

# Corporate Governance, Ownership and Bank Performance in Emerging Markets: Evidence from Russia and Ukraine.\*

Inessa Love  
Development Research Group  
The World Bank

Andrei Rachinsky  
Center for Economic and Financial Research  
at New Economic School

## Abstract:

This paper presents evidence on the relationship between ownership, corporate governance and operating performance in banks using a sample of 107 banks in Russia and 50 banks in Ukraine surveyed by International Financial Corporation in 2003-2006. We find some significant, but economically unimportant relationship between governance and contemporaneous operating performance and an even weaker link with the subsequent performance. We conclude that aside from the popularity of the governance in public discussion, corporate governance has at best a second-order effect on operating performance in Russian and Ukrainian banks. We also find that in both countries banks with more concentrated ownership have lower rankings on corporate governance.

JEL codes: G3, G21

Keywords: corporate governance, banking, ownership, emerging markets

---

\* We thank Vanessa Moreira da Silva for excellent research assistance, IFC representatives (Patrick Luternauer in Moscow office and Desmond O'Maonaigh in Kiev office) for kindly allowing us to use IFC bank survey results, and Mobile for making the Russian financial data available to us. We are also grateful to Bernard Black, Bob Cull, Leora Klapper and Martin Raiser for useful discussions. All errors are our own. The views expressed in this paper do not necessarily represent those of the World Bank, its Executive Directors, or the countries they represent. Corresponding author: Inessa Love, [ilove@worldbank.org](mailto:ilove@worldbank.org), The World Bank, 1818 H St NW Washington DC, 20433.

## **Introduction**

The banking sector in Russia and Ukraine has experienced rapid growth in recent years, with total assets and equity more than doubling during the past 4 years between 2003 and 2006 (see Figure 1). Amidst this rapid growth, the issue of corporate governance has received considerable attention among bankers and policymakers alike.

Research has demonstrated that financial institutions are critically important for growth and efficient capital allocation (see Levine (2005)). In the rapidly growing economies of Russia and Ukraine, as in many other emerging markets, the banks are set to play a crucial role. It is, therefore, important to understand the key ingredients for maximizing the performance of banks and their role in the growing economies. While the corporate governance is deemed an important ingredient of bank operation, there is very little empirical evidence to support the emphasis currently placed by market participants and policy makers on the issue of corporate governance. The paper attempts to fill in this gap.

This paper explores the link between ownership, corporate governance and bank performance using proprietary bank surveys of 50 banks in Ukraine surveyed in 2004, and 107 banks in Russia (50 surveyed in 2003 and 81 in 2006). The surveys were conducted by the local offices of the International Finance Corporation. The questionnaires contained detailed questions about bank's corporate governance and ownership (see IFC (2004a), IFC (2004b), IFC (2007)). We supplemented the governance data with financial data collected from Russia and Ukraine reporting agencies.

Russia and Ukraine present interesting case studies of banking sector and the issue of corporate governance in particular. Most of the banks in these countries are de-novo banks, i.e. those that entered the markets after the fall of the communist empire, while the rest of the banks have changed the ownership from public to private in the last two decades. A few of the remaining state owned banks have recently been active in transforming their ownership structure and tapping the private financial markets with equity share issuance (eg. Sberbank and VTB in Russia). The ownership is highly

concentrated in both countries, and almost all banks are controlled by a small group of majority shareholders, often just one individual private owner. Foreign ownership is increasing rapidly in both countries.

An important element in corporate governance research is the legal enforcement of the laws on the books and provisions of the companies' corporate charters and by-laws. Even though the rule of law has improved from its post-communist low, it is still rather weak in both Russia and the Ukraine. With the importance of corporate governance issues given in the media and public discussions, many enterprises and banks go beyond of what is required by law and adopt stricter corporate governance provisions suggested by national and international best practices.

We find that in both countries banks with more concentrated ownership have lower rankings on corporate governance. In other words, banks with more pronounced presence of minority shareholders appear to have higher rankings on corporate governance. It is not clear whether this relationship is due to the fact that banks with better corporate governance are able to attract more minority shareholders, or whether banks with more minority shareholders are more likely to adopt better governance practices to satisfy minority shareholders' demands. This is an important question to address in subsequent research.

Our main focus is on the relationship between governance and performance. There are several reasons to expect that better governed banks may have more efficient operations and better performance. First, governance may reduce the incidence and amounts of related-parties transactions and other "self-dealing" practices. Since such transactions are usually sub-optimal from the efficiency point of view, the reduction in such transactions should translate into improved performance. Second, better governed banks may have lower cost of capital, especially if they employ subordinated debt financing. Third, better governance may translate into more efficient and streamlined operations, as the supervisory board and management functions are separated and modernized.

Most of the existing work on the relationship between governance and performance focuses on publicly traded firms and measures performance as market values. Not much is known on the potential influences of governance on operating performance, especially in closely held private banks. With high ownership concentration, the controlling shareholders are effectively in charge of running the bank and there is unlikely to be any managerial agency costs. However, many banks in our sample do have minority shareholders with less than 2% of ownership, so it's these shareholders that are likely to be affected by the inefficiencies and "self-dealing" by controlling shareholders.

We find some evidence of a positive contemporaneous relationship between governance and performance in both countries, but it's stronger in the Ukraine than it is in Russia. For Ukraine we find that higher rankings on corporate governance index are associated with higher contemporaneous return on assets, return on equity and net interest income. For Russia we only find an association with return on assets and lower non-performing loans.

To reduce the endogeneity problem (i.e. better performing banks may choose to have better governance), we also evaluate the relationship between governance and subsequent performance (the year after the governance was measured). For Ukraine we find a positive but weaker relationship between governance and subsequent performance; however we don't find any relationship between governance and subsequent performance in Russia.

The economic magnitude of the relationship is small in both countries. For example, one standard deviation increase in corporate governance index results in about 0.3%-0.4% increase in ROA, which is around 20% of one standard deviation in ROA. The magnitude is slightly higher for ROE (significant for Ukraine only), but even then one standard deviation change in governance results in about one-third of one standard deviation change in ROE.

Aside from the potentially poor data quality and a small sample, our results are not strong enough to suggest a robust relationship between governance and performance. Based on our results it appears that aside from the popularity of the corporate governance issues in public discussion, it has at best a second-order effect on performance in Russian and Ukrainian banks.

Our paper adds to the broader literature on governance and performance, with a particular focus on banking institutions. A significant research has focused on the effect of ownership on performance, with a number of studies examining bank privatizations (see for example a recent survey in Clarke, Cull and Shirley (2005)). A separate strand of literature examines foreign ownership and foreign entry and their impact on performance (see Clarke, Cull, Martinez Peria and Sanchez, (2003)). For a discussion of specifics of corporate governance in financial institutions see Levine (2004) and Macey and O'Hara (2003). A survey of recent empirical literature on the topic of governance in banking with specific focus on Russia and Eastern Europe can be found in Vernikov (2007).

