TELL-TALE SIGNS & THE HELPING HAND: EARLY WARNING RATIOS & GOVERNMENT GUARANTEES

Dulani Jayasuriya
National University of Singapore

Abstract

Using a unique data set of 2236 banks in 78 countries, this study examines how long and short term government guarantees for private, state and foreign owned banks relate to key ratios on bank management and soundness such as capital, liquidity, asset quality and operations risk. Given short & long term government guarantees, private owned banks increase liquidity levels by around 4.01% and 0.17% respectively compared to foreign owned banks. The opposite result is true for better governed private banks owning less liquid assets by around 0.13% and 0.1% respectively, relative to foreign owned banks. Short and long term government guarantees to local banks, increase tier 1 capital by around 0.6% to 0.7%. Short and long term government guarantees, result in private banks having loan portfolios with better quality, by around 0.25% and 1.9% respectively, compared to foreign owned banks. Private and state owned banks in general have a higher amount of fees and other income of around 0.24% and 0.54% as a percentage of its earnings. We provide an explanation for our results based on asset encumbrance and profit maximisation purposes and our results support the liquidity shortage hypothesis. Policy wise, we suggest improving the credibility, transparency, and strength of bank balance sheets, at the same time avoiding undue pressure on banks from un-coordinated national and international regulatory initiatives and uncertainty.

JEL: G21, G28, G32, H44

Keywords: Early warning Ratios, Government guarantees, Bank Ownership, Basel III Accord

[1]I am extremely grateful to my thesis advisor Professor Sumit Agarwal for his constant support and excellent guidance. I thank Professor Bernard Yeung, Professor Anand Srinivasan, Professor Tilak Abeysinghe, Professor Shawn Cole, Si Cheng, and Ruichang Lu for helpful discussions, suggestions and comments. Financial support from the NUS research scholarship is gratefully acknowledged. Any remaining errors are my own. Department of Finance, National University of Singapore. Email: g090061@nus.edu.sg.

1. Introduction

Our goal is to examine how long and short term government guarantees for private, state and foreign owned banks relate to key ratios in bank management and soundness such as capital, liquidity, asset quality and operations risk. Each group of these ratios throw light on the differences of liquidity and capital management practices of private, state and foreign owned commercial banks. These early warning ratios have long been valuable tools for assessing the safety and soundness of any firm let alone banks for several decades[1].

This study clearly shows that there are considerable variations in the ratios of private, state and foreign owned banks with and without long and short term government guarantees[2]. These early warning ratios are of particular interest because although the full effects of Basel III will not be known for several years to come, our results can provide valuable insights into the association between these ratios, bank ownership structures and government guarantees[3]. The Basel III proposals go beyond the ratios we have discussed so far. Our goal is to suggest that these particular ratios contain valuable and virtually costless information, and therefore should have a more prominent role in an overall framework for regulatory requirements.

We pose the following research questions: 1.What is the nature of the relationship between these different types of ratios and government guarantees for protected (state and private owned) and unprotected banks (foreign owned)? 2. Which type of ratio is most affected by government guarantees for private, state and foreign owned banks? 3. What are the policy implications of our results? In this article, we examine some of the roles that different types of ratios play with regard to long and short term government guarantees. We then present empirical evidence of these relationships. We primarily focus on four categories of ratios: liquidity, capital, asset quality and operations risk. An empirical analysis of the relationship between these different types of ratios and government guarantees may merit a role in a revised framework. These simple ratios could supplement more sophisticated measures by providing a timely signal of the need for government intervention and the mechanisms of government interventions.

To our knowledge, this is the first study that analyses the effects on these different types of ratios for private, state and foreign owned banks given long and short term government guarantees in a cross country setting. Presently, a key undecided debate argues upon which type of bank ownership is most attractive or optimal? State or private, in order to achieve banking and economic stability. In addition, these ratios are relatively simple to calculate yet the information they convey is important. Furthermore, we provide insight on the capability of the government to influence bank safety and soundness through the mechanisms of constrained and unconstrained government guarantees.

We assemble a large extensive database on bank ownership, long and short term government guarantees and banking crisis for an extensive sample of 78 countries worldwide for the recent period from 2001 to 2011, including the recent global crisis years[4]. In contrast to a majority of studies based on indirect proxies for the (likely) government guarantees, such as bank size or ratings data, our study provides direct evidence by using explicit measures of long and short term government guarantee variables in the form of liquidity support, capital injection and blanket guarantees. In addition, we explore the implications of
our results on several key theories in literature such as market discipline, charter value, social and political view and finally agency costs within the context of banking stability, ownership structure and government guarantees[5].

Our key findings are as follows: Given short & long term government guarantees, private owned banks increase liquidity levels by around 4.01% and 0.17% at 5% & 10% significance respectively compared to foreign owned banks. However, interestingly enough, short and long term guarantees result in better governed private owned banks holding less liquid assets by around 0.13% and 0.1% at 1% significance respectively, relative to foreign owned banks. This can be explained by the fact that holding liquid assets yield a very low return and high opportunity cost compared to holding other investments. Banks in general would therefore hold liquid assets only up to the point required for profit maximisation.

Furthermore, private owned banks in general tend to be the net placer by around 21.3% and 18.9% at 10% and 5% significance rather than the borrower of funds in the market place compared to foreign banks. The opposite result is true for countries with better governance. Short and long term government guarantees actually reduce the percentage of private owned banks' assets tied up by loans from around 4.45% and 3.3% at 1% significance respectively, insinuating improved liquidity conditions compared to foreign banks.

However, private banks with better governance tends to have more assets tied up in loans compared to foreign banks by around 0.16% and 0.2% at 5% significance compared to their foreign counterparts. This can again be explained by the fact that better governance leads to lower liquidity levels by following profit maximisation objectives.

These results suggest that better governed private owned banks pursue profit maximisation purposes compared to foreign banks by holding lower levels of liquid assets which has lower returns and higher opportunity costs. On one hand, countries with better governance might have more competition among local banks resulting in them holding less liquid assets. On the other hand, government guarantees resulting in an increase in monitoring might force banks into holding more liquid assets. Therefore, better governance seems to be a double edged sword and the argument that better governance increases the efficiency of government guarantees is contradicted by these results. We believe that Basel III liquidity regulations should help maintain liquidity buffers. Both capital and liquidity measures should improve financial stability. However, continuing weakness in bank funding markets especially in stressed economies, OTC derivative reforms and some aspects of Basel III liquidity regulations may encumber more assets, thereby increasing unsecured bondholders potential losses. Asset encumbrance would still be an issue, even though according to our results government guarantees result in an increase in funding for both borrowers and depositors. Our results support the liquidity shortage hypothesis[6].

According to the capital regression results, short and long term government guarantees to local banks, increase tier 1 capital by around 0.6% to 0.7% at 5% significance. However, interestingly enough better governed state owned banks hold more of an equity cushion to absorb loan book losses by around 2.6% at 10% significance compared to foreign owned banks. Private banks, given better governance, have lower equity funding to absorb loan book losses by around 0.4% at 5% significance.

---

[1]Moreover, the informal use of these different types of ratios by bank regulators and supervisors go back well over a century (Mitchell 1909). The Basel Committee on Banking Supervision (1999) is currently engaged in an effort to improve the Basel Accord and, once again, capital and liquidity ratios play a central role in these proposed solutions.

[2]Although we are unable to calculate the Basel III ratios that use daily data due to our annual data set, we calculate other liquidity, capital ratios that involve short, long term and volatile funding available to both shareholders, borrowers and depositors as proxy ratios.

[3]The above four categories of ratios are critical in bank management (Sinkey (1989), Prefontaine and Thiebault (1993)) and often serve as early warning ratios of impending bank failures and instability.

[4]Our data set on long and short term government guarantees for 78 countries provide us with interesting information regarding government guarantee patterns in different countries for private, state and foreign owned banks. Bank level data on short and long term government guarantees enable us to obtain some insight on whether the rest of the world follow the US and other major developed countries' models for government guarantee mechanisms etc.

[5] We contribute to the literature that examines capital and liquidity requirements as influenced by Basel Accords and the corporate governance of banks. We show that the type of bank ownership and government guarantees does indeed influence capital adequacy and bank liquidity. Secondly, our results offer insights into the probable effects of the proposed Basel III standards (e.g., Allen, Chan, Milne, and Thomas, 2010; Ojo, 2010; and Went, 2010) introduced in 2013. Our study aptly contributes to the ongoing debate on the costs, benefits and other consequences of Basel III. Finally, the recent financial crisis has spawned a plethora of studies on government bailouts and guarantees, its causes and consequences. We contribute to this emerging body of literature by analysing the effects of government guarantees on these early warning ratios.

[6]The Liquidity shortage hypothesis (LSH) supposes that bank fragility stems from irrational behavior of uninformed depositors who are incapable of distinguishing between liquidity and solvency shocks.

Long term government guarantees to local banks improve capital levels of state owned banks by around 1.4% at 10% significance compared to foreign owned banks. Global bank capitalization remains divergent due to banks being at different stages of balance sheet recovery and operating in different economic and regulatory environments. Asset quality and profitability pressures at some banks have reduced their ability to increase capital levels through retained earnings. This might explain our results of private and state owned bank capital levels not significantly increasing through government guarantees. Basel III capital regulations reduce the cost of any type of debt by increasing loss absorbing buffers before any debt holders face losses.

The asset quality regressions show that short and long term government guarantees result in private banks having loan portfolios with better quality, by around 0.25% and 1.9% at 5% and 1% significance respectively, compared to foreign owned banks. However, for countries with better governance, the quality of the loan portfolio for state banks reduces, given short term government guarantees by around 0.1% at 5% significance compared to foreign banks. Hence, we can deduce that in better governed countries, the government's objective of expanding credit to even unhealthy households are to some extent carried out by private banks. Given short and long term government guarantees, state owned banks charge higher margins of around 26% and 13% more compared to foreign banks at 5% significance. State and private owned banks in countries with better governance have higher loan loss provisioning to impaired loans by around 12% and 19% at 5% and 1% significance. The result of state owned banks loan portfolio quality increase can be explained by our next result of state banks requiring higher margins as these determine their ability to extend credit. The operation risk regressions show that private and state owned banks in general have a higher amount of fees and other income of around 0.24% and 0.54% at 5% and 10% significance as a percentage of its earnings. However, the opposite result is true for foreign banks with around 0.25% at 10% significance. Short and long term government guarantees result in an increase in fees and other income for private owned banks by around 0.12% and 1.4% at 5% and 10% significance respectively, compared to foreign banks.

Policy wise, our study suggests the following: The credibility, transparency, and strength of balance sheets, should be improved at the same time avoiding undue pressures on banks from un-coordinated national and international regulatory initiatives and uncertainty. These policy challenges should be properly managed, and necessary reforms implemented as promised to smoothen the transition toward greater banking stability and economic growth.

We believe a bank by bank, asset quality review is required that looks into individual bank loan portfolios and takes into account provisions and capital held by each bank in order to ascertain loan loss provisioning, capital and liquidity needs.

This study is organized as follows. Section 2 reviews the prior academic literature. Section 3 documents the empirical methodology & data. Section 4 provides our empirical evidence. Section 5 relates our findings to policy implications. Finally, section 6 summarizes our findings and concludes the study[7]
.

2. Background and Hypothesis Development

2.1. Background

This paper is closely related to Agarwal & Jayasuriya (2013) which analyses the relationship of long and short term government guarantees on banking stability (risk, lending, profitability and sources and costs of bank funding) for private, state and foreign owned banks. However, in this article we focus on ratios that serve as early warning signals for bank health, bank failures and thresholds of capital and liquidity requirements for Basel III. We believe these ratios are key factors that can be considered whether a bank is solvent and therefore is eligible for government guarantees. This article is related to several strands of literature.,

2.2. Liquidity

Liquidity ratios are considered in several strands of the literature. Firstly, we consider the literature on bank failures. Two hypotheses dominate the literature on bank failure: the "Weak Fundamentals Hypothesis" (WFH) and the "Liquidity Shortage Hypothesis" (LSH). Under the WFH, poor bank fundamentals foreshadow an impending bank failure. These ratios can be used as proxies of early warning systems, with decaying capital ratios, reduced liquidity, deteriorating asset quality, and depleted earnings, signalling a rising likelihood of bank failure.

Whereas bank failures are information-based under the WFH, the LSH supposes that bank fragility stems from irrational behaviour of uninformed depositors who are incapable of distinguishing between liquidity and solvency shocks. Under the LSH, banks are assumed to be solvent, but because they finance illiquid assets with liquid liabilities, they are exposed to external shocks that may lead to liquidity shortages.

Under a sequential servicing constraint, first-in-line depositors expect to receive all their deposits and the probability of failure rises as the bank's ability to meet deposit withdrawals declines. The literature on bank failures generally treat fragility from the perspective of asset risk (WFH) or liability risk (LSH) separately. Throughout the latest global financial crisis, a number of banks struggled to maintain adequate liquidity. In spite of the enormous support from central banks, a number of banks failed or were forced into mergers and acquisitions. The crisis illustrates how acutely liquidity risks can materialize and how quickly certain sources of funding can evaporate, compounding concerns related to the valuation of assets and capital adequacy (Bank for International Settlements 2010)[8].

2.3. Capital

Capital account management refers to the ability of the bank to ensure that there is enough capital both to satisfy the regulations as well as to provide an adequate base for asset growth. Regulations require that every bank should have enough capital to maintain the minimum capital adequacy requirement as defined by the BIS (Bank of International Settlements) Capital Adequacy Ratio. If a bank does not have enough capital which is above the minimum required by the regulators, then further asset growth will have to be constrained or stopped by the bank's management, as further asset growth will worsen the Capital Adequacy Ratio[9]. Although bank regulators have relied on capital ratios formally or informally for decades, the use of these ratios have varied considerably. Prior to explicit capital requirements, bank supervisors utilized capital ratios as a rule of thumb to gauge the adequacy of a bank's level of capital. The simple ratios used (e.g.: capital to total assets or capital to deposits) would be unable to provide an accurate measure of the appropriate capital level for a bank, however, large deviations of actual capital ratios from standard benchmarks suggested the need for further scrutiny[10].

---

[7]Since the number of tables for this study are quite extensive, the tables and results for the robustness tests are provided in a detailed appendix and are available upon request.

---

[8]As a consequence, the G20 countries called for a global framework for promoting stronger liquidity buffers at national and cross-border financial institutions. In response, the Basel Committee for Banking Supervision (BCBS) developed two internationally consistent regulatory standards for liquidity risk supervision. These standards establish a global minimum level of liquidity, but allow national authorities to adopt more stringent levels. In theory, the strength of the financial safety net and in particular the availability of a LOLR arrangement, should reduce the banks' incentives to hold liquidity buffers (Repullo, 2003). Empirical studies of UK and Argentinian banks, where LOLR support is measured as the Fitch support rating and the availability of external credit lines in the context of the currency board, respectively, support this prediction (Aspach, Nier and Thiesset, 2005, and Gonzalez-Eiras, 2003).

[9]In response to the recent financial crisis, the Basel Committee on Banking Supervision (BCBS) has developed new capital-stability rules aimed at preventing financial crises in the future. These new rules, referred to as "Basel III," start replacing Basel II in 2013 with complete replacement occurring in 2018. Basel II emphasizes capital adequacy and liquidity, whereas Basel III includes capital stability as an additional factor. Dietrich and Wanzenried (2011) argue that better capitalized banks experience significantly better corporate performance. The new standards may actually lead to better performance consistent with their evidence.

[10]When capital ratios were finally introduced formally in regulations in 1981 (see Gilbert, Stone, and Trebing [1985]), they were applied in quite a different way. The requirements were most binding for the large banks, whereas smaller banks were already in compliance with the more stringent requirements. Banks are deemed to be "adequately capitalized" if they meet the Basel requirements plus a leverage ratio requirement. In contrast, a bank that falls below the minimum adequate level, is deemed to be "critically undercapitalized" and must be shut down by supervisory authorities.

This concept is different from the previous minimum capital requirements used by regulators since in that failure to comply results in the closure of the institution. Contrary to a minimum operating capital level, identified by the earlier regulations, the new cut-off point is a backstop level, below which the bank is no longer considered to be solvent.

Demsetz and Strahan (1997) shows that large banks are better able to diversify and operate with lower levels of capital. Flannery and Rangan (2004) shows that large banks have better access to wholesale funding allowing them to hold lower levels of capital. Keeley (1990) shows that banks with a low capital ratio can be assumed to have lower charter values and therefore be more prone to engage in higher risk-taking behaviour. Nier and Baumann (2006) shows that banks holding lower capital levels may have to rely on the interbank market to obtain funding.

2.4. Asset Quality

The level of nonperforming loans in bank loan portfolios depict the quality of bank loans which gives an indication of the profitability of bank lending activities and it's asset quality[11]. A deterioration in a banks' asset quality serves as an indicator of the risk levels being assumed by banks, hence a tightening of credit standards leading to a reduction in a banks' future lending to reduce its risk levels.

The impact of bank asset quality on lending behaviour is both direct and indirect. With the direct effect, a deterioration in bank loan assets indicate that banks are taking on high risks and hence banks cannot build up its risk levels ad infinatum. As a result, they would tighten credit standards which will reduce the number of loan applicants as well as successful loan applications. With the indirect effect, incurring losses from non-performing loans demands loan write-offs which depletes the equity capital of banks. This would in-turn affect the bank's ability to write more loan businesses, hence a reduction in lending, called the capital crunch by Richard Syron former president of the Boston Federal Reserve (Bernanke et. al., 1991). Asset quality does pose a threat to the financial stability of the banking sector (IMF, 2011).

2.5. Operations

Operational risk is defined as the risk of loss resulting from inadequate or failed processes, people and systems or external events. This definition includes legal risk, but excludes strategic and reputational risk[12].
Operational risk measures in institutions generally involve high volume activities, such as transaction processing, which are easily defined and measurable[13].

A bank can implement policies, procedures and internal controls in an attempt to control excessive risk-taking by individual employees, but is likely to be of little consequence if the incentives of individuals, as reflected in their bonus schemes encourage excessive risk-taking or gaming[14]. Risk culture may also be captured with respect to the setting of exposure limits (and penalties for breaches), and the attitude of management towards whistle blowing[15]. To our knowledge this is the first study to analyse the impact on a bank's operational risk given long and short term government guarantees, especially for banks with different ownership types. In this section we examine potential leading indicators of operational risk in financial institutions.

2.6. LLR Policy and Solvency

The academic literature on the Lender of Last Resort (LLR), is quite modest in size.

It mainly focused on the role of the Central Bank as an LLR to prevent and manage crises. Two decades of research on LLR and closure policy has been nicely documented by Freixas and Parigi (2008) who mention the classic Bagehot (1873) principle: LLR should provide liquidity to illiquid, but solvent banks at a penalty rate and against good collateral. The authors recommend that we should study the architecture of prudential regulation, risk supervision, monetary policy, and deposit insurance to best guarantee banking stability[16].

Repullo (2005) finds that certainty about liquidity provisions does not increase moral hazard however, the introduction of penalty rates, cause some moral hazard. Cordella and Yeyati (2003) also states that moral hazard is not sufficient to justify criticism on standard LLR policies. They argue that the moral hazard effect of having implicit guarantees are compensated by an increase in charter value.

---

[11]Banks require the provision for write-offs of either portions or all of the loans. The write-offs are losses that the banks absorb with its equity capital, hence the banks reluctance to take new risks and commit to new 'loans which is described as the credit crunch. Lower bank asset quality signals banks as to their risk levels, therefore their reluctance to take on more risk through lending.

[12]Basel II forms a set of guidelines for a capital charge against operational risks. According to Basel II banks must explicitly hold equity capital against operational risks.

---

[13]Losses related to these activities, such as transaction errors, tend to be low in volume and certainly unlikely to place strains on the capital base of the bank. However, observation of major losses in institutions (low probability/high-loss events) over recent years that can be directly linked to operational risk show that the actions of a single individual, or a group of individuals, are often responsible for these events. The risk culture of a bank, in many ways, is at the center of operational risk.

[14]A systematic investigation of the remuneration schemes employed by banks, including the realization of bonuses (sales targets, profit targets, market share, etc.) at all levels of staffing, is required as part of an operational risk management strategy.

[15]In the Allied Irish Banks or the National Australia Bank, unethical and fraudulent behavior was driven by large monetary incentives in
form of bonus payments that were linked to profits, as opposed to risk-adjusted performance. Scorecard approaches typically incorporate financial and non-financial measures of performance. Such an approach might be a valuable tool for identifying leading indicators of operational risk in financial institutions, as operational risks are mainly idiosyncratic, and as such dependent on the financial institution's particular risk culture and vulnerabilities.

[16]One interesting recommendation in Bagehot's LLR review is the idea that central banks should be ambiguous about liquidity provisions. Hence, individual banks will face some uncertainty about whether it will actually receive liquidity, and will face requirements on funding.
This so called "creative ambiguity" doctrine is analysed among others Freixas (1999), Goodhart and Huang (1999), Repullo (2005) and Cordella and Yeyati (2003), with mixed results. Freixas (1999) finds that ambiguity may have its merits in some cases (by reducing moral hazard), he also provides a rationale for the Too-Big-to-Fail policy. A similar result is found by Goodhart and Huang (1999): the optimal degree of ambiguity decreases strongly in bank size, leading to a policy motivated by contagion concerns.

Rochet (2004) finds that banks with an exposure above a certain level are perceived to be too risky and therefore should not receive liquidity assistance. Acharya and Yorulmazer (2007, 2008) considers interlink-ages between banks that invest in similar projects and defines the "too-many-to-fail" problem. The models discussed above mainly focus on the central bank as a lender of last resort, which provides liquidity assistance only when the bank is deemed solvent. Therefore, a lack of information at the central bank, may lead to banks
being inefficiently closed[17].

2.7. Background Information on the Basel Accords

2.7.1 Basel II: Capital adequacy standards

Under Basel II, banks are required to maintain sufficient capital, measured by the capital adequacy ratio, to offset risky investments. The capital adequacy ratio is calculated as follows: (Capital/Risk-weighted assets) > 8% . In our capital ratios we consider the CAR ratio and other numerous ratios that can provide valuable insight into a bank's capital management practises and the status of bank capital as per required by the Basel III Accord[18]. Market and operational risks can result from changes in interest rates as well as changes in equity, commodity and foreign exchange prices. If interest rates move unfavourably, resulting in losses, banks must have enough capital to absorb the losses. Consequently, banks that invest in more risky assets must hold more capital to compensate for the higher risk. The capital adequacy ratio thus reflects the insolvency risk and can be used as a proxy for the extent of risk taking by a bank.

2.7.2. Basel III: Liquidity and Capital Stability Standards

Although we cannot calculate the Basel III ratios that use daily data since ours is an annual data set we calculate other liquidity ratios that involve short term and long term and volatile funding available to both shareholders, borrowers and depositors as proxy ratios. These liquidity, capital, asset quality and operations risk ratios are of particular interest because although the full effects of Basel III will not be known for several years to come, our results can provide valuable insights into the association between these early warning ratios, ownership type and government guarantees.

3. Empirical Methodology

3.1 Empirical Model

As a first step, we follow pooled ordinary least squares (OLS) with year and country fixed effects with clustering at the country level. However, the main results shown are based on a panel fixed effects model with year and bank fixed effects and clustering the standard errors at bank level. We conducted Hausman tests which rejected a random effects model. Subsequently, we use a system gmm model to control for any further remaining endogeneity issues[19]. Our main results are based on a fixed effects model, with year, country fixed effects and robust standard errors clustered at bank level[20].

$$Y_{i,j,t}=a+a1*State\_Owned_{i,j,t}+a2*Private\_Owned_{i,j,t}+a3*(State\_Owned_{i,j,t}*X_{i,j,t})+ a4*(Private\_Owned_{i,j,t}*X_{i,j,t})+a5*X_{i,j,t}+a6*Assets_{i,j,t-1}+a7*Profit_{i,j,t-1}+a8*Deposits/Liabilities_{i,j,t-1} +a9*Governance_{i,t}+a10*GDPgrowth\%_{i,t}+a11*GDPperCapital_{i,t}+a12*Inflation_{i,t}+ a13*CrisisDummy_{i,t} + a14*Y_{i,j,t-1} + a15*Y_{i,j,t-2}+\varepsilon \quad (1)$$

The dependent variable $Y_{i,j,t}$ contains all the liquidity, capital, and asset quality and operations ratios. Then we calculate several liquidity ratios such as the Liq_Assets, InterBnkRatio,NetLoansTARatio,NetLoansSTFundRatio,LoansTotDepRatio,LiqAsstsDepR atio, LiqAsstsTotDepRatio. The capital ratios are Tier1Ratio, CARRatio,EquityRatio, EquitySTFundingRatio,EquityLiabRatio,CapFundTARatio,CapFundNLRatio,CapFundLiab Ratio. The asset ratios are LoanLossRatio, LlossProvisionRatio, ImpLoansEquityRatio. The operationsrisk ratios are NetIntrstMarginRatio,NetIntrstAsstsRatio,OpIncAsstsRatio, NonInrstAsstsRatio, ROAA , ROAE. DivPORatio, NonOpItNIRatio, CosttoIncRatio.

We consider several bank level control variables, lagged by one year. Among these, assets is the log of total assets in constant 2000 dollars to capture the impact of a bank's too- big-to-fail status. In addition, deposits over total liabilities is a measure of the stability of a bank's funding, since non-deposit funding tends to flee quickly during periods of instability. We consider two macroeconomic controls from World Development Indicators (WDI, 2011) database.

---

17 Furthermore, as described above and noted by e.g. Boot and Thakor (1993) and Rochet (2004), the inability to discriminate between liquidity and solvency problems can lead to regulatory forbearance: resulting in insolvent banks being allowed to operate. Diamond and Rajan (2005) set up a general equilibrium model in which an endogenous liquidity problem occurs when entrepreneurs need to refinance their projects (Holmstrom and Tirole, 1998). This in turn leads to an aggregate liquidity shortage, which the central bank can mitigate to some extent. In addition, they show that a capital injection may improve a banks' ability to raise liquidity in such situations.

18 Risk-weighted assets comprise investments involving credit, operational, and market risk. For instance, credit risk can arise from the loans provided by banks. If the counterparties default, these loans are classified as nonperforming loans. Banks must hold adequate capital in order to offset the losses from these loans.

19 As Flannery (2012) shows if the lagged dependent variable is of no interest FE is accurate in estimating both exogenous and endogenous X's.

20 We consider OLS and GMM apart from our fixed effects model. Simple OLS and country specific fixed effects have the advantage of well understood asymptotic theory, but their restrictions on the correlation structure of the disturbances may not be appropriate in dynamic panel settings.

We collect this information from central banks' of each country and (Laeven and Valencia, 2010). We exclude banking system distress events that effected isolated banks but were not systematic in nature. Our ownership variables are calculated as follows: Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company and is excluded from the regression. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. Ownership Concentration is the percentage of shares owned by the primary shareholder (more than 20% of shares)[21]. Shortterm Guarantee is a dummy variable equal to 1 if the government provided any liquidity support during a particular year and is 0 if a bank is foreign owned. Recapitalization is a dummy variable is equal to 1 if the government provided any capital injection in a particular year. Blanket guarantee is a dummy variable equal to 1 if the government provided any blanket guarantee on deposits in a particular year. Longterm Guarantee is a dummy variable equal to 1 if recapitalisation or blanket guarantee is equal to 1 for that particular country for that particular.

4.2. Data

We compile a large comprehensive dataset of banking ownership, government guarantees and accounting information at bank level for 78 countries, where we select the 30 largest commercial banks[22] (as defined by total assets in at least one year of our sample period 2001 to 2011). We use consolidated bank statements from BankScope. If no consolidated statements were available, we used unconsolidated statements. We also excluded bank holdings and bank holding companies to avoid a double-counting of banks.
The information on bank ownership is obtained from the section "Shareholder Information" in the BankScope database. When BankScope's shareholder database does not have enough information to determine a bank's ownership, we gather bank ownership information using additional sources such as the individual bank's financial statements. Moreover, we use various websites to classify the owner as private or state and company websites of the banks. We classify a bank as having a "large owner" if the shareholder has direct and indirect voting rights that sum up to 20 percent or more. Thus, a bank is categorized as a state bank if it is majority owned by a state owned entity etc. Results of this study hold even when using a 10 or 15 percent cut-offs to define a large owner.

While direct ownership involves shares registered in the shareholder's name, indirect ownership involves bank shares held by entities controlled by the ultimate shareholder. When multiple shareholders have over 20 percent of the votes, we define the "large owner" as the owner with the greatest percentage of ownership. We gather the income statement and balance sheet data from the Bureau Van Dijk's Bankscope database. We collect the government guarantee variables of liquidity support, capital injection, blanket guarantees, deposit insurance, implicit guarantees, permanent funds, sources of funds etc. through various central bank websites, company websites and other sources etc. for each country.

General effectiveness of the government bureaucracy, i.e. good governance is proxied by a composite indicator of the government effectiveness from the World Governance Indicators (WGI) database (Kaufmann et al., 2010), which includes perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures. We consider two macroeconomic controls from World Development Indicators (WDI, 2011) database. These are GDP per capita in thousands of constant 2000 dollars, and inflation measured as the percentage change in the GDP deflator. Finally, the bank crisis variable is a dummy variable signalling whether a country is experiencing a banking crisis (Laeven and Valencia, 2010). We extend the banking crisis variable unto 2011 using central bank sources for each country.

Our approach is different from the one adopted by La Porta et al. (2002) and Dinç (2005), who select the ten largest banks in each country, by focusing on the largest banks only. We not only focus our analysis on large banks, but also manage to achieve a more balanced sample in terms of bank size, and no significant difference between banks with different ownership structures. Banks mergers or acquisitions are treated as follows. If Bankscope continues to use the accounts of the surviving bank for the new entity after a merger or acquisition, the surviving bank remains in the sample. If Bankscope starts a new account for the new entity, banks involved in that merger exit the sample. As a result, we end up with an unbalanced data set consisting of 2236 banks from 78 countries for a total of 18,722 bank year observations for which we have ownership and accounting data.

21 We use several cut offs such as 10%, 15% , 25% and more detailed definitions of ownership such as management, family, institutional, government etc. as robustness tests. Secondary Ownership Concentration is the percentage of shares owned by secondary shareholders (i.e. when the percentage of ownership is less than the 20% cut off).

[22] Considering the largest banks enhance comparability since they tend to have more liquid shares and comply with international accounting
standards. This reduces concerns that accounting or liquidity differences would be driving the results. On average, our sample accounts for over 80 % of total banking system assets in each country.

