25	44.38
All Banks	47.42	31.55	35.13	33.7	23.84	34.32

Source: Researcher's compilation from fieldwork data

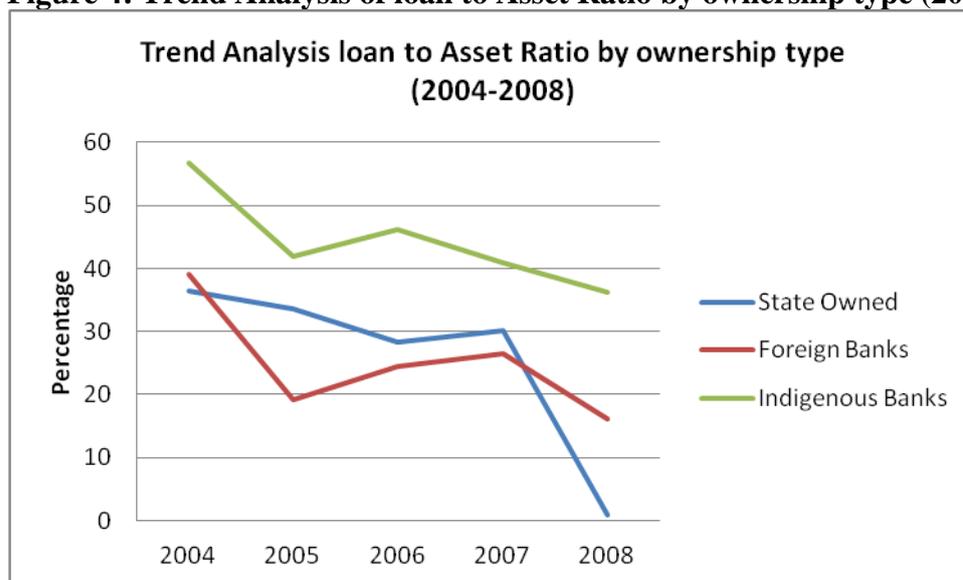
The results show a decrease in the loan to asset ratio for the whole banking sector from 47.42 percent in 2004 to 34.32 percent in 2008. Indigenous banks reported loan

¹⁸ Conversely, maintenance of superfluous liquidity can lead to the underperformance of banking assets and thus to lower profitability of banking firms. However, an unmatched position potentially enhances profitability but also increases the risk of losses.

¹⁹ McNaughton and Barltrop (1992:13) argue that 'though the appropriate level varies by country. 70-80 percent would represent a reasonable balance between liquidity and earnings' concerns.

to asset ratios above the banking sector averages.²⁰ Both Table 6 and Figure 4 show that over the 5 years, private indigenous banks had the highest loan to asset ratio. The trend analysis also shows that indigenous banks had higher liquidity ratios between 2004 and 2005 compared to other banking types. The reduction of the loan to asset ratio between 2004 and 2008 in figure 4 could have been a result of reduced lending by most banks. This could have been a result of increased liquidity constraints imposed upon the banking sector over the period. Another possible reason for the more conservative credit practices over this period could be the rigorous lending guidelines introduced in 2004 which resulted in a cautious approach to avoid liquidity problems.

Figure 4: Trend Analysis of loan to Asset Ratio by ownership type (2004-2008)



Source: Author's own compilation.

The results also show a sharp fall in the ratio in 2008 which could be a result of low deposits by customers following the dollarisation of the economy with customers unsure of the changes, preferred to keep their money outside the banking system.

Correlation results between corporate governance and performance.

Having specified the variables used in the correlation analysis, we then analyse the results of the correlation between corporate governance and performance. The *Pearson Product-Moment Correlation Coefficient* (r) or *correlation coefficient* is interpreted using the established procedure. Firstly, the sign of the correlation (+, -) is interpreted to define the direction of the relationship between the variables. Based on the general statistical interpretation of correlation coefficients, a positive correlation coefficient is interpreted to mean that as the value of one variable increases, the value of the other variable increases whilst a negative correlation indicates that as one variable increases the other one decreases (Lomax, 2007).