A recent paper by Spong and Sullivan (2007) examines the relationship between bank ownership and several governance aspects in US Midwest community banks. They focus on the owner-manager agency problems and find that increasing ownership stakes for hired managers and board improves bank performance. To the best of our knowledge, our paper is the first example of relating corporate governance (measured by an index that focuses on specific corporate governance provisions) to performance in banking institutions.

A separate strand of literature examines relationship between corporate governance and performance in publicly traded non-financial companies in emerging markets (see for example Klapper and Love (2004) or Durnev and Kim (2005)). A recent example of such research on Russia is Black, Love and Rachinsky (2006). They found strong and robust relationship between governance and market values. However, there are several important differences between the current paper and previous research: our paper looks at banks rather than industrial companies, most of the banks in our sample are private rather

than publicly held, and we look at operating performance rather than market performance, measured by Tobin Q. The link between governance and operating performance is not as obvious as the link with the market performance. In the later case, the stock price is determined by the marginal shareholder, who is likely to be a minority shareholder and rely heavily on minority shareholder protection. Thus the stock price, and hence the market capitalization, should directly reflect governance provisions that protect minority shareholder rights.

In the case of operating performance, the link is not as obvious. However, as we discussed above, better governance mechanisms may reduce the likelihood of inefficient resource allocation (eg. lending to directed parties, consumption of perquisites, etc.) and therefore increase operating efficiency. These gains should be reflected in better operating performance.

The rest of the paper is organized as follows: Section 1 describes our data, Section 2 presents our results, Section 3 lists a number of caveats and Section 4 concludes.

## **1. Data**

### **1.1. Corporate Governance Data**

We use two proprietary surveys completed by the International Finance Corporation, IFC, of 50 banks in Ukraine surveyed in 2004, and 107 banks in Russia (50 surveyed in 2003 and 81 in 2006).<sup>1</sup> The surveys are described and the data analyzed in detail in the original publications by IFC (see IFC 2004a, 2004b, 2007). For Russia our sample of 81 banks surveyed in 2006 represents 7% of all registered banks and 20% of total assets in the banking sector as of September 2006 (IFC, 2007). For Ukraine, our sample of 50 banks represents 32% of all banks, 41% of total capital and 45% of total assets in the banking sector of Ukraine as of April 2004 (see IFC, 2004b).

---

<sup>1</sup> We found that 24 banks were present in both waves of the survey in Russia.

The surveys contain very detailed questions about the bank’s corporate governance practices. In selecting questions we relied on the OECD corporate governance principles and commonly known best practices to choose the questions most relevant and least ambiguous with the direction of their effect on corporate governance. We selected questions for which there was some variation in our sample (specifically, we did not include questions for which over 90% of the banks answer in the same way).<sup>2</sup> Finally, we limited our list to questions that were present in both waves of the survey in Russia, which allows us to compare the evolution of governance in Russia over time. Fortunately, most of the questions we selected for Russia, with the exception of 3 questions, were also available in the survey in Ukraine.

Our final list contains 26 questions broken down into 5 general categories:

- I. Commitment to Corporate Governance
- II. Shareholder Rights
- III. Supervisory Bodies
- IV. Audit
- V. Transparency and Disclosure

The exact questions for each of these categories are given in Table 1. The variables are coded as dummies, where one indicates better governance. For each of the 5 categories, we created one index that is a sum of questions in each category. The overall index of corporate governance is a sum of all 26 questions. For ease of inference we standardized our governance index to have zero mean and standard deviation of one for use in regressions.

Figure 2 presents histograms for our corporate governance indices in Russia and Ukraine. The distributions seem fairly “normal” with wide variation within each country and no visible outliers. In both countries the minimum value is about 6.5; the maximum is 15.5 in Ukraine and 19 in Russia (this difference is due to 3 fewer questions available in

---

<sup>2</sup> For example all banks conduct the annual general meeting of the shareholders and almost all banks provide information about the agenda of the meeting, annual reports and the time and location of the meeting prior to the AGM (because these are required by law)

Ukrainian survey). Looking at individual governance categories, presented in Table 1, Russian Banks score higher than Ukrainian for most of the individual questions in all categories except the audit (in which it is about the same). It appears that corporate governance is somewhat better in Russian Banks than it is in Ukrainian Banks.

## **1.2. Ownership variables**

As the main measure of ownership concentration we use the natural logarithm of the number of shareholders. We also create an estimated Herfindahl index of ownership concentration, using the information on percent ownership held in different ownership categories.<sup>3</sup>

In addition, we create two dummy variables – Small owners, equal to one if there are any owners with less than 15% shares and Large owners, equal to one if there are any owners with more than 15% ownership share. Clearly, they both cannot be equal to zero (a bank must have either small or large shareholder). In our sample about 70% of banks in both countries have both – large and small shareholders and the rest of banks have either only large shareholders (16% of the sample in Ukraine and about 9% in Russia) or only small shareholders (16% in Ukraine and 21% in Russia).<sup>4</sup>

Ownership concentration is very similar in both countries, and it's marginally more concentrated in Ukraine – the average number of shareholders is 50 in Russia and 47 in Ukraine, the average Herfindahl index is 0.32 in Russia and 0.28 in Ukraine.

---

<sup>3</sup> The survey included information on 8 ownership categories: 75-100, 50-74.0, 25-49.9, 15-24.9, 10-14.9, 5-9.9, 2-4.9 and less than 2. We assumed that everyone in each ownership category had the similar stakes.

<sup>4</sup> The 15% cutoff point was empirically chosen. In the first round of regressions we used a number of dummies for each of the ownership categories listed in footnote 3. We found that three “small shareholder” dummies – those with less than 2% and those between 2% and 15% stakes behaved similarly in regressions and had coefficients not significantly different from each other. We observed similar patterns for dummies for “large owners” groups. Therefore we decided to combine them into two broader groups to save on degrees of freedom.

Despite such high measures of concentration, our measures are likely to underestimate true ownership concentration because in most cases the ultimate owners are unknown.<sup>5</sup>

### **1.3. Financial Variables**

We collected financial data for Russia from the financial information agency Mobile. The data are available quarterly since 2002 and the latest data point is October 2006.<sup>6</sup> Mobile collects the data from financial reports submitted to the Central Bank of Russia. We collected financial data for Ukraine from the NBU – National Bank of Ukraine - website. The data are available annually, for 2003-2006. Note that since early 2004 both Russia and Ukraine banks are required to report their financial results following the IAS – International Accounting Standards.