5. Empirical Results

5.1 Summary Statistics

Table 1 provides summary statistics for our sample of commercial banks. According to the detailed summary statistics state owned banks have higher liquid assets in general probably due to better monitoring and they are also the net lender to foreign and private owned banks. They have less volatile funding and lesser funding available to borrowers and depositors.

Foreign owned banks have lower liquid assets mainly due to profit maximisation purposes[23] and more funding for borrowers and depositors. State owned banks also tend to have more loan write-offs and hold lower levels of capital probably due to the too big to fail hypothesis while foreign banks have higher levels of capital. Foreign banks pay out more post-tax profits to shareholders compared to local banks. Overall according to the summary statistics foreign banks seems to be in better stable position compared to local banks and especially state owned banks riddled with heavy moral hazard issues. The main variables of interest are the liquidity, capital, asset quality and operations ratios[24].

Our main long term and short term government guarantee[25] measures are as follows:

Short term government guarantee is a dummy variable that is more of a short term government guarantee measure and is equal to 1 if any banks were provided with liquidity support in a particular year. Long term government guarantee is more of a measure of long term government support and is a dummy variable that is equal to 1 if the government provided capital injections and a blanket guarantee to any banks in a given year. All these government guarantee variables are equal to 0 if the bank is a foreign owned bank for that particular country. Ownership concentration averaging 66% is the percentage of shares owned by the primary shareholder (more than 20% of shares), this variable measures the degree of ownership of a particular bank. The State bank variable is a dummy variable that equals one, if a bank has a majority state ownership shares[26]. To represent business cycles, we use GDP annual growth rate in percentages, with a mean value of 3.77%.

---

[23] Supporting the results of Agarwal & Jayasuriya 2013 who finds that foreign banks have higher profitability.

[24] Refer variable definitions and data sources in the appendix.

[25] We have several variables measuring government guarantees including but not limited to deposit insurance, implicit guarantees number of bank bailouts, deposit insurance paid up in the past etc.

[26] In our sample, since we only consider the top 30 commercial banks in a specific country at a given year in our sample based on total assets only 9% of commercial banks are state-owned. Private bank variable considers the domestic banks indicating a majority of private
domestic ownership, while the foreign bank variable signals majority of foreign ownership. Private and Foreign banks constitute 48% and 41% of our observations respectively.

---

[27] The impact of different types of ownership on the procyclicality of banks' lending possibly depends on the general effectiveness of the government bureaucracy, i.e. good governance.

[28] The numbers for state owned banks may be explained by the fact that these are the top largest commercial state owned banks in a particular country and therefore would be bound to hold less liquid assets compared to its other private and foreign owned contemporaries. [29] Liquidity averaging 0.27 is constructed as the ratio of liquid assets to total assets, can be a measure of bank soundness and its ability to
sustain its lending, as well as an indicator of inefficiency (since too much liquidity comes at the cost of bank intermediation).

[30] This ratio for state owned banks is considerably low with 0.22 while private and foreign banks have a considerably high number of 0.81 and 0.82.

In anticipation of this foreign banks also increase their liquid asset holdings since they do not receive such assistance as possibly as a form of insurance. However, surprisingly better governed private owned banks hold less levels of liquid assets compared to foreign banks with better governance. This result seems to suggest that better governed private owned banks pursue profit maximisation motives more so compared to foreign banks by holding lower levels of liquid assets which has lower returns and higher opportunity costs. On one hand, countries with better governance might have more competition among local banks resulting in them holding less liquid assets. On the other hand, government guarantees increase monitoring and force banks into holding more liquid assets.

Hence, better governance seems to be a double edged sword that reduces liquidity whence short term government guarantees increase the same. The argument that better governance increases the efficiency of government guarantees is contradicted by these results. A low liquid asset ratio indicates that a bank is managing its liquidity more profitably, but at the same time if the liquidity is too low there is a risk of cash deficit. Further we should also note that the cash is funded by raising deposits which have a cost in the form of interest paid to depositors.

5.2.1. Short Term Government Guarantees

Table 4A reports regressions that examine the effect on Liquid assets for private, state owned and foreign banks given short term government guarantees. Panel A regressions 1, 2 & 3, shows that given short term government guarantees, private owned banks increase liquidity levels by around 4.01% at 5% significance compared to foreign owned banks. However, short term guarantees result in better governed private owned banks holding less liquid assets by around 0.13% at 1% significance relative to foreign owned banks. This can be explained by the fact that holding liquid assets yield a very low return and high opportunity cost compared to other investments and banks in general would therefore hold liquid assets only up to the point required for profit maximisation.
Panel B regressions 1, 2 & 3 shows somewhat surprisingly that private owned banks in general tend to be the net placer by around 21.3% at 10% significance rather than the borrower of funds in the market place compared to foreign banks. However, the result is the opposite for countries with better governance. In general, one would expect the state banks to be the net placer and foreign and private owned bans to be the net borrower.

Panel C regressions 1, 2 & 3 shows that short term government guarantees actually reduce the percentage of private owned banks assets tied up by loans from around 4.45% at 1% significance, insinuating improved liquidity conditions compared to foreign banks. However, private banks with better governance tends to have more assets tied up in loans compared to foreign banks by around 0.16% at 5% significance. This can again be explained by the fact that better governance leads to lower liquidity levels by following profit maximisation objectives.
In Table 4B, panel D regressions 1, 2 & 3 shows that short term government guarantees actually worsens liquidity levels by around 7.3% at 5% significance for private owned banks compared to foreign banks. Panel E regressions 1, 2 & 3 shows that state banks have lower deposits and borrowings excluding capital instruments around 0.1% at 5% significance. Short term government guarantees result in a decrease in private owned banks deposits and borrowings excluding capital by around 0.61% at 5% significance. Again, given better governance the opposite result is true for private owned banks by around 0.22% at 5%. Therefore, better governance results in short term guarantees improves deposits and borrowings of private owned banks. Panel F regressions 1, 2 & 3 shows that private owned banks are less vulnerable to deposit run offs by around 2.7% at 1% significance given short term government guarantees. Given short term government guarantees the percentage of liquid assets available not just to depositors but borrowers as well increases by around 4% for private owned banks.
[Insert Table 4A] [Insert Table 4B]

5.2.2 Long Term Government Guarantee

Table 5A reports regressions that examine the effect on Liquid assets for private, state owned and foreign banks given long term government guarantees. According to Panel A regressions 1, 2 & 3, shows that given long term government guarantees private owned banks increase liquidity levels by 0.17% at 10% significance. However, better governed private owned banks hold less liquid assets by around 0.1% at 1% significance compared to foreign banks. This can be explained by the fact that holding liquid assets yield a very low return and high opportunity cost compared to other investments and banks in general would therefore hold liquid assets only up to the point required for profit maximisation.

Panel B regressions 1, 2 & 3 shows somewhat surprisingly, private owned banks in general tend to be the net placer rather than the borrower of funds in the market place by around 18.9% at 5% significance compared to foreign owned banks. In general, one would expect the state banks to be the net placer and foreign and private owned bans to be the net borrower.

Panel C regressions 1, 2 & 3 shows that long term government guarantees actually reduces the percentage of private owned banks assets tied up by loans from around 3.3% at 1% significance, insinuating improved liquidity conditions compared to foreign banks. However, private banks with better governance tends to have more assets tied up in loans compared to foreign banks by around 0.2% at 5% significance. This can again be explained by the fact that better governance leads to lower liquidity levels by following profit maximisation objectives.

In Table 5B, panel D regressions 1, 2 & 3 shows that long term government guarantees again decreases liquidity levels by around 5.54% at 5% significance for private owned banks by increasing volatile funding. Panel E regressions 1, 2 & 3 shows that state and private owned banks have higher deposits and borrowings excluding capital instruments around 3.7% at 5% significance compared to foreign banks. However, given better governance, long term government guarantees result in higher liquidity levels of around 0.2% at 10% significance for private owned banks. However, given long term guarantees to local banks, foreign banks increase their liquidity levels by around 2.42% at 10% significance. Panel F regressions 1, 2 & 3 shows that private owned banks in general have less vulnerability to deposit run offs by around 2.7% at 10% significance compared to foreign owned banks.
[Insert Table 5A] [Insert Table 5B]

5.3 Capital

We first examine the main capital ratios of commercial banks with different ownership types given the existence of government guarantees. According to our regression results short term and long term government guarantees result in a capital increase for foreign owned banks. Given government assistance to local banks, foreign banks probably shore up their capital anticipating bad times ahead.

5.3.1. Short Term Government Guarantees

Table 6A Panel A reports regressions that examines the effect on capital for private, state owned and foreign banks given short term government guarantees. According to Panel A & B regressions 1, 2 & 3, given short term government guarantees to local banks, tier 1 capital increases by around 0.6% to 0.7% at 5% significance. However, according to Panel C, better governed state owned banks hold more of an equity cushion to absorb loan book losses by around 2.6% at 10% significance compared to foreign owned banks. In Table 6B, panel D regressions 1, 2 & 3 shows that private banks, given better governance, have lower equity funding to absorb loan book losses by around 0.4% at 5% significance. Panel D & E regressions, 1, 2 & 3 shows that short term government guarantees to local banks improve capital levels significantly.
[Insert Table 6A] [Insert Table 6B]

5.3.2 Long Term Government Guarantees

Table 7A and 7B report regressions that examines the effect on capital for private, state owned and foreign banks given long term government guarantees. According to Panel B regressions 1, 2 & 3, long term government guarantees increase capital by 0.6% at 5% significance. Panel C regressions 1, 2 & 3 shows that state owned banks have lower equity to absorb losses given long term government guarantees by 0.27% at 5% significance compared to foreign owned banks. Panel F regressions 1, 2 & 3 shows that, long term government guarantees to local banks improve capital levels of state owned banks by 1.4% at 10% significance compared to foreign owned banks.
[Insert Table 7A] [Insert Table 7B]

5.4 Asset Quality

We first examine the main liquidity ratios of commercial banks with different ownership types given the existence of government guarantees. Short & long term government guarantees to local banks result in foreign banks having a poor quality loan portfolio. State banks loan portfolios improve probably due to better monitoring. Again supporting the results of Agarwal & Jayasuriya 2013 who shows that government guarantees to local banks result in foreign banks' increasing lending to grab more market share etc. However, surprisingly enough given short and long term guarantees state owned banks charge considerably higher margins compared to foreign banks.

5.4.1. Short Term Government Guarant

Table 8A Panel A report regressions that examine the effect on asset quality for private, state owned and foreign banks given short term government guarantees. According to Panel A regressions 1, 2 & 3, short term government guarantees result in private banks having better quality loan portfolios by around 0.25% at 5% significance compared to foreign owned banks. However, for countries with better governance, the quality of the loan portfolio for state banks reduces, given short term government guarantees by around 0.1% at 5% significance compared to foreign banks. Hence, we can deduce that in better governed countries the motives of the government of expanding credit to even unhealthy households are to some extent carried out by state banks. However, the opposite result is true for private owned banks. Panel B regressions 1, 2 & 3 shows that given short term government guarantees state owned banks charge higher margins of around 26% more compared to foreign banks at 5% significance. Table 8B, panel C regressions 1, 2 & 3 shows that state and private owned banks in countries with better governance have higher loan loss provisioning to impaired loans by 12% and 19% at 5% and 1% significance. Although in general, state banks have lower loan loss provisioning. Panel D regressions, 1, 2 & 3 shows that private owned banks have better loan portfolios relative to bank capital of around 5.5% at 5% significance. However, given short term government guarantees to local banks the opposite effect is true for foreign banks.
[Insert Table 8A] [Insert Table 8B]

5.4.2 Long Term Government Guarantees

Table 9A Panel A reports regressions that examines the effect on asset quality for private, state owned and foreign banks given long term government guarantees. According to Panel A regressions 1, 2 & 3, long term government guarantees result in state banks having better quality loan portfolios in better governed countries where 1.9% of the total portfolio has been provided for but not charged off at 1% significance. Panel B regressions 1, 2 & 3 shows that given long term government guarantees, state owned banks charge higher margins of around 13% more compared to foreign banks at 5% significance. In Table 9B panel C regressions 1, 2 & 3 shows that state and private owned banks in countries with better governance have higher loan loss provisioning to impaired loans by 12% and 18% at 5% and 1% significance. Panel D regressions 1, 2 & 3 shows that private owned banks in general have better loan portfolios relative to bank capital of around 3.6% at 5% significance.
-

5.5 Operations ratios

[Insert Table 9A] [Insert Table 9B]

We first examine the main operation risk ratios of commercial banks with different ownership types given the existence of government guarantees. Given short and long term government guarantees, funding actually depletes for private and state owned banks. Given short term government guarantees state owned banks ROAA increases by 0.1%. Given government guarantees to local banks the ROAE decreases to foreign bank shareholders considerably.

5.5.1. Short Term Government Guarantees

Table 10A Panel A & B report regressions that examines the effect on operations ratios for private, state owned and foreign banks given short term government guarantees. According to Panel A regressions 1, 2 & 3, short term government guarantees depletes funding for state and private banks and they require lower margins of around 0.9%, 0.7% and 0.3% and 0.2% at 1% and 5% significance. Panel B regressions 1, 2 & 3 shows that private and state owned banks in general have a higher amount of fees and other income of around 0.24% and 0.54% at 5% and 10% significance as a percentage of its earnings. However, the opposite result is true for foreign banks by around 0.25% at 10% significance. Panel C shows that short term government guarantees result in an increase in fees and other income for private owned banks by around 0.12% at 5% significance compared to foreign banks. In Table 10B, panel D regressions 1, 2 & 3 shows that private owned banks in general have higher ROAA of around 0.1% at 10% significance. This increases by around 0.98% at 10% significance for state owned banks given short term government guarantees compared to foreign owned banks. Panel F regressions 1, 2 & 3 shows that given short term government guarantees, in countries with better governance, private owned banks dividend pay-outs to shareholders decrease by around 0.2% at 10% significance. In Table 10C panel regressions 1, 2 & 3 shows that given short term government guarantees, the percentage of unusual items contained in net income for private owned banks increases by around 17% at 5% significance compared to foreign owned banks. The opposite result is true for foreign owned banks given government guarantees to local banks and the decrement in unusual items is around 16% at 10% significance. The results for the cost to income ratio in Panel H are marginally insignificant.

[Insert Table 10A] [Insert Table 10B] [Insert Table 10C]

5.5.2 Long Term Government Guarantees

Table 11A panel A & B reports regressions that examine the effect on operations ratios for private, state owned and foreign banks given long term government guarantees. According to Panel A regressions 1, 2 & 3, long term government guarantees state banks require lower margins of around 0.3% at 5% significance compared to foreign banks. In panel B, long term government guarantees result in a decrease in net income as a percentage of the total balance sheet for state banks by around 0.4% at 10% significance compared to foreign banks. Panel C regressions 1, 2 & 3 shows, that private owned banks in general, have a higher amount of fees and other income of around 1.4% at 10% significance as a percentage of its earnings compared to foreign owned banks. In Table 11B, panel D regressions 1, 2 & 3 shows, that given long term government guarantees to local banks, foreign banks ROAA reduces by around 0.5% at 5% significance. Panel E regressions 1, 2 & 3 shows, that given long term government guarantees to local banks return on equity for shareholders in foreign owned banks reduces by around 4.38% at 1% significance. Panel F regressions 1, 2 & 3 shows that given long term government guarantees, private owned banks dividend pay-outs to shareholders decrease by around 13.6% at 5% significance. In panel G regressions 1, 2 & 3 shows, that given long term government guarantees to local banks, the percentage of unusual items contained in net income for foreign owned banks increases by around 13% at 10% significance. In Panel G regressions 1, 2 & 3 shows that given long term guarantees to local banks the cost to income increases by around 2% at 5% significance.

6. Robustness

[Insert Table 11A] [Insert Table 11B] [Insert Table 11C]

We perform additional checks to determine whether a) financial variables other than those included in our specification are important by adding more controls, b) conduct sub sample analysis and different heterogeneity tests based on crisis periods, income level, supervisory regimes and geography, c) different econometric specifications such as OLS, different fixed effects (interactions) and system GMM.

d) Consider other ratios as dependent variables to measure liquidity, capital, asset quality and operations risk. Despite the potential for structural breaks our results are quantitatively similar across these subsamples.

We add the following additional variables as dependents. CapFundSTFundRatio is capital funds divided by short term funding. LLossNonPerRatio ratio relates loan loss reserves to nonperforming or impaired loans. The higher this ratio, the better provided the bank is and the more comfortable we will feel about the assets quality. ImpairedLoansRatio is a measure of the amount of total loans which are doubtful. GrossLoansRatio is a measure of the amount of the total loans which are doubtful. A lower figure points towards better quality assets. NetIncLoanLoss ratio similarly measures charge offs but against income generated in the year. UnResImpLoansEqR is the impaired or problem loans not covered by reserves as a percentage of capital. It shows what percentage of the banks' capital would be written off if the reserves or accumulated provisions were 100% of impaired loans and how vulnerable a bank's capital ratio would be as a result. IncNetofDist ratio is effectively the return on equity after deducting the dividend from the returns and it shows by what percentage the equity has increased from internally generated funds. RecEarnPowRatio ratio is a measure of before tax profits adding back provisions for bad debts as a percentage of total assets. Effectively this is a return on assets performance measurement without deducting provisions. We run separate regressions introducing our ownership variables one by one along with the control variables. We add more governance indicators and many more interaction terms between GDP and ownership, government guarantees etc. and our results persist.

Fourth, we use the cut-off levels of 10% and 15% when defining ownership types and our results hold for the 10% cut-off and in most part for the 15% cut-off. Fifth, we also perform a number of additional robustness checks that are specification related. Other control variables specially related to bank competition and bank concentration are added and other controls to account for business differences are introduced in the estimations such as the market share of the top 3 banks and the ratio of net non-interest income to net operating income. Finally, as a straightforward test of endogeneity we run all our fixed effects panel regressions without the lags of the dependent variable and our results or the significance of the coefficients do not differ in most part.

7. Policy Implications

Banks are at different stages of balance sheet repair and operate in different economic and regulatory environments resulting in a diverse global bank capitalization. The primary tasks would be to improve the credibility, transparency, and strength of balance sheets, while avoiding undue pressures from un-co-ordinated national and international regulatory initiatives and uncertainty. More efforts needed to assess how market developments and regulatory initiatives affect bank business models, especially through the costs and provisions of market liquidity. Increased monitoring regarding trading liquidity pressures will be required as financial markets move to a regime with higher interest rates and volatility. These policy challenges should be properly managed, and reforms should be implemented in order for a smooth transition towards greater banking stability. Despite recent efforts to assess asset quality and boost provisions, our study suggests that local banks still need to further increase provisioning to address the potential deterioration of asset quality on their corporate loan books, which could absorb a large portion of future bank profits. Recently increased capital provides additional loss absorption capacity, if needed. Further measures such as cuts in operating costs and reductions in dividends, will also help improve profitability and/or boost capital. However, as mentioned previously, provisioning and/or capital needs can only be ascertained precisely through a bank by bank asset quality review that looks into individual bank loan portfolios and takes into account provisions and capital held by each bank.

The systemic liquidity shocks during the global financial crisis promoted globally agreed upon quantitative liquidity regulations for the first time. These regulations aim to reduce liquidity risks arising from maturity mismatches and short term funding sources. In addition, provide stronger incentives for banks to shift funding mixes to include more insured deposits (from individuals and small and medium enterprises) and longer term funding (secured or unsecured), shown to be relatively more resilient during the recent crisis. Global systemically important banks are subject to surcharges, given their critical relevance for financial stability. With no change in assets, higher capital buffers should reduce the probability of default, reducing the costs of debt regardless of the remaining funding structure. Basel III also raises the loss absorbing capacity of debt that qualifies as additional Tier1 and Tier 2 capital.

8. Conclusion

Our goal is to examine how long and short term government guarantees for private, state and foreign owned banks relate to different types of ratios on capital, liquidity, asset quality and operation risks. Although we cannot calculate the Basel III ratios that use daily data since ours is an annual data set we calculate other liquidity, capital, asset quality and operation risk ratios that involve short and long term and volatile funding available to both shareholders, borrowers and depositors as proxy ratios. These ratios are of particular interest because although the full effects of Basel III will not be known for several years to come, our results can provide valuable insights into the association between these early warning ratios, ownership type and government guarantees. These early warning ratios are virtually costless to implement and could help more sophisticated measures by providing a timely signal of the need for government intervention. Our findings would facilitate policy makers on the formation, revision and implementation of banking regulations in several dimensions. To our knowledge, this is the first study that analyses the effects on different types of ratios for private, state and foreign owned banks given long and short term government guarantees in a cross country setting.

Our results clearly show, that capital adequacy, liquidity, asset quality and operations risk vary depending on bank ownership type and the type of government guarantee received. Our key findings are as follows: Given short & long term government guarantees, private owned banks increase liquidity levels by around 4.01% and 0.17% at 5% & 10% significance respectively compared to foreign owned banks. However, interestingly enough, short and long term guarantees result in better governed private owned banks holding less liquid assets by around 0.13% and 0.1% at 1% significance respectively, relative to foreign owned banks. These results suggest that better governed private owned banks pursue profit maximisation purposes compared to foreign banks by holding lower levels of liquid assets which has lower returns and higher opportunity costs.

On one hand, countries with better governance might have more competition among local banks resulting in them holding less liquid assets. On the other hand, government guarantees resulting in an increase in monitoring might force banks into holding more liquid assets. Therefore, better governance seems to be a double edged sword and the argument that better governance increases the efficiency of government guarantees is contradicted by these results. We believe that Basel III liquidity regulation should help maintain liquidity buffers. Both capital and liquidity measures should improve financial stability. However, continuing

weakness in bank funding markets especially in stressed economies, OTC derivative reforms and some aspects of Basel III liquidity regulations may encumber more assets, thereby increasing unsecured bondholders potential losses. Asset encumbrance would still be an issue, even though according to our results government guarantees result in an increase in funding for both borrowers and depositors. According to the capital regression results, short and long term government guarantees to local banks, increase tier 1 capital by around 0.6% to 0.7% at 5% significance. However, interestingly enough better governed state owned banks hold more of an equity cushion to absorb loan book losses by around 2.6% at 10% significance compared to foreign owned banks. Asset quality and profitability pressures at some banks have reduced their ability to increase capital levels through retained earnings. This might explain our results of private and state owned bank capital levels not being significantly increased even through government guarantees. Basel III capital regulations reduce the cost of any type of debt by increasing loss absorbing buffers before any debt holders face losses.

The asset quality regressions show that short and long term government guarantees, result in private banks having loan portfolios with better quality, by around 0.25% and 1.9% at 5% and 1% significance, compared to foreign owned banks. However, for countries with better governance, the quality of the loan portfolio for state banks reduces, given short term government guarantees by around 0.1% at 5% significance compared to foreign banks. Hence, we can deduce that in better governed countries the motives of the government of expanding credit to even unhealthy households are to some extent carried out. The operation risk regressions show that private and state owned banks in general have a higher amount of fees and other income of around 0.24% and 0.54% at 5% and 10% significance as a percentage of its earnings.

Policy wise, our study suggests the following: The key tasks are to improve the credibility, transparency, and strength of balance sheets, while avoiding undue pressures on banks from un-coordinated national and international regulatory initiatives and uncertainty. As a further research extension, we have one study (Agarwal & Jayasuriya 2014) which concentrates on several heterogeneities of the early warning ratios and government guarantees based on supervisory control, income level, legal origin, geographies and another study (Agarwal & Jayasuriya 2013) focusing on ownership concentration, specifically block ownership.

References

Acker, L., Athanassakos, G., 2003. A simultaneous equations analysis of analysts' forecast bias, analyst following and institutional ownership. Journal of Business Finance and Accounting, 30, 1017-1042.
Aebi V, Sabato G, Schmid M (2011) Risk management, corporate governance, and bank performance in the financial crisis. Journal of Banking and Finance, forthcoming
Allen WA, Chan KK, Milne A, Thomas S (date) Basel III: Is the cure worse than the disease. Working paper, City University London
Altman EI, Sabato G (2005) Effects of the New Basel Capital Accord on Bank Capital Requirements for SMEs. Journal of Financial Services Res 28: 15–42
Arellano, M., and O. Bover, 1995, Another look at the instrumental variables estimation of error components models, Journal of Econometrics 68, 29-51.
Bank for International Settlements (2010) Basel III: International framework for liquidity risk measurement, standards and monitoring. Basel Committee on Banking Supervision
Barth J.R., G. Caprio Jr., and R. Levine, 2001, Banking systems around the globe: Do regulations and ownership affect performance and stability?, in F.S. Mishkin (Ed.), Prudential supervision: What works and what doesn't, University of Chicago Press, Chicago, IL, 31–96.
Barth J.R., G. Caprio Jr., and R. Levine, 2004, Bank supervision and regulation: What works best?, Journal of Financial Intermediation 13, 205-48.
Baum, C., M. Caglayan, and O. Talavera, 2010, Parliamentary election cycles and the Turkish banking sector, Journal of Banking and Finance 34, 2709-2719.
Beck, T., 2008, The econometrics of finance and growth, Policy Research Working Paper Series 4608, World Bank.
Beck, T., A. Demirguc-Kunt, and M. S. Martinez Peria, 2007, Reaching out: Access to and use of banking services across countries, Journal of Financial Economics 85, 234-266.
Beltratti A, Stulz R (2011) The credit crisis around the globe: Why did some banks perform better? J Financ Econ, forthcoming
Berger, A., G. Clarke, R. Cull, L. Klapper, and G. Udell, 2005, Corporate governance and bank performance: A joint analysis of the static, selection, and dynamic effects of domestic, foreign, and state ownership, Journal of Banking and Finance 29, 2179-2221.
Berger, A. N., L. Klapper, M.S. Martinez Peria, and R. Zaidi, 2008, Bank ownership type and banking

relationships, Journal of Financial Intermediation 17, 37-62.
Bliss, R., Flannery, M., 2002. Market discipline in the governance of U.S. Bank Holding Companies: monitoring vs. influencing. European Finance Review, 6 (3),361-395.
Blundell, R., and S. Bond, 1998, Initial conditions and moment restrictions in dynamic panel data models, Journal of Econometrics 87, 115-143.
Bonin, J.P., Hasan, I., Wachtel, P., 2005. Bank performance, efficiency and ownership in transition countries. Journal of Banking and Finance, 29, 31-54.
Boubakri, N., Cosset, J.C., Fischer K., Guedhami O., 2005. Privatization and Bank Performance in developing countries. Journal of Banking and Finance, 29, 2015-2041.
Boyd, J.H., Graham, S.L, 1986. Risk, Regulation and Bank Holding Company Expansion. Quaterly Review, Federal Reserve Bank of Mineapolis.
Burkart, M., Gromb, D., Panunzi, F., 1997. Large shareholders, monitoring and the value of the firm. Quaterly Journal of Economics, 112, 693-728.
Caprio, G., and M. S. Martinez Peria, 2002, Avoiding disaster: Policies to reduce the risk of banking crisis, in Monetary policy and exchange rate regimes: Options for the Middle East, ed.
Chen, C.R., Steiner,T.L, Whyte, A.M, 1998. Risk-taking Behavior and Management Ownership in Depository Institutions. Journal of Financial Research, 21,1-16.
Claessens, S., Demirguc-kunt, A., Huizinga, H., 2001. How does foreign entry affect the domestic banking market ? Journal of Banking and Finance, 25, 891-911.
Cole, S., 2009, Financial Development, Bank Ownership, and Growth: Or, Does Quantity Imply Quality?, Review of Economics and Statistics 91, 33-51.
Cornett, M., L. Guo, S. Khaksari, and H. Tehranian, 2010, The impact of state ownership on performance differences in privately-owned versus state-owned banks: An international comparison, Journal of Financial Intermediation 19, 74-94.
Cull, R. and M.S. Martinez Peria, 2012, Bank ownership and lending patterns during the 2008-2009 financial crisis. Evidence from Eastern Europe and Latin America, mimeo, World Bank.
Demsetz, H., Lehn, K, 1985. The Structure of Corporate Ownership: Causes and Consequences. Journal of Political Economics, 93, 1155-1177.
Dinc, I. S., 2005, Politicians and banks: Political influences on government-owned banks in emerging markets, Journal of Financial Economics 77, 453-479.
Dietrich A, Wanzenried G (2011) Determinants of bank profitability before and during the crisis: Evidence from Switzerland. Journal of International Financial Markets, Institutional Money 21:307–327
Eliana Cardoso and Ahmed Galal, 193–230, Egyptian Center for Economic Studies, Cairo. Carvalho, D. R., 2010, The real effects of government-owned banks: Evidence from an emerging market, mimeo, USC Marshall Business School.
Esty, B., 1998. The impact of Contingent Liability on Commercial Bank Risk Taking. Journal of Financial Economics, 47, 189-218.
Flannery, M. J., 2001. The faces of market discipline, Journal of Financial Services Research, 20(2-3), 107-119.
Galai, D., Masulis, R., 1976. The Option Pricing Model and the Risk Factor of Stock. Journal of Financial Economics, 3,53-81.
Givoly, D., Hayn, C., Katz, S., Does public ownership of equity improve earnings quality? Accounting Review, Forthcoming.
Gorton, G., Rosen, R.,1995. Corporate Control, Portfolio Choice, and the Decline of Banking. Journal of Finance, 50, 509-527.
Goyeau, D., Tarazi A., 1992. Evaluation du risqué de défaillance bancaire en Europe. Revue d'Economie Politique, 102, 249-280.
Gugler, K., Weigland, J., 2003. Is ownership endogenous?, Applied Economics Letters, 10, 483-486. Himmelberg, C., Hubbard, R., Palia, D, 1999. Understanding the determinants of managerial ownership and the link between ownership and performance, Journal of Financial Economics, 53, 353-384.
Iannotta, G., G. Nocera, and A. Sironi, 2011, The impact of government ownership on bank risk profile and lending behavior, mimeo, Bocconi University.
Ivashina V, Scharfstein D (2009) Bank lending during the financial crisis of 2008. Working paper, Harvard University
James, H., 1999. Owner as manager, extended horizon and the family firm. International Journal of the Economics of Business, 6, 41-56
Jensen, M.C., Meckling, W.H., 1976. Theory of the firm: Managerial behavior, Agency cost and Ownership structure. Journal of Financial Economics, 3, 305-360.
Kaufmann D., A.Kraay and M. Mastruzzi, 2010, The Worldwide Governance Indicators : A summary of methodology, data and analytical Issues, Policy Research Working Paper 5430,World Bank.