²⁰ ReNaissance Bank had a high loan to asset ratio of 102.6 % in 2004 and 128.2 in 2006 whilst CBZ Bank reported 73.2 % in 2004. This could have been responsible for the high averages within the private indigenous banks.

Second, the absolute value of the correlation coefficient is taken to measure the strength of the relationship between the variables. A correlation coefficient of $r=0.50$ or greater is taken to indicate a stronger degree of linear relationship than one below 0.50 .²¹ Lastly, the analysis tests whether the correlation coefficient is statistically significant by interpreting the *p-values*.

The correlation results presented in Table 9 shows the relationship between the corporate governance variables and the performance variables separately. In general, whilst some of the corporate governance variables show a positive relationship with performance variables, a significant number show the relationship between the variables to be negative. We only find a strong relationship between the variables displayed in Table 9. However, only a few of the relationships are statistically significant. However, some major findings from the results show a strong and statistically significant negative correlation between degree of insider lending (ISLD) and ROE. Although not statistically significant, we also find a strong relationship between the board of director's level of qualifications (LBQL) and the bank's non-performing loans (NPLs).

Table 9: Variables showing strong correlation

CG Variable	Performance Variable	Coefficient	P-Value
Ownership Variables			
OCON	ROA	0.5065	0.1357
Board Variables			
LBQL	NPL	-0.5071	0.0924
LBQL	LLR	-0.563	*0.0567
Risk			
ISLD	ROE	-0.6439	*0.0239
Disclosure			
LDSC	ROE	0.5124	0.1039
LDSC	CIM	-0.5047	0.0942

*Results are statistically significant.

Although the results show no strong correlation between corporate governance and performance variables, this does not necessarily disprove the claim that good governance leads to good performance. Besides the fact that some studies in other countries do not find this relationship to be robust, a number of factors could have influenced the findings from this study. First, most research supports the positive correlation between firm-level corporate governance practices and different measures of firm performance. The link is stronger with market-based measures of performance (that is firm valuation) and weaker with accounting measures (Lomax, 2007). One of the reasons for a weaker relationship when using accounting figures might be explained by the allowed discretion in accounting reporting and the fact that better governance might reduce such discretion (Dedman, 2002). This study uses accounting

²¹ Likewise, a correlation coefficient of $r=-.50$ shows a greater degree of relationship than one of $r=-.40$. A correlation coefficient of zero ($r=0.0$) indicates the absence of a linear relationship and correlation coefficient of $r=+1.0$ and $r=1.0$ indicate a perfect linear relationship.

measures, instead of stock returns due to the absence of reliable stock market data. This may explain the weak relationship we find between corporate governance and performance.

Second, some studies find a weak relationship between corporate governance and performance as a result of a financial crisis or poor macroeconomic conditions. A study of 296 financial institutions in 30 countries found that board independence and high institutional investor ownership, which are usually assumed to be good practices, were associated with poor stock performance during a crisis (Erkens et al., 2010). The deteriorating macroeconomic climate in Zimbabwe at the time of this study may have contributed to a weaker association between corporate governance and performance. Third, the findings could also indicate that besides corporate governance, there may be other institutional factors which can affect the relationship between corporate governance and performance (Rajan and Zingales, 1999; Brownbridge, 1998). These include the effect of regulatory and political factors such as the central bank regulatory policies, the existence of special interest groups and political interference in banks.

Correlation analysis between CGS scoring and performance

The results from Corporate Governance Scoring (CGS) are summarised in Table 10. They show higher corporate governance scoring by foreign owned banks (Barclays and Stanbic Bank). However, FBC Bank, a private indigenous bank also recorded the second highest corporate governance score from all the banks ranked. The lowest ranked banks (ReNaissance and Interfin) are private Indigenous banks. A year after the survey, the two banks collapsed and were placed under curatorship by the central bank.