We constructed a number of traditional performance variables and additional control variables available in our data. They are described in Table 2.<sup>7</sup>

To eliminate influential observations, we removed extreme values outside of 1% and 99% range (for variables bounded by zero we only eliminated top 1% of observations). We made an exception for growth rates (of assets and capital) as those distributions appeared to have more influential observations and eliminated 5% on each side for these two variables.

### **1.4. Control variables**

---

<sup>5</sup> Unfortunately, the survey question about the number of shareholder in each of the ownership category did not specify whether the question referred to ultimate owners or to immediate owners. But even if it did, it's unlikely that such information would be disclosed as such information is very hard to come by in Russia and Ukraine.

<sup>6</sup> When using 2006 data we adjusted the flow variables, like sales, income, expenses, etc. by multiplying by 4/3 to annualize the data which are reported for the 3 quarters of the year.

<sup>7</sup> We have also experimented with the Profit Efficiency Rank, constructed following the methodology of Berger and Mester (1997) and Berger et al.(2005). These estimates were only available for Russia, as in Ukraine we did not have enough data for input choices to estimate the production function. The relationship of the PER and governance was not significant.

From the corporate governance survey we selected several additional variables that may capture the differences in governance and performance. We control for state ownership (as an indicator variable) in the Russian sample because state ownership plays a prominent role in the Russian Banking sector. In our sample 34% of all banks have at least some state ownership. There are no banks with government ownership in our Ukrainian sample.

We also control for foreign ownership, as foreign owners may instill better governance norms and also have more efficient operations and performance. Foreign ownership is rapidly growing in both countries. While in our Russia sample foreign owned banks represent 13% of the sample (note that this is across two rounds of the survey), in Ukraine in 2004 only 6% of our sample banks have any foreign owners (see Table 2). Since 2004 the proportion of foreign ownership has grown to about 25% of total banking sector in Ukraine.

Bank size may be another important element of performance as banks may enjoy economies of scale in both – adoption of corporate governance norms and financial operations. We measure size with the (logarithm) of total assets. Finally, we control for geographic location of the bank with the “Central Region” dummy, which includes Moscow in Russia and Kiev in Ukraine.

## **1.5. Descriptive Statistics**

Table 3 reports descriptive statistics on financial performance measures and control variables for Russia (Panel A) and Ukraine (panel B). This table reports financial ratios for the years 2003-2006, all years that are used in the analysis, even though different regressions will include different years (as described in the next section).

We observe that Banks in our sample are somewhat higher performing in Russia, than in Ukraine – the average/median ROA is 2.4%/2% in Russia and 1.5%/1.1% in Ukraine. Similarly ROE and NII (net interest income) are slightly higher in Russia. On the other

side, the capital ratios appear to be higher in Ukraine – the average is 0.2 vs. 0.16 in Russia. The growth rates are slightly higher in Ukraine.

Figure 3 presents simple scatter plots of the governance index and the number of shareholders, with a fitted bi-variate regression line. In both countries there is a visible positive relationship, which is somewhat stronger in Ukraine.

Table 4 presents correlations between corporate governance index and other ownership variables (Panel A for Russia and B for Ukraine). Correlations with ownership confirm the positive relationship between ownership and number of shareholders and negative relationship with the Herfindahl index of ownership concentration (which is inversely related to the number of shareholders).

Interestingly, we find that in Ukraine banks with small owners have better governance than banks without small owners (while the Large owners dummy is not significant). In Russia the banks with large owners do worse than banks without the large owners (while the small owners dummy is not significant). In both countries higher ownership concentration is negatively related to governance, but it is driven by somewhat different categories of bank owners – small ones in Ukraine and large ones in Russia.

Table 4 also presents the correlations between corporate governance and financial performance variables (panel C for Russia and D for Ukraine). The correlations between governance and performance variables are low and mostly insignificant. In Russia ROA and ROE are significantly positively correlated with governance, while reserves are negatively correlated. In Ukraine the only significant correlation is with net interest income.

## **2. Regression Results**

### **2.1. Determinants of Corporate Governance**

We start with analysis of our corporate governance index in Table 5. Panel A reports results for the Russian sample and Panel B for Ukrainian sample. We find that in both countries ownership concentration is significantly related to governance. Our preferred measure of ownership concentration is (log of) the number of shareholders. We also use the Herfindahl index of ownership concentration (which is inversely related to the number of shareholders) and two dummies – small owner dummy and large owner dummy.<sup>8</sup> In both countries number of shareholders is positively related to governance index, but in Ukraine the relationship is more significant and is almost three times larger in magnitude. Similarly for the Herfindahl index we find that it's negatively related to governance and, again, the significance and magnitude are stronger in Ukraine. For the large and small owner dummies we find some differences: in Russia we find that banks with large owner do worse than banks without large ownership, and in Ukraine we find that banks with small owners do better than banks without small ownership. However the cumulative effect is the same in both countries (i.e. less concentration is linked to better governance).

We also find that in Russia governance has improved over the past 3 years – the dummy for year 2006 is significant and large – the governance has improved by 0.6 of one standard deviation. (Note that the governance index is standardized to have mean zero and standard deviation of one). This is consistent with the conclusion made in the IFC report that compared detailed survey responses for two years (see IFC, 2007).

Only in Ukraine we find some evidence that prior performance (i.e. a year before the governance is measured) is positively linked with subsequent governance. However, it's only significant for ROA (at 5%), while for ROE the significance level is within 15%. In Russia the coefficients are positive, but not significant.

---

<sup>8</sup> We have also experimented with different ownership dummies, including a dummy for major shareholder (i.e. an owner with over 50% stake), large block-holders (shares between 15-50%), small block-holders (shares between 2-15%) and minority shareholders (shares under 2%). We found that large block-holder dummy was insignificantly different from major shareholder dummy (and both are now included in the large owner dummy) and that small block-holder was insignificantly different from minority shareholder dummy (both are now included in the small owner dummy).

Surprisingly, there are no other significant relationships that would predict the index of corporate governance. Neither foreign nor state ownership dummies are significant. Also non-significant are the dummies for central region, the capital adequacy ratios and proportion of loans in bank's assets.

The only robust finding so far is that banks with more concentrated ownership have lower rankings on corporate governance. However, without time series data we are not able to establish whether this relationship is due to the fact that banks with better corporate governance are able to attract more minority shareholders, or whether banks with more minority shareholders are more likely to adopt better governance practices to satisfy minority shareholders' demands. This is an important question to address in subsequent research.

## **2.2. Corporate Governance and Contemporaneous Performance**

In this section we put aside the issues of endogeneity for a moment and explore contemporaneous relationship between governance and performance. We revisit the endogeneity issue in the next section. We report all our main results using the aggregate corporate governance index. The results on subindicies were mostly insignificant, and so we do not report them in the paper (they are available on request).