Khwaja, A. and A. Mian, 2005, Unchecked intermediaries: Price manipulation in an emerging stock market, Journal of Financial Economics 78, 203-241.
Knopf, J.K., Teal, J., 1996. Risk-taking behavior in the U.S thrift industry: ownership structure and regulatory changes. Journal of Banking and Finance, 1, 3-11.
Kwan, HK., 2004. Risk and Return of Publicly held versus Privately Owned banks. FRBNY Economic Policy Review.
La Porta, R., F. Lopez de Silanes, and A. Shleifer, 2002, Government ownership of banks, Journal of Finance 57, 265-301.
Laeven, L., and F. Valencia, 2010, Resolution of banking crises: The good, the bad, and the ugly,IMF Working Papers 10/146.
Levine, R., N. Loayza and T. Beck, 2000, Financial intermediation and growth: Causality and causes", Journal of Monetary Economics 46, 31-77.
Lin, X. and Y. Zhang, 2009, Bank ownership reform and bank performance in China, Journal of Banking and Finance 33, 20-29.
Mian, A., 2003, Foreign, private domestic, and government banks: New evidence from emerging markets, mimeo, University of Chicago.
Micco, A., and U. Panizza, 2006, Bank ownership and lending behavior", Economics Letters 93, 248-254. Micco, A., U. Panizza, and M. Yanez, 2007, Bank ownership and performance. Does politics matter?, Journal of Banking and Finance 31, 219-241.
Morck, R., Stangeland, D., Yeung, B., 2000. Inherited wealth, corporate control, and economic growth: The Canadian disease, in: Morck, R. (Ed.), Concentrated Corporate Ownership, National Bureau of Economic Research Conference Volume, University of Chicago Press.
Nichols, D., Wahlen, J., Wieland, M., 2009. Publicly-traded versus privately-held: implications for conditional conservatism in bank accounting. Review of Accounting Studies, 14(1), 88-122.
Ongena,S. and _. Sendeniz-Yüncü,2011, Which firms engage small, foreign, or state banks? And who goes Islamic? Evidence from Turkey, Journal of Banking and Finance 35, 3213-3224.
Pound J., 1988. Proxy contests and the efficiency of shareholder oversight. Journal of Financial Economics, 10, 53-83
Repullo, R. and J. Saurina, 2011, The countercyclical capital buffer of Basel III: A critical assessment, mimeo, CEMFI.
Sapienza, P., 2004, The effects of government ownership on bank lending, Journal of Financial Economics 72, 357-384.Saunders, A., Strock, E., Travlos, N., 1990. Ownership Structure, Deregulation, and Bank Risk Taking. Journal of Finance, 45(2), 643-654.
Shleifer A., 1998. State versus private ownership. Journal of Economic Perspective, 12, 133-150.
Shleifer A., Vishny R.W., 1998. The grabbing hand: government pathologies and their cures, Harvard University Press, MA.
Shleifer A., Vishny R.W., 1997. A survey of corporate governance. Journal of Finance, 52, 737-783.
Shleifer, A., Vishny, R., 1986. Large Shareholders and Corporate Control. Journal of Political Economy, 94, 461-488.
Stein, JC., 1989. Efficient capital markets, inefficient firms: A model of myopic corporate behavior. Quarterly Journal of Economics, 104, 655-669.
Stein, JC., 1988 .Takeover threats and managerial myopia. Journal of Political Economy, 96, 61-68.
Sullivan, R., Spong, K.R, 2007. Managerial Wealth, Ownership Structure, and Risk in Commercial Banks. Journal of Financial Intermediation, 16, 229-248.
Williams, J., Nguyen, N., 2005. Financial liberalization, crisis, and restructuring: A comparative study of bank performance and bank governance in South East Asia. Journal of Banking and Finance, 29, 2119-2154.
Windmeijer, F., 2005, A finite sample correction for the variance of linear efficient two-step GMM estimators, Journal of Econometrics 126, 25-51.

Table 1: Summary Statistics (Sample period 2001 to 2011)

Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. Ownership Concentration is the percentage of shares owned by the primary shareholder (more than 20% of shares). Tier1ratio_bs is shareholder funds plus perpetual noncumulative preference shares as a percentage of risk weighted assets. ImpGurantee is a dummy variable equal to 1 if the deposit insurance is explicit. DepositInsurance is a dummy variable equal to 0 if the country has Deposit insurance scheme. PermFund is a dummy variable equal to 1 if the country has a permanent fund set up for deposit insurance. SourceFund is a variable equal to 2 if the bailout funding is by the government, 0 if private and 1 if joint. Intervene is a dummy variable that equals 1 if the deposit insurance

authority can intervene on a bank. BailedOut is a dummy variable that equals one if the d0epositors of that country were compensated in case of a bank failure. Bank fail is a variable containing the number of banks that failed so far up to 2003. NoDepPaidOut is a dummy variable equal to 1 if depositors not covered by the insurance were also compensated. These variables on deposit insurance and bail outs and failures are on a country level for all years. ShortTermGuarantee (Liquidity Support), Recapitalization, Blanket guarantee are dummies equal to 1 if the government provided liquidity, capital injection & blanket guarantee to any banks in a particular year. LongTermGuarantee is a dummy variable equal to 1 if either capital injection or blanket guarantees were provided by the government). These dummies are equal to 0 if a bank is foreign owned. ZScore=ZP1 + ZP2 =Average ROA /SDROA + (TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). Liq_Assets is Liquid assets over total assets. DepositsOverLiabilities is Total deposits over total Liabilities. Profit is the bank's ratio of total Operating Income to total earnings assets. Capital is the bank's ratio of the book value of Equity to Total Assets. Crisisd is a dummy variable equal to 1 if the country is in a banking crisis. conloan is consumer loans scaled by total assets as of the end of year t-1. ROAA is return on average assets. ROAE is return on average equity. Assets is Log of Total Assets. Costs is total operating expense scaled by total earnings assets. WGI_Estimate is an index for Government Effectiveness. GDPperCapitaGrowth is the annualised growth rate of GDP per capita. InterBnkRatio is money lent to other banks divided by money borrowed from other banks. NetLoansTARatio is NET LOANS / TOT ASSETS. NetLoansSTFundRatio is NET LOANS/ CUST & ST FUND. LoansTotDepRatio is NET LOANS/TOT DEP & BOR. LiqAsstsDepRatio is liquid assets divided by total deposits. LoanLossRatio is LOAN LOSS RES / GROSS LOANS. LLossProvisionRatio is LOAN LOSS PROV / NET INT REV. LLossNonPerRatio is LOAN LOSS RES / NON PERF LOANS. ImpairedLoansRatio is NON PERF LOANS / GROSS LOANS. GrossLoansRatio is NCO / AVERAGE GROSS LOANS. NetIncLoanLoss is NET INCOME BEFORE LOAN LOSS PROVISION. ImpLoansEquityRatio is IMPAIRED/EQUITY. UnResImpLoansEqR is UNRESERVED IMPAIRED LOANS/EQUITY. CARRatio is the total capital adequacy ratio under the Basel rules. EquityRatio is EQUITY / TOT ASSETS. EquityLiabRatio is EQUITY / LIABILITIES. EquityLoansRatio is EQUITY / NET LOANS. EquitySTFundingRatio is EQUITY / CUST & ST FUNDING. CapFundNLRatio is CAP FUNDS / NET LOANS. CapFundTARatio is CAP FUNDS / TOT ASSETS. CapFundSTFundRatio is CAP FUNDS / CUST & ST FUNDING. CapFundLiabRatio is CAP FUNDS / LIABILITIES. NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets. NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets. NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. NON INT EXP / AVG ASSETS. OpIncAsstsRatio is OTH OP INC / AVG ASSETS. NonInrstAsstsRatio is NON INT EXP / AVG ASSETS. PreTaxOpIncAsstsRatio is PRE-TAX OP INC / AVG ASSETS. NonOpTaxRatio is NON OP ITEMS & TAXES/AVG AST. ROAA is RETURN ON AVG ASSETS. ROAE is RETURN ON AVG EQUITY. DivPORatio is DIVIDEND PAY-
OUT. IncNetofDist is INC NET OF DIST / AVG EQUITY. CosttoIncRatio is COST TO INCOME RATIO. RecEarnPowRatio is RECURRING EARNING POWER. Data is winsorized 1 99%.

Variable	Mean	Obs	Mean	Obs	Mean	Obs	Mean
1. Liquidity Ratios	Total	Go		Priv		Forei	
Liq_Assets	0.27	1579	0.22	8815	0.24	7502	0.3
InterBnkRatio	1.71	1114	2.07	5957	1.7	5728	1.57
NetLoansTARatio	0.51	1575	0.52	8747	0.54	7396	0.5
NetLoansSTFundR	0.69	1563	0.66	8684	0.73	7360	0.67
LoansTotDepRatio	0.63	1323	0.61	7736	0.65	6504	0.61
LiqAsstsDepRatio	0.37	1571	0.29	8723	0.33	7405	0.41
LiqAsstsTotDepRat	0.32	1323	0.26	7769	0.3	6546	0.35
2. Asset Quality							

Table 1: Summary Statistics (Sample period 2001 to 2011)

3. Capital Ratios							
Tier1Ratio	0.14	740	0.12	4014	0.12	2784	0.16
CARRatio	0.18	945	0.15	4982	0.16	3830	0.19
EquityRatio	0.12	1579	0.09	8827	0.11	7502	0.12
EquityLoansRatio	0.32	1570	0.21	8671	0.27	7314	0.34
EquitySTFundingRa	0.18	1571	0.13	8725	0.16	7401	0.17
EquityLiabRatio	0.15	1578	0.11	8780	0.13	7451	0.14
CapFundTARatio	0.12	998	0.09	6475	0.12	5198	0.12
CapFundNLRatio	0.32	993	0.21	6401	0.28	5110	0.33
CapFundSTFundRat	0.18	991	0.13	6425	0.17	5162	0.17
CapFundLiabRatio	0.15	998	0.11	6456	0.14	5175	0.14
4. Operations							
NetIntrstMarginRati	0.04	1562	0.04	8627	0.04	7338	0.04
NetIntrstAsstsRatio	0.04	1562	0.03	8634	0.03	7341	0.03
OpIncAsstsRatio	0.02	1565	0.02	8604	0.02	7322	0.02
NonIntrstAsstsRatio	0.05	1563	0.04	8588	0.05	7313	0.04
PreTaxOpIncAsstsR	0.01	1200	0.01	6345	0.01	4926	0.01
NonOpTaxRatio	-0.004	1440	0	8243	0	6968	0
ROAA	0.01	1569	0.01	8783	0.01	7471	0.01
ROAE	0.1	1561	0.11	8776	0.1	7460	0.09
DivPORatio	0.44	771	0.32	3959	0.44	2658	0.49
IncNetofDist	0.07	772	0.1	3995	0.07	2689	0.07
NonOpItNIRatio	0.01	1181	-0.06	6215	0.02	4808	0.01
CosttoIncRatio	0.64	1542	0.6	8476	0.63	7213	0.63
RecEarnPowRatio	0.02	1569	0.02	8782	0.02	7468	0.02
5. Ownership & Guarantees							
State_Owned	0.09	1579	1	8748	0.01	7342	0.01
Private_Owned	0.48	1513	0.04	8827	1	7342	0.01
Foreign_Owned	0.41	1500	0.04	8735	0.01	7508	1
long term gov	0.05	1579	0.07	8827	0.07	7508	0
short term gov	0.04	1579	0.05	8827	0.06	7508	0.01
6. Controls							
ZScore	22.69	815	22.87	4966	23.62	5124	21.83
Assets	25.63	1579	28.39	8827	25.74	7508	24.99
Profit	0.07	1564	0.06	8654	0.06	7364	0.06
Capital	0.12	1579	0.09	8827	0.11	7508	0.12
Deposits/Liabilitie	0.81	1565	0.84	8730	0.8	7413	0.82
7. Macro Variables							
Governance	0.59	1414	0.13	7790	0.67	6802	0.71
GDP growth %	3.76	1563	5.43	8813	3.59	7445	3.56
GDP per capita	12.34	1564	6.63	8820	13.87	7453	13.25
Inflation	5.98	1490	6.76	8426	5.46	7211	5.54
Crisis Dummy	0.31	1579	0.3	8827	0.35	7508	0.25

Table 2: Ownership Distribution

Average foreign ownership is average yearly ratio of total assets of each Foreign bank to total assets of all banks per each country.

Country	Income Group	# of Banks	Foreign
Argentina	Low Income	38	0.2
Austria	High Income	45	0.37
Australia	High Income	26	0.48
Bangladesh	Low Income	33	0.05
Belgium	High Income	38	0.44
Bulgaria	Low Income	25	0.54
Bahrain	Low Income	15	0.5
Brazil	Low Income	38	0.38
Belarus	Low Income	25	0.39
Canada	High Income	53	0.57
Chile	Low Income	29	0.36
China	Low Income	28	0.12
Colombia	Low Income	31	0.37
Costa Rica	Low Income	31	0.11
Croatia	Low Income	39	0.48
Cyprus	High Income	20	0.48
Czech Republic	Low Income	27	0.67
Denmark	High Income	29	0.21
Dominican Republic	Low Income	39	0.25
Ecuador	Low Income	37	0.05
Egypt	Low Income	32	0.51
Finland	High Income	14	0.36
France	High Income	27	0.23
Germany	High Income	44	0.44
Greece	High Income	23	0.39
Guatemala	Low Income	35	0.34
Hong Kong	High Income	23	0.68
Hungary	Low Income	35	0.67
Indonesia	Low Income	37	0.37
Ireland	High Income	24	0.58
Israel	High Income	17	0.25
India	Low Income	34	0.15
Iceland	High Income	7	0.35

Italy	High Income	46	0.24
Jordan	Low Income	11	0.33
Japan	High Income	27	0.22
Kuwait	High Income	7	0.22
Kazakhstan	Low Income	31	0.38
Lebanon	Low Income	40	0.19
Luxembourg	High Income	47	0.93
Latvia	Low Income	25	0.4
Morocco	Low Income	13	0.43
Mauritius	Low Income	20	0.72
Mexico	Low Income	42	0.27

Table 2: Ownership Distribution continued…

Malaysia	Low Income	24	0.44
Nigeria	Low Income	40	0.18
Netherlands	High Income	38	0.42
Norway	High Income	24	0.16
Panama	Low Income	73	0.33
Peru	Low Income	23	0.59
Philippines	Low Income	35	0.3
Pakistan	Low Income	26	0.31
Poland	Low Income	40	0.79
Portugal	High Income	39	0.41
Qatar	High Income	7	0.18
Romania	Low Income	31	0.76
Russia	Low Income	50	0.33
Saudi Arabia	High Income	9	0.24
Sweden	High Income	27	0.16
Singapore	High Income	24	0.47
Slovenia	High Income	20	0.5
Slovakia	Low Income	18	0.86
Spain	High Income	36	0.49
South Africa	Low Income	27	0.22
South Korea	Low Income	21	0.29
Sri Lanka	Low Income	13	0.2
Switzerland	High Income	47	0.33
Thailand	Low Income	23	0.52
Tunisia	Low Income	16	0.46
Turkey	Low Income	34	0.53
Trinidad & Tobago	Low Income	10	0.37
Ukraine	Low Income	53	0.4
United Kingdom	High Income	34	0.22
United States	High Income	60	0.13
United Arab Emirates	High Income	20	0.12
Uruguay	Low Income	26	0.44
Venezuela	Low Income	52	0.27
Vietnam	Low Income	38	0.15

Table 4A: Liquidity Ratios & Short term Government Guarantee

InterBnkRatio is money lent to other banks divided by money borrowed from other banks. NetLoansTARatio is NET LOANS / TOT ASSETS. NetLoansSTFundRatio is NET LOANS/ CUST & ST FUND. LoansTotDepRatio is NET LOANS/TOT DEP & BOR. LiqAsstsDepRatio is liquid assets divided by total deposits. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. Assets is Log of Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. The data is winsorized 1 99%. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel A (1) Liq_Asset	(2) Liq_Assets	(3) Liq_Assets	Panel B (1) InterBnkRati	(2) InterBnkRat	(3) InterBnkRat	Panel C (1) NetLoansTARati	(2) NetLoansTARati	(3) NetLoansTARatio
State_Owned	-0.00223	-0.00255	0.00328	0.132	0.105	0.135	-0.00442	-0.00388	-0.00437
	(0.00932)	(0.00941)	(0.00862)	(0.130)	(0.134)	(0.144)	(0.00888)	(0.00903)	(0.00784)
Private_Owned	0.00588	0.00480	**0.0143*** **	**0.117***	**0.116***	**0.180***	-0.00261	-0.00127	-0.00592
	(0.00370)	(0.00363)	**(0.00466)**	**(0.0676)**	**(0.0684)**	**(0.0934)**	(0.00383)	(0.00384)	(0.00429)
State_Owned*		0.0128	0.00986		0.431	0.434		-0.0183	-0.0187
ShortTermGuarant		(0.0217)	(0.0213)		(0.396)	(0.395)		(0.0213)	(0.0211)
Private_Owned*		**0.0353****	**0.0312****		0.0979	0.0847		**-0.0441****	**-0.0429****
ShortTermGuarant		**(0.0160)**	**(0.0154)**		(0.266)	(0.265)		**(0.0176)**	**(0.0174)**
State_Owned*			-0.0198			-0.0876			-0.00286
Governance			(0.0202)			(0.133)			(0.0208)
Private_Owned*			-			-0.0931			**0.00752****
Governance			**(0.00399)**			(0.0593)			**(0.00363)**
ShortTermGuarant	**0.0227****	-0.00654	-0.00333	-0.0979	-0.209	-0.202	**-0.0187*****	0.0181	0.0173
	(0.00634)	(0.0147)	(0.0140)	(0.0880)	(0.256)	(0.255)	**(0.00522)**	(0.0169)	(0.0168)
ZP t-1	-	-	-	-0.000950	-0.000952	-0.000938	0.000193**	0.000197**	0.000193**
	(0.000045	(0.000045	(0.000043	(0.000857)	(0.000875)	(0.000867)	(0.0000810)	(0.0000799)	(0.0000765)
Assets t-1	-0.00333*	-0.00331*	-0.00269	0.00210	0.00212	0.00733	-0.00132	-0.00135	-0.00159
	(0.00202)	(0.00201)	(0.00197)	(0.0398)	(0.0398)	(0.0398)	(0.00189)	(0.00189)	(0.00189)
Profit t-1	0.106***	0.106***	0.108***	1.086**	1.098**	1.109**	-0.0906***	-0.0904***	-0.0908***
	(0.0358)	(0.0356)	(0.0357)	(0.450)	(0.446)	(0.444)	(0.0291)	(0.0291)	(0.0290)
Capital t-1	0.0576	0.0564	0.0621	-0.569	-0.562	-0.516	0.0725	0.0742	0.0714
	(0.0505)	(0.0505)	(0.0506)	(0.659)	(0.661)	(0.658)	(0.0455)	(0.0455)	(0.0454)
Deposits/Liabilities	-0.00412	-0.00390	-0.00293	0.297	0.295	0.303	-0.0149	-0.0153	-0.0161
	(0.0152)	(0.0152)	(0.0152)	(0.219)	(0.218)	(0.219)	(0.0144)	(0.0144)	(0.0144)
Governance	-0.0122	-0.0122	-0.00342	-0.119	-0.118	-0.0707	0.0303***	0.0301***	0.0262***
	(0.00949)	(0.00950)	(0.00981)	(0.137)	(0.137)	(0.141)	(0.00844)	(0.00844)	(0.00879)
GDP growth %	0.000536	0.000608	0.000607	0.0135	0.0131	0.0130	0.00111***	0.00104**	0.00104**
	(0.000450	(0.000449	(0.000448	(0.00822)	(0.00824)	(0.00823)	(0.000415)	(0.000417)	(0.000417)
GDP per capita	0.00254	0.00241	0.00217	0.0121	0.0121	0.0108	0.00127	0.00142	0.00152
	(0.00160)	(0.00160)	(0.00161)	(0.0228)	(0.0228)	(0.0229)	(0.00147)	(0.00147)	(0.00147)

Inflation	0.00115**	0.00115**	0.00118**	0.00948	0.00955	0.0101	-0.000350	-0.000353	-0.000358
	(0.000429	(0.000427	(0.000425	(0.0103)	(0.0103)	(0.0103)	(0.000349)	(0.000346)	(0.000344)
Crisis Dummy	-0.0155**	-0.0167**	-0.0165**	-0.136	-0.136	-0.135	0.0142*	0.0155**	0.0154**
	(0.00728)	(0.00733)	(0.00731)	(0.114)	(0.113)	(0.113)	(0.00752)	(0.00753)	(0.00752)
Liq_Assets t-1	0.417***	0.417***	0.416***						
	(0.0208)	(0.0208)	(0.0208)						
Liq_Assets t-2	0.00533	0.00545	0.00403						
	(0.0166)	(0.0166)	(0.0166)						
InterBnkRatio t-1				0.193***	0.193***	0.194***			
				(0.0275)	(0.0276)	(0.0276)			
InterBnkRatio t-2				-0.0323	-0.0325	-0.0328			
				(0.0215)	(0.0215)	(0.0215)			
NetLoansTARatio							0.462***	0.462***	0.462***
							(0.0320)	(0.0321)	(0.0320)
NetLoansTARatio							0.0219	0.0223	0.0217
							(0.0204)	(0.0204)	(0.0205)
Constant	0.189***	0.191***	0.171***	0.858	0.859	0.698	0.273***	0.270***	0.278***
	(0.0583)	(0.0582)	(0.0572)	(1.137)	(1.136)	(1.141)	(0.0581)	(0.0580)	(0.0579)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	8908	8905	8905	5854	5853	5853	8852	8849	8849
adj. R-sq	0.222	0.223	0.224	0.043	0.043	0.043	0.258	0.259	0.259

Table 4B: Liquidity Ratios & Short term Government Guarantees Continued

InterBnkRatio is money lent to other banks divided by money borrowed from other banks. NetLoansTARatio is NET LOANS / TOT ASSETS. NetLoansSTFundRatio is NET LOANS/ CUST & ST FUND. LoansTotDepRatio is NET LOANS/TOT DEP & BOR. LiqAsstsDepRatio is liquid assets divided by total deposits. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. Assets is Log of Total Assets. Equity over assets is Equity over total assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel D (1) NetLoansSTFundRa	(2) NetLoansSTFundRat	(3) NetLoansSTFundRa	Panel E (1) LoansTotDepRat	(2) LoansTotDepRati	(3) LoansTotDepRat	Panel F (1) LiqAsstsDepRati	(2) LiqAsstsDepRati	(3) LiqAsstsDepRati
State_Owned	0.00339	0.00456	-0.00752	**-0.0188****	**-0.0182****	**-0.0152***	0.00112	-0.0000187	0.00358
	(0.0246)	(0.0250)	(0.0165)	**(0.00888)**	**(0.00880)**	**(0.00837)**	(0.00994)	(0.0101)	(0.0109)
Private_Owned	-0.00929	-0.00739	-0.00906	-0.00293	-0.00146	**-0.00881***	0.00935	0.00798	**0.0241*****
	(0.00685)	(0.00689)	(0.00730)	(0.00453)	(0.00453)	**(0.00517)**	(0.00612)	(0.00600)	**(0.00766)**
State_Owned*		-0.0342	-0.0247		-0.0301	-0.0336		0.0311	0.0310
ShortTermGuarantee		(0.0306)	(0.0316)		(0.0313)	(0.0309)		(0.0340)	(0.0332)
Private_Owned*		**-0.0633****	**-0.0586****		**-0.0600****	**-0.0589****		**0.0467***	**0.0419***
ShortTermGuarantee		**(0.0254)**	**(0.0261)**		**(0.0265)**	**(0.0265)**		**(0.0258)**	**(0.0242)**
State_Owned*			0.0675			-0.0266			0.000464
Governance			(0.0702)			(0.0194)			(0.0148)
Private_Owned*			0.00303			**0.0110****			**-0.0263*****
Governance			(0.00730)			**(0.00451)**			**(0.00633)**
ShortTermGuarantee	**-0.0400*****	0.0133	0.00884	**-0.0230*****	0.0287	0.0282	**0.0217****	-0.0181	-0.0148
	(0.0109)	(0.0236)	(0.0244)	**(0.00724)**	(0.0260)	(0.0261)	**(0.00893)**	(0.0221)	(0.0206)
ZP t-1	0.000172	0.000177	0.000201	0.000242	0.000263*	0.000231*	0.00000820	0.00000421	0.0000167
	(0.000140)	(0.000137)	(0.000150)	(0.000149)	(0.000138)	(0.000127)	(0.0000860)	(0.0000868)	(0.0000815)
Assets t-1	0.00273	0.00268	0.00215	-0.00293	-0.00296	-0.00318	-0.00477	-0.00474	-0.00388
	(0.00430)	(0.00429)	(0.00423)	(0.00252)	(0.00251)	(0.00252)	(0.00291)	(0.00290)	(0.00285)
Profit t-1	-0.196*	-0.196*	-0.197*	-0.0814**	-0.0809**	-0.0800**	0.0923*	0.0923*	0.0936*
	(0.102)	(0.102)	(0.102)	(0.0371)	(0.0370)	(0.0367)	(0.0487)	(0.0484)	(0.0481)
Capital t-1	0.0233	0.0254	0.0248	0.0915	0.0946	0.0904	-0.0257	-0.0273	-0.0167
	(0.0926)	(0.0926)	(0.0927)	(0.0697)	(0.0696)	(0.0695)	(0.0641)	(0.0643)	(0.0642)
Deposits/Liabilities t-	-0.0393	-0.0397	-0.0394	-0.00802	-0.00843	-0.00987	-0.0273	-0.0269	-0.0252
	(0.0364)	(0.0364)	(0.0362)	(0.0179)	(0.0179)	(0.0179)	(0.0243)	(0.0243)	(0.0244)
Governance	0.0545***	0.0542***	0.0500***	0.0419***	0.0420***	0.0370***	-0.0185	-0.0184	-0.00480
	(0.0169)	(0.0169)	(0.0177)	(0.0114)	(0.0114)	(0.0116)	(0.0150)	(0.0150)	(0.0156)
GDP growth %	0.00102	0.000921	0.000926	0.00120**	0.00110**	0.00108**	0.000933	0.00101	0.00101
	(0.000897)	(0.000903)	(0.000904)	(0.000551)	(0.000550)	(0.000549)	(0.000684)	(0.000684)	(0.000681)
GDP per capita	-0.00199	-0.00179	-0.00153	-0.00103	-0.000832	-0.000737	0.00275	0.00261	0.00231
	(0.00252)	(0.00252)	(0.00255)	(0.00206)	(0.00206)	(0.00205)	(0.00254)	(0.00254)	(0.00254)
Inflation	-0.000624	-0.000627	-0.000667	-0.000339	-0.000340	-0.000309	0.00140**	0.00140**	0.00143**
	(0.000653)	(0.000651)	(0.000659)	(0.000500)	(0.000496)	(0.000489)	(0.000569)	(0.000568)	(0.000564)
Crisis Dummy	0.0637**	0.0657**	0.0657**	0.00707	0.00811	0.00782	-0.00560	-0.00698	-0.00668
	(0.0257)	(0.0256)	(0.0257)	(0.00957)	(0.00953)	(0.00952)	(0.0136)	(0.0136)	(0.0136)
NetLoansSTFundRati	0.341***	0.341***	0.341***						
	(0.0328)	(0.0328)	(0.0325)						
NetLoansSTFundRati	0.0248	0.0253	0.0248						
	(0.0295)	(0.0295)	(0.0295)						
LoansTotDepRatio t-1				0.436***	0.436***	0.435***			

				(0.0285)	(0.0286)	(0.0286)			
LoansTotDepRatio t-2				0.0213	0.0218	0.0215			
				(0.0216)	(0.0216)	(0.0216)			
LiqAsstsDepRatio t-1							0.370***	0.370***	0.369***
							(0.0276)	(0.0276)	(0.0276)
LiqAsstsDepRatio t-2							0.00967	0.00963	0.00855
							(0.0219)	(0.0219)	(0.0219)
Constant	0.300**	0.295**	0.308**	0.376***	0.371***	0.382***	0.311***	0.314***	0.285***
	(0.126)	(0.126)	(0.125)	(0.0768)	(0.0767)	(0.0769)	(0.0899)	(0.0899)	(0.0889)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	8796	8793	8793	7348	7346	7346	8843	8840	8840
adj. R-sq	0.162	0.163	0.163	0.234	0.235	0.236	0.169	0.169	0.171