Table 10: Corporate Governance Score of Individual banks by sub-category

Bank	OWNERSHIP	BOARD	RISK CONTROL (ISLD)	DISCLOSURE (LDSC)	TOTAL SCORE
State					
Agribank	3	4	3	0	10
ZB	5	4	3	0	12
Average	4	4	3	0	11
Foreign					
Stanchart	5	4	5	0	14
Barclays	7	4	5	1	17
Premier	5	4	0	0	9
BancABC	5	4	3	1	13
Met Bank	5	4	3	0	12
Average	5.4	4	3.2	0.4	13
Indigenous					
CFX	5	4	1	0	10
NMB	5	4	2	0	11
Kingdom	4	4	2	1	11
TN Bank	4	4	4	0	12
FBC	6	4	4	1	15
ReNaissance	4	4	0	0	8
Interfin	4	4	0	0	8
Average	4.5	4	1.8	0.2	10.7

Source: Author's own compilation from fieldwork data.

Except for the three banks which recorded the highest score, in general, the results show no marked differences in the corporate governance scores between the rest of the banks regardless of ownership type. When analysed by category, all the banks had complete scores for their board structures largely because of new regulatory provisions which required banks to set up new board structures and sub-committees.

We also relate CGS to different classifications of banks, more specifically to establish whether CGS differs between listed and non listed banks, between stand alone banks and banks as part of a holding company, and between foreign owned domestic banks, and between banks in which CEOs and executive directors control more than 10 percent of the shareholding and those in which they control less. The results in this regard are presented in Table 11 alongside the ROE means.

Table 11: Corporate Governance Scores (CGS) by Ownership Structure

Ownership Structure	No of Banks ROE/Mean*	CGS/Means	P-Values**
Listed Banks.	9	28.5	143.71
Unlisted Banks	3	26.5	87.63
			Pr ([T] >[t])=0.6996
Stand-alone-Banks	5	28.4	151.02
Part of a Group or Holdings	7	25.8	96.07
			Pr ([T] >[t])=0.6192
Substantially owned by foreigners	5	27.41	80.06
Others	7	27.71	75.02
			Pr ([T] >[t])=0.9100
CEO >10 % shares.	3	26.80	117.13
CEO <10 % shares	9	32.33	128.92
			Pr ([T] >[t])=0.0351
Concentrated ownership Executive >10 % shares	5	25.60	107.43
Diffuse Executive Directors <10% shares.	7	32.63	142.88
			Pr ([T] >[t])=0.0743

Source: Author's own compilation from fieldwork data.

*Return on Equity (ROE) as at year ending 2008.

** The p-Values in this table relates to a paired t test for the corporate governance score between the two contrasting ownership types.

Though statistically insignificant, the comparative results show that banks listed on the Zimbabwe Stock Exchange have higher average CGS (28.5) compared to unlisted banks (26.5). When the means for the ROE ratio for the two are compared listed banks have a higher average ROE average (143.71%) almost double that of unlisted banks (87.63 %). A possible explanation for the higher CGS among listed banks could be the extra corporate governance compliance requirements for listed companies enforced by the stock exchange (Mangena and Tauringana, 2005). The results show that stand-alone-banks have higher CGS (28.41) and higher ROE ratios (151.02) compared to those which are part of a group or holding company with lower score CGS (25.8) and ROE ratios (96.07%). During the same period, foreign banks performed marginally better than locally owned banks.²²

The results in Table 11 also show that owner managed banks in which the CEO controls 10 percent or more of the bank's shareholding have lower CGS (26.80) and lower ROE ratios (117.13 %) compared to banks in which the CEO owns less than 10 percent of the shareholding with higher CGS (32.33) and higher ROE (128.92). The difference in the CGS in this regard is statistically significant at 5 percent. The last set of results show banks with diffuse ownership in which executive directors own less than 10 percent of the issued share capital, to have higher CGS (32.63) and higher ROE ratio (142.88%) compared to banks with concentrated ownership in which executive directors control more than 10 percent of the shareholding with a lower CGS (25.60) and lower ROE ratios (107.43). The difference in the CGS between these two groups is also statistically significant at 10 percent.