The results are reported in Table 6. Panel A reports results for Russia and Panel B for Ukraine. In both countries we find a relatively weak relationship between governance and ROA – it's significant only at 10% in both countries (despite the fact that Russian sample is over twice the size of Ukrainian sample), while the relationship with ROE is only significant (at 5%) for Ukraine and is not significant in Russia in our full specification.<sup>9</sup>

The economic magnitude of the relationship is small in both countries. For example, one standard deviation increase in corporate governance index results in about 0.3%-0.4%

---

<sup>9</sup> The ROE is significant at 5% in Russia if we only include size and year dummy as controls and no other control variables are included. Excluding controls for the own capital and proportion of loans does not significantly affect our results.

increase in ROA, which is around 20% of one standard deviation in ROA. The magnitude is slightly higher for ROE (significant for Ukraine only), but even then one standard deviation change in governance results in about one-third of one standard deviation change in ROE.

We also find the net interest income to be significantly related to governance in Ukraine but not in Russia. In Ukraine better governance results in higher interest income and lower (but not significantly lower) interest expense, with the net effect of significant relationship to net interest income. This is in line with the argument that better governance systems allow banks to cut the expenses and gain from higher interest rates on loans. The later could be due to reduction in loans to related parties with favorable interest rates (and hence the average interest on loans is higher). However, in Russia both – interest expense and interest income (the later is significant only at about 11%) rise as a function of governance index, with no net effect on the net interest income.

In Russia we also find that better governance results in lower NPL – non-performing loans. This could be because better governance results in less related parties transactions or better credit evaluation. As a result of lower NPL, reserves are also slightly lower in Russia (although not significant at conventional levels<sup>10</sup>). There is no NPL data for Ukraine and reserves are not significant in Ukraine sample. We don't find any relationship between governance and the growth rates of assets or capital in either country.

Considering numerous control variables we find that in Ukraine larger banks on average have higher performance, which is not consistently true for Russia. We also find that banks with larger number of shareholders (less concentrated ownership) under-perform those with more ownership concentration in Ukraine (again, this is not true in Russia).

---

<sup>10</sup> We found reserves to be slightly more significant (at around 10%) in some other specifications with some of our controls excluded or with added control for listed on stock exchange or plans to list.

In Year 2006, relative to 2003 we find that Russian banks report higher levels of NPL and lower net interest income. This may be a note of concern to policymakers.

### **2.3. Corporate Governance and Subsequent Performance**

As noted earlier, corporate governance may be endogenous to performance. Because corporate governance is a choice variable, better performing banks may choose to adopt stricter corporate governance mechanisms, perhaps as a way of signaling their higher performance potential. Therefore, the contemporaneous relationship between governance and performance is likely to be biased. The bias, however, is more likely to be upward because of the positive reverse causality between performance and governance. So the consistent estimates, if we were able to obtain them, are likely to be weaker than those we described in the previous section.

In this section we explore the relationship between governance and subsequent performance. We use financial performance data in the year following the governance measurement, which reduces the endogeneity problem. Table 7 reports the results for Russia, in Panel A and Ukraine in Panel B. Note that because the second wave of Russian governance data is completed at the end of 2006 and the latest financial data for Russia are of the end of 2006, in this section we can only use the first wave of Russian governance data.

We find no significant relationship between governance and subsequent performance in Russia. If anything, the relationship with the ROA and ROE is negative (but not significant).

In Ukraine we find a weak relationship with ROA (only significant at about 11%) and somewhat stronger relationship with ROE (significant at 5%). The coefficient on governance in the net interest income regression is also positive, but only “near-significant” at about 15%. Surprisingly the growth in capital is negative, which is counter-intuitive.

### 3. Caveats

The overall findings so far suggest that the relationship between governance and performance is relatively weak and small in magnitude. There are a number of caveats one should consider before making definite conclusions from this research.

First, the financial data maybe unreliable. In the environment of weak bank supervision in Russia and Ukraine, the financial data reported by Banks to the supervisory agency are likely to be noisy at best and unreliable at worst. In addition, the practice of financial reporting using International Accountings Standards is relatively new in both countries, which may exacerbate the concerns over the data quality. However, the financial data we use in this paper have been used in a number of other related papers with sensible results (for example, Karas, Pyle and Koen (2006), Golovan et al.( 2007)). This caveat is not limited to this particular study on Russia and Ukraine, but extends to any empirical work on emerging markets of which there are too many to name.

Second, the governance data maybe unreliable. It's plausible that the survey respondents did not answer the surveys truthfully. Their incentives in answering the surveys are unclear, especially because IFC offers corporate governance educational and consulting services to the banks in the survey. However, it is not obvious, apriori, if this potential for a future relationship with IFC would lead banks to overstate their governance (to make it look better) or to understate it (with hopes that it may generate some additional assistance from IFC<sup>11</sup>).

Third, the variation in our corporate governance index might be insufficient to pick up much effect because the banks in our sample range from "bad" to "less bad" rather than from "bad" to "good." The IFC concluded that while the governance is improving, it was still far from perfect in 2006 survey (see IFC, 2007).

---

<sup>11</sup> Even though the banks who receive assistance from IFC had to pay for it, apriori the possibility of such assistance may affect the incentives in providing the survey results.

Fourth, the questions contained in the IFC survey that were available to us may not capture the particular elements of governance that really matter for performance in these countries. It's hard to know what these "important elements" are without additional data. Vernikov (2007) argues that "alien concepts of corporate governance make it into formal norms and are subsequently complied with or imitated by market participants, but have limited impact on the structure and control..." He further argues that in Russia, the transplanted system of laws and corporate governance norms is picked from all over the world and is not cohesive. It is plausible that the indicators of good governance that are important in the Anglo-American type of corporations are not all that important in the Russian and Ukrainian business world.

Finally, our samples are small and perhaps insufficient to generate strong statistical significance. The small sample issue has less implication for the low magnitudes of the effect observed as it's mainly an issue with the lack of statistical significance.

#### **4. Conclusion**

This paper presents evidence on the relationship between ownership, corporate governance and operating performance in banks using a sample of 50 banks in Ukraine surveyed in 2004 and 107 banks in Russia surveyed in 2003 and 2006. We find some significant, but economically unimportant relationship between governance and contemporaneous operating performance and an even weaker link with the subsequent performance. We conclude that aside from the popularity of the governance in public discussion, corporate governance has at best a second-order effect on operating performance in Russian and Ukrainian banks. We also find that in both countries banks with more concentrated ownership have lower rankings on corporate governance.

Despite the potential limitations of this study described in the paper, this exercise is the first one, to our knowledge, of relating a broad index of corporate governance to

performance in banking institutions. If it stimulates the additional research on the topic, part of our objective would be complete.