Table 5A: Liquidity Ratios & Long term Government Guarantees

InterBnkRatio is money lent to other banks divided by money borrowed from other banks. NetLoansTARatio is NET LOANS / TOT ASSETS. NetLoansSTFundRatio is NET LOANS/ CUST & ST FUND. LoansTotDepRatio is NET LOANS/TOT DEP & BOR. LiqAsstsDepRatio is liquid assets divided by total deposits. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. Assets is Log of Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. The data is winsorized 1 99%. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel A (1) Liq_Assets	(2) Liq_Assets	(3) Liq_Assets	Panel B (1) InterBnkRatio	(2) InterBnkRatio	(3) InterBnkRatio	Panel C (1) NetLoansTARat	(2) NetLoansTARatio	(3) NetLoansTARatio
State_Owned	-0.00161	-0.00681	-0.00246	0.195	0.228	0.249	-0.00788	-0.00814	-0.00906
	(0.00942)	(0.00827)	(0.00784)	(0.131)	(0.148)	(0.158)	(0.00865)	(0.00818)	(0.00799)
Private_Owned	**0.00632***	**0.00708***	**0.0160*****	**0.140****	**0.139****	**0.194****	-0.00269	-0.00119	-0.00542
	(0.00371)	**(0.00361)**	**(0.00446)**	**(0.0632)**	**(0.0642)**	**(0.0862)**	(0.00374)	(0.00377)	(0.00434)
State_Owned*		-0.00531	-0.00705		-0.210	-0.214		0.00641	0.00717
LongTermGuarantee		(0.0150)	(0.0147)		(0.267)	(0.268)		(0.0153)	(0.0152)
Private_Owned*		0.0160	0.0143		0.0506	0.0488		**-0.0327*****	**-0.0325*****
LongTermGuarantee		(0.0127)	(0.0121)		(0.182)	(0.184)		**(0.0120)**	**(0.0116)**
State_Owned*			-0.0107			-0.0438			-0.00128
Governance			(0.0180)			(0.143)			(0.0188)
Private_Owned*			**-0.0155*****			-0.0856			**0.00734****
Governance			**(0.00379)**			(0.0572)			**(0.00358)**
LongTermGuarantee	**0.0127****	-0.00463	-0.00303	**-0.136***	-0.143	-0.141	**-0.00887****	0.0149	0.0147
	(0.00502)	(0.0117)	(0.0110)	**(0.0718)**	(0.162)	(0.164)	**(0.00405)**	(0.0110)	(0.0107)
ZP t-1	-0.0000467	-0.0000520	-0.0000483	-0.000481	-0.000490	-0.000467	0.000163*	0.000160*	0.000157*
	(0.0000457)	(0.0000427)	(0.0000414)	(0.000521)	(0.000521)	(0.000525)	(0.0000838)	(0.0000849)	(0.0000827)
Assets t-1	-0.00336*	-0.00351*	-0.00293	-0.00253	-0.00196	0.00235	-0.00191	-0.00186	-0.00210
	(0.00202)	(0.00205)	(0.00201)	(0.0342)	(0.0341)	(0.0338)	(0.00167)	(0.00164)	(0.00164)
Profit t-1	0.105***	0.0942***	0.0954***	1.192***	1.186***	1.192***	-0.0846***	-0.0836***	-0.0839***
	(0.0364)	(0.0338)	(0.0339)	(0.413)	(0.414)	(0.412)	(0.0263)	(0.0261)	(0.0261)
Capital t-1	0.0589	0.0219	0.0268	-0.560	-0.564	-0.530	0.0525	0.0534	0.0512
	(0.0506)	(0.0412)	(0.0413)	(0.585)	(0.585)	(0.582)	(0.0368)	(0.0368)	(0.0368)
Deposits/Liabilities t-1	-0.00464	-0.00996	-0.00900	0.287	0.289	0.295	-0.0151	-0.0154	-0.0160
	(0.0153)	(0.0144)	(0.0143)	(0.205)	(0.204)	(0.205)	(0.0131)	(0.0131)	(0.0131)
Governance	-0.0128	-0.00678	0.00194	-0.0504	-0.0458	-0.00313	0.0200**	0.0193**	0.0153*
	(0.00949)	(0.00877)	(0.00909)	(0.134)	(0.135)	(0.138)	(0.00791)	(0.00792)	(0.00826)
GDP growth %	0.000332	0.000251	0.000257	0.0117	0.0121	0.0121	0.00128***	0.00114***	0.00114***
	(0.000443)	(0.000430)	(0.000429)	(0.00743)	(0.00757)	(0.00756)	(0.000384)	(0.000379)	(0.000378)
GDP per capita	0.00236	0.00180	0.00162	-0.000978	-0.00111	-0.00199	0.00193	0.00206	0.00214
	(0.00160)	(0.00162)	(0.00163)	(0.0227)	(0.0227)	(0.0227)	(0.00139)	(0.00140)	(0.00141)
Inflation	0.00115***	0.00114***	0.00115***	0.00736	0.00783	0.00817	-0.000434	-0.000527	-0.000531
	(0.000429)	(0.000406)	(0.000404)	(0.00926)	(0.00937)	(0.00938)	(0.000334)	(0.000330)	(0.000330)
Crisis Dummy	-0.0110	-0.00871	-0.00875	-0.0604	-0.0639	-0.0638	0.0103	0.0120*	0.0120*
	(0.00708)	(0.00642)	(0.00640)	(0.110)	(0.111)	(0.112)	(0.00717)	(0.00719)	(0.00718)
Liq_Assets t-1	0.418***	0.383***	0.382***						
	(0.0208)	(0.0184)	(0.0184)						
Liq_Assets t-2	0.00546	0.0127	0.0115						
	(0.0167)	(0.0151)	(0.0151)						
InterBnkRatio t-1				0.182***	0.182***	0.182***			
				(0.0240)	(0.0241)	(0.0241)			

InterBnkRatio t-2				-0.0488**	-0.0487**	-0.0489**	
				(0.0192)	(0.0192)	(0.0192)	
NetLoansTARatio t-1							0
Constant	0.188***	0.240***	0.221***	1.035	1.018	0.884	0
	(0.0582)	(0.0599)	(0.0587)	(1.005)	(1.002)	(1.002)	
Year & Firm FE	yes	yes	yes	yes	yes	yes	
# obs	8908	10360	10360	6643	6642	6642	
adj. R-sq	0.221	0.190	0.191	0.039	0.039	0.039	

Table 5B: Liquidity Ratios & Long term Government Guarantees Continued

InterBnkRatio is money lent to other banks divided by money borrowed from other banks. NetLoansTARatio is NET LOANS / TOT ASSETS. NetLoansSTFundRatio is NET LOANS/ CUST & ST FUND. LoansTotDepRatio is NET LOANS/TOT DEP & BOR. LiqAsstsDepRatio is liquid assets divided by total deposits. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. The data is winsorized 1 99%. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel D (1) NetLoansSTFundRa	(2) NetLoansSTFundRat	(3) NetLoansSTFundRa	Panel E (1) LoansTotDepRat	(2) LoansTotDepRati	(3) LoansTotDepRat
State_Owned	-0.00648	-0.00840	-0.0195	**-0.0248*** **	**-0.0221** **	**-0.0213* **
	(0.0227)	(0.0220)	(0.0158)	**(0.00957)**	**(0.0100)**	**(0.0111)**
Private_Owned	**-0.0113***	-0.00916	-0.0101	-0.00283	-0.00140	-0.00716
	(0.00663)	(0.00670)	(0.00730)	(0.00466)	(0.00471)	(0.00540)
State_Owned*		0.0210	0.0222		-0.0151	-0.0141
LongTermGuarante		(0.0240)	(0.0245)		(0.0188)	(0.0183)
Private_Owned*		**-0.0463** **	**-0.0406* **		**-0.0363** **	**-0.0372** **
LongTermGuarante		**(0.0227)**	**(0.0217)**		**(0.0158)**	**(0.0156)**
State_Owned*			0.0646			-0.0148
Governance			(0.0604)			(0.0207)
Private_Owned*			0.00161			**0.00919* **
Governance			(0.00716)			**(0.00482)**
LongTermGuarante	-0.00404	0.0281	0.0227	-0.00666	0.0232	**0.0242* **
	(0.00886)	(0.0201)	(0.0193)	(0.00579)	(0.0143)	**(0.0141)**
ZP t-1	0.000106	0.000103	0.000122	0.000230	0.000226	0.000206
	(0.000154)	(0.000157)	(0.000169)	(0.000175)	(0.000175)	(0.000167)
Assets t-1	0.00155	0.00166	0.00117	-0.00373	-0.00379	-0.00405*
	(0.00409)	(0.00410)	(0.00403)	(0.00237)	(0.00236)	(0.00239)
Profit t-1	-0.156*	-0.154*	-0.156*	-0.0623**	-0.0611**	-0.0604**
	(0.0876)	(0.0875)	(0.0874)	(0.0294)	(0.0293)	(0.0292)
Capital t-1	-0.0271	-0.0243	-0.0246	0.0139	0.0157	0.0139
	(0.0942)	(0.0941)	(0.0943)	(0.0614)	(0.0615)	(0.0615)
Deposits/Liabilities	-0.0251	-0.0260	-0.0258	-0.00133	-0.00150	-0.00247
	(0.0348)	(0.0348)	(0.0346)	(0.0187)	(0.0187)	(0.0188)
Governance	0.0425**	0.0413**	0.0378**	0.0309***	0.0304***	0.0258**
	(0.0165)	(0.0165)	(0.0173)	(0.0109)	(0.0109)	(0.0114)
GDP growth %	0.00115	0.000941	0.000969	0.00148***	0.00132**	0.00129**
	(0.000797)	(0.000799)	(0.000801)	(0.000512)	(0.000516)	(0.000514)
GDP per capita	-0.000352	-0.000121	0.000137	-0.000308	-0.000191	-0.000149
	(0.00242)	(0.00243)	(0.00247)	(0.00196)	(0.00197)	(0.00198)
Inflation	-0.000807	-0.000952	-0.000968	-0.000289	-0.000364	-0.000358
	(0.000635)	(0.000634)	(0.000636)	(0.000455)	(0.000451)	(0.000446)
Crisis Dummy	0.0478**	0.0505**	0.0506**	0.00277	0.00387	0.00367
	(0.0231)	(0.0231)	(0.0231)	(0.00899)	(0.00901)	(0.00899)
NetLoansSTFund Ratio t-1	0.334***	0.333***	0.333***			
	(0.0316)	(0.0316)	(0.0313)			
NetLoansSTFund Ratio t-2	0.0134	0.0135	0.0135			

	(0.0261)	(0.0261)	(0.0260)			
LoansTotDepRatio				0.413***	0.413***	0.412***
				(0.0273)	(0.0273)	(0.0274)
LoansTotDepRatio				0.0233	0.0233	0.0226
				(0.0209)	(0.0209)	(0.0209)
Constant	0.352***	0.344***	0.355***	0.423***	0.423***	0.434***
	(0.119)	(0.119)	(0.118)	(0.0737)	(0.0735)	(0.0742)
Year & Firm FE	yes	yes	yes	yes	yes	yes
# obs	10237	10233	10233	8435	8432	8432
adj. R-sq	0.142	0.143	0.144	0.206	0.206	0.207

Table 6A: Capital Ratios & Short term Government Guarantees

CARRatio is the total capital adequacy ratio under the Basel rules. EquityRatio is EQUITY / TOT ASSETS. EquityLiabRatio is EQUITY / LIABILITIES. EquityLoansRatio is EQUITY / NET LOANS. EquitySTFundingRatio is EQUITY / CUST & ST FUNDING. CapFundNLRatio is CAP FUNDS / NET LOANS. CapFundTARatio is CAP FUNDS / TOT ASSETS. CapFundSTFundRatio is CAP FUNDS / CUST & ST FUNDING. CapFundLiabRatio is CAP FUNDS / LIABILITIES. NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. For_Priv20 is a dummy variable equal to 1 if the primary shareholder is a foreign company. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel A			Panel B			Panel C		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
	Tier1Ratio	Tier1Ratio	Tier1Rati	CARRati	CARRatio	CARRatio	EquityLoansRati	EquityLoansRati	EquityLoansR
State_Owned	0.00569	0.00477	0.00566	0.00653	0.00579	0.00698	0.00591	0.00525	-0.00140
	(0.00520)	(0.00444)	(0.00495)	(0.00460	(0.00394)	(0.00485)	(0.00912)	(0.00921)	(0.0102)
Private_Owned	-0.00332	-0.00316	-0.00343	-0.00110	-	-	0.00367	0.00326	-0.00511
	(0.00218)	(0.00218)	(0.00276)	(0.00254	(0.00262)	(0.00334)	(0.00858)	(0.00866)	(0.00811
State_Owned*		0.0193	0.0182		0.0155	0.0145		0.0156	0.0197
ShortTermGuarant		(0.0253)	(0.0240)		(0.0280)	(0.0269)		(0.0417)	(0.0418)
Private_Owned*		0.000850	0.000845		-0.00912	-0.00928		0.0150	0.0193
ShortTermGuarant		(0.00964)	(0.00980)		(0.0138)	(0.0139)		(0.0441)	(0.0439)
State_Owned*			-0.00702			-0.00581			**0.0282***
Governance			(0.00225)			(0.00261)			**(0.00864**
Private_Owned*			0.000446			-			0.0138
Governance			(0.00225)			(0.00261)			(0.00864
ShortTermGuarant	**0.00664****	0.00473	0.00465	**0.00732***	0.0140	0.0141	0.00942	-0.00378	-0.00730
	(0.00282)	(0.00888)	(0.00901)	**(0.00298**	(0.0127)	(0.0127)	(0.0162)	(0.0407)	(0.0407)
ZP t-1	0.00296	0.00296	0.00296	0.00286	0.00284	0.00284	-0.000197	-0.000198	-0.000194
	(0.00192)	(0.00192)	(0.00192)	(0.00177	(0.00177)	(0.00176)	(0.000148)	(0.000148)	(0.000147
Assets t-1	-0.00358	-0.00356	-0.00359	0.000155	0.000184	0.000237	-0.00667	-0.00665	-0.00727
	(0.00441)	(0.00441)	(0.00448)	(0.00177	(0.00177)	(0.00177)	(0.00485)	(0.00485)	(0.00485
Profit t-1	-0.0768	-0.0760	-0.0769	-0.0475	-0.0464	-0.0471	0.148**	0.148**	0.147**
	(0.132)	(0.132)	(0.132)	(0.101)	(0.101)	(0.101)	(0.0621)	(0.0621)	(0.0623)
Capital t-1	-0.211***	-0.211***	-	-0.114	-0.113	-0.113	0.228	0.227	0.222
	(0.0804)	(0.0805)	(0.0807)	(0.0820)	(0.0820)	(0.0819)	(0.183)	(0.184)	(0.184)
Deposits/Liabilitie	0.0208	0.0206	0.0206	0.0185	0.0182	0.0182	0.0232	0.0232	0.0221
	(0.0131)	(0.0131)	(0.0131)	(0.0134)	(0.0134)	(0.0133)	(0.0380)	(0.0380)	(0.0381)
Governance	-0.00710	-0.00694	-0.00685	-0.0129	-0.0126	-0.0120	0.00273	0.00274	-0.00563
	(0.00966)	(0.00966)	(0.00955)	(0.00847	(0.00849)	(0.00881)	(0.0259)	(0.0259)	(0.0262)
GDP growth %	0.000114	0.0000679	0.000071	-	-	-	-0.00417***	-0.00416***	-0.00414**
	(0.000419)	(0.000407)	(0.000407	(0.00039	(0.000395	(0.000396	(0.00117)	(0.00118)	(0.00118
GDP per capita	-0.00155	-0.00150	-0.00149	-0.00212	-0.00203	-0.00204	-0.000876	-0.000908	-0.000639
	(0.00167)	(0.00168)	(0.00169)	(0.00170	(0.00171)	(0.00172)	(0.00444)	(0.00445)	(0.00445
Inflation	-0.000262	-0.000259	-	0.000017	0.000025	0.000031	0.000901	0.000902	0.000872
	(0.000348)	(0.000348)	(0.000347	(0.00031	(0.000307	(0.000307	(0.000892)	(0.000892)	(0.00089
Crisis Dummy	-0.00980*	-0.00933	-0.00936	-	-	-	-0.0570**	-0.0575**	-0.0576**

	(0.00583)	(0.00592)	(0.00592)	(0.00521	(0.00524)	(0.00525)	(0.0250)	(0.0250)	(0.0251)
Tier1Ratio t-1	0.539***	0.539***	0.539***						
	(0.106)	(0.106)	(0.106)						
Tier1Ratio t-2	0.0109	0.0110	0.0108						
	(0.0326)	(0.0327)	(0.0327)						
CARRatio t-1				0.432***	0.433***	0.433***			
				(0.0926)	(0.0926)	(0.0927)			
CARRatio t-2				0.0127	0.0130	0.0129			
				(0.0356)	(0.0357)	(0.0357)			
EquityLoansRatio							0.416***	0.416***	0.415***
							(0.0445)	(0.0445)	(0.0445)
EquityLoansRatio							-0.0852**	-0.0853**	-0.0852**
							(0.0351)	(0.0351)	(0.0350)
Constant	0.118	0.117	0.118	0.0626	0.0600	0.0583	0.373**	0.374**	0.393**
	(0.115)	(0.115)	(0.117)	(0.0717)	(0.0720)	(0.0719)	(0.158)	(0.158)	(0.160)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	3393	3391	3391	4255	4253	4253	8779	8776	8776
adj. R-sq	0.305	0.305	0.305	0.240	0.240	0.240	0.177	0.177	0.177

Table 6B: Capital Ratios & Short term Government Guarantees Continued

CARRatio is the total capital adequacy ratio under the Basel rules. EquityRatio is EQUITY / TOT ASSETS. EquityLiabRatio is EQUITY / LIABILITIES. EquityLoansRatio is EQUITY / NET LOANS. EquitySTFundingRatio is EQUITY / CUST & ST FUNDING. CapFundNLRatio is CAP FUNDS / NET LOANS. CapFundTARatio is CAP FUNDS / TOT ASSETS. CapFundSTFundRatio is CAP FUNDS / CUST & ST FUNDING. CapFundLiabRatio is CAP FUNDS / LIABILITIES. NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets. NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. For_Priv20 is a dummy variable equal to 1 if the primary shareholder is a foreign company. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel D (1) EquitySTFund	(2) EquitySTFunding	(3) EquitySTFunding	Panel E (1) EquityLiab	(2) EquityLiab	(3) EquityLiab	Panel F (1) CapFundNL	(2) CapFundNL	(3) CapFundNL	Panel G (1) CapFundLiab	(2) CapFundLiab	(3) CapFundLiab
State_Owned	-0.00168	-0.00135	-0.00279	-0.00299	-0.00284	-0.00168	0.00733	0.00897	-0.00314	0.00230	0.00241	0.00190
	(0.00866)	(0.00885)	(0.00997)	(0.00810)	(0.00823)	(0.00934)	(0.00672)	(0.00619)	(0.0116)	(0.00423)	(0.00356)	(0.00524)
Private_Owned	-0.00378	-0.00344	**-0.00824****	-	-	-	0.00286	0.00342	-0.00357	-0.00229	-0.00208	-0.00516
	(0.00416)	(0.00423)	**(0.00413)**	**(0.00272)**	**(0.00275)**	**(0.00336)**	(0.00793)	(0.00768)	(0.00956)	(0.00297)	(0.00295)	(0.00448)
State_Owned*		-0.00885	-0.00853		-0.00517	-0.00628		-0.0539	-0.0522		-0.00587	-0.00595
ShortTermGuarant		(0.0148)	(0.0147)		(0.0141)	(0.0138)		(0.0833)	(0.0844)		(0.0323)	(0.0315)
Private_Owned*		-0.0123	-0.0107		-0.0118	-0.0119		-0.0292	-0.0286		-0.00959	-0.00923
ShortTermGuarant		(0.0116)	(0.0117)		(0.0104)	(0.0104)		(0.0765)	(0.0757)		(0.0159)	(0.0156)
State_Owned*			0.00203			-0.00768			0.0315			-0.0000468
Governance			(0.00437)			(0.00264)			(0.00979)			(0.00326)
Private_Owned*			**0.00781***			0.00214			0.00837			0.00362
Governance			**(0.00437)**			(0.00264)			(0.00979)			(0.00326)
ShortTermGuarant	-0.000870	0.00967	0.00856	-	0.00984	0.0101	**0.0477****	0.0752	0.0750	**0.00782***	0.0164	0.0162
	(0.00551)	(0.0104)	(0.0104)	(0.00415)	(0.00989)	(0.00986)	**(0.0209)**	(0.0737)	(0.0731)	**(0.00464)**	(0.0151)	(0.0149)
ZP t-1	-0.0000332	-0.0000325	-0.0000352	-	-	-	-0.000262	-0.000243	-0.000243	-0.000101*	-0.0000971	-
	(0.0000535)	(0.0000536)	(0.0000549)	(0.0000312	(0.000031	(0.000032	(0.000274)	(0.000279)	(0.000274)	(0.0000577	(0.0000599	(0.0000587)
Assets t-1	-0.000616	-0.000626	-0.000896	-0.00181	-0.00182	-0.00185	-0.00594	-0.00594	-0.00646	-0.00202	-0.00201	-0.00214
	(0.00300)	(0.00301)	(0.00303)	(0.00230)	(0.00230)	(0.00230)	(0.00627)	(0.00628)	(0.00610)	(0.00226)	(0.00226)	(0.00225)
Profit t-1	0.0144	0.0143	0.0140	0.0221	0.0222	0.0223	0.267	0.264	0.271	0.0453	0.0451	0.0462
	(0.0383)	(0.0384)	(0.0383)	(0.0249)	(0.0249)	(0.0249)	(0.269)	(0.269)	(0.269)	(0.109)	(0.109)	(0.109)
Capital t-1	-0.0333	-0.0328	-0.0355	0.717***	0.718***	0.717***	-0.00993	-0.00964	-0.0136	-0.210	-0.210	-0.211
	(0.212)	(0.213)	(0.213)	(0.203)	(0.203)	(0.202)	(0.228)	(0.228)	(0.228)	(0.145)	(0.145)	(0.145)
Deposits/Liabilities	0.00945	0.00927	0.00858	0.0104	0.0103	0.00989	0.00122	0.00118	0.0000355	0.00212	0.00202	0.00169
	(0.0264)	(0.0264)	(0.0265)	(0.0131)	(0.0131)	(0.0131)	(0.0504)	(0.0505)	(0.0508)	(0.0129)	(0.0129)	(0.0130)
Governance	-0.00582	-0.00588	-0.0101	-0.00444	-0.00449	-0.00535	-0.0445	-0.0445	-0.0496*	-0.00735	-0.00734	-0.00932
	(0.00958)	(0.00958)	(0.0102)	(0.00693)	(0.00693)	(0.00709)	(0.0282)	(0.0282)	(0.0273)	(0.00648)	(0.00649)	(0.00652)
GDP growth %	-0.000262	-0.000280	-0.000275	-0.000599	-0.000620	-0.000619	-0.00252*	-0.00253*	-0.00255*	-0.000726	-0.000738	-0.000735
	(0.000564)	(0.000564)	(0.000564)	(0.000452	(0.000450	(0.000450	(0.00148)	(0.00151)	(0.00151)	(0.000503)	(0.000502)	(0.000503)
GDP per capita	-0.00249*	-0.00245*	-0.00234*	-	-	-	-0.00502	-0.00498	-0.00479	-0.00211**	-0.00208**	-0.00202**
	(0.00135)	(0.00136)	(0.00136)	(0.000975	(0.000979	(0.000982	(0.00455)	(0.00460)	(0.00466)	(0.000970)	(0.000976)	(0.000986)
Inflation	0.000316	0.000315	0.000307	0.000398	0.000398	0.000400	0.00125	0.00125	0.00116	0.00109	0.00110	0.00108
	(0.000452)	(0.000452)	(0.000453)	(0.000397	(0.000397	(0.000398	(0.00148)	(0.00148)	(0.00152)	(0.000726)	(0.000727)	(0.000729)
Crisis Dummy	-0.00499	-0.00466	-0.00477	-0.0127	-0.0123	-0.0124	-0.0402**	-0.0395**	-0.0398**	0.00568	0.00580	0.00557
	(0.0125)	(0.0125)	(0.0125)	(0.00772)	(0.00772)	(0.00773)	(0.0176)	(0.0175)	(0.0176)	(0.00587)	(0.00587)	(0.00590)
EquitySTFunding Ratio t-1	0.401***	0.401***	0.401***									
	(0.0959)	(0.0959)	(0.0959)									
EquitySTFunding Ratio t-2	-0.0947***	-0.0946***	-0.0945***									

	(0.0357)	(0.0357)	(0.0357)									
EquityLiabRatio t-				0.0149	0.0149	0.0147						
				(0.130)	(0.130)	(0.130)						
EquityLiabRatio t-				-	-	-						
				(0.0323)	(0.0323)	(0.0323)						
CapFundNLRatio							0.368***	0.368***	0.368***			
							(0.0765)	(0.0765)	(0.0761)			
CapFundNLRatio							-0.0913**	-0.0913**	-0.0912**			
							(0.0424)	(0.0424)	(0.0424)			
CapFundLiabRatio										0.495***	0.495***	0.495***
										(0.114)	(0.114)	(0.114)
CapFundLiabRatio										-0.0810	-0.0809	-0.0810
										(0.0835)	(0.0835)	(0.0835)
Constant	0.186**	0.185**	0.194**	0.175**	0.174**	0.176**	0.509**	0.507**	0.524**	0.165**	0.164**	0.169**
	(0.0904)	(0.0904)	(0.0915)	(0.0714)	(0.0714)	(0.0714)	(0.210)	(0.212)	(0.209)	(0.0735)	(0.0738)	(0.0734)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	8852	8849	8849	8887	8884	8884	5292	5290	5290	5330	5328	5328
adj. R-sq	0.146	0.146	0.146	0.145	0.145	0.145	0.133	0.133	0.133	0.167	0.166	0.166

Table 7A: Capital Ratios & Long term Government Guarantees

CARRatio is the total capital adequacy ratio under the Basel rules. EquityRatio is EQUITY / TOT ASSETS. EquityLiabRatio is EQUITY / LIABILITIES. EquityLoansRatio is EQUITY / NET LOANS. EquitySTFundingRatio is EQUITY / CUST & ST FUNDING. CapFundNLRatio is CAP FUNDS / NET LOANS. CapFundTARatio is CAP FUNDS / TOT ASSETS. CapFundSTFundRatio is CAP FUNDS / CUST & ST FUNDING. CapFundLiabRatio is CAP FUNDS / LIABILITIES. NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. For_Priv20 is a dummy variable equal to 1 if the primary shareholder is a foreign company. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel A (1) Tier1Ratio	(2) Tier1Ratio	(3) Tier1Rati	Panel B (1) CARRati	(2) CARRati	(3) CARRatio	Panel C (1) EquityLoansRati	(2) EquityLoansRati	(3) EquityLoans
State_Owned	0.00420	0.00592	0.00636	0.00654	0.00915	0.00955	0.00874	0.0151	0.0103
	(0.00510)	(0.00600)	(0.00626)	(0.00465)	(0.00561)	(0.00613)	(0.01000)	(0.0103)	(0.0112)
Private_Owned	-0.00358	-0.00350	-0.00253	-0.00187	-0.00151	-	0.00511	0.00553	-0.00215
	(0.00272)	(0.00268)	(0.00300)	(0.00280)	(0.00288)	(0.00346)	(0.00886)	(0.00902)	(0.00859)
State_Owned*		-0.00832	-0.00847		-0.0128	-0.0129		**-0.0421****	**-0.0404****
LongTermGuarante		(0.00668)	(0.00671)		(0.00969)	(0.00978)		**(0.0184)**	**(0.0183)**
Private_Owned*		-0.000637	-		-0.00586	-0.00581		-0.0111	-0.00901
LongTermGuarante		(0.00659)	(0.00670)		(0.01000)	(0.0101)		(0.0184)	(0.0184)
State_Owned*			-0.00114			-			0.0163
Governance			(0.00963)			(0.00747)			(0.0180)
			-0.00160			-0.00175			0.0134
			(0.00300)			(0.00313)			(0.00921)
LongTermGuarante	0.00165	0.00324	0.00324	**0.00680***	0.0127	0.0127	-0.00382	0.0100	0.00807
	(0.00304)	(0.00579)	(0.00589)	**(0.00299)**	(0.00908)	(0.00921)	(0.00980)	(0.0142)	(0.0144)
ZP t-1	0.00212*	0.00214*	0.00212*	0.00222*	0.00223*	0.00221*	-0.000149	-0.000152	-0.000153
	(0.00114)	(0.00113)	(0.00111)	(0.00112)	(0.00112)	(0.00110)	(0.000108)	(0.000110)	(0.000111)
Assets t-1	-0.00365	-0.00358	-0.00341	0.000058	0.000073	0.000146	-0.00448	-0.00460	-0.00516
	(0.00439)	(0.00440)	(0.00437)	(0.00175)	(0.00176)	(0.00173)	(0.00431)	(0.00431)	(0.00431)
Profit t-1	0.00220	0.00181	0.00219	-0.00867	-0.00900	-0.00902	0.151**	0.151**	0.150**
	(0.129)	(0.129)	(0.129)	(0.0935)	(0.0936)	(0.0937)	(0.0609)	(0.0608)	(0.0610)
Capital t-1	-0.144	-0.143	-0.142	-0.0784	-0.0779	-0.0773	0.151	0.150	0.146
	(0.0904)	(0.0905)	(0.0909)	(0.0802)	(0.0801)	(0.0803)	(0.175)	(0.175)	(0.175)
Deposits/Liabilities	0.0140	0.0142	0.0144	0.0121	0.0122	0.0125	0.0298	0.0299	0.0288
	(0.0136)	(0.0136)	(0.0136)	(0.0136)	(0.0136)	(0.0135)	(0.0337)	(0.0337)	(0.0338)
Governance	-0.00501	-0.00477	-0.00365	-0.0123	-0.0122	-0.0110	0.0141	0.0144	0.00641
	(0.00866)	(0.00863)	(0.00902)	(0.00766)	(0.00765)	(0.00821)	(0.0238)	(0.0239)	(0.0244)
GDP growth %	0.0000285	0.0000284	0.000034	-	-	-	-0.00411***	-0.00413***	-0.00412***
	(0.000387)	(0.000395)	(0.000396	(0.000403	(0.000427	(0.000428	(0.00121)	(0.00121)	(0.00121)
GDP per capita	-0.00194	-0.00193	-0.00196	-	-	-	-0.00185	-0.00187	-0.00166
	(0.00150)	(0.00150)	(0.00149)	(0.00153)	(0.00154)	(0.00154)	(0.00431)	(0.00433)	(0.00433)
Inflation	-0.000347	-0.000329	-	-	-	-	0.00121	0.00123	0.00122

	(0.000261)	(0.000268)	(0.000269	(0.000234	(0.000239	(0.000239)	(0.000759)	(0.000773)	(0.000774)
Crisis Dummy	-0.00576	-0.00619	-0.00614	-	-	-0.00894*	-0.0445**	-0.0450**	-0.0450**
	(0.00548)	(0.00553)	(0.00554)	(0.00500)	(0.00503)	(0.00503)	(0.0213)	(0.0214)	(0.0214)
Tier1Ratio t-1	0.446***	0.445***	0.445***						
	(0.109)	(0.109)	(0.109)						
Tier1Ratio t-2	0.0243	0.0244	0.0244						
	(0.0256)	(0.0256)	(0.0256)						
CARRatio t-1				0.347***	0.346***	0.346***			
				(0.0883)	(0.0883)	(0.0883)			
CARRatio t-2				0.0474*	0.0475*	0.0474*			
				(0.0267)	(0.0266)	(0.0266)			
EquityLoansRatio							0.387***	0.386***	0.386***
							(0.0424)	(0.0424)	(0.0423)
EquityLoansRatio							-0.0759**	-0.0759**	-0.0759**
							(0.0324)	(0.0324)	(0.0323)
Constant	0.154	0.151	0.147	0.0937	0.0927	0.0906	0.316**	0.319**	0.337**
	(0.110)	(0.110)	(0.111)	(0.0620)	(0.0621)	(0.0622)	(0.146)	(0.146)	(0.148)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	3795	3793	3793	4800	4798	4798	10215	10211	10211
adj. R-sq	0.239	0.239	0.239	0.191	0.191	0.191	0.156	0.156	0.156