A correlation analysis between the corporate governance scores and the performance indicators is also performed. The CGS in the different categories such as Ownership and Board are also correlated separately. The results are summarized in Table 12.

Table 12: Correlation Analysis Results.

CGS Variable	ROA	ROE	NIM	CIM	NPL	LLR	OWTF	OWTP	PUB
CGS									
(Coeff)	0.2684	-0.0598	0.0568	-0.3314	-0.3199	-0.3948	0.3213	-0.1414	0.2957
P-value	0.3990	0.8535	0.8607	0.2927	0.3107	0.2041	0.3085	0.6612	0.3508
OWT									
(Coeff)	0.1271	0.0534	0.1762	-0.6350	0.0027	-0.0602	0.4283	-0.1034	0.3089
P-value	0.6939	0.8690	0.5838	0.0265	0.9935	0.8527	0.1648	0.7492	0.3286
BOARD									
(Coeff)
P-value	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
RISK									
(Coeff)	0.1965	-0.2684	-0.1765	0.0001	-0.4195	-0.4927	0.1662	-0.1857	0.0818
P-value	0.5405	0.3989	0.5831	0.9998	0.1746	0.1036	0.6057	0.5633	0.8005
LSDC									
(Coeff)	0.3904	0.4342	0.4474	-0.2566	-0.2107	-0.2079	0.1195	0.1195	0.5000
P-value	0.2095	0.1584	0.1448	0.4207	0.5109	0.5167	0.7114	0.7114	0.0979

Source: Author's own compilation.

* Results show a strong relationship between the variables. p-Value statistically significant at 5 percent.

²² It should be noted, however, that foreign banks in this analysis includes weak indigenous banks which were taken over by foreign investors after the 2003 financial sector crisis.

Although there is a positive correlation between corporate governance scores and some performance variables such as ROA, NIM and PUB listing, none of these results are strong or statistically significant. When analysed by sub-category, the results for the correlation between the corporate governance scoring categories and performance variables largely mirror those of the composite corporate governance scoring. The only results which show a strong and statistically significant relationship is between ownership variables and cost to income margin (CIM).

Conclusion

The purpose of this paper was to analyse the relationship between corporate governance and performance in the Zimbabwean banking sector using various statistical measures. The first set of results presents our findings on the general aggregate performance of the banking sector during the periods between 1999-2003 and 2004-2008. The two time periods represents the period before and after the 2003 banking sector crisis and the implementation of a new set of corporate governance regulations by the central bank. Our findings suggest a positive growth of profitability ratios such as ROA and ROE suggesting performance improvements between the two periods. We also find differences in the performance ratios between the two periods to be statistically significant using a paired t test.

In the second part of the analysis, we conducted a correlation analysis between selected corporate governance and performance variables. In general, whilst most corporate governance variables show a positive correlation with performance, our results show the relationship as neither strong nor statistically significant. We however find a strong and statistically significant relationship between corporate governance variables such as the level of insider lending and performance variables such as ROE, suggesting that as the level of insider lending increases, performance reduces.

Lastly, we constructed a corporate governance scoring (CGS) grid based on selected corporate governance variables. The CGS was then correlated with the performance variables. The results in this regard match our general findings relating to corporate governance and performance as positive but not strong or statistically significant. When the results are analysed separately, they reveal some interesting findings. First, we find that banks listed on the Zimbabwe Stock Exchange have higher CGS and ROE ratios compared to unlisted banks. Stand alone banks also attained higher scores and ROE ratios compared to banks that are part of a holding group.