Finally, in this paper we explore only one dimension of the bank performance, specifically the operating financial performance imperfectly captured by our measures of ROE, ROA, net interest income, etc. However, corporate governance is most likely to play an important role in the issue of bank stability and bank's ability to provide liquidity in difficult market conditions. The impact on stability may turn out to be the most important benefit of good corporate governance for Russia and Ukraine, and emerging markets in general. This would be an important question to address in further research.

## References

- Berger, A.N. and Mester, L.J., 1997, Inside the black box: What explains differences in the efficiencies of Financial Institutions?, *Journal of Banking and Finance* 21, 895-947.
- Berger, A.N., G. Clarke, R. Cull, L. Klapper and G.F. 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.
- Black, B., I. Love and A. Rachinsky, 2006, Corporate Governance Indices and Firms' Market Values: Time Series Evidence from Russia, *Emerging Markets Review*, vol. 7 No. 4, pp.361-379.
- Clarke G., R. Cull, and M.M. Shirley, 2005, Bank Privatization in Developing Countries: A Summary of Lessons and Findings, *Journal of Banking and Finance* 29, 1905-1930.
- Clarke G., R. Cull, M.S. Martinez Peria, S. Sanchez, 2003, Foreign Bank Entry: Experience, Implications for Developing Economies, and Agenda for Further Research, *The World Bank Research Observer*, vol. 18, no. 1, pp.25-59.
- Durnev, A. and E. H. Kim (2005), "To Steal or Not to Steal: Firm Attributes, Legal Environment, and Valuation," *Journal of Finance* Vol. 60, pp. 1461-1493.
- Golovan' S.B., O.U. Kosturina, E.B. Pastuxova, A.M. Karminskiy and A.A. Perceckiy, 2007, Cost Efficiency of Russian Banks, New Economic School, Working paper #71.
- IFC, 2004a, A Survey of Corporate Governance Practices in the Russia Banking sector, International Finance Corporation, Moscow (mimeo), [www.ifc.org/rcgp](http://www.ifc.org/rcgp)
- IFC, 2004b, A Survey of Corporate Governance Practices in the Ukrainian Banking sector, International Finance Corporation, Kyiv (mimeo).
- IFC, 2007, Russia Banking Sector Corporate Governacne Survey: A snapshot on Improvements Made, International Finance Corporation, Moscow (mimeo), [www.ifc.org/rcgp](http://www.ifc.org/rcgp)
- Karas, A., W. Pyle and K. Schoors, 2006, Sophisticated discipline in a nascent deposit market: Evidence from post-communist Russia, BOFIT Discussion Papers #13, 2006.
- Klapper, Leora F. and Inessa Love (2004), "Corporate Governance, Investor Protection, and Performance in Emerging Markets," *Journal of Corporate Finance* Vol.10, pp.287-322.
- Levine, R., 2004, The Corporate Governance of Banks: A Concise Discussion of Concepts and Issues, *The Certified Accountant*, 18, April, 2004.

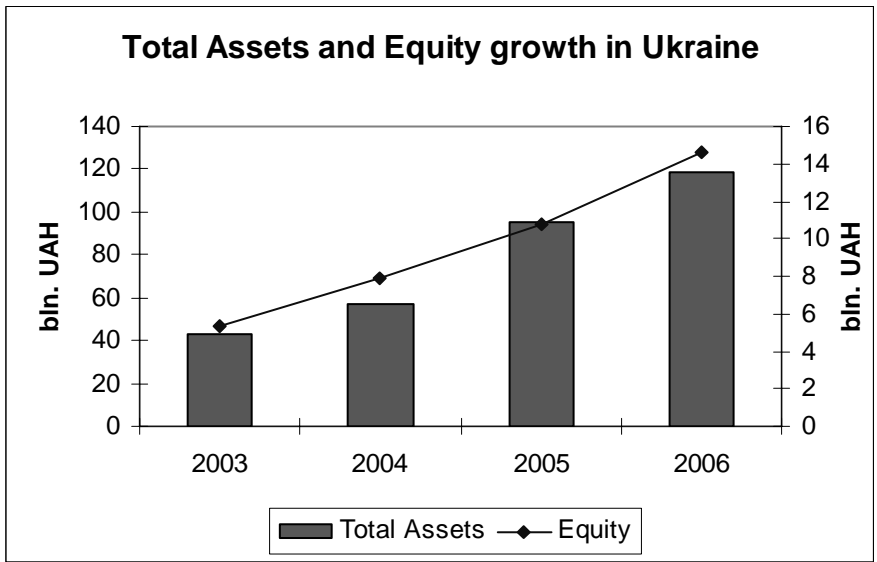
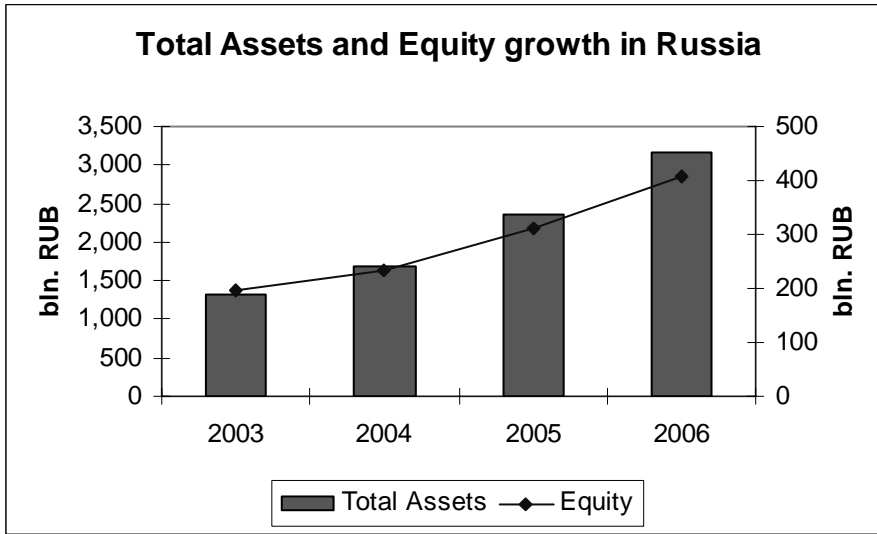
Levine, R., 2005, "Finance and Growth: Theory and Evidence." in Handbook of Economic Growth, Eds:Philippe Aghion and Steven Durlauf, The Netherlands: Elsevier Science, 2005.