Table 7B: Capital Ratios & Long term Government Guarantees Continued

CARRatio is the total capital adequacy ratio under the Basel rules. EquityRatio is EQUITY / TOT ASSETS. EquityLiabRatio is EQUITY / LIABILITIES. EquityLoansRatio is EQUITY / NET LOANS. EquitySTFundingRatio is EQUITY / CUST & ST FUNDING. CapFundNLRatio is CAP FUNDS / NET LOANS. CapFundTARatio is CAP FUNDS / TOT ASSETS. CapFundSTFundRatio is CAP FUNDS / CUST & ST FUNDING. CapFundLiabRatio is CAP FUNDS / LIABILITIES. NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. For_Priv20 is a dummy variable equal to 1 if the primary shareholder is a foreign company. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel D (1) EquitySTFun	(2) EquitySTFunding	(3) EquitySTFunding	Panel E (1) EquityLiabR	(2) EquityLiabR	(3) EquityLiabR	Panel F (1) CapFundNL	(2) CapFundNL	(3) CapFundNL	Panel G (1) CapFundLiab	(2) CapFundLiab	(3) CapFundLiab
State_Owned	-0.00357	-0.00225	-0.00412	-0.00524	-0.00525	-0.00465	0.0100	**0.0148***	0.00141	0.000601	0.000404	-0.000774
	(0.00751)	(0.00892)	(0.00952)	(0.00646)	(0.00766)	(0.00814)	(0.00615)	**(0.00778)**	(0.0110)	(0.00364)	(0.00419)	(0.00548)
Private_Owned	-0.00365	-0.00374	-0.00728	**-0.00718****	-	-	0.00577	0.00486	-0.00196	-0.00352	-0.00413	-0.00670
	(0.00423)	(0.00432)	(0.00446)	**(0.00291)**	**(0.00297)**	**(0.00362)**	(0.00892)	(0.00896)	(0.0103)	(0.00297)	(0.00295)	(0.00458)
State_Owned*		-0.00943	-0.00873		-0.00125	-0.00117		**-0.0290***	**-0.0253***		-0.000767	-0.000357
LongTermGuarantee		(0.0115)	(0.0115)		(0.00978)	(0.00979)		**(0.0160)**	**(0.0146)**		(0.00713)	(0.00723)
Private_Owned*		0.00137	0.00213		0.00869	0.00835		0.0190	0.0231		0.0130	0.0132
LongTermGuarantee		(0.0111)	(0.0112)		(0.00893)	(0.00902)		(0.0174)	(0.0170)		(0.00826)	(0.00834)
State_Owned*			0.00516			-0.00439			0.0329			0.00193
Governance			(0.00770)			(0.00652)			(0.0271)			(0.00762)
			0.00613			0.00125			0.00831			0.00312
			(0.00443)			(0.00262)			(0.0110)			(0.00354)
LongTermGuarantee	0.00114	0.00136	0.000649	0.000692	-0.00566	-0.00533	**0.0208***	0.0102	0.00621	**0.00786****	-0.00172	-0.00192
	(0.00507)	(0.00997)	(0.0101)	(0.00345)	(0.00865)	(0.00876)	**(0.0115)**	(0.0117)	(0.0114)	**(0.00397)**	(0.00667)	(0.00677)
ZP t-1	-	-0.0000279	-0.0000292	-0.0000303	-	-	-0.000256	-0.000248	-0.000247	-0.000122*	-0.000120*	-0.000121*
	(0.0000404	(0.0000404)	(0.0000408)	(0.0000244)	(0.000024	(0.0000248	(0.000219)	(0.000216)	(0.000211)	(0.0000704	(0.0000695)	(0.0000684
Assets t-1	-0.00127	-0.00130	-0.00154	-0.00159	-0.00160	-0.00161	-0.00609	-0.00602	-0.00658	-0.00317	-0.00313	-0.00328
	(0.00256)	(0.00258)	(0.00261)	(0.00198)	(0.00200)	(0.00199)	(0.00657)	(0.00654)	(0.00634)	(0.00257)	(0.00256)	(0.00255)
Profit t-1	0.0346	0.0344	0.0340	0.0278	0.0276	0.0277	0.441	0.436	0.440	0.302**	0.300**	0.301**
	(0.0368)	(0.0368)	(0.0367)	(0.0230)	(0.0230)	(0.0230)	(0.305)	(0.305)	(0.305)	(0.126)	(0.126)	(0.126)
Capital t-1	0.0370	0.0362	0.0340	0.589***	0.588***	0.588***	-0.00811	-0.00820	-0.0109	-0.132	-0.133	-0.134
	(0.195)	(0.195)	(0.195)	(0.157)	(0.157)	(0.157)	(0.260)	(0.260)	(0.261)	(0.173)	(0.173)	(0.173)
Deposits/Liabilities t-1	0.00455	0.00459	0.00423	0.0112	0.0113	0.0111	-0.00186	-0.00117	-0.00238	0.00658	0.00681	0.00651
	(0.0245)	(0.0245)	(0.0246)	(0.0120)	(0.0120)	(0.0120)	(0.0516)	(0.0516)	(0.0519)	(0.0144)	(0.0144)	(0.0145)
Governance	0.000925	0.00105	-0.00250	-0.00342	-0.00325	-0.00377	-0.0255	-0.0246	-0.0300	-0.00223	-0.00192	-0.00372
	(0.00995)	(0.00995)	(0.0106)	(0.00678)	(0.00677)	(0.00713)	(0.0263)	(0.0263)	(0.0254)	(0.00630)	(0.00629)	(0.00654)
GDP growth %	-0.000499	-0.000487	-0.000485	-0.000718	-0.000683	-0.000685	-0.00234*	-0.00220	-0.00219	-0.000824*	-0.000747	-0.000745
	(0.000552)	(0.000551)	(0.000551)	(0.000447)	(0.000446	(0.000446)	(0.00134)	(0.00134)	(0.00134)	(0.000489)	(0.000489)	(0.000489)
GDP per capita	-0.00156	-0.00158	-0.00150	-0.00203**	-	-	-0.00623	-0.00631	-0.00613	-0.00267**	-0.00272**	-0.00268**
	(0.00136)	(0.00136)	(0.00136)	(0.00102)	(0.00103)	(0.00103)	(0.00457)	(0.00459)	(0.00463)	(0.00115)	(0.00115)	(0.00116)
Inflation	0.000238	0.000252	0.000248	0.000279	0.000303	0.000304	0.000809	0.000994	0.000939	0.000905	0.000980	0.000968
	(0.000397)	(0.000402)	(0.000402)	(0.000322)	(0.000327	(0.000327)	(0.00123)	(0.00127)	(0.00129)	(0.000598)	(0.000614)	(0.000617)
Crisis Dummy	-0.00585	-0.00616	-0.00615	-0.0122*	-0.0127*	-0.0127*	-0.0183	-0.0205	-0.0204	0.00542	0.00456	0.00446
	(0.0108)	(0.0108)	(0.0108)	(0.00674)	(0.00679)	(0.00679)	(0.0136)	(0.0137)	(0.0138)	(0.00600)	(0.00606)	(0.00605)
EquitySTFundingRatio t-	0.308***	0.308***	0.308***									
	(0.0839)	(0.0839)	(0.0839)									
EquitySTFundingRatio t-	-0.0728**	-0.0728**	-0.0728**									
	(0.0284)	(0.0284)	(0.0284)									

EquityLiabRatio t-1				0.0461	0.0462	0.0459		
				(0.0975)	(0.0977)	(0.0976)		
EquityLiabRatio t-2				-0.0694**	-0.0694**	-0.0695**		
				(0.0282)	(0.0282)	(0.0282)		
CapFundNLRatio t-1							0.242**	0.242**
							(0.101)	(0.101)
CapFundNLRatio t-2							-0.0567	-0.0568
							(0.0502)	(0.0501)
CapFundLiabRatio t-1								
CapFundLiabRatio t-2								
Constant	0.147*	0.149*	0.156*	0.137**	0.138**	0.139**	0.506**	0.505**
	(0.0786)	(0.0789)	(0.0801)	(0.0611)	(0.0614)	(0.0614)	(0.221)	(0.221)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes
# obs	10298	10294	10294	10335	10331	10331	6017	6014
adj. R-sq	0.105	0.104	0.104	0.129	0.129	0.129	0.071	0.072

Table 8A: Asset Quality & Short term Government Guarantees

LoanLossRatio is LOAN LOSS RES / GROSS LOANS. LLossProvisionRatio is LOAN LOSS PROV / NET INT REV. LLossNonPerRatio is LOAN LOSS RES / NON PERF LOANS. ImpairedLoansRatio is NON PERF LOANS / GROSS LOANS. GrossLoansRatio is NCO / AVERAGE GROSS LOANS. NetIncLoanLoss is NET INCOME BEFORE LOAN LOSS PROVISION. ImpLoansEquityRatio is IMPAIRED/EQUITY. UnResImpLoansEqR is UNRESERVED IMPAIRED LOANS/EQUITY. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. For_Priv20 is a dummy variable equal to 1 if the primary shareholder is a foreign company. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel A (1)	(2)	(3)	Panel B (1)	(2)	(3)
	LoanLossRati	LoanLossRati	LoanLossRat	LLossProvisionRat	LLossProvisionRat	LLossProvisionRat
State_Owned	0.0000642	0.000111	-0.00221	-0.0250	-0.0118	-0.00560
	(0.00280)	(0.00278)	(0.00303)	(0.0311)	(0.0285)	(0.0322)
Private_Owned	**-0.00258***	**-0.00260****	**-0.00385****	0.0178	0.0161	0.0176
	(0.00133)	**(0.00129)**	**(0.00179)**	(0.0137)	(0.0136)	(0.0188)
State_Owned*		-0.00116	-0.000596		**-0.258****	**-0.261****
ShortTermGuarantee		(0.0146)	(0.0144)		**(0.122)**	**(0.120)**
Private_Owned*		0.0000197	0.00118		0.0158	0.0143
ShortTermGuarantee		(0.0121)	(0.0120)		(0.0685)	(0.0690)
State_Owned*			**0.0139****			-0.0318
Governance			**(0.00560)**			(0.0536)
Private_Owned*			**0.00275***			-0.00269
Governance			**(0.00142)**			(0.0163)
ShortTermGuarantee	**0.00526****	0.00536	0.00434	0.0462	0.0531	0.0543
	(0.00261)	(0.0119)	(0.0118)	(0.0328)	(0.0584)	(0.0586)
ZP t-1	-	-0.000136**	-0.000131**	-0.000266	-0.000269	-0.000279
	(0.0000628)	(0.0000629)	(0.0000597)	(0.000282)	(0.000285)	(0.000290)
Assets t-1	0.00244**	0.00244**	0.00227**	0.00506	0.00496	0.00525
	(0.00109)	(0.00109)	(0.00106)	(0.00683)	(0.00682)	(0.00675)
Profit t-1	0.0127	0.0126	0.0117	-0.172	-0.185	-0.185
	(0.00890)	(0.00889)	(0.00878)	(0.158)	(0.157)	(0.158)

Capital t-1	-0.0144	-0.0146	-0.0155	-0.305	-0.311	-0.311
	(0.0220)	(0.0220)	(0.0219)	(0.192)	(0.192)	(0.192)
Deposits/Liabilities t-	0.00412	0.00409	0.00405	-0.0704	-0.0697	-0.0695
	(0.00472)	(0.00473)	(0.00474)	(0.0536)	(0.0536)	(0.0538)
Governance	-0.00215	-0.00221	-0.00448	-0.0846***	-0.0840**	-0.0813**
	(0.00357)	(0.00358)	(0.00377)	(0.0326)	(0.0327)	(0.0337)
GDP growth %	-	-0.00237***	-0.00236***	-0.0338***	-0.0335***	-0.0335***
	(0.000234)	(0.000238)	(0.000237)	(0.00397)	(0.00393)	(0.00393)
GDP per capita	-0.000780	-0.000768	-0.000604	-0.0184***	-0.0186***	-0.0187***
	(0.000501)	(0.000507)	(0.000501)	(0.00683)	(0.00685)	(0.00686)
Inflation	0.000420**	0.000419**	0.000414**	0.00296	0.00297	0.00299
	(0.000181)	(0.000181)	(0.000181)	(0.00196)	(0.00194)	(0.00194)
Crisis Dummy	-0.00294	-0.00296	-0.00302	-0.0772**	-0.0794**	-0.0792**
	(0.00325)	(0.00324)	(0.00324)	(0.0372)	(0.0378)	(0.0378)
LoanLossRatio t-1	0.703***	0.703***	0.704***			
	(0.0402)	(0.0402)	(0.0401)			
LoanLossRatio t-2	-0.109***	-0.109***	-0.108***			
	(0.0284)	(0.0284)	(0.0282)			
LLossProvisionRatio				0.153***	0.154***	0.153***
				(0.0346)	(0.0346)	(0.0346)
LLossProvisionRatio				-0.0189	-0.0170	-0.0171
				(0.0283)	(0.0274)	(0.0274)
Constant	-0.0163	-0.0164	-0.0126	0.629***	0.639***	0.632***
	(0.0308)	(0.0309)	(0.0302)	(0.233)	(0.232)	(0.232)
Year & Firm FE	yes	yes	yes	yes	yes	yes
# obs	6618	6616	6616	7848	7845	7845
adj. R-sq	0.468	0.468	0.469	0.169	0.170	0.170

Table 8B: Asset Quality & Short term Government Guarantees Continued

LoanLossRatio is LOAN LOSS RES / GROSS LOANS. LLossProvisionRatio is LOAN LOSS PROV / NET INT REV. LLossNonPerRatio is LOAN LOSS RES / NON PERF LOANS. ImpairedLoansRatio is NON PERF LOANS / GROSS LOANS. GrossLoansRatio is NCO / AVERAGE GROSS LOANS. NetIncLoanLoss is NET INCOME BEFORE LOAN LOSS PROVISION. ImpLoansEquityRatio is IMPAIRED/EQUITY. UnResImpLoansEqR is UNRESERVED IMPAIRED LOANS/EQUITY. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. For_Priv20 is a dummy variable equal to 1 if the primary shareholder is a foreign company. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel C (1) LLossNonPerRat	(2) LLossNonPerRati	(3) LLossNonPerRat	Panel D (1) ImpLoansEquityRa	(2) ImpLoansEquityRat	(3) ImpLoansEquityRa
State_Owned	-0.0969	-0.0917	**-0.153***	-0.0198	-0.0359	-0.0348
	(0.0682)	(0.0713)	**(0.0819)**	(0.0384)	(0.0343)	(0.0289)
Private_Owned	0.0594	0.0695	-0.0131	**-0.0365****	**-0.0335***	**-0.0446***
	(0.0492)	(0.0482)	(0.0542)	**(0.0185)**	**(0.0180)**	**(0.0229)**
State_Owned*		-0.160	-0.134		0.410	0.411
ShortTermGuarantee		(0.261)	(0.262)		(0.299)	(0.302)
Private_Owned*		-0.336	-0.281		-0.0218	-0.0185
ShortTermGuarantee		(0.243)	(0.239)		(0.106)	(0.111)
State_Owned*			**0.274****			-0.0233
Governance			**(0.119)**			(0.103)
Private_Owned*			**0.202*****			0.0256
Governance			**(0.0651)**			(0.0242)
ShortTermGuarantee	0.0432	0.323	0.276	**0.0908****	0.0842	0.0805
	(0.0649)	(0.204)	(0.200)	**(0.0386)**	(0.101)	(0.106)
ZP t-1	0.0194**	0.0190**	0.0209**	-0.00420	-0.00405	-0.00387
	(0.00928)	(0.00925)	(0.00962)	(0.00263)	(0.00264)	(0.00264)
Assets t-1	-0.0229	-0.0225	-0.0371	0.0374**	0.0377**	0.0368*
	(0.0245)	(0.0246)	(0.0255)	(0.0188)	(0.0187)	(0.0190)
Profit t-1	-0.344	-0.347	-0.366	-0.102	-0.0899	-0.0909
	(0.353)	(0.355)	(0.351)	(0.0701)	(0.0732)	(0.0733)
Capital t-1	-0.124	-0.102	-0.197	0.253	0.267	0.257
	(0.429)	(0.429)	(0.421)	(0.191)	(0.191)	(0.191)
Deposits/Liabilities t-	0.161	0.152	0.139	-0.205***	-0.211***	-0.213***
	(0.213)	(0.214)	(0.215)	(0.0683)	(0.0680)	(0.0680)
Governance	0.542***	0.538***	0.391***	-0.184***	-0.182***	-0.198***
	(0.119)	(0.119)	(0.122)	(0.0549)	(0.0547)	(0.0578)
GDP growth %	0.0194***	0.0187***	0.0190***	-0.0259***	-0.0266***	-0.0265***
	(0.00618)	(0.00600)	(0.00601)	(0.00408)	(0.00400)	(0.00399)
GDP per capita	0.0603***	0.0636***	0.0751***	-0.0180**	-0.0168**	-0.0156**
	(0.0230)	(0.0229)	(0.0226)	(0.00723)	(0.00698)	(0.00749)
Inflation	0.00480	0.00457	0.00415	0.000633	0.000629	0.000574
	(0.00455)	(0.00451)	(0.00451)	(0.00207)	(0.00209)	(0.00208)
Crisis Dummy	-0.390***	-0.375**	-0.378***	-0.0378	-0.0352	-0.0354
	(0.145)	(0.146)	(0.145)	(0.0351)	(0.0362)	(0.0363)
LLossNonPerRatio t-	0.444***	0.442***	0.436***			
	(0.0399)	(0.0401)	(0.0400)			
LLossNonPerRatio t-	-0.0248	-0.0243	-0.0247			
	(0.0293)	(0.0292)	(0.0291)			

ImpLoansEquityRati				0.664***	0.665***	0.665***
				(0.0513)	(0.0512)	(0.0513)
ImpLoansEquityRati				-0.00825	-0.00750	-0.00677
				(0.0361)	(0.0360)	(0.0359)
Constant	0.169	0.123	0.432	-0.134	-0.159	-0.145
	(0.845)	(0.842)	(0.865)	(0.523)	(0.522)	(0.527)
Year & Firm FE	yes	yes	yes	yes	yes	yes
# obs	4260	4258	4258	4602	4600	4600
adj. R-sq	0.237	0.237	0.240	0.491	0.493	0.493

Table 9A: Asset Quality & Long term Government Guarantees

LoanLossRatio is LOAN LOSS RES / GROSS LOANS. LLossProvisionRatio is LOAN LOSS PROV / NET INT REV. LLossNonPerRatio is LOAN LOSS RES / NON PERF LOANS. ImpairedLoansRatio is NON PERF LOANS / GROSS LOANS. GrossLoansRatio is NCO / AVERAGE GROSS LOANS. NetIncLoanLoss is NET INCOME BEFORE LOAN LOSS PROVISION. ImpLoansEquityRatio is IMPAIRED/EQUITY. UnResImpLoansEqR is UNRESERVED IMPAIRED LOANS/EQUITY. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011

.

Model	Panel A (1)	(2)	(3)	Panel B (1)	(2)	(3)
	LoanLossRati	LoanLossRati	LoanLossRat	LLossProvisionRat	LLossProvisionRat	LLossProvisionRat
State_Owned	0.00217	0.00304	0.0000649	-0.00757	0.0117	0.0153
	(0.00288)	(0.00313)	(0.00310)	(0.0270)	(0.0305)	(0.0328)
Private_Owned	-0.00199	-0.00194	-0.00294	0.00875	0.00912	0.0127
	(0.00139)	(0.00142)	(0.00197)	(0.0138)	(0.0141)	(0.0195)
State_Owned*		-0.00664	-0.00642		**-0.144****	**-0.145****
LongTermGuarantee		(0.00512)	(0.00508)		**(0.0709)**	**(0.0710)**
Private_Owned*		-0.00144	0.0000808		-0.0137	-0.0149
LongTermGuarantee		(0.00375)	(0.00376)		(0.0518)	(0.0521)
State_Owned*			**0.0194*****			-0.0144
Governance			**(0.00658)**			(0.0451)
Private_Owned*			0.00243			-0.00652
Governance			(0.00158)			(0.0162)
LongTermGuarantee	0.00109	0.00303	0.00160	0.0365	0.0640	0.0652
	(0.00161)	(0.00322)	(0.00324)	(0.0273)	(0.0438)	(0.0441)
ZP t-1	-0.0000265	-0.0000271	-0.0000200	-0.000216	-0.000217	-0.000218
	(0.0000439)	(0.0000435)	(0.0000458)	(0.000257)	(0.000262)	(0.000263)
Assets t-1	0.00266**	0.00266**	0.00250**	0.0101	0.00959	0.00990
	(0.00109)	(0.00109)	(0.00106)	(0.00689)	(0.00687)	(0.00681)
Profit t-1	0.00826	0.00819	0.00692	-0.201	-0.204	-0.204
	(0.00836)	(0.00836)	(0.00825)	(0.150)	(0.150)	(0.150)
Capital t-1	-0.0205	-0.0207	-0.0215	-0.0967	-0.102	-0.100
	(0.0157)	(0.0158)	(0.0157)	(0.171)	(0.171)	(0.171)
Deposits/Liabilities t-	0.00205	0.00204	0.00226	-0.0462	-0.0457	-0.0454
	(0.00448)	(0.00448)	(0.00449)	(0.0492)	(0.0492)	(0.0492)
Governance	-0.00186	-0.00182	-0.00431	-0.0785**	-0.0771**	-0.0727**

	(0.00373)	(0.00373)	(0.00407)	(0.0331)	(0.0332)	(0.0347)
GDP growth %	-	-0.00220***	-0.00219***	-0.0336***	-0.0336***	-0.0336***
	(0.000231)	(0.000233)	(0.000231)	(0.00419)	(0.00422)	(0.00422)
GDP per capita	-0.000591	-0.000597	-0.000399	-0.0177***	-0.0179***	-0.0180***
	(0.000478)	(0.000480)	(0.000473)	(0.00664)	(0.00668)	(0.00669)
Inflation	0.000356**	0.000357**	0.000358**	0.000702	0.000780	0.000788
	(0.000150)	(0.000150)	(0.000150)	(0.00157)	(0.00158)	(0.00157)
Crisis Dummy	-0.00151	-0.00158	-0.00165	-0.0454	-0.0476	-0.0476
	(0.00279)	(0.00282)	(0.00282)	(0.0406)	(0.0407)	(0.0407)
LoanLossRatio t-1	0.678***	0.677***	0.679***			
	(0.0337)	(0.0337)	(0.0336)			
LoanLossRatio t-2	-0.102***	-0.102***	-0.102***			
	(0.0244)	(0.0244)	(0.0243)			
LLossProvisionRatio				0.123***	0.123***	0.123***
				(0.0331)	(0.0331)	(0.0331)
LLossProvisionRatio				-0.0244	-0.0244	-0.0244
				(0.0273)	(0.0273)	(0.0273)
Constant	-0.0273	-0.0270	-0.0241	0.422*	0.438*	0.429*
	(0.0310)	(0.0310)	(0.0302)	(0.246)	(0.244)	(0.243)
Year & Firm FE	yes	yes	yes	yes	yes	yes
# obs	7704	7702	7702	9119	9115	9115
adj. R-sq	0.445	0.445	0.446	0.143	0.143	0.143

Table 9B: Asset Quality & Long term Government Guarantees Continued

LoanLossRatio is LOAN LOSS RES / GROSS LOANS. LLossProvisionRatio is LOAN LOSS PROV / NET INT REV. LLossNonPerRatio is LOAN LOSS RES / NON PERF LOANS. ImpairedLoansRatio is NON PERF LOANS / GROSS LOANS. GrossLoansRatio is NCO / AVERAGE GROSS LOANS. NetIncLoanLoss is NET INCOME BEFORE LOAN LOSS PROVISION. ImpLoansEquityRatio is IMPAIRED/EQUITY. UnResImpLoansEqR is UNRESERVED IMPAIRED LOANS/EQUITY. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel C (1) LLossNonPerRat	(2) LLossNonPerRati	(3) LLossNonPerRat	Panel D (1) ImpLoansEquityRa	(2) ImpLoansEquityRat	(3) ImpLoansEquityRati
State_Owned	-0.0730	-0.0599	-0.121	-0.00716	-0.0167	-0.0233
	(0.0726)	(0.0830)	(0.0933)	(0.0367)	(0.0432)	(0.0368)
Private_Owned	0.0447	0.0531	-0.0305	**-0.0377***	**-0.0400****	**-0.0550****
	(0.0507)	(0.0504)	(0.0571)	**(0.0194)**	**(0.0199)**	**(0.0259)**
State_Owned*		-0.0634	-0.0347		0.0528	0.0567
LongTermGuarante		(0.145)	(0.143)		(0.106)	(0.106)
Private_Owned*		-0.181	-0.156		0.0455	0.0474
LongTermGuarante		(0.151)	(0.150)		(0.0414)	(0.0402)
State_Owned*			**0.241****			0.0190
Governance			**(0.107)**			(0.0972)
Private_Owned*			**0.217*****			0.0366
Governance			**(0.0669)**			(0.0263)

LongTermGuarante	0.0348	0.177	0.147	**0.0697*** **	0.0289	0.0259
	(0.0536)	(0.143)	(0.141)	**(0.0264)**	(0.0304)	(0.0290)
ZP t-1	0.00540	0.00533	0.00603	-0.00122	-0.00122	-0.00111
	(0.00534)	(0.00534)	(0.00569)	(0.00154)	(0.00154)	(0.00151)
Assets t-1	-0.0357*	-0.0361*	-0.0494**	0.0445**	0.0446**	0.0429**
	(0.0205)	(0.0206)	(0.0226)	(0.0194)	(0.0194)	(0.0192)
Profit t-1	-0.306	-0.304	-0.326	-0.0994	-0.0987	-0.101
	(0.319)	(0.319)	(0.318)	(0.0733)	(0.0733)	(0.0738)
Capital t-1	-0.355	-0.359	-0.450	0.515***	0.516***	0.504***
	(0.367)	(0.368)	(0.363)	(0.172)	(0.172)	(0.172)
Deposits/Liabilities	0.130	0.129	0.119	-0.224***	-0.224***	-0.225***
	(0.195)	(0.195)	(0.195)	(0.0674)	(0.0674)	(0.0673)
Governance	0.732***	0.726***	0.568***	-0.230***	-0.229***	-0.255***
	(0.119)	(0.119)	(0.123)	(0.0527)	(0.0528)	(0.0582)
GDP growth %	0.0197***	0.0189***	0.0191***	-0.0238***	-0.0236***	-0.0236***
	(0.00556)	(0.00535)	(0.00534)	(0.00388)	(0.00389)	(0.00387)
GDP per capita	0.0613***	0.0634***	0.0750***	-0.0130*	-0.0134**	-0.0115
	(0.0217)	(0.0217)	(0.0210)	(0.00675)	(0.00674)	(0.00722)
Inflation	0.00452	0.00395	0.00369	-0.00188	-0.00175	-0.00183
	(0.00399)	(0.00394)	(0.00395)	(0.00218)	(0.00222)	(0.00222)
Crisis Dummy	-0.390***	-0.379***	-0.377***	-0.0263	-0.0280	-0.0283
	(0.130)	(0.130)	(0.129)	(0.0307)	(0.0316)	(0.0316)
LLossNonPerRatio	0.408***	0.406***	0.401***			
	(0.0375)	(0.0376)	(0.0372)			
LLossNonPerRatio	-0.00958	-0.00961	-0.00899			
	(0.0254)	(0.0254)	(0.0254)			
ImpLoansEquity Ratio t-1				0.628***	0.628***	0.628***
				(0.0534)	(0.0534)	(0.0533)
ImpLoansEquity Ratio t-2				-0.00657	-0.00655	-0.00543
				(0.0418)	(0.0418)	(0.0418)
Constant	0.817	0.796	1.094	-0.423	-0.419	-0.386
	(0.698)	(0.699)	(0.749)	(0.537)	(0.538)	(0.533)
Year & Firm FE	yes	yes	yes	yes	yes	yes
# obs	4927	4925	4925	5325	5323	5323
adj. R-sq	0.213	0.213	0.217	0.468	0.468	0.468

Table 10A: Operations Ratios & Short term Government Guarantees

NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. NON INT EXP / AVG ASSETS. OpIncAsstsRatio is OTH OP INC / AVG ASSETS. NonInrstAsstsRatio is NON INT EXP / AVG ASSETS. PreTaxOpIncAsstsRatio is PRE-TAX OP INC / AVG ASSETS. NonOpTaxRatio is NON OP ITEMS & TAXES/AVG AST. ROAA is RETURN ON AVG ASSETS. ROAE is RETURN ON AVG EQUITY. DivPORatio is DIVIDEND PAY-OUT. IncNetofDist is INC NET OF DIST / AVG EQUITY.
CosttoIncRatio is COST TO INCOME RATIO. RecEarnPowRatio is RECURRING EARNING POWER. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2
=Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011. .