Significantly, we also find that owner managed banks in which the CEO controls 10 percent or more of the bank's shareholding have lower CGS and lower ROE ratios compared to banks in which the CEO owns less than 10 percent of the shareholding with record higher CGS and higher ROE. The difference in the CGS in this regard is statistically significant at 5 percent. Banks with diffuse ownership in which executive directors own less than 10 percent of the issued share capital also had higher CGS and higher ROE ratio compared to banks with concentrated ownership in which executive directors control more than 10 percent shareholding. The difference in the CGS between these two groups is also statistically significant at 10 percent.

References:

- Adams, R.B. and Mehran, R. (2008), 'Corporate Performance, Board Structure, and Their Determinants in the Banking Industry', No. 330, FRB of New York Staff Report.
- Allen, F. and Gale, D. (2000), 'Corporate Governance and Competition', in Xavier Vives (eds.), *Corporate Governance: Theoretical and Empirical Perspectives*. Cambridge: Cambridge University Press, 23–76.
- Andrés, P. and Vallelado, E. (2008), 'Corporate Governance in Banking: the Role of the Board of Directors', *Journal of Banking and Finance*, 32, pp2570–2580.
- Arun, T. and Turner, J. (2004), 'Corporate Governance of Banks in Developing Economies: Concepts and Issues', *Corporate Governance: An International Review*, 12(3), pp371-377.
- Barth, J. R., Caprio, G. Jr. and Levine, R. (2004), 'Bank Supervision and Regulation: What Works Best?', *Journal of Financial Intermediation*, 13, pp205-248.
- Bathala, C. and Rao, R.P. (1995), 'The Determinants of Board Composition: An Agency Theory Perspective', *Managerial and Decision Economics*, 16, pp59–69.
- Bauer, R., Gunster, N. and Otten, R. (2004), 'Empirical Evidence on Corporate Governance in Europe: the Effect on Stock Returns, Firm Value and Performance', *Journal of Asset Management*, 5(2), 91-104.
- Baysinger, B.D. and Hoskisson, R.R. (1990), 'The Composition of Board of Directors and Strategic Control: Effects on Corporate Strategy', *Academy of Management Review*, 15(1), pp72-87.
- Becker, G. and Stigler, G. (1974), 'Law Enforcement, Malfeasance, and the Compensation of Enforcers', *Journal of Legal Studies* 3, pp.1-18.
- Belkhir, M. (2009), 'Board of Directors' Size and Performance in the Banking Industry', *International Journal of Managerial Finance*, 5, pp201-221.
- Berle, A.A. and Means, G.C. (1932), *The Morden Corporation and Private Property*, Larcourt Brace and World, New York.
- Bhagat, S. and Bolton, B. (2008), 'Corporate Governance and Firm Performance', *Journal of Corporate Finance*, 14, pp257-273.
- Bhattacharya, S., Boot, A. W. A. and Thakor, A. V. (1998), 'The Economics of Bank Regulation', *Journal of Money, Credit and Banking*, 30, pp745–770.
- Black, B. (2001), 'The Corporate Governance Behavior and Market Value of Russian Firms', *Emerging Markets Review*, 2(2), pp89-108.