Macey, Jonathan R. and O'Hara, Maureen, 2003, "The Corporate Governance of Banks." Economic Policy Review, Vol. 9, No. 1, April 2003. Available at SSRN:

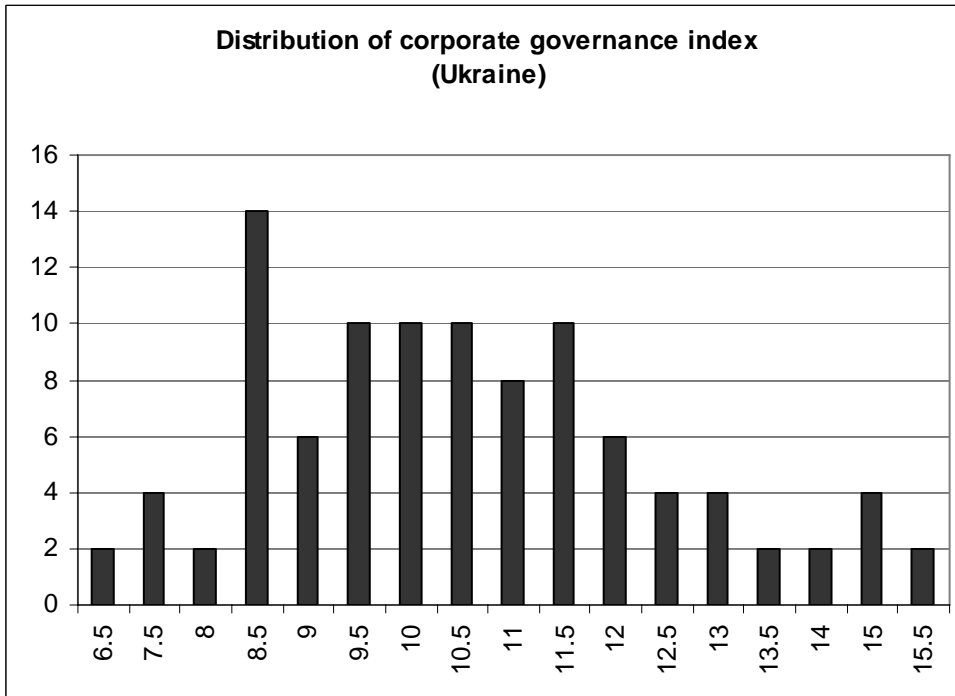
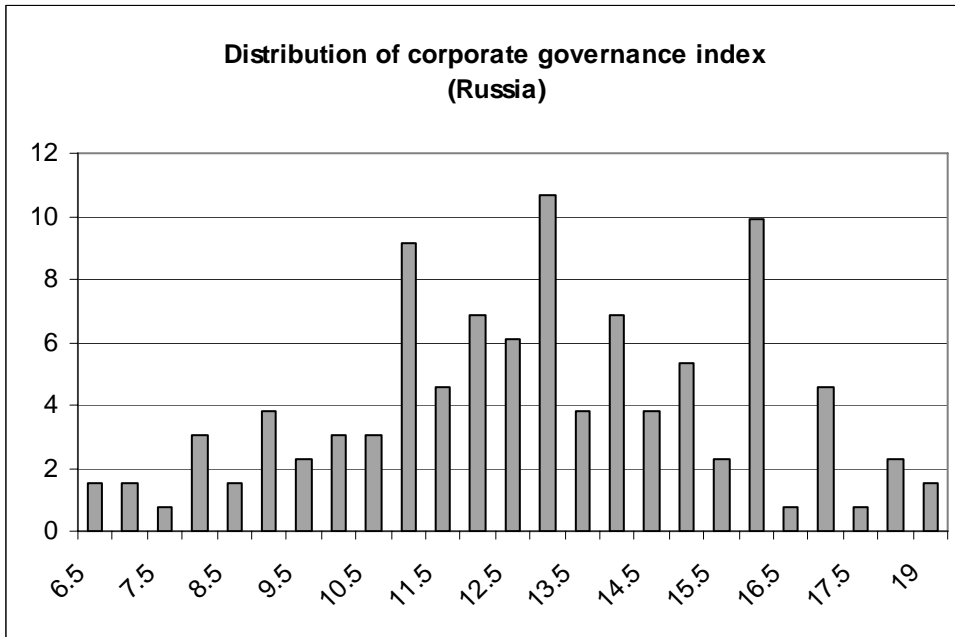
Spong, Kenneth and Sullivan, Richard J., 2007, "Corporate Governance and Bank Performance," Working paper, Federal Reserve Bank of Kansas.

Vernikov A., 2007, Corporate Governance and Control in Russian Banks, Working paper WP1/2007/02, Moscow State University, Higher School of Economics.