Model	Panel A (1) NetIntrstMarginRat	(2) NetIntrstMarginRat	(3) NetIntrstMarginRat	Panel B (1) NetIntrstAsstsRat	(2) NetIntrstAsstsRati	(3) NetIntrstAsstsRat	Panel C (1) OpIncAsstsRati	(2) OpIncAsstsRa	(3) OpIncAsstsRati
State_Owned	0.00155	0.00192	0.00188	0.00137	**0.00168***	0.00165	-0.00278	-0.00218	-0.00130
	(0.00117)	(0.00120)	(0.00134)	(0.000981)	**(0.00101)**	(0.00113)	(0.00493)	(0.00519)	(0.00627)
Private_Owned	0.0000444	0.0000923	-0.000282	0.000101	0.000140	-0.000126	**0.00496****	**0.00464****	**0.00649***
	(0.000455)	(0.000459)	(0.000669)	(0.000395)	(0.000400)	(0.000580)	**(0.00226)**	**(0.00229)**	**(0.00365)**
State_Owned*		**-0.00901*****	**-0.00904*****		**-0.00716****	**-0.00719****		-0.0111	-0.0114
ShortTermGuarantee		**(0.00334)**	**(0.00335)**		**(0.00280)**	**(0.00281)**		(0.0111)	(0.0114)
Private_Owned*		**-0.00323****	**-0.00313***		**-0.00258***	**-0.00252***		0.00809	0.00746
ShortTermGuarantee		**(0.00161)**	**(0.00161)**		**(0.00146)**	**(0.00146)**		(0.00707)	(0.00728)
State_Owned*			-0.000257			-0.000193			-0.00266
Governance			(0.00131)			(0.00111)			(0.00719)
Private_Owned*			0.000623			0.000444			-0.00312
Governance			(0.000482)			(0.000429)			(0.00241)
ShortTermGuarantee	0.000104	**0.00339****	**0.00333****	-0.0000367	**0.00259***	**0.00255***	0.00284	-0.00282	-0.00238
	(0.000702)	**(0.00146)**	**(0.00145)**	(0.000605)	**(0.00134)**	**(0.00134)**	(0.00287)	(0.00608)	(0.00624)
ZP t-1	0.00000730	0.00000741	0.00000708	0.00000929*	0.00000937*	0.00000914*	0.00000435	0.00000356	0.00000402
	(0.00000540)	(0.00000554)	(0.00000568)	(0.00000482)	(0.00000487)	(0.00000491)	(0.0000129)	(0.0000130)	(0.0000136)
Assets t-1	-0.0000678	-0.0000741	-0.0000928	0.0000364	0.0000313	0.0000179	0.00288**	0.00288**	0.00300**
	(0.000236)	(0.000236)	(0.000237)	(0.000185)	(0.000185)	(0.000185)	(0.00145)	(0.00145)	(0.00146)
Profit t-1	0.00401	0.00388	0.00385	0.000463	0.000363	0.000347	-0.0981	-0.0994	-0.100
	(0.00441)	(0.00439)	(0.00440)	(0.00354)	(0.00353)	(0.00354)	(0.0681)	(0.0681)	(0.0679)
Capital t-1	0.0343***	0.0342***	0.0340***	0.0254***	0.0254***	0.0253***	0.0157	0.0153	0.0164
	(0.00726)	(0.00726)	(0.00726)	(0.00555)	(0.00555)	(0.00555)	(0.0149)	(0.0149)	(0.0149)
Deposits/Liabilities t-	0.00364*	0.00362*	0.00355	0.00305*	0.00304*	0.00299*	-0.00314	-0.00305	-0.00278
	(0.00216)	(0.00216)	(0.00216)	(0.00162)	(0.00162)	(0.00162)	(0.00992)	(0.00990)	(0.00989)
Governance	-0.00371***	-0.00374***	-0.00407***	-0.00286***	-0.00288***	-0.00311***	0.00473*	0.00473*	0.00653**
	(0.00119)	(0.00119)	(0.00121)	(0.000982)	(0.000982)	(0.00100)	(0.00259)	(0.00259)	(0.00292)
GDP growth %	0.0000393	0.0000426	0.0000434	0.0000200	0.0000224	0.0000230	-0.00101***	-	-0.000983***
	(0.0000726)	(0.0000728)	(0.0000727)	(0.0000591)	(0.0000593)	(0.0000592)	(0.000274)	(0.000268)	(0.000268)
GDP per capita	0.000260	0.000262	0.000269	0.000206	0.000206	0.000211	0.00186***	0.00182***	0.00179***

	(0.000189)	(0.000188)	(0.000188)	(0.000155)	(0.000155)	(0.000155)	(0.000433)	(0.000427)	(0.000426)
Inflation	0.000236**	0.000235**	0.000235**	0.000182**	0.000181**	0.000181**	-0.000276	-0.000277	-0.000271
	(0.000104)	(0.000103)	(0.000103)	(0.0000829)	(0.0000824)	(0.0000823)	(0.000190)	(0.000190)	(0.000190)
Crisis Dummy	-0.00319**	-0.00315**	-0.00316**	-0.00289**	-0.00285**	-0.00286**	-0.0237***	-0.0240***	-0.0240***
	(0.00130)	(0.00130)	(0.00130)	(0.00118)	(0.00119)	(0.00119)	(0.00458)	(0.00460)	(0.00460)
NetIntrstMarginRatio	0.330***	0.330***	0.330***						
	(0.0343)	(0.0343)	(0.0343)						
NetIntrstMarginRatio	-0.00453	-0.00481	-0.00463						
	(0.0242)	(0.0242)	(0.0242)						
NetIntrstAsstsRatio t-				0.333***	0.332***	0.332***			
				(0.0333)	(0.0332)	(0.0332)			
NetIntrstAsstsRatio t-				-0.00789	-0.00815	-0.00809			
				(0.0224)	(0.0223)	(0.0223)			
OpIncAsstsRatio t-1							0.274**	0.275**	0.276**
							(0.132)	(0.132)	(0.132)
OpIncAsstsRatio t-2							-0.284***	-0.284***	-0.284***
							(0.101)	(0.102)	(0.102)
Constant	0.0223***	0.0225***	0.0232***	0.0179***	0.0180***	0.0185***	-0.0460	-0.0444	-0.0485
	(0.00797)	(0.00787)	(0.00791)	(0.00630)	(0.00623)	(0.00625)	(0.0386)	(0.0387)	(0.0391)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	8695	8692	8692	8695	8692	8692	8697	8694	8694
adj. R-sq	0.187	0.188	0.188	0.181	0.182	0.182	0.055	0.056	0.056

Table 10B: Operations & Short term Government Guarantees Continued

NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. NON INT EXP / AVG ASSETS. OpIncAsstsRatio is OTH OP INC / AVG ASSETS. NonInrstAsstsRatio is NON INT EXP / AVG ASSETS. PreTaxOpIncAsstsRatio is PRE-TAX OP INC / AVG ASSETS. NonOpTaxRatio is NON OP ITEMS & TAXES/AVG AST. ROAA is RETURN ON AVG ASSETS. ROAE is RETURN ON AVG EQUITY. DivPORatio is DIVIDEND PAY-OUT. IncNetofDist is INC NET OF DIST / AVG EQUITY. CosttoIncRatio is COST TO INCOME RATIO. RecEarnPowRatio is RECURRING EARNING POWER. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011 .

	Panel D			Panel E			Panel F		
Model	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
ROAE t-2	ROAA	ROAA	ROAA	ROAE	ROAE	ROAE	DivPORatio	DivPORatio	DivPORatio
State_Owned	-0.0000459	-0.000531	0.0000782	0.000269	0.000167	-0.000194	-0.0237	0.0371	0.0193
	(0.00127)	(0.00120)	(0.00125)	(0.0133)	(0.0136)	(0.0134)	(0.0245)	(0.0283)	(0.0279)
Private_Owned	**0.00114***	0.00105	**0.00183***	0.00343	0.00350	0.00561	0.00162	0.00580	0.00611
	(0.000669)	(0.000645)	**(0.000958)**	(0.00663)	(0.00645)	(0.00952)	(0.0395)	(0.0373)	(0.0372)
DivPORatio t-2							-0.0790***	-0.0777***	-0.0785***
							(0.0309)	(0.0320)	(0.0293)
State_Owned*		**0.0103***	**0.00991***		0.00408	0.00448	0.0854	0.0324	0.0469
Constant	0.0171	0.0170	0.0152	-0.0971	-0.0953	-0.0986	(0.0274)	(0.0274)	(0.0274)
ShortTermGuarante	(0.0113)	**(0.00564)**	**(0.00557)**	(0.0826)	(0.0827)	(0.0816)	0.781	0.657	0.527
Private_Owned*		0.00411	0.00372		-0.000140	-0.000457	(0.645)	(0.647)	(0.654)
ShortTermGuarante		(0.00471)	(0.00465)		(0.0454)	(0.0454)		-0.209	-0.233
State_Owned*			-0.00244			0.00436		(0.190)	(0.188)
Governance			(0.00259)			(0.0239)			-0.0604
Private_Owned*			-0.00127*			-0.00338			**-0.0594***
Governance			(0.000737)			(0.00828)			**(0.0357)**
ShortTermGuarante	**-0.00230****	-0.00637	-0.00605	**-0.0226***	-0.0228	-0.0227	-0.000450	0.130	0.155
	(0.00117)	(0.00462)	(0.00457)	**(0.0131)**	(0.0447)	(0.0448)	(0.0603)	(0.176)	(0.174)
ZP t-1	0.000000855	0.000000555	0.000000292	-0.000250**	-0.000252**	-0.000249**	0.000588	0.000609	0.000566
	(0.00000714)	(0.00000711)	(0.00000709)	(0.000110)	(0.000111)	(0.000109)	(0.000393)	(0.000394)	(0.000387)
Assets t-1	-0.000931**	-0.000925**	-0.000867**	-0.000970	-0.00101	-0.000923	-0.00125	0.000157	0.00389
	(0.000372)	(0.000371)	(0.000362)	(0.00240)	(0.00240)	(0.00237)	(0.0134)	(0.0132)	(0.0133)
Profit t-1	0.00117	0.00130	0.00142	-0.00529	-0.00493	-0.00481	0.111	0.0824	0.0807
	(0.00487)	(0.00485)	(0.00485)	(0.0418)	(0.0417)	(0.0416)	(0.231)	(0.228)	(0.228)
Capital t-1	-0.000622	-0.000643	-0.000190	-0.0545	-0.0536	-0.0525	1.072**	1.134**	1.171**
	(0.00919)	(0.00919)	(0.00916)	(0.0529)	(0.0529)	(0.0527)	(0.529)	(0.529)	(0.540)
Deposits/Liabilities	0.00160	0.00161	0.00169	0.0249	0.0251*	0.0255*	0.0486	0.0422	0.0526
	(0.00211)	(0.00211)	(0.00211)	(0.0152)	(0.0151)	(0.0152)	(0.159)	(0.159)	(0.160)
Governance	-0.000507	-0.000480	0.000292	0.0272*	0.0274*	0.0290*	-0.0218	-0.0132	0.0229
	(0.00152)	(0.00152)	(0.00165)	(0.0144)	(0.0144)	(0.0155)	(0.0968)	(0.0955)	(0.0987)
GDP growth %	0.000956***	0.000954***	0.000953***	0.00996***	0.00996***	0.00995***	-0.00376	-0.00537	-0.00512
	(0.000135)	(0.000134)	(0.000134)	(0.00120)	(0.00120)	(0.00120)	(0.00421)	(0.00427)	(0.00429)
GDP per capita	0.000413*	0.000408*	0.000385	0.00763***	0.00749***	0.00746***	0.00937	0.0120	0.0112
	(0.000233)	(0.000235)	(0.000234)	(0.00248)	(0.00249)	(0.00250)	(0.0157)	(0.0161)	(0.0160)
Inflation	-0.000314**	-0.000313**	-0.000311**	-0.000807	-0.000800	-0.000799	-0.000486	-0.00101	-0.000132
	(0.000133)	(0.000132)	(0.000133)	(0.00109)	(0.00109)	(0.00109)	(0.00407)	(0.00391)	(0.00396)
Crisis Dummy	-0.00218	-0.00225	-0.00223	0.00741	0.00752	0.00756	0.233***	0.280***	0.283***
	(0.00185)	(0.00185)	(0.00184)	(0.0149)	(0.0149)	(0.0149)	(0.0875)	(0.0869)	(0.0868)
ROAA t-1	0.260***	0.261***	0.261***						
	(0.0409)	(0.0409)	(0.0408)						
ROAA t-2	-0.0420*	-0.0416*	-0.0419*						
	(0.0251)	(0.0249)	(0.0248)						
ROAE t-1				0.336***	0.337***	0.337***			
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	8859	8856	8856	8844	8841	8841	2644	2643	2643
adj. R-sq	0.157	0.158	0.158	0.204	0.204	0.204	0.013	0.019	0.020

Table 10C: Operations Ratios & Short term Government Guarantees Continued

NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. NON INT EXP / AVG ASSETS. OpIncAsstsRatio is OTH OP INC / AVG ASSETS. NonInrstAsstsRatio is NON INT EXP / AVG ASSETS. PreTaxOpIncAsstsRatio is PRE-TAX OP INC / AVG ASSETS. NonOpTaxRatio is NON OP ITEMS & TAXES/AVG AST. ROAA is RETURN ON AVG ASSETS. ROAE is RETURN ON AVG EQUITY. DivPORatio is DIVIDEND PAY-OUT. IncNetofDist is INC NET OF DIST / AVG EQUITY. CosttoIncRatio is COST TO INCOME RATIO. RecEarnPowRatio is RECURRING EARNING POWER. CAPITAL is the bank's ratio of the book value of Equity to Total Assets DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel G (1) NonOpItNIRatio	(2) NonOpItNIRatio	(3) NonOpItNIRatio	Panel H (1) CosttoIncRatio	(2) CosttoIncRatio	(3) CosttoIncRatio
State_Owned	0.00961	0.00114	-0.0119	-0.00813	-0.00588	-0.00695
	(0.0517)	(0.0530)	(0.0520)	(0.0118)	(0.0114)	(0.0133)
Private_Owned	-0.0459	-0.0515	-0.0422	0.00149	0.00191	0.00161
	(0.0355)	(0.0359)	(0.0389)	(0.00735)	(0.00714)	(0.00956)
State_Owned*		0.213	0.226		-0.0522	-0.0516
ShortTermGuarante		(0.160)	(0.162)		(0.0609)	(0.0604)
Private_Owned*		**0.225****	**0.234****		-0.0215	-0.0212
ShortTermGuarante		**(0.0954)**	**(0.0961)**		(0.0493)	(0.0491)
State_Owned*			0.0699			0.00616
Governance			(0.0738)			(0.0182)
Private_Owned*			-0.0148			0.000538
Governance			(0.0393)			(0.00919)
ShortTermGuarante	0.0380	**-0.160***	**-0.170***	0.0164	0.0376	0.0373
	(0.0435)	**(0.0888)**	**(0.0895)**	(0.0130)	(0.0474)	(0.0473)
ZP t-1	0.000842	0.000807	0.000864	-0.000162	-0.000162	-0.000161
	(0.00130)	(0.00133)	(0.00137)	(0.000128)	(0.000128)	(0.000129)
Assets t-1	-0.00668	-0.00689	-0.00696	0.000366	0.000264	0.000204
	(0.0149)	(0.0150)	(0.0150)	(0.00307)	(0.00307)	(0.00309)
Profit t-1	0.0969	0.110	0.117	0.0958	0.0957	0.0955
	(0.546)	(0.547)	(0.548)	(0.0620)	(0.0620)	(0.0620)
Capital t-1	0.113	0.105	0.106	0.0894	0.0898	0.0897
	(0.246)	(0.246)	(0.248)	(0.104)	(0.103)	(0.104)
Deposits/Liabilities	-0.0205	-0.0177	-0.0161	-0.0120	-0.0118	-0.0118
	(0.143)	(0.143)	(0.144)	(0.0233)	(0.0232)	(0.0234)
Governance	0.139	0.142	0.148	-0.0303*	-0.0301*	-0.0306
	(0.0879)	(0.0879)	(0.0932)	(0.0177)	(0.0177)	(0.0190)

GDP growth %	-0.00519	-0.00485	-0.00486	-0.00146	-0.00147	-0.00147
	(0.00457)	(0.00462)	(0.00462)	(0.00105)	(0.00106)	(0.00106)
GDP per capita	0.0125	0.0115	0.0118	0.00298	0.00287	0.00289
	(0.0157)	(0.0158)	(0.0158)	(0.00405)	(0.00406)	(0.00407)
Inflation	-0.00497	-0.00511	-0.00510	0.000262	0.000262	0.000256
	(0.00406)	(0.00406)	(0.00405)	(0.00138)	(0.00138)	(0.00139)
Crisis Dummy	0.0591	0.0542	0.0545	0.0222	0.0225	0.0225
	(0.0800)	(0.0797)	(0.0797)	(0.0198)	(0.0199)	(0.0199)
NonOpItNIRatio t-1	-0.0155	-0.0152	-0.0147			
	(0.0323)	(0.0323)	(0.0324)			
NonOpItNIRatio t-2	-0.0218	-0.0215	-0.0216			
	(0.0220)	(0.0220)	(0.0220)			
CosttoIncRatio t-1				0.270***	0.270***	0.270***
				(0.0312)	(0.0312)	(0.0312)
CosttoIncRatio t-2				0.0111	0.00867	0.00861
				(0.0208)	(0.0210)	(0.0211)
Constant	-0.410	-0.384	-0.393	0.465***	0.471***	0.472***
	(0.549)	(0.551)	(0.551)	(0.113)	(0.113)	(0.113)
Year & Firm FE	yes	yes	yes	yes	yes	yes
# obs	4958	4956	4956	8450	8447	8447
adj. R-sq	0.003	0.003	0.003	0.086	0.085	0.085

Table 11A: Operations Risk Ratios & Long term Government Guarantees

NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. NON INT EXP / AVG ASSETS. OpIncAsstsRatio is OTH OP INC / AVG ASSETS. NonInrstAsstsRatio is NON INT EXP / AVG ASSETS. PreTaxOpIncAsstsRatio is PRE-TAX OP INC / AVG ASSETS. NonOpTaxRatio is NON OP ITEMS & TAXES/AVG AST. ROAA is RETURN ON AVG ASSETS. ROAE is RETURN ON AVG EQUITY. DivPORatio is DIVIDEND PAY-OUT. IncNetofDist is INC NET OF DIST / AVG EQUITY. CosttoIncRatio is COST TO INCOME RATIO. RecEarnPowRatio is RECURRING EARNING POWER. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. The data is winsorized 1 99%. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel A (1) NetIntrstMarginRat	(2) NetIntrstMarginRat	(3) NetIntrstMarginRat	Panel B (1) NetIntrstAsstsRati	(2) NetIntrstAsstsRati	(3) NetIntrstAsstsRat	Panel C (1) OpIncAsstsRati	(2) OpIncAsstsRat	(3) OpIncAsstsRati
State_Owned	0.00118	0.00199	0.00169	0.00109	0.00175	0.00148	-0.00428	-0.00543	-0.00530
	(0.00108)	(0.00123)	(0.00135)	(0.000923)	(0.00108)	(0.00118)	(0.00480)	(0.00561)	(0.00657)
Private_Owned	-0.000103	-0.0000627	-0.000413	0.0000233	0.0000516	-0.000233	**0.00421****	**0.00375***	0.00515
	(0.000466)	(0.000471)	(0.000680)	(0.000401)	(0.000407)	(0.000592)	**(0.00201)**	**(0.00205)**	(0.00313)
State_Owned*		**-0.00528****	**-0.00524****		**-0.00431***	**-0.00428***		0.00641	0.00616
LongTermGuarantee		**(0.00247)**	**(0.00247)**		**(0.00229)**	**(0.00229)**		(0.00690)	(0.00688)
Private_Owned*		-0.00116	-0.00105		-0.000842	-0.000741		**0.0103***	**0.0103***
LongTermGuarantee		(0.00144)	(0.00145)		(0.00119)	(0.00120)		**(0.00555)**	**(0.00585)**
State_Owned*			0.00125			0.00118			0.00138
Governance			(0.00119)			(0.00101)			(0.00674)
Private_Owned*			0.000630			0.000513			-0.00250
Governance			(0.000502)			(0.000430)			(0.00206)
LongTermGuarantee	-0.000736	0.000829	0.000728	-0.000672	0.000526	0.000433	0.00292	-0.00562	-0.00564
	(0.000581)	(0.00128)	(0.00128)	(0.000513)	(0.00105)	(0.00107)	(0.00201)	(0.00468)	(0.00499)
ZP t-1	0.00000258	0.00000235	0.00000240	0.00000517	0.00000500	0.00000509	0.00000139	0.00000227	0.00000377
	(0.00000580)	(0.00000616)	(0.00000612)	(0.00000429)	(0.00000453)	(0.00000450)	(0.0000100)	(0.00000998)	(0.0000107)
Assets t-1	-0.000204	-0.000222	-0.000251	-0.0000643	-0.0000790	-0.000104	0.00198*	0.00200*	0.00207*
	(0.000248)	(0.000245)	(0.000245)	(0.000194)	(0.000190)	(0.000190)	(0.00110)	(0.00110)	(0.00110)
Profit t-1	0.00604	0.00600	0.00591	0.00195	0.00192	0.00185	-0.0629	-0.0648	-0.0647
	(0.00432)	(0.00431)	(0.00431)	(0.00339)	(0.00338)	(0.00339)	(0.0556)	(0.0559)	(0.0557)
Capital t-1	0.0239***	0.0238***	0.0236***	0.0190***	0.0189***	0.0188***	0.00695	0.00698	0.00768
	(0.00665)	(0.00664)	(0.00665)	(0.00478)	(0.00477)	(0.00478)	(0.0128)	(0.0127)	(0.0127)
Deposits/Liabilities t-	0.00518**	0.00518**	0.00514**	0.00425***	0.00425***	0.00422***	-0.00622	-0.00616	-0.00595
	(0.00206)	(0.00206)	(0.00205)	(0.00150)	(0.00150)	(0.00149)	(0.00887)	(0.00885)	(0.00883)
Governance	-0.00373***	-0.00370***	-0.00410***	-0.00293***	-0.00289***	-0.00323***	0.00465**	0.00473**	0.00608**
	(0.00114)	(0.00114)	(0.00118)	(0.000947)	(0.000949)	(0.000982)	(0.00237)	(0.00239)	(0.00263)
GDP growth %	0.0000606	0.0000601	0.0000607	0.0000617	0.0000615	0.0000621	-0.00100***	-0.000965***	-0.000966***

	(0.0000807)	(0.0000811)	(0.0000811)	(0.0000682)	(0.0000688)	(0.0000688)	(0.000249)	(0.000242)	(0.000241)
GDP per capita	0.000279	0.000277	0.000283	0.000225	0.000222	0.000228	0.00167***	0.00165***	0.00164***
	(0.000197)	(0.000195)	(0.000195)	(0.000162)	(0.000160)	(0.000160)	(0.000392)	(0.000390)	(0.000392)
Inflation	0.000181*	0.000185*	0.000184*	0.000125	0.000128*	0.000127*	-0.000233	-0.000212	-0.000211
	(0.0000947)	(0.0000955)	(0.0000951)	(0.0000764)	(0.0000767)	(0.0000765)	(0.000155)	(0.000154)	(0.000154)
Crisis Dummy	-0.00357***	-0.00364***	-0.00364***	-0.00310***	-0.00316***	-0.00316***	-0.0191***	-0.0194***	-0.0194***
	(0.00119)	(0.00120)	(0.00120)	(0.00107)	(0.00107)	(0.00107)	(0.00385)	(0.00390)	(0.00390)
NetIntrstMarginRatio	0.340***	0.339***	0.340***						
	(0.0327)	(0.0327)	(0.0327)						
NetIntrstMarginRatio	-0.0154	-0.0156	-0.0154						
	(0.0209)	(0.0209)	(0.0209)						
NetIntrstAsstsRatio				0.342***	0.341***	0.341***			
				(0.0304)	(0.0303)	(0.0303)			
NetIntrstAsstsRatio				-0.0208	-0.0209	-0.0208			
				(0.0197)	(0.0197)	(0.0197)			
OpIncAsstsRatio t-1							0.249**	0.251**	0.251**
							(0.111)	(0.111)	(0.111)
OpIncAsstsRatio t-2							-0.261***	-0.261***	-0.260***
							(0.0899)	(0.0900)	(0.0901)
Constant	0.0272***	0.0278***	0.0287***	0.0215***	0.0220***	0.0228***	-0.0219	-0.0215	-0.0243
	(0.00830)	(0.00807)	(0.00808)	(0.00676)	(0.00654)	(0.00654)	(0.0299)	(0.0301)	(0.0304)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	10136	10132	10132	10136	10132	10132	10139	10135	10135
adj. R-sq	0.173	0.173	0.173	0.171	0.171	0.171	0.054	0.055	0.055

Table 11 B: Operations Risk Ratios & Long term Government Guarantees Continued

NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. NON INT EXP / AVG ASSETS. OpIncAsstsRatio is OTH OP INC / AVG ASSETS. NonInrstAsstsRatio is NON INT EXP / AVG ASSETS. PreTaxOpIncAsstsRatio is PRE-TAX OP INC / AVG ASSETS. NonOpTaxRatio is NON OP ITEMS & TAXES/AVG AST. ROAA is RETURN ON AVG ASSETS. ROAE is RETURN ON AVG EQUITY. DivPORatio is DIVIDEND PAY-OUT. IncNetofDist is INC NET OF DIST / AVG EQUITY. CosttoIncRatio is COST TO INCOME
RATIO. RecEarnPowRatio is RECURRING EARNING POWER. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. The data is winsorized 1 99%. Data is winsorized 1 99%. Standard errors are given in parentheses, *, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel D (1) ROAA	(2) ROAA	(3) ROAA	Panel E (1) ROAE	(2) ROAE	(3) ROAE	Panel F (1) DivPORatio	(2) DivPORatio	(3) DivPORatio
State_Owned	-0.00104	-0.00171	-0.00103	-0.00809	-0.0113	-0.00925	-0.0262	-0.0247	-0.00309
	(0.00117)	(0.00123)	(0.00132)	(0.0140)	(0.0143)	(0.0135)	(0.0238)	(0.0368)	(0.0363)
Private_Owned	**0.00125****	**0.00114***	**0.00195****	0.00545	0.00519	0.00922	-0.00883	0.000458	0.0346
	(0.000606)	**(0.000594)**	**(0.000921)**	(0.00644)	(0.00649)	(0.00938)	(0.0305)	(0.0314)	(0.0274)
State_Owned*		0.00410	0.00394		0.0203	0.0196		0.0392	0.0283
LongTermGuarantee		(0.00267)	(0.00266)		(0.0276)	(0.0280)		(0.119)	(0.120)
Private_Owned*		0.00256	0.00225		0.00588	0.00507		**-0.136***	**-0.148****
LongTermGuarantee		(0.00244)	(0.00241)		(0.0198)	(0.0197)		**(0.0728)**	**(0.0729)**
State_Owned*			-0.00268			-0.00576			-0.0907
Governance			(0.00233)			(0.0258)			(0.0605)
Private_Owned*			**-0.00142***			-0.00694			-0.0475
Governance			**(0.000770)**			(0.00833)			(0.0351)
LongTermGuarantee	**-0.00290*****	**-0.00536****	**-0.00507****	**-0.0367*****	**-0.0438****	**-0.0430****	-0.0350	0.0445	0.0567
	(0.000915)	**(0.00245)**	**(0.00243)**	**(0.00985)**	**(0.0184)**	**(0.0183)**	(0.0388)	(0.0556)	(0.0556)
ZP t-1	0.00000845	0.00000873	0.00000861	-0.0000691	-0.0000678	-0.0000657	0.000398	0.000323	0.000294
	(0.00000673)	(0.00000681)	(0.00000670)	(0.0000512)	(0.0000509)	(0.0000502)	(0.000294)	(0.000284)	(0.000279)
Assets t-1	-0.000994***	-0.000981***	-0.000916***	-0.000561	-0.000474	-0.000209	0.00289	0.00241	0.00441
	(0.000339)	(0.000338)	(0.000325)	(0.00229)	(0.00230)	(0.00226)	(0.00922)	(0.00920)	(0.00938)
Profit t-1	0.00371	0.00371	0.00386	-0.00483	-0.00469	-0.00417	0.112	0.106	0.112
	(0.00514)	(0.00513)	(0.00513)	(0.0415)	(0.0415)	(0.0414)	(0.226)	(0.225)	(0.225)
Capital t-1	-0.00662	-0.00654	-0.00610	-0.0338	-0.0334	-0.0313	1.154**	1.182**	1.199**
	(0.00805)	(0.00805)	(0.00803)	(0.0732)	(0.0733)	(0.0733)	(0.477)	(0.473)	(0.479)
Deposits/Liabilities t-	0.00173	0.00172	0.00179	0.0166	0.0163	0.0167	0.0346	0.0335	0.0413
	(0.00188)	(0.00188)	(0.00188)	(0.0185)	(0.0184)	(0.0184)	(0.146)	(0.146)	(0.147)
Governance	0.0000606	0.0000433	0.000927	0.0280**	0.0277**	0.0318**	0.0349	0.0304	0.0635
	(0.00138)	(0.00138)	(0.00156)	(0.0140)	(0.0140)	(0.0156)	(0.0896)	(0.0902)	(0.0931)
GDP growth %	0.000978***	0.000985***	0.000984***	0.0105***	0.0105***	0.0105***	-0.00427	-0.00561	-0.00539
	(0.000137)	(0.000137)	(0.000136)	(0.00124)	(0.00124)	(0.00124)	(0.00465)	(0.00481)	(0.00481)
GDP per capita	0.000489**	0.000488**	0.000465**	0.00790***	0.00795***	0.00787***	0.0120	0.0130	0.0124

	(0.000216)	(0.000218)	(0.000218)	(0.00234)	(0.00235)	(0.00235)	(0.0140)	(0.0142)	(0.0142)
Inflation	-0.000184*	-0.000181*	-0.000180*	0.000252	0.000245	0.000250	-0.000403	-0.00150	-0.00118
	(0.0000989)	(0.0000994)	(0.0000995)	(0.000765)	(0.000771)	(0.000772)	(0.00330)	(0.00321)	(0.00321)
Crisis Dummy	-0.00119	-0.00121	-0.00122	0.0169	0.0171	0.0171	0.261***	0.295***	0.297***
	(0.00157)	(0.00158)	(0.00157)	(0.0139)	(0.0140)	(0.0140)	(0.0810)	(0.0829)	(0.0828)
ROAA t-1	0.208***	0.208***	0.208***						
	(0.0354)	(0.0355)	(0.0353)						
ROAA t-2	-0.0292	-0.0295	-0.0297						
	(0.0252)	(0.0252)	(0.0251)						
ROAE t-1				0.272***	0.272***	0.272***			
				(0.0334)	(0.0335)	(0.0334)			
ROAE t-2				-0.0264	-0.0268	-0.0270			
				(0.0214)	(0.0214)	(0.0214)			
DivPORatio t-1							-0.0178	-0.0174	-0.0173
							(0.0347)	(0.0345)	(0.0345)
DivPORatio t-2							-0.0762***	-0.0765***	-0.0766***
							(0.0261)	(0.0261)	(0.0261)
Constant	0.0169	0.0167	0.0147	-0.111	-0.114	-0.123	0.0657	0.0384	-0.0385
	(0.0106)	(0.0106)	(0.0103)	(0.0795)	(0.0798)	(0.0784)	(0.506)	(0.508)	(0.515)
Year & Firm FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
# obs	10311	10307	10307	10286	10282	10282	2993	2992	2992
adj. R-sq	0.124	0.124	0.125	0.175	0.175	0.175	0.015	0.016	0.017

Table 11 C: Operations Risk Ratios & Long term Government Guarantees Continued…

NetIntrstMarginRatio is net interest income expressed as a percentage of earning assets . NetIntrstAsstsRatio is NET INT INC / AVG ASSETS. NON INT EXP / AVG ASSETS. OpIncAsstsRatio is OTH OP INC / AVG ASSETS. NonInrstAsstsRatio is NON INT EXP / AVG ASSETS. PreTaxOpIncAsstsRatio is PRE-TAX OP INC / AVG ASSETS. NonOpTaxRatio is NON OP ITEMS & TAXES/AVG AST. ROAA is RETURN ON AVG ASSETS. ROAE is RETURN ON AVG EQUITY. DivPORatio is DIVIDEND PAY-OUT. IncNetofDist is INC NET OF DIST / AVG EQUITY. CosttoIncRatio is COST TO INCOME RATIO. RecEarnPowRatio is RECURRING EARNING POWER. CAPITAL is the bank's ratio of the book value of Equity to Total Assets. DepositsOverLiabilities is Total deposits over total Liabilities. WGI_Estimate is an index for Government Effectiveness. Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government. ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA. Where SDROA is the standard deviation of ROAA for the whole sample period. GDPperCapita is the GDP per capita (constant 2000 US$). GDPperCapitaGrowth is the annualised growth rate of GDP per capita. The data is winsorized 1 99%. Data is winsorized 1 99%. Standard errors are given in parentheses,
*, **, *** denotes significance at 10%, 5% and 1%. Sample is annual data from 2001 to 2011.