- Black, B., Love, I. and Rachinsky, A. (2006), 'Corporate Governance Indices and Firms' Market Values: Time Series Evidence from Russia', *Emerging Markets Review*, 7(4), pp361-379.
- Brown, L. and Caylor, M. (2006), 'Corporate Governance and Firm Valuation', *Journal of Accounting and Public Policy*, 25(4), pp409-434.
- Brownbridge, M. (2002), 'Policy Lessons for Prudential Regulation in Developing Countries', *Development Policy Review*, 20, pp305-316.
- Brownbridge, M., and Harvey, C. (1998), *Banking in Africa: the Impact of Financial Sector Reform since Independence*, James Currey, Oxford, Africa World Press, Trenton, E.A.E.P., Nairobi, and Fountain Publishers, Kampala
- Buchanan, J.M. and Tullock, G. (1962), *The Calculus of Consent*. University of Michigan Press.
- Caprio, G. Jr. and Levine, R. (2002), 'Corporate governance in finance: Concepts and international observations,' in *Financial Sector Governance: The Roles of the Public and Private Sectors*,(eds). R. E. Litan, M. Pomerleano, and V. Sundararajan, Washington, DC: The Brookings Institution, pp. 17-50.
- Cheung, Y.L. and Jang, H. (2008), 'Scorecard on Corporate Governance in East Asia: A Comparative Study', in Choi, J.J. (ed.), *International Finance Review*, Emerald Group Publishing Limited.
- Cho, M-H. (1998), 'Ownership Structure, Investment and the Corporate Value: An Empirical Analysis', *Journal of Financial Economics*, 47(1), pp103-121.
- Coles, J. W. and Hesterly, W.S. (2000), 'Independence of the Chairman and Board Composition: Firm Choices and Shareholder Value', *Journal of Management*, 26(2), pp195-214.
- Conyon, M.J. and Murphy, K. J. (2000), 'The Prince and the Pauper? CEO Pay in the United States and the United Kingdom', *Economic Journal*, 110(467), pp640-671.
- Demsetz, H. and Lehn, K. (1985), 'The Structure of Corporate Governance : Causes and Consequences', *Journal of Political Economy*, 93(6), 1155-1177.
- Demsetz, H. and Villalonga, B. (2001), 'Ownership Structure and Corporate Performance', *Journal of Corporate Finance*, 7(3), pp209-233.
- Drobetz, W. (2004), 'The Impact of Corporate Governance on Firm Performance, *Working Paper*, Department of Corporate Finance, University of Basel.
- Drobetz, W., Schillhofer, A. and Zimmermann, H. (2004), 'Corporate Governance and Expected Stock Returns: Evidence from Germany', *European Financial Management*, 10(2), pp267-293.

- Eisenber, T., Sundgren, S. and Wells, M.T. (1998), 'Larger Board Size and Decreasing Value in Small Firms', *Journal of Financial Economics*, 48(1), pp35-54.
- Ezzamel, M. and Watson, R. (2002), 'Pay Comparability across and within UK Boards, An Empirical Analysis of the Pay Cash Awards to CEOs and other Board Members', *Journal of Management*, 39(2), pp207-232.
- Fama, E. and Jensen, M. (1983), 'Separation of Ownership and Control', *Journal of Law and Economics*, 26, pp301–325.
- Gompers, P., Ishii, J. and Metrick, A. (2003), 'Corporate Governance and Equity Prices', *Quarterly Journal of Economics*, 118(1), pp107-155.
- Haque, F., Arun, T. and Kirkpatrick, C. (2011), 'The Political Economy of Corporate Governance in Developing Economies: the Case of Bangladesh', *Research in International Business and Finance*, 25(2), pp169-182.
- Harvey, C.R. (2005), 'The Risk Exposure of Emerging Equity Markets', *World Bank Economic Review*, 9(1), pp19-50.
- Henderson, J. P. (1986), 'Agency of Alienation? Smith, Mill and Marx on the Joint-Stock Company', *History of Political Economy*, 18, pp111–131.
- Holthausen, E.W. and Larker, D.F. (1993), *Boards of Directors, Ownership Structure and CEO Compensation*, unpublished manuscript, Wharton School, University of Pennsylvania.
- Jensen, M. C. and Meckling, W. (1976), 'Theory of the Firm: Managerial Behaviour, Agency Costs and Capital Structure', *Journal of Financial Economics*, 3, pp305–360.
- Klapper, L. F. and Love, L. (2004), 'Corporate Governance, Investor Protection, and Performance in Emerging Markets', *Journal of Corporate Finance*, 10(5), pp703-728.
- King, R.G. and Levine, R. (1993), 'Finance, Entrepreneurship and Growth: Theory and Evidence', *Journal of Monetary Economics*, 32, pp513-542.
- La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (1999), 'Corporate Ownership Around the World', *Journal of Finance*, 54, pp471–517.
- Lauterbach, R. and Vaninsky, A. (1999), 'Ownership Structure and Firm Performance: Evidence from Israel', *Journal of Management and Governance*, 3(2), pp189-201.
- Lawrence, J. and Stapledon, G.P. (1999), *Do Independent Directors Add Value?*, National Library of Australia, Melbourne, Australia.
- Levine, R. (1997), 'Financial Development and Economic Growth: Views and Agenda', *Journal of Economic Literature*, 35, pp688-726.