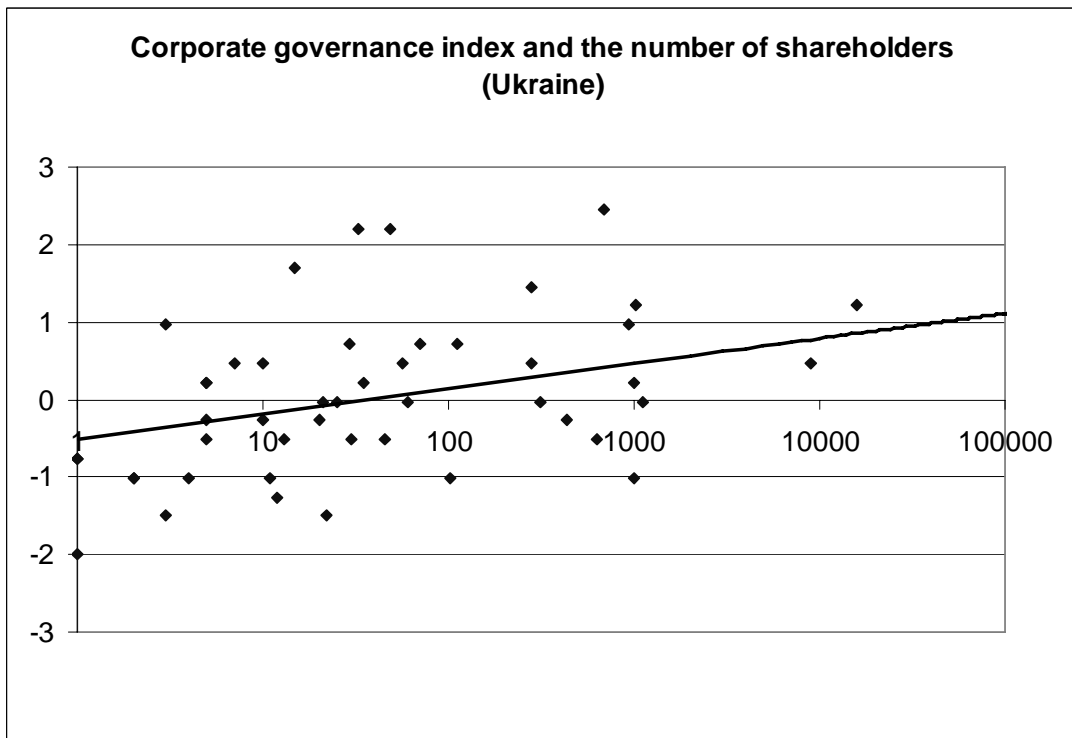
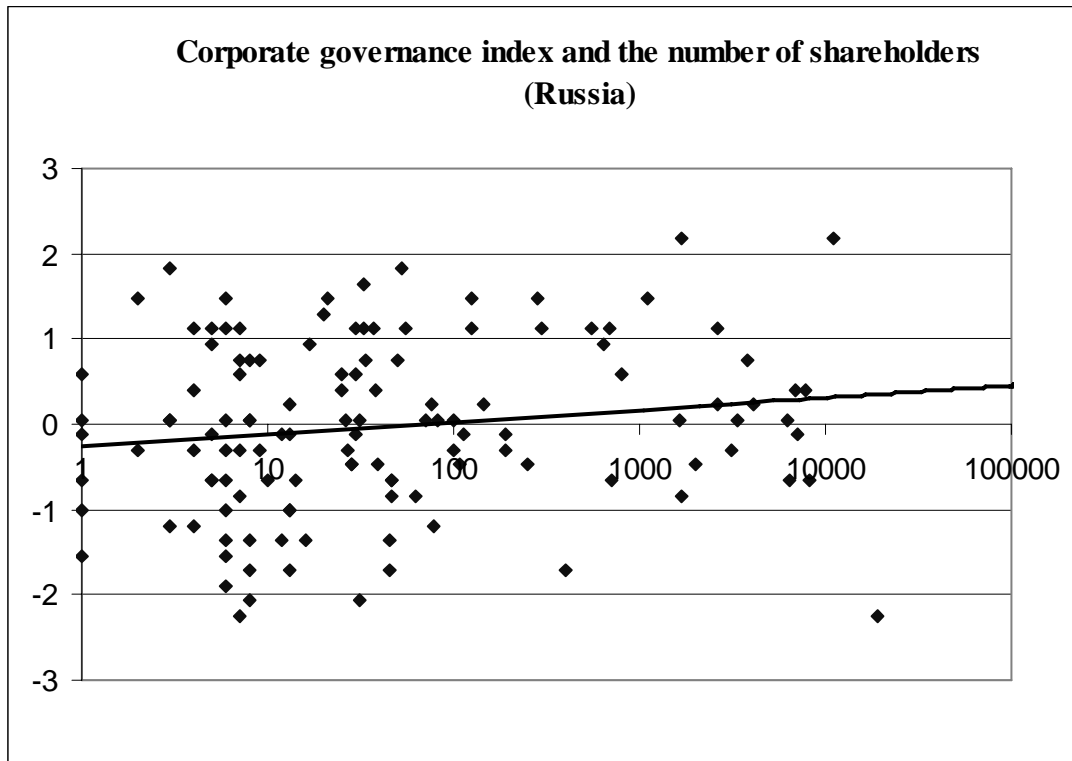
**Figure 1. Total Assets and Equity Growth in Ukraine and Russia in 2003-2006.**



**Figure 2. Distribution of Corporate Governance Index**



**Figure 3. Corporate Governance Index and the Number of Shareholders**



**Table 1. Corporate Governance Index**

<b>Elements of CGI</b>		Average Russia	Average Ukraine
<b>I. Commitment to Corporate Governance</b>		<b>0.53</b>	<b>0.36</b>
Code of corporate conduct	1 if bank has its own corporate governance code, 0.5 if bank plans to develop it, 0 otherwise	0.56	0.43
Disclosure of corporate governance practices	1 if bank periodically disclose to stakeholders its corporate governance practices and the extent to which they conform with national or international best practice, 0 otherwise	0.66	N/A
Corporate governance committee or corporate governance officer	1 if bank's BoD have a Corporate Governance Committee or a designated Corporate Governance Officer in place, 0 otherwise.	0.31	0.14
Training	1 if bank provides training in corporate governance issues to management or members of BoD, 0 otherwise.	0.71	0.54
Independent register	1 independent register holds banks share register, 0 otherwise.	0.40	0.32
<b>II. Shareholders rights</b>		<b>0.70</b>	<b>0.61</b>
Notification on shareholders meeting	1 if announcement of AGM is sent to shareholders by mail, 0 otherwise.	0.85	0.92
Additional information to notice of AGM	1 if supporting documents to each agenda item are provided before AGM, 0 otherwise.	0.80	0.66
Secret voting	1 if voting at the AGM is conducted by ballot, 0 otherwise.	0.69	N/A
Notification on results of AGM	1 if results of AGM are sent personally to shareholders, 0 otherwise.	0.46	0.26
<b>III. Supervisory bodies</b>		<b>0.60</b>	<b>0.51</b>
Independent directors	1 if there are independent directors in BoD, 0 otherwise.	0.66	0.30
Minority representatives	1 if there are representatives of minority shareholders in BoD, 0 otherwise.	0.53	0.44
Professional directors	1 if members of BoD are paid for their duties, 0 otherwise.	0.60	0.24
Insider information	1 if responsibility concerning the disclosure and use of confidential and insider information for their personal or third parties interests is specified, 0 otherwise.	0.70	0.26
Committees	1 if there are any committees within BoD, 0 otherwise.	0.32	0.28

Roles of supervisory bodies	1 if BoD defines mission and business strategy while ExB participates in day-to-day management of a bank, 0 otherwise.	0.38	0.96
Assessment of BoD	1 if there is assessment of members of BoD performance, 0 otherwise.	0.72	0.72
Assessment of ExB	1 if there is assessment of members of ExB performance, 0 otherwise.	0.90	0.88
<b>IV. Audit</b>		<b>0.71</b>	<b>0.73</b>
Internal audit	1 if there exists internal audit department, 0 otherwise.	0.89	0.92
Appointment of external auditor	0 if external auditor is appointed by ExB, 1 otherwise.	0.84	0.82
Additional services provided by external auditor	1 if external auditor does not provide additional services, 0 otherwise.	0.40	0.44
<b>V. Transparency and Disclosure</b>		<b>0.56</b>	<b>0.26</b>
Ownership of members of BoD and ExB	1 if bank's annual report discloses information on shares held by members of BoD and ExB, 0 otherwise.	0.45	0.26
Remuneration of members of BoD and ExB	1 if bank's annual report discloses information on remuneration of members of BoD and ExB, 0 otherwise.	0.35	0.00
Ultimate shareholders	1 if ultimate shareholders are known to wide public, 0 otherwise.	0.60	0.34
Related party and large transactions	1 if related party transactions and transactions involving more than 10% of the book value of the Bank's assets are disclosed, 0 otherwise.	0.42	0.42
Affiliated parties and indirect shareholdings	0 if list of affiliated parties and indirect shareholdings is not published, 1 otherwise.	0.80	N/A
Languages	0 if information provided to shareholders and investors is in Russian only, 1 otherwise.	0.76	N/A