Model	Panel G (1) NonOpItNIRati	(2) NonOpItNIRatio	(3) NonOpItNIRatio	Panel H (1) CosttoIncRatio	(2) CosttoIncRatio	(3) CosttoIncRatio
State_Owned	0.00809	0.0189	0.0105	0.0152	0.0212	0.0189
	(0.0482)	(0.0514)	(0.0508)	(0.0117)	(0.0130)	(0.0143)
Private_Owned	-0.0323	-0.0259	-0.0164	0.00384	0.00398	0.00101
	(0.0337)	(0.0343)	(0.0368)	(0.00773)	(0.00771)	(0.0102)
State_Owned*		-0.0340	-0.0288		-0.0402	-0.0398
LongTermGuarante		(0.0943)	(0.0955)		(0.0287)	(0.0287)
Private_Owned*		-0.120	-0.113		-0.00403	-0.00320
LongTermGuarante		(0.0962)	(0.0968)		(0.0292)	(0.0294)
State_Owned*			0.0368			0.00926
Governance			(0.0719)			(0.0198)
Private_Owned*			-0.0167			0.00534
Governance			(0.0372)			(0.0101)
LongTermGuarante	0.0445	**0.135***	0.128	**0.0233****	0.0317	0.0309
	(0.0461)	**(0.0818)**	(0.0821)	**(0.00995)**	(0.0273)	(0.0275)
ZP t-1	0.000166	0.000145	0.000184	-0.000296***	-0.000298***	-0.000298***
	(0.00100)	(0.00100)	(0.00103)	(0.000103)	(0.000106)	(0.000106)
Assets t-1	-0.0134	-0.0137	-0.0134	-0.000641	-0.000833	-0.00108
	(0.0151)	(0.0151)	(0.0151)	(0.00303)	(0.00304)	(0.00309)
Profit t-1	0.559	0.575	0.578	0.145**	0.145**	0.144**
	(0.520)	(0.519)	(0.520)	(0.0586)	(0.0587)	(0.0587)
Capital t-1	-0.421	-0.422	-0.419	0.0542	0.0530	0.0516
	(0.290)	(0.290)	(0.291)	(0.0937)	(0.0938)	(0.0940)
Deposits/Liabilities	-0.00369	-0.00519	-0.00343	0.00318	0.00359	0.00328
	(0.136)	(0.136)	(0.137)	(0.0240)	(0.0239)	(0.0240)
Governance	0.164**	0.162**	0.171**	-0.0270	-0.0263	-0.0297
	(0.0822)	(0.0821)	(0.0871)	(0.0169)	(0.0169)	(0.0183)
GDP growth %	-0.00567	-0.00649	-0.00646	-0.00122	-0.00122	-0.00121
	(0.00416)	(0.00421)	(0.00421)	(0.000984)	(0.000989)	(0.000989)
GDP per capita	0.00609	0.00665	0.00687	0.00177	0.00162	0.00167
	(0.0154)	(0.0155)	(0.0155)	(0.00370)	(0.00371)	(0.00371)
Inflation	-0.00344	-0.00385	-0.00382	0.000501	0.000534	0.000524
	(0.00357)	(0.00362)	(0.00361)	(0.000973)	(0.000978)	(0.000981)
Crisis Dummy	0.0844	0.0911	0.0913	0.0272	0.0264	0.0264
	(0.0852)	(0.0862)	(0.0862)	(0.0200)	(0.0200)	(0.0200)
NonOpItNIRatio t-	-0.0252	-0.0253	-0.0250			
	(0.0308)	(0.0308)	(0.0309)			
NonOpItNIRatio t-	-0.0484**	-0.0485**	-0.0485**			
	(0.0202)	(0.0202)	(0.0202)			
CosttoIncRatio t-1				0.253***	0.252***	0.252***
				(0.0264)	(0.0264)	(0.0265)
CosttoIncRatio t-2				0.0163	0.0150	0.0150
				(0.0189)	(0.0190)	(0.0190)
Constant	-0.173	-0.180	-0.198	0.487***	0.495***	0.503***
	(0.530)	(0.530)	(0.531)	(0.109)	(0.109)	(0.110)
Year & Firm FE	yes	yes	yes	yes	yes	yes
# obs	5688	5686	5686	9870	9866	9866
adj. R-sq	0.007	0.007	0.007	0.078	0.078	0.078

Figure 1A: Average Ownership is average yearly ratio of total assets of each ownership typed bank to total assets of all banks per each country.

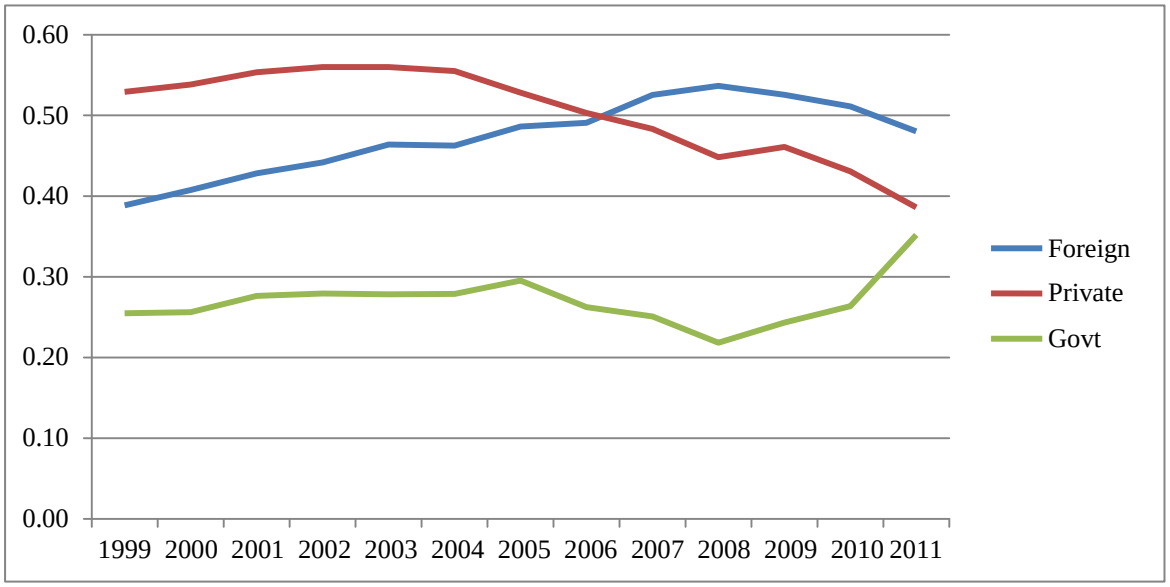
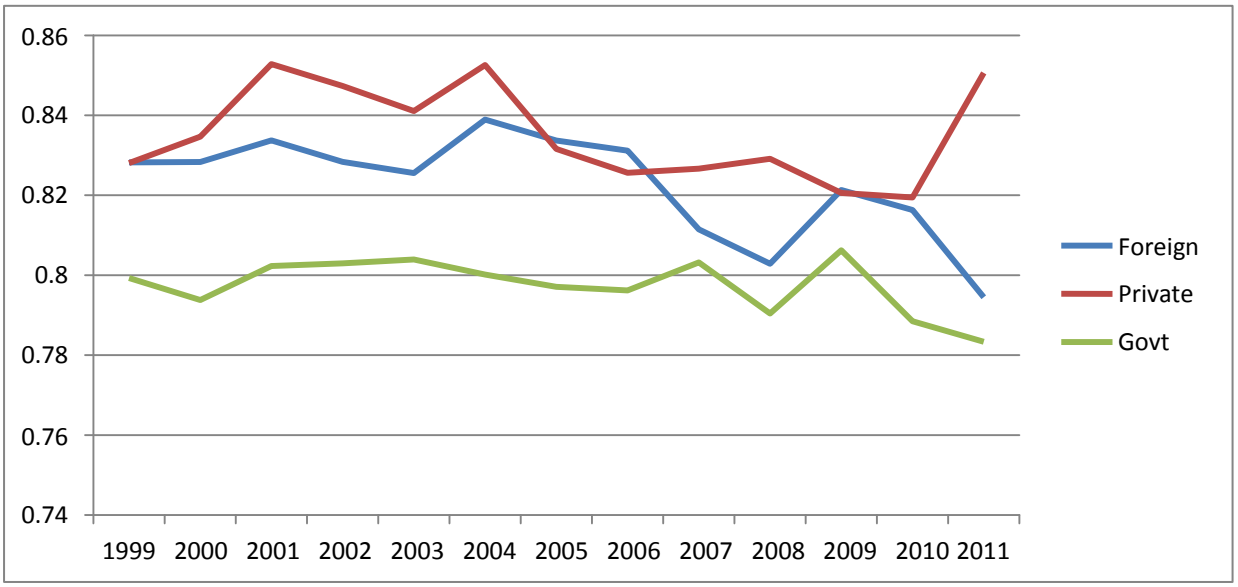


Figure 1B:Average Deposits over Liabilities by each ownership type per year.



Appendix

A.1. Empirical Methodology

A.1.1 Empirical Model

As a first step, we follow pooled ordinary least squares (OLS) with year and country fixed effects with clustering at the country level. However, the main results shown are based on a panel fixed effects model with year and bank fixed effects and clustering the standard errors at bank level. We control for: 1) exogenous determinants of risk, lending and profitability 2) potential reverse causality running from risk, lending and profitability to bank ownership type 3) include many governance, regulatory and control indicators simultaneously, so we can evaluate the independent relationship between each indicator and the dependent conditional on government guarantees. We conducted Hausman tests which rejected a random effects model. Subsequently, in Section 5.2, we use a system gmm model to control for any further remaining endogeneity issues. As Flannery (2012) shows if the lagged dependent variable is of no interest FE is accurate in estimating both exogenous and endogenous X's. To test Hypothesis 1 we estimate the following panel fixed effects model, with year, country fixed effects and robust standard errors clustered at bank level. We consider four econometric techniques. The first two methodologies simple OLS and country specific fixed effects have the advantage of well understood asymptotic theory, but their restrictions on the correlation structure of the disturbances may not be appropriate in dynamic panel settings. A third method for estimating dynamic panels is the difference GMM method of Arellano and Bond (1991) which uses first differences and lagged series to instrument for predetermined and endogenous variables. When the series are highly autoregressive and the number of time observations is small, the Arellano Bond estimator tends to have large finite sample bias and poor precision in simulation studies (Blundell et al., 2000). In our final method we use a system GMM method developed by Arellano and Bover (1995) and Blundell and Bond (1998) that addresses these concerns.

$$Y_{i,j,t} = a + a1*State\_Owned_{i,j,t} + a2*Private\_Owned_{i,j,t} + a3*(State\_Owned_{i,j,t}*X_{i,j,t}) + a4*(Private\_Owned_{i,j,t}*X_{i,j,t}) + a5*X_{i,j,t} + a6*Assets_{i,j,t-1} + a7*Profit_{i,j,t-1} + a8*Deposits/Liabilities_{i,j,t-1} + a9*Governance_{i,t} + a10*GDPgrowth\%_{i,t} + a11*GDPperCapital_{i,t} + a12*Inflation_{i,t} + a13*CrisisDummy_{i,t} + a14*Y_{i,j,t-1} + a15*Y_{i,j,t-2} + \varepsilon \quad (1)$$

The dependent variable Yi, j, t contains all the liquidity, capital, and asset quality and operations ratios. The liquidity ratios we calculate as follows: Liq_Assets is constructed as the ratio of liquid assets to total assets and is a measure of overall bank soundness, ability to continue lending. InterBnkRatio is money lent to other banks divided by money borrowed from other banks. This ratio being greater than 100 indicates the bank is a net placer rather than a borrower of funds in the market place, and therefore more liquid. NetLoansTARatio the percentage of the bank's assets tied up and a higher value indicates the bank as being less liquid. NetLoansSTFundRatio is loans to deposit ratio where high figures denote lower liquidity.

LoansTotDepRatio is similar to the earlier ratio where the denominator is deposit and borrowings with the exception of capital instruments. LiqAsstsDepRatio is a deposit run off ratio which considers the percentage of customer and short term funds that could be met if they were withdrawn suddenly. The higher this ratio is the more liquid the bank would be and less vulnerable to a classic run on the bank. LiqAsstsTotDepRatio is similar to the earlier ratio but considers the amount of liquid assets available to the borrower as well as the depositor. Tier1Ratio is a measure of tier 1 capital adequacy i.e. shareholder funds plus perpetual non- cumulative preference shares as a percentage of risk weighted assets and off balance sheet risks measured under the Basel rules. CARRatio is the total capital adequacy ratio under the Basel rules, measured by Tier1+ Tier2 capital which includes subordinated debt, hybrid capital, loan loss reserves and the valuation reserves as a percentage of risk weighted assets and off balance sheet risks.

EquityRatio measures the amount of protection afforded to the bank by the equity they've invested in. EquitySTFundingRatio measures the amount of permanent funding relative to short term volatile funding, the higher this ratio the better. EquityLiabRatio is simply another way of looking at the equity funding of the balance sheet and its capital adequacy. CapFundTARatio is capital funds divided by total assets. CapFundNLRatio is capital funds divided by net loans. CapFundLiabRatio is capital funds divided by liabilities. LoanLossRatio indicates how much of the portfolio has been provided for but not charged off. It is a reserve for losses expressed as percentage of total loans. Given a similar charge off policy the higher the ratio the poorer the quality of the loan portfolio will be. LLossProvisionRatio is the relationship between provisions in the profit and loss account and the interest income over the same period. Ideally, these ratios should be as low as possible. In a well-run bank a high risk lending book would be reflected by higher interest margins. ImpLoansEquityRatio is impaired or problem loans stated as a percentage of the bank's equity. This indicates the weakness of a loan portfolio relative to the bank's capital. If it's a high percentage, this would be cause for concern. NetIntrstMarginRatio is the net interest income expressed as a percentage of earning assets.

The higher this figure, the cheaper the funding or the higher the margin the bank is commanding. Higher margins and profitability are desirable as long as asset quality is being maintained. NetIntrstAsstsRatio is the same as the earlier ratio but expressed as a percentage of the total balance sheet. OpIncAsstsRatio indicates to what extent fees and other income represent a greater percentage of earnings of the bank. As long as this is not volatile trading income it can be seen as a lower risk form of income. The higher this figure is the better. NonInrstAsstsRatio shows non-interest expenses or overheads plus provisions giving a measure of the cost side of the banks performance relative to the assets invested. ROAA is the most important single ratio when comparing the efficiency and operational performance of banks as it looks at the returns generated from the assets financed by the bank. ROAE is a measure of the return on shareholder funds. Higher the figure the better however, the ratio might be high at the expense of an over leveraged balance sheet. While ROAE (post tax) itself is not an indicator of investors return on investment, which would rather depend on dividend declared plus capital appreciation if any. However, we can argue that a higher ROE leads to better return to the shareholders.

Return on Assets is another good measure of performance and profitability. However, ROAA does not reflect the impact of capital structure decisions (financial leverage also called gearing) on the firm's earnings. DivPORatio is a measure of the amount of post-tax profits paid out to shareholders, the higher the ratio, the better, but not if it's at the cost of restricting reinvestment in the bank and its ability to grow its business. NonOpItNIRatio denotes what percentage of total income consists of unusual items. CosttoIncRatio is one of the most famous ratios at present which measures the overhead or costs of running the bank, the major element of which is normally salaries, as percentage of income generated before provisions. It is a measure of efficiency although if the lending margins in a particular country are very high then the ratio will improve as a result. It can be distorted by high net income from associates or volatile trading income.

We consider several bank level control variables, lagged by one year. Among these, assets is the log of total assets in constant 2000 dollars to capture the impact of a bank's too-big-to-fail status. In addition, deposits over total liabilities is a measure of the stability of a bank's funding, since non-deposit funding tends to flee quickly during periods of instability. We consider two macroeconomic controls from World Development Indicators (WDI, 2011) database. These are GDP per capita in thousands of constant 2000 dollars, and inflation measured as the percentage change in the GDP deflator. Finally, the bank crisis variable is a dummy variable signalling a country is experiencing a banking crisis. We collect this information from central banks' of each country and (Laeven and Valencia, 2010).

We exclude banking system distress events that effected isolated banks but were not systematic in nature. Our ownership variables are calculated as follows: Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company and is excluded from the regression. State_Owned is a dummy variable equal to 1 if the primary shareholder is the government. Private_Owned if the primary shareholder is a local company but not the government.

Ownership Concentration is the percentage of shares owned by the primary shareholder (more than 20% of shares)[31]. Secondary Ownership Concentration is the percentage of shares owned by secondary shareholders (i.e. when the percentage of ownership is less than the 20% cut off). The independent variable $X_{i, j, t}$ is a measure of government guarantee. DepositInsurance is a dummy variable equal to 0 if the country has Deposit insurance scheme. ImpGurantee is a dummy variable equal to 1 if the deposit insurance is explicit. PermFund is a dummy variable =1 if the country has a permanent fund set up for deposit insurance. SourceFund is a variable equal to 2 if the bailout funding is by the government, 0 if private and 1 if joint. Intervene is a dummy variable that equals 1 if the deposit

[31] We use several cut offs such as 10%, 15% , 25% and more detailed definitions of ownership such as management, family, institutional, government etc. as robustness tests.

insurance authority can intervene on a bank. BailedOut is a dummy variable that equals one if the depositors of that country were compensated in case of a bank failure. Bankfail is a variable containing the number of banks that failed so far up to 2003.

NoDepPaidOut is a dummy variable equal to 1 if depositors not covered by the insurance were also compensated. These variables on deposit insurance and bail outs and failures are on a country level for all years. Shortterm Guarantee is a dummy variable equal to 1 if the government provided any liquidity support during a particular year and is 0 if a bank is foreign owned. Recapitalization is a dummy variable is equal to 1 if the government provided any capital injection in a particular year. Blanket guarantee is a dummy variable equal to 1 if the government provided any blanket guarantee on deposits in a particular year. Longterm Guarantee is a dummy variable equal to 1 if recapitalisation or blanket guarantee is equal to 1 for that particular country for that particular.

4.2. Data

We compile a large comprehensive dataset of banking ownership, government guarantees and accounting information at bank level for 79 countries, where we select the 30 largest commercial banks (as defined by total assets in at least one year of our sample period 2001 to 2011). Considering the largest banks enhances comparability since they tend to have more liquid shares and comply with international accounting standards. Furthermore, this reduces concerns that accounting or liquidity differences would be driving the results. On average, our sample accounts for over 80 % of total banking system assets in each country.

We use consolidated bank statements from BankScope. If no consolidated statements were available, we used unconsolidated statements. We also excluded bank holdings and bank holding companies to avoid a double-counting of banks. The information on bank ownership is obtained from the section "Shareholder Information" in the BankScope database. When BankScope's shareholder database does not have enough information to determine a bank's ownership, we gather bank ownership information using additional sources such as the individual bank's financial statements. Moreover, we use various websites to classify the owner as private or state and company websites of the banks.

We classify a bank as having a "large owner" if the shareholder has direct and indirect voting rights that sum up to 20 percent or more. Thus, a bank is categorized as a state bank if it is majority owned by a state owned entity etc. Results of this study hold even when using a 10 or 15 percent cut-offs to define a large owner. While direct ownership involves shares registered in the shareholder's name, indirect ownership involves bank shares held by entities controlled by the ultimate shareholder. When multiple shareholders have over 20 percent of the votes, we define the "large owner" as the owner with the greatest percentage of ownership. We gather the income statement and balance sheet data from the Bureau Van Dijk's Bankscope database. We collect the government guarantee variables of liquidity support, capital injection, blanket guarantees, deposit insurance, implicit guarantees, permanent funds, sources of funds etc. through various central bank websites, company websites and other sources etc. for each country.

General effectiveness of the government bureaucracy, i.e. good governance is proxied by a composite indicator of the government effectiveness from the World Governance Indicators (WGI) database (Kaufmann et al., 2010), which includes perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures. We consider two macroeconomic controls from World Development Indicators (WDI, 2011) database. These are GDP per capita in thousands of constant 2000 dollars, and inflation measured as the percentage change in the GDP deflator. Finally, the bank crisis variable is a dummy variable signalling whether a country is experiencing a banking crisis (Laeven and Valencia, 2010). We extend the banking crisis variable unto 2011 using central bank sources for each country.

Our approach is different from the one adopted by La Porta et al. (2002) and Dinç (2005), who select the ten largest banks in each country, by focusing on the largest banks only. We not only focus our analysis on large banks, but also manage to achieve a more balanced sample in terms of bank size, and no significant difference between banks with different ownership structures. Banks mergers or acquisitions are treated as follows. If Bankscope continues to use the accounts of the surviving bank for the new entity after a merger or acquisition, the surviving bank remains in the sample. If Bankscope starts a new account for the new entity, banks involved in that merger exit the sample. As a result, we end up with an unbalanced data set consisting of 2236 banks from 78 countries for a total of 18,722 bank year observations for which we have ownership and accounting data.

5. Empirical Results

5.1 Summary Statistics

Table 1 provides summary statistics for our sample of commercial banks. According to the detailed summary statistics state owned banks have higher liquid assets in general probably due to better monitoring and they are also the net lender to foreign and private owned banks. They have less volatile funding and lesser funding available to borrowers and depositors.

Foreign owned banks have lower liquid assets mainly due to profit maximisation purposes[32] and more funding for borrowers and depositors. State owned banks also tend to have more loan write-offs and hold lower levels of capital probably due to the too big to fail hypothesis while foreign banks have higher levels of capital. Foreign banks pay out more post-tax profits to shareholders compared to local banks. Overall according to the summary statistics foreign banks seems to be in better stable position compared to local banks and especially state owned banks riddled with heavy moral hazard issues. The main variables of interest are the liquidity, capital, and asset quality and operations ratios[33].

---

[32] Supporting the results of Agarwal & Jayasuriya 2013 who finds that foreign banks have higher profitability.

[33] Refer variable definitions and data sources in the appendix.

Our main long term and short term government guarantee[34] measures are as follows: Short term government guarantee is a dummy variable that is more of a short term government guarantee measure and is equal to 1 if any banks were provided with liquidity support in a particular year. Long term government guarantee is more of a measure of long term government support and is a dummy variable that is equal to 1 if the government provided capital injections and a blanket guarantee to any banks in a given year. All these government guarantee variables are equal to 0 if the bank is a foreign owned bank for that particular country. Ownership concentration averaging 66% is the percentage of shares owned by the primary shareholder (more than 20% of shares); this variable measures the degree of ownership of a particular bank. The State bank variable is a dummy variable that equals one, if a bank has a majority state ownership shares[35]. To represent business cycles, we use GDP annual growth rate in percentages, with a mean value of 3.77%. We use a composite indicator of the government effectiveness from the World Governance Indicators (WGI) database (Kaufmann et al., 2010), which includes perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures[36]. Among these, assets averaging around 25% is the log of total assets in constant 2000 dollars to capture the impact of a bank's too-big-to-fail status. And as expected government owned banks have large number of assets with 28% with private and foreign owned banks trailing close behind with 25% and 24% respectively. Equity is the ratio of equity to total assets, to control for bank soundness, averaging 18.47% in our sample.

For state owned banks it is 18% while for private and foreign owned banks it is 18% and 17% respectively. State owned banks[37] have alarmingly low liquid assets[38] with 0.1 while private and foreign owned banks have respectable numbers of 0.24 and 0.30. Moreover, deposits over total liabilities[39] averaging 0.81 is a measure of the stability of a bank's funding, since non-deposit funding tends to flee quickly during periods of instability.

Table 2 and Table 3 provides the average foreign ownership as the average yearly ratio of total assets of each foreign bank to total assets of all banks per each country and in addition, the number of banks per each country. Moving on to the early warning ratios we begin with Liquidity ratios: For private owned banks liquid asset percentage is 22% and 24% for foreign owned banks. As expected government owned banks have the highest amount of liquid assets. Interbank ratio is

---

[34] We have several variables measuring government guarantees including but not limited to deposit insurance, implicit guarantees number of bank bailouts, deposit insurance paid up in the past etc.

[35] In our sample, since we only consider the top 30 commercial banks in a specific country at a given year in our sample based on total assets only 9% of commercial banks are state-owned.

Private bank variable considers the domestic banks indicating a majority of private domestic ownership, while the foreign bank variable signals majority of foreign ownership. Private and Foreign banks constitute 48% and 41% of our observations respectively.

---

[36] The impact of different types of ownership on the procyclicality of banks' lending possibly depends on the general effectiveness of the government bureaucracy, i.e. good governance.

[37] The numbers for state owned banks maybe explained by the fact that these are the top largest commercial state owned banks in a particular country and therefore would be bound to hold less liquid assets compared to its other private and foreign owned contemporaries.

[38] Liquidity averaging 0.27 is constructed as the ratio of liquid assets to total assets, can be a measure of bank soundness and its ability to sustain its lending, as well as an indicator of inefficiency (since too much liquidity comes at the cost of bank intermediation).

[39] This ratio for state owned banks is considerably low with 0.22 while private and foreign banks have a considerably high number of 0.81 and 0.82.

over 1 and is around 1.7 on average which shows these top commercial banks in these countries generally tend to be the net placer rather than the net borrower. Interestingly enough, when we consider the ratio for each ownership type, state owned banks stand out as the leader of the net placers with a huge 2.07 interbank ratio. NetLoansTARatio shows that 51% of the bank's assets on average are tied up in loans. Private owned banks have 54% and the largest amount of assets tied up in loans compared to government and foreign owned banks. NetLoansSTFundRatio is 69% is relatively high and shows lower liquidity levels. Private owned banks have 66% while government owned banks have 73% and foreign owned banks have 67%, showing that state owned banks have a higher amount of net loans compared to short term funding. LoansTotDepRatio is also 63%, however, excluding capital does not increase this ratio. Break down by ownership types also gives the same levels of the ratio. LiqAsstsDepRatio shows that 37% of customer and short term funds could be met if they were withdrawn. For state owned banks it is only 29% while for private and foreign owned banks it is 33% and 41% respectively. LiqAsstsTotDepRatio shows 32% of funds are available not just for depositors but also for borrowers as well. In state owned banks it is lower with just 26% while for private and foreign owned banks it is 30% and 35% respectively.

Moving on to asset quality ratios: LoanLossRatio shows that 5% of the total portfolio has been provided for but not charged off. The numbers are within the same range for each type of ownership. LlossProvisionRatio is 22% which is relatively low, showing that banks are well run since if the lending book is high risk it is reflected by higher interest margins. ImpairedLoansRatio is 8%, which is very low showing that one cannot be that comfortable with bank's asset quality. GrossLoansRatio is 1% which is a good sign since this shows the total loans that are doubtful in nature. NetIncLoanLoss shows that 23% off todays loans have been finally been written off the books. This ratio is 31% for state owned banks showing more write-offs while it is 26% and 20% for private and foreign owned banks respectively. ImpLoansEquityRatio is 44% showing the weakness of the loan portfolio to the banks' capital. This ratio is alarmingly large for state owned banks with 73% while it is 42% and 40% for private and foreign owned banks.

UnResImpLoansEqR shows that 32% of the banks loans would be written off if the reserves or accumulated provisions were 100%. State owned banks have a high number of bad loans with 57% while private and foreign banks are in a better position with only 30% and 28%. Thirdly, we consider the capital ratios: Tier1 ratio is 14% showing well enough capital adequacy, this ratio should at least be 4%. CARRatio is also at a sound level of 18% whence it should at least be 8%. EquityRatio is quite low though at 12% showing the amount of protection afforded to the bank by the equity invested in it. EquityLoansRatio is relatively higher with 32%. However, for state owned banks this ratio is only around 21% while for private and foreign owned banks it 27% and 34% respectively. This shows that foreign banks are again in a better position compared to local banks. EquitySTFundingRatio is 18% showing that banks are funded with volatile funding compared to more permanent funding. EquityLiabRatio is also pretty low around 15%. CapFundTARatio is also low at 12%. CapFundNLRatio is relatively higher at 32%.

Again state owned banks maintain lower capital levels compared to net loans with around 21% while private and foreign banks maintain better levels of 28% and 33%. CapFundSTFundRatio is 18%, again evidence of more short term funding. State owned banks have a considerably large amount of short term funds of around 13% over capital while private and foreign owned banks have around 17%, comparatively less. CapFundLiabRatio is also low at 15% but this can be indicative of either an over leveraged or expansive balance sheet. For state owned banks this is 11% while for private and foreign owned banks it is 14%.

Finally, we consider the operations ratios NetIntrstMarginRatio is 4% showing that funding is relatively expensive and margins are lower for banks. NetIntrstAsstsRatio is also 4%. OpIncAsstsRatio is also distressingly low at 2% showing that fees and other income constitute a very low percentage of earnings of the banks. PreTaxOpIncAsstsRatio is also relatively low at 1% showing that profitability unaffected by one off non-trading activities is low. ROAA is also relatively low at 1%. ROAE is relatively larger at 10% showing the return on shareholders' funds. However, one should be careful in putting too much weight on this ratio as it may be at the expense of an over-leveraged balance sheet.

DivPORatio is quite large at 44%. For state owned banks its quite low with only 32%, private and foreign owned banks have a ratio of 44% and 49%. Showing that the amount of post-tax profit paid out to shareholders is relatively high. IncNetofDist is low at 7% showing the percentage of equity that has increased from internally generated funds. NonOpItNIRatio is 1% indicating that only a very small amount of net income is made up of unusual items. CosttoIncRatio is large at 64% showing overheads or costs of running the bank as a percentage of income generated before provisions. It is a measure of efficiency although if the lending margins in a particular country are very high then the ratio will improve as a result. It can be distorted by high net income from associates or volatile trading income. RecEarnPowRatio is also low at 2%.

[Insert Table 1]

[Insert Table 2]

[Insert Table 3]

Figure 1A shows the average ownership as the average yearly ratio of total assets of each ownership typed bank to total assets of all banks per each country.