- Levine, R. (2004), 'The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence', World Bank Policy Research working paper no. 3404.
- Li, J. (1994), 'Ownership Structure and Board Composition: A Multi-country Test of Agency Theory Predictions', *Managerial and Decision Economics*, 15, pp359–368.
- Macey, J. R. and O'Hara, M. (2003), 'The Corporate Governance of Banks', *Economic Policy Review*, Federal Reserve Bank of New York.
- Mak, Y.T. and Li, Y. (2001) 'Determinants of Corporate Ownership and Board Structure: Evidence from Singapore', *Journal of Corporate Finance*, 7, pp235–256.
- Makoni, T.A. (2010), 'Overview of Zimbabwean Banking Sector', http://EzineArticles.com/?expert=Dr_Tawafadza_A._Makoni (accessed on 14th September 2012)
- Mishkin, F. S. (2005), 'Getting Financial Globalization Right', paper prepared for the World Bank/Journal of Banking and Finance conference Globalization and Financial Services in Emerging Market Countries, Washington, D.C. June 20-21-2005.
- Morck, R., Nakamura, M. and Shivdasani, A. (2000), 'Banks, Ownership Structure, and Firm Value in Japan', *Journal of Business*, 73(4), pp539-567.
- Mumvuma, T., Mujajati, C. and Mufute, B. (2003), 'Understanding Reform: the Case of Zimbabwe', First Draft URP.
- Nam, S. and Lum, C. S. (2006), *Corporate Governance of Banks in Asia*, Volume 2, Asian Development Bank.
- Nanka-Bruce, D. (2009), *Corporate Governance and Multi-dimensional Performance*, unpublished thesis, Universitat Autònoma de Barcelona.
- Oman, C.P. (2001), 'Corporate Governance and National Development', Development Centre Technical Papers, No. 180, OECD.
- Park, Y.W., Shin, H. (2004). Board composition and earnings management in Canada, *Journal of Corporate Finance*, Vol. 10 No.3, pp.431-57.
- Prevost, A.K., Rao, R.P., Hossain, M. (2002), "Determinants of board composition in New Zealand: a simultaneous equations approach", *Journal of Empirical Finance*, Vol. 9 No.4, pp.373-97.
- Rajan, R. and Zingales, L. (2003), 'Banks and Markets: the Changing Character of European Finance', No. 9595, NBER Working Papers Series.
- Reserve Bank of Zimbabwe (2003), Monetary Policy Statement
- Renneboog, L. (2000), 'Ownership, Managerial Control and the Governance of Companies Listed on the Brussels Stock Exchange', *Journal of Banking and Finance*, 24(12), pp1959-1995.

Shapiro, C. and Willig, R. D. (1990), 'Economic Rationales for the Scope of Privatization', in *the Political Economy of Public Sector Reform and Privatization*, (eds.) Suleiman, E.N. and J. Waterbury, Westview Press, London pp55-87.

Shleifer, A. and Vishny, R. (1994), 'Politicians and Firms', *Quarterly Journal of Economics* 109(4), pp995-1025.

Shleifer, A., Vishny, R., (1997). 'A survey of corporate governance'. *Journal of Finance*, 52, pp737-783.

Stigler, G. (1971), 'The Theory of Economic Regulation', *The Bell Journal of Economics and Management Science*, 2(1), pp3-21.