5.2. Government guarantees, Ownership Structure & Liquidity Ratios

We first examine the main liquidity ratios of private, state and foreign owned commercial banks given the existence of government guarantees. We find that short and long term government guarantees to local banks as expected improves the liquidity conditions of private owned banks a great deal. In anticipation of this foreign banks also increase their liquid asset holdings since they do not receive such assistance as possibly as a form of insurance. However, surprisingly better

governed private owned banks hold less levels of liquid assets compared to foreign banks with better governance. This result seems to suggest that better governed private owned banks pursue profit maximisation motives more so compared to foreign banks by holding lower levels of liquid assets which has lower returns and higher opportunity costs. On one hand, countries with better governance might have more competition among local banks resulting in them holding less liquid assets. On the other hand, government guarantees increase monitoring and force banks into holding more liquid assets.

Therefore, better governance seems to be a double edged sword that reduces liquidity whence short term government guarantees increase the same. The argument that better governance increases the efficiency of government guarantees is contradicted by these results. A low liquid assets ratio indicates that a bank is managing its liquidity more profitably, but at the same time if the liquidity is too low there is a risk of cash deficit. A bank maintaining a high level of cash that is excess cash suffers from a problem of profit sub-optimization. More specifically the bank will be losing on profit which it could have otherwise made, had its cash management been better.

The reason being that excess cash earns a zero interest. In addition, if cash is invested in securities or commercial loans then the bank would earn a return which directly contributes to profitability. Further we should also note that the cash is funded by raising deposits which have a cost in the form of interest paid to depositors.

We specify regressions with the following dependent variables. Liq_Assets is constructed as the ratio of liquid assets to total assets and is a measure of overall bank soundness, ability to continue lending. InterBnkRatio is money lent to other banks divided by money borrowed from other banks. If this ratio is greater than 100 then it indicates the bank is the net placer rather than a borrower of funds in the market place, and therefore more liquid. NetLoansTARatio indicates what percentage of the assets of the bank are tied up. The higher this ratio the less liquid the bank will be. NetLoansSTFundRatio is loans to deposit ratio where high figures denote lower liquidity. LoansTotDepRatio is similar to the earlier ratio where the denominator is deposit and borrowings with the exception of capital instruments. LiqAsstsDepRatio is a deposit run off ratio and looks at what percentage of customer and short term funds could be met if they were withdrawn suddenly, the higher this percentage the more liquid the bank is and less vulnerable to a classic run on the bank. LiqAsstsTotDepRatio is similar to the earlier ratio but looks at the amount of liquid assets available to the borrower as well as the depositor.

The set of explanatory variables include the short term and long term government guarantee dummy variables, private and state owned dummy variables, and interactions of the government guarantee variables and ownership variables. The coefficient on the government guarantee variable informs about the effect of government guarantees on foreign banks, while the sum of this coefficient and the coefficient on the interaction of government guarantee and the state owned or private bank variable measures the effect on the dependent for state owned and private owned banks given government guarantees respectively. The sum of the ownership coefficient and the ownership and government guarantee interaction variable coefficient measures the effect on the dependent for state owned and private owned banks given government guarantees relative to foreign banks.

5.2.1. Short Term Government Guarantees

Table 4A reports regressions that examine the effect on Liquid assets for private, state owned and foreign banks given short term government guarantees.

According to Panel A regressions 1, 2 & 3, shows that given short term government guarantees, private owned banks increase liquidity levels by around 4.01% at 5% significance compared to foreign owned banks. However, interestingly enough, short term guarantees result in better governed private owned banks holding less liquid assets by around 0.13% at 1% significance relative to foreign owned banks. This can be explained by the fact that holding liquid assets yield a very low return and high opportunity cost compared to other investments and banks in general would therefore hold liquid assets only up to the point required for profit maximisation.

Panel B regressions 1, 2 & 3 shows somewhat surprisingly that private owned banks in general tend to be the net placer by around 21.3% at 10% significance rather than the borrower of funds in the market place compared to foreign banks. However, the result is the opposite for countries with better governance. In general, one would expect the state banks to be the net placer and foreign and private owned bans to be the net borrower. Panel C regressions 1, 2 & 3 shows that short term government guarantees actually reduce the percentage of private owned banks assets tied up by loans from around 4.45% at 1% significance, insinuating improved liquidity conditions compared to foreign banks. However, private banks with better governance tends to have more assets tied up in loans compared to foreign banks by around 0.16% at 5% significance compared to their foreign counterparts. This can again be explained by the fact that better governance leads to lower liquidity levels by following profit maximisation objectives.

In Table 4B, panel D regressions 1, 2 & 3 shows that short term government guarantees actually worsens liquidity levels by around 7.3% at 5% significance for private owned banks compared to foreign banks.

Panel E regressions 1, 2 & 3 shows that state banks have lower deposits and borrowings excluding capital instruments around 0.1% at 5% significance. Given short term government guarantees, private owned banks deposits and borrowing excluding capital decreases by around 0.61% at 5% significance. Again, given better governance the opposite result is true for private owned banks by around 0.22% at 5%. Therefore, better governance results in short term guarantees improving deposits and borrowings of private owned banks. Panel F regressions 1, 2 & 3 shows that private owned banks have less vulnerability to deposit run offs by around 2.7% at 1% significance given short term government guarantees. Given short term government guarantees the percentage of liquid assets available not just to depositors but borrowers as well increases by around 4% for private owned banks.

[Insert Table 4A]
[Insert Table 4B]

5.2.2 Long Term Government Guarantee

Table 5A reports regressions that examines the effect on Liquid assets for private, state owned and foreign banks given short term government guarantees. According to Panel A regressions 1, 2 & 3, shows that given long term government guarantees private owned banks increase liquidity levels by around 0.17% at 10% significance respectively. However, interestingly enough better governed private owned banks hold less liquid assets by around 0.1% at 1% significance compared to foreign banks. This can be explained by the fact that holding liquid assets yield a very low return and high opportunity cost compared to other investments and banks in general would therefore hold liquid assets only up to the point required for profit maximisation. Panel B regressions 1, 2 & 3 shows somewhat surprisingly, private owned banks in general tend to be the net placer rather than the borrower of funds in the market place by around 18.9% at 5% significance compared to foreign owned banks. In general, one would expect the state banks to be the net placer and foreign and private owned bans to be the net borrower.

Panel C regressions 1, 2 & 3 shows that long term government guarantees actually reduces the percentage of private owned banks assets tied up by loans from around 3.3% at 1% significance, insinuating improved liquidity conditions compared to foreign banks. However, private banks with better governance tends to have more assets tied up in loans compared to foreign banks by around 0.2% at 5% significance compared to foreign owned banks. This can again be explained by the fact that better governance leads to lower liquidity levels by following profit maximisation objectives.

In Table 5B, panel D regressions 1, 2 & 3 shows that long term government guarantees again decreases liquidity levels by around 5.54% at 5% significance for private owned banks by increasing volatile funding. Panel E regressions 1, 2 & 3 shows that state and private owned banks have higher deposits and borrowings excluding capital instruments around 3.7% at 5% significance compared to foreign banks. However, given better governance, long term government guarantees result in higher liquidity levels of around 0.2% at 10% significance for private owned banks. However, given long term guarantees to local banks, foreign banks increase their liquidity levels by around 2.42% at 10% significance. Panel F regressions 1, 2 & 3 shows that private owned banks in general have less vulnerability to deposit run offs by around 2.7% at 10% significance compared to foreign owned banks.

[Insert Table 5A]
[Insert Table 5B]

5.3 Capital

We first examine the main capital ratios of commercial banks with different ownership types given the existence of government guarantees. According to our regression results short term and long term government guarantees result in a capital increase for foreign owned banks. Given government assistance to local banks, foreign banks probably shore up their capital anticipating bad times ahead. We specify regressions with the following dependent variables. Tier1Ratio is a measure of tier 1 capital adequacy. That is shareholder funds plus perpetual non-cumulative preference shares as a percentage of risk weighted assets and off balance sheet risks measured under the Basel rules. CARRatio is the total capital adequacy ratio under the Basel rules. It measures Tier1+ Tier2 capital which includes subordinated debt, hybrid capital, loan loss reserves and the valuation reserves as a percentage of risk weighted assets and off balance sheet risks. EquityRatio measures the amount of protection afforded to the bank by the equity they invested in it. EquitySTFundingRatio measures the amount of permanent funding relative to short term potentially volatile funding. The higher this figure the better. EquityLiabRatio is simply another way of looking at the equity funding of the balance sheet and capital adequacy. CapFundTARatio is capital funds divided by total assets. CapFundNLRatio is capital funds divided by net loans. CapFundLiabRatio is capital funds divided by liabilities.

5.3.1. Short Term Government Guarantees

Table 6A Panel A reports regressions that examines the effect on capital for private, state owned and foreign banks given short term government guarantees. According to Panel A & B regressions 1, 2 & 3, shows that given short term government guarantees to local banks, tier 1 capital increases by around 0.6% to 0.7% at 5% significance. However, according to Panel C, interestingly enough better governed state owned banks hold more of an equity cushion to absorb loan book losses by around 2.6% at 10% significance compared to foreign owned banks. In Table 6B, panel D regressions 1, 2 & 3 shows that private banks, given better governance, have lower equity funding to absorb loan book losses by around 0.4% at 5% significance. Panel D & E regressions 1, 2 & 3 shows that given short term government guarantees to local banks improves capital levels significantly.

[Insert Table 6A]
[Insert Table 6B]

5.3.2 Long Term Government Guarantees

Table 7A and 7B reports regressions that examines the effect on capital for private, state owned and foreign banks given long term government guarantees. According to Panel B regressions 1, 2 & 3, shows that given long term government guarantees capital is increased by around 0.6% at 5% significance. Panel C regressions 1, 2 & 3 shows that state owned banks have lower equity to absorb losses given long term government guarantees by around 0.27% at 5% significance compared to foreign owned banks. Panel F regressions 1, 2 & 3 shows that, long term government guarantees to local banks improves capital levels of state owned banks by around 1.4% at 10% significance compared to foreign owned banks.

[Insert Table 7A]
[Insert Table 7B]

5.4 Asset Quality

We first examine the main liquidity ratios of commercial banks with different ownership types given the existence of government guarantees. Short term & long term government guarantees to local banks result in foreign banks having a poor quality loan portfolio. State banks loan portfolios improve probably due to better monitoring. Again supporting the results of Agarwal & Jayasuriya 2013 who shows that government guarantees to local banks result in foreign banks' lending to riskier borrowers to grab more market share etc. However, surprisingly enough given short and long term guarantees state owned banks charge considerably higher margins compared to foreign banks. We specify regressions with the following dependent variables. LoanLossRatio ratio indicates how much of the portfolio has been provided for but not charged off. It is a reserve for losses expressed as percentage of total loans. Given a similar charge-off policy the higher the ratio the poorer the quality of the loan portfolio will be. LLossProvisionRatio is the relationship between provisions in the profit and loss account and the interest income over the same period.

Ideally, this ratio should be as low as possible and in a well-run bank a high risk lending book should be reflected by higher interest margins. If the ratio deteriorates this means that risk is not being properly remunerated by margins. ImpLoansEquityRatio is impaired or problem loans as a percentage of the bank's equity. This indicates the weakness of the loan portfolio relative to the bank's capital. A high ratio would be cause for concern.

5.4.1. Short Term Government Guarantees

Table 8A Panel A reports regressions that examines the effect on asset quality for private, state owned and foreign banks given short term government guarantees. According to Panel A regressions 1, 2 & 3, shows that given short term government guarantees, private banks have loan portfolios with better quality, by around 0.25% at 5% significance compared to foreign owned banks. However, for countries with better governance, the quality of the loan portfolio for state banks reduces, given short term government guarantees by around 0.1% at 5% significance compared to foreign banks. Hence, we can deduce that in better governed countries the motives of the government of expanding credit to even unhealthy households are to some extent carried out by private banks

However, the opposite result is true for private owned banks. Panel B regressions 1, 2 & 3 shows that given short term government guarantees state owned banks charge higher margins of around 26% more compared to foreign banks at 5% significance. Table 8B, panel C regressions 1, 2 & 3 shows that state and private owned banks in countries with better governance has higher loan loss provisioning to impaired loans by around 12% and 19% at 5% and 1% significance. Although in general state banks have lower loan loss provisioning. Panel D regressions 1, 2 & 3 shows that private owned banks have better loan portfolios relative to bank capital of around 5.5% at 5% significance. However, given short term government guarantees to local banks the opposite effect is true for foreign banks.

[Insert Table 8A]
[Insert Table 8B]

5.4.2 Long Term Government Guarantees

Table 9A panel A reports regressions that examines the effect on asset quality for private, state owned and foreign banks given short term government guarantees. According to Panel A regressions 1, 2 & 3, shows that given long term government guarantees, state banks have better quality loan portfolios in better governed countries. That is, around 1.9% of the total portfolio has been provided for but not charged off at 1% significance given long term government guarantees. Panel B regressions 1, 2 & 3 shows that given long term government guarantees state owned banks charge higher margins of around 13% more compared to foreign banks at 5% significance. In Table 9B panel C regressions 1, 2 & 3 shows that state and private owned banks in countries with better governance has higher loan loss provisioning to impaired loans by around 12% and 18% at 5% and 1% significance. Panel D regressions 1, 2 & 3 shows that private owned banks in general have better loan portfolios relative to bank capital of around 3.6% at 5% significance.

[Insert Table 9A]
[Insert Table 9B]

5.5 Operations ratios

We first examine the main operations risk ratios of commercial banks with different ownership types given the existence of government guarantees. Given short term and long term government guarantees funding depletes for private and state owned banks. Given short term government guarantees state owned banks ROAA increases by 0.1%. Given government guarantees to local banks the ROAE decreases to foreign bank shareholders considerably. We specify regressions with the following dependent variables. NetIntrstMarginRatio is the net interest income expressed as a percentage of earning assets. The higher this figure, cheaper the funding or higher the margin the bank is commanding. Higher margins and profitability are desirable as long as the asset quality is being maintained. NetIntrstAsstsRatio is the same as the earlier ratio but expressed as a percentage of the total balance sheet. OpIncAsstsRatio indicates to what extent fees and other income represent a greater percentage of earnings of the bank. As long as this is not volatile trading income it can be seen as a low risk form of income. The higher this figure, the better. NonInrstAsstsRatio shows non-interest expenses or overheads plus provisions giving a measure of the cost side of the banks performance relative to the assets invested. ROAA is the most important single ratio in comparing the efficiency and operational performance of banks as it looks at the returns generated from the assets financed by the bank.

ROAE is a measure of the return on shareholder funds. Obviously in this case, higher the figure the better, however, one should be careful in putting too much weight on this ratio as it may be at the expense of an over leveraged balance sheet. DivPORatio is a measure of the amount of post-tax profits paid out to shareholders. In general, higher the ratio the better but not if it's at the cost of restricting reinvestment in the bank and its ability to grow its business. NonOpItNIRatio denotes what percentage of total income consists of unusual items. CosttoIncRatio is one of the most famous ratios at present and measures the overheads or costs of running the bank, the major element of which is normally salaries, as a percentage of income generated before provisions. It is a measure of efficiency although if the lending margins in a particular country are very high then the ratio will improve as a result. It can be distorted by high net income from associates or volatile trading income.

5.5.1. Short Term Government Guarantees

Table 10A Panel A & B reports a regression that examines the effect on operations ratios for private, state owned and foreign banks given short term government guarantees. According to Panel A regressions 1, 2 & 3, shows that given short term government guarantees state and private banks funding access depletes and they require lower margins of around 0.9%, 0.7% and 0.3% and 0.2% at 1% and 5% significance. Panel B regressions 1, 2 & 3 shows that private and state owned banks in general have a higher amount of fees and other income of around 0.24% and 0.54% at 5% and 10% significance as a percentage of its earnings. However, the opposite result is true for foreign banks with around 0.25% at 10% significance. Panel C shows that short term government guarantees result in an increase fees and other income for private owned banks by around 0.12% at 5% significance compared to foreign banks. In Table 10B, panel D regressions 1, 2 & 3 shows that private owned banks in general have higher ROAA of around 0.1% at 10% significance. This increases by around 0.98% at 10% significance for state owned banks given short term government guarantees compared to foreign owned banks. Panel F regressions 1, 2 & 3 shows that given short term government guarantees, in countries with better governance, private owned banks dividend pay-outs to shareholders decrease by around 0.2% at 10% significance. In Table 10C panel regressions 1, 2 & 3 shows that given short term government guarantees, the percentage unusual items contained in net income for private owned banks increases by around 17% at 5% significance compared to foreign owned banks. The opposite result is true for foreign owned banks given government assistance to local banks and the decrement in unusual items is around 16% at 10% significance. The results for the cost to income ratio in Panel H are marginally insignificant.

[Insert Table 10A]
[Insert Table 10B]
[Insert Table 10C]

5.5.2 Long Term Government Guarantees

Table 11A panel A & B reports regressions that examines the effect on operations ratios for private, state owned and foreign banks given long term government guarantees. According to Panel A regressions 1, 2 & 3, long term government guarantees state banks funding access depletes and they require lower margins of around 0.3% at 5% significance compared to foreign banks. In panel B, long term government guarantees result in a decrease in net income as a percentage of the total balance sheet for state banks by around 0.4% at 10% significance compared to foreign banks.

Panel C regressions 1, 2 & 3 shows that private owned banks in general have a higher amount of fees and other income of around 1.4% at 10% significance as a percentage of its earnings compared to foreign owned banks. In Table 11B, panel D regressions 1, 2 & 3 shows that given long term government guarantees to local banks, foreign banks ROAA reduces by around 0.5% at 5% significance. Panel E regressions 1, 2 & 3 shows that given short term government guarantees to local banks return on equity for shareholders in foreign owned banks reduces by around 4.38% at 1% significance. Panel F regressions 1, 2 & 3 shows that given long term government guarantees, private owned banks dividend pay-outs to shareholders decrease by around 13.6% at 5% significance.

In panel G regressions 1, 2 & 3 shows that given long term government guarantees to local banks, the percentage unusual items contained in net income for foreign owned banks increases by round 13% at 10% significance. Panel G regressions 1, 2 & 3 shows that given long term guarantees to local banks the cost to income increases by around 2% at 5% significance.

[Insert Table 11A]

[Insert Table 11B]

[Insert Table 11C]

6. Robustness

We perform additional checks to determine whether a) financial variables other than those included in our specification are important by adding more controls,

b) conduct sub sample analysis and different heterogeneity tests based on Crisis periods, Income, Supervisory regimes and Geography, c) different econometric specifications such as ols, different fixed effects (interactions) and system gmm, d) Consider other ratios as dependent variables to measure liquidity, capital, asset quality and operations risk. Despite the potential for structural breaks our results are quantitatively similar across subsamples.

We add the following additional variables as dependents. CapFundSTFundRatio is capital funds divided by short term funding. LLossNonPerRatio ratio relates loan loss reserves to non-performing or impaired loans. The higher this ratio, the better provided the bank is and the more comfortable we will feel about the assets quality. ImpairedLoansRatio is a measure of the amount of total loans which are doubtful. The lower this figure, better the assets quality.

GrossLoansRatio is a measure of the amount of the total loans which are doubtful. The lower this figure, the better the assets quality. NetIncLoanLoss ratio similarly measures charge offs but against income generated in the year. The lower this figure the better, other things being equal. UnResImpLoansEqR is the impaired or problem loans not covered by reserves as a percentage of capital. Also known as the capital impairment ratio. It shows what percentage of the bank's capital would be written off if the reserves or accumulated provisions were 100% of impaired loans and how vulnerable a bank's capital ratio would be as a result. IncNetofDist ratio is effectively the return on equity after deducting the dividend from the returns and it shows by what percentage the equity has increased from internally generated funds. RecEarnPowRatio ratio is a measure of before tax profits adding back provisions for bad debts as a percentage of total assets. Effectively this is a return on assets performance measurement without deducting provisions. We run separate regressions introducing our ownership variables one by one along with the control variables. We add more governance indicators and many more interaction terms between GDP% and ownership, government guarantees etc. and our results persist.

Fourth, we use the cut-off levels of 10% and 15% when defining ownership types and our results hold for the 10% cut-off and in most part for the 15% cut-off. Fifth, we also perform a number of additional robustness checks that are specification related. Other control variables specially related to bank competition and bank concentration are added and other controls to account for business differences are introduced in the estimations such as the market share of the top 3 banks and the ratio of net non-interest income to net operating income. Finally, as a straightforward test of endogeneity we run all our fixed effects panel regressions without the lags of the dependent variable and our results or the significance of the coefficients do not differ in most part.

6. Caveats

6.1 Caveats

The fixed effects panel data estimators allows for heterogeneity across panel units, and produce consistent and efficient estimators as long as the unobserved time invariant individual effects are not strictly orthogonal to the repressors in the regression. However, if the observed association between the treatment dummy variable (government guarantees) and the dependent variable (the early warning ratios) is driven by other incidents occurring at the time of treatment, they could lead to biased results. Aware of the potential endogeneity bias, we show that banks' unobservable characteristics likely do not influence our results. Specifically, we exploit the insight from Altonji, Elder, and Taber (2005) to demonstrate that selection from unobservables would have to be much stronger than selection from observables to explain away the ownership and the government guarantee effect. We consider four econometric techniques. The first two methodologies simple OLS and country-specific fixed effects have the advantage of well-understood asymptotic theory, but their restrictions on the correlation structure of the disturbances may not be appropriate in dynamic panel settings.

A third method for estimating dynamic panels is the difference GMM method of Arellano and Bond (1991) (AB) which uses first differences and lagged series to instrument for predetermined and endogenous variables. When the series are highly autoregressive and the number of time observations is small, the Arellano- Bond estimator tends to have large finite sample bias and poor precision in simulation studies (Blundell et al., 2000). In our final method we use a system GMM method developed by Arellano and Bover (1995) and Blundell and Bond (1998) that addresses these concerns.

7. Policy Implications

Banks are at different stages of balance sheet repair and operate in different economic and regulatory environments resulting in a diverse global bank capitalization. The primary tasks would be to improve the credibility, transparency, and strength of balance sheets, while avoiding undue pressures from un-co- ordinated national and international regulatory initiatives and uncertainty. More efforts needed to assess how market developments and regulatory initiatives affect bank business models may influence the cost and provision of market liquidity. Increased monitoring regarding trading liquidity pressures will be required as financial markets move to a regime with higher interest rates and volatility. These policy challenges should be properly managed, and reforms should be implemented in order for a smooth transition toward greater banking stability. Despite recent efforts to assess asset quality and boost provisions, our study suggests that local banks still need to further increase provisioning to address the potential deterioration of asset quality on their corporate loan books, which could absorb a large portion of future bank profits. Recently increased capital provides additional loss absorption capacity, if needed. Further measures such as cuts in operating costs and reductions in dividends, will also help improve profitability and/or boost capital.

However, as mentioned previously, provisioning and/or capital needs can only be ascertained precisely through a bank by bank asset quality review that looks into individual bank loan portfolios and takes into account provisions and capital held by each bank. The systemic liquidity shocks during the global financial crisis promoted globally agreed upon quantitative liquidity regulations for the first time. These regulations aim to reduce liquidity risks arising from maturity mismatches and short term funding sources and to provide stronger incentive for banks to shift funding mixes to include more insured deposits (from individuals and small and medium enterprises) and more longer term funding (secured or unsecured), which have been shown to be relatively more resilient during the recent crisis. Global systemically important banks are subject to surcharges, given their critical relevance for financial stability. With no change in assets, higher capital buffers should reduce the probability of default, reducing the costs of debt regardless of the remaining funding structure. Basel III also raises the loss absorbing capacity of debt that qualifies as additional Tier1 and Tier 2 capital.

Table A.1 Variable Description

Variable	Source	Description
1. Liquidity variables		
Liq_Assets		The ratio of liquid assets to total assets and is a measure of overall bank soundness, ability to continue lending.
InterBnkRatio	BankScope	Money lent to other banks divided by money borrowed from other banks. If this ratio is greater than 100 then it indicates the bank is net placer rather than a borrower of funds in the market place, and therefore more liquid.
NetLoansTARatio	BankScope	indicates what percentage of the assets of the bank are tied up. The higher this ratio the less liquid the bank will be.
NetLoansSTFundRatio	BankScope	loans to deposit ratio where high figures denote lower liquidity
LoansTotDepRatio	BankScope	similar to the earlier ratio where the denominator is deposit and borrowings with the exception of capital instruments
LiqAsstsDepRatio	BankScope	is a deposit run off ratio and looks at what percentage of customer and short term funds could be met if they were withdrawn suddenly, the higher this percentage the more liquid the bank is and less vulnerable to a classic run on the bank.
LiqAsstsTotDepRatio	BankScope	similar to the earlier ratio but looks at the amount of liquid assets available to the borrower as well as the depositor.
2. Capital		
Tier1Ratio	BankScope	is a measure of tier 1 capital adequacy. That is shareholder funds plus perpetual non-cumulative preference shares as a percentage of risk weighted assets and off balance sheet risks measured under the Basel rules.
CARRatio	BankScope	is the total capital adequacy ratio under the Basel rules. It measures Tier1+ Tier2 capital which includes subordinated debt, hybrid capital, loan loss reserves and the valuation reserves as a percentage of risk weighted assets and off balance sheet risks.
EquityRatio	BankScope	measures the amount of protection afforded to the bank by the equity they invested in it.
EquitySTFundingRatio	BankScope	measures the amount of permanent funding relative to short term potentially volatile funding. The higher this figure the better.
EquityLiabRatio	BankScope	is simply another way of looking at the equity funding of the balance sheet and is another of looking at capital adequacy.
CapFundTARatio	BankScope	is capital funds divided by total assets.
CapFundNLRatio	BankScope	is capital funds divided by net loans.
CapFundLiabRatio	BankScope	is capital funds divided by liabilities
3. Asset Quality		
LoanLossRatio	BankScope	indicates how much of the portfolio has been provided for but not charged off. It is a reserve for losses expressed as percentage of total loans. Given a similar charge-off policy the higher the ratio the poorer the quality of the loan portfolio will be.
LLossProvisionRatio	BankScope	is the relationship between provisions in the profit and loss account and the interest income over the same period. Ideally this ratios should be as low as possible and in a well-run bank if the lending book is higher risk this should be reflected by higher interest margins. If the ratio deteriorates this means that risk is not being properly remunerated by margins.

ImpLoansEquityRatio	BankScope	is impaired or problem loans as a percentage of the bank's equity. This indicates the weakness of the loan portfolio relative to the bank's capital. If this high percentage this would be cause for concern.
4. Operations Risk		
NetIntrstMarginRatio	BankScope	is the net interest income expressed as a percentage of earning assets. The higher this figure the cheaper the funding or the higher the margin the bank is commanding. Higher margins and profitability are desirable as long as the asset quality is being maintained.
NetIntrstAsstsRatio	BankScope	is the same as the earlier ratio but expressed as a percentage of the total balance sheet.
OpIncAsstsRatio	BankScope	indicates to what extent fees another income represent a greater percentage of earnings of the bank. As long as this is not volatile trading income it can be seen as a lower risk form of income. The higher this figure is the better.
NonInrstAsstsRatio	BankScope	shows non-interest expenses or overheads plus provisions give a measure of the cost side of the banks performance relative to the assets invested.
ROAA	BankScope	is the most important single ratio in comparing the efficiency and operational performance of banks as it looks at the returns generated from the assets financed by the bank.
ROAE	BankScope	is a measure of the return on shareholder funds. Obviously here the higher the figure the better but one should be careful in putting too much weight on this ratio as it may be at the expense of an over leveraged balance sheet.
DivPORatio	BankScope	is a measure of the amount of post-tax profits paid out to shareholders. In general the higher the ratio the better but not if it's at the cost of restricting reinvestment in the bank and its ability to grow its business.
NonOpItNIRatio	BankScope	denotes what percentage of total income consists of unusual items.
CosttoIncRatio	BankScope	is one of the most focused on ratios currently and measures the overheads or costs of running the bank,
5. Ownership Variables		
Foreign_Owned	BankScope	Foreign_Owned is a dummy variable equal to 1 if the primary shareholder is a foreign company.
State_Owned	BankScope	State_Owned is a dummy variable equal to 1 if the primary shareholder is the government.
Private_Owned	BankScope	Private_Owned if the primary shareholder is a local company but not the government.
Ownership Concentration	BankScope	Ownership Concentration is the percentage of shares owned by the primary shareholder(more than 20% of shares).
Secondary Ownership Concentration	BankScope	Secondary Ownership Concentration is the percentage of shares owned by secondary shareholders.
6. Govt Guarantee		
Shortterm Guarantees	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government provided liquidity support for any banks in a particular year. Is 0 for foreign owned banks.
Longterm Guarantee	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government provided blanket guarantees or capital injections for any banks in a particular year. Is 0 for foreign owned banks.
blanket guarantee	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government provided blanket guarantees for any banks in a particular year. Is 0 for foreign owned banks.
recapitalization	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government provided capital injections for any banks in a particular year. Is 0 for foreign owned banks.
depositinsurance	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government has a deposit insurance scheme.
impgurantee	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government has an implicit guarantee.

permfund	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government has a permanent fund for bailing out banks.
intervene	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government intervenes when banks are in distress.
bailedout	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if the government has bailed out any banks before.
bankfail	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is the number of banks that has failed in the past.
nodeppaidout	Barth et al 2007, Laeven and Valencia (2010), Central Banks, Bank Websites	Is a dummy variable equal to 1 if there was deposit insurance and the government didn't pay up in case of failure.
7. Controls Variables		
ZP	Goyeau & Tarazi 1992	ZP=ZP1 + ZP2 =Average ROA /SDROA +(TotalEquities / TotalAssets)/SDROA.
Deposits/Liabilities	Bertay et al 2012 & Ianotta et al 2009	DepositsOverLiabilities is Total deposits over total Liabilities.
profit	Bertay et al 2012 & Ianotta et al 2009	Profit is the bank's ratio of total Operating Income to total earnings assets.
Crisis Dummy	Bertay et al 2012 & Ianotta et al 2009	Crisisd is a dummy variable equal to 1 if the country is in a banking crisis.
8. Governance Indicators		
Governance	WGI	WGI_Estimate is an index for Government Effectiveness.
wgrf_estimate	WGI	WGRF_Estimate is an index for Rule of Law.
wgpsnv_estimate	WGI	WGPSNV_Estimate is an index for Political Stability and Absence of Violence.
wgrq_estimate	WGI	WGRQ_Estimate is an index for Regulatory Quality.
wgcc_estimate	WGI	WGCC_Estimate is an index for Control of Corruption.
9. Macro Variables		
GDP growth %	WDI	GDPperCapita is the GDP per capita (constant 2000 US$).
GDP per capita	WDI	GDPperCapitaGrowth is the annualised growth rate of GDP per capita.
Inflation	WDI	Inflation Rate of change in GDP deflator in percentages