---

**Table 2. Variable Definitions**

<b>Performance measures</b>		
<b>Abbreviation</b>	<b>Variable</b>	<b>Description</b>
ROA	Return on assets	Annual profit to total equity ratio
ROE	Return on equity	Annual profit to total assets ratio
AGR	Asset growth	Annual growth rate in total assets
CGR	Capital growth	Annual growth rate in total capital
NPL	Non performing loans	Non performing loans to total loans ratio
RES	Reserves	Reserves to total assets ratio
dividend	Dividend	Dividends to total equity ratio
NII	Net interest income	Net interest income to total loans ratio
int_exp	Interest expense	Interest expense to total deposits ratio
int_inc	Interest income	Interest income to total loans ratio
<b>Governance variables</b>		
<b>Stata name</b>	<b>Variable</b>	<b>Description</b>
CGI	Governance index	Standardized sum of corporate governance indicators
cgi_1	Commitment to Corporate Governance	Standardized sum of Commitment to Corporate Governance indicators
cgi_2	Shareholders rights	Standardized sum of Shareholders rights indicators
cgi_3	Supervisory bodies	Standardized sum of Supervisory bodies indicators
cgi_4	Audit	Standardized sum of Audit indicators
cgi_5	Transparency and Disclosure	Transparency and Disclosure
<b>Control variables</b>		
	<b>Variable</b>	<b>Description</b>
	Size	Logarithm of total assets
	Own capital	Total equity to total assets ratio
	Loans	Total loans to total assets ratio
	Shareholders	Logarithm of number of shareholders
	Herfindahl	Herfindahl index of ownership concentration - sum of squares of shares owned by each shareholder. If we know only total shareholding by group of owners we assume equal distribution.
	Small owners	1 if there exists shareholder that controls less than 15% of shares, 0 otherwise.
	Large owners	1 if there exists shareholder that controls more than 15%, 0 otherwise.
	Foreign	1 if foreign individual or company is among 3 largest shareholders, 0 otherwise.
	State	1 if there exists non trivial state ownership in a bank, 0 otherwise
	Central region	1 if bank is located in central region, 0 otherwise.

*Note: NPL and dividend are not available for Ukraine*

**Table 3. Descriptive Statistics***Panel A. Russia*

<b>Performance measures</b>	<b># of obs</b>	<b>mean</b>	<b>median</b>	<b>std.dev.</b>	<b>min</b>	<b>max</b>
Return on assets	400	0.024	0.021	0.02	0.00	0.11
Return on equity	401	0.17	0.16	0.11	0.00	0.60
Asset growth	365	0.42	0.36	0.32	-0.10	1.87
Capital growth	365	0.29	0.21	0.27	-0.03	1.29
Non performing loans	392	0.01	0.01	0.01	0.00	0.08
Reserves	403	0.04	0.02	0.04	0.00	0.22
Dividend	404	0.04	0.04	0.03	0.00	0.21
Net interest income	394	0.09	0.08	0.03	0.00	0.21
Interest expense	378	0.10	0.09	0.04	0.00	0.24
Interest income	395	0.14	0.14	0.04	0.01	0.26
Size	409	15.67	15.61	1.51	9.82	20.18
Own capital	409	0.16	0.13	0.11	0.04	1.05
Loans	402	0.59	0.61	0.18	0.04	1.00
Shareholders	124	3.92	3.40	2.62	0.00	11.63
Herfindahl	115	0.32	0.18	0.30	0.02	1.00
Small owners	115	0.92	1.00	0.27	0.00	1.00
Big owners	115	0.79	1.00	0.41	0.00	1.00
Foreign	128	0.13	0.00	0.33	0.00	1.00
State	128	0.34	0.00	0.47	0.00	1.00
Central region	128	0.47	0.00	0.50	0.00	1.00

*Panel B. Ukraine*

<b>Performance measures</b>	<b># of obs</b>	<b>mean</b>	<b>median</b>	<b>std.dev.</b>	<b>min</b>	<b>max</b>
Return on assets	187	0.015	0.012	0.01	-0.02	0.08
Return on equity	187	0.08	0.07	0.07	-0.18	0.33
Asset growth	166	0.50	0.42	0.36	-0.06	1.69
Capital growth	166	0.38	0.29	0.31	0.00	1.37
Reserves	142	0.04	0.03	0.03	0.00	0.16
Net interest income	142	0.07	0.06	0.03	0.01	0.21
Interest expense	135	0.09	0.09	0.03	0.01	0.16
Interest income	136	0.15	0.15	0.03	0.06	0.21
<hr/>						
Size	190	13.32	13.06	1.38	10.55	16.77
Own capital	190	0.20	0.17	0.12	0.07	0.70
Loans	189	0.63	0.64	0.14	0.03	0.90
Shareholders	48	3.85	3.38	2.63	0.00	11.71
Herfindahl	50	0.28	0.16	0.29	0.02	1.00
Small owners	50	0.84	1.00	0.37	0.00	1.00
Big owners	50	0.84	1.00	0.37	0.00	1.00
Foreign	50	0.06	0.00	0.24	0.00	1.00
Central region	50	0.12	0.00	0.33	0.00	1.00

**Table 4. Correlations**

See Table 2 for variable definitions.

*Panel A. Governance and ownership in Russia*

	(1)	(2)	(3)	(4)	(5)
	Governance index	Shareholders	Herfindahl	Large owners	Small owners
Governance index	1.00				
Shareholders	<b>0.22</b> [0.01]	1.00			
Herfindahl	-0.08 [0.40]	<b>-0.33</b> [0.00]	1.00		
Large owners	<b>-0.25</b> [0.01]	<b>-0.30</b> [0.00]	<b>0.45</b> [0.00]	1.00	
Small owners	0.04 [0.64]	<b>0.35</b> [0.00]	<b>-0.34</b> [0.00]	-0.15 [0.11]	1.00

*Panel B. Governance and ownership in Ukraine*

	(1)	(2)	(3)	(4)	(5)
	Governance index	Shareholders	Herfindahl	Large owners	Small owners
Governance index	1.00				
Shareholders	<b>0.37</b> [0.01]	1.00			
Herfindahl	<b>-0.32</b> [0.02]	<b>-0.58</b> [0.00]	1.00		
Large owners	0.00 [0.99]	-0.28 [0.054]	<b>0.35</b> [0.01]	1.00	
Small owners	<b>0.38</b> [0.01]	<b>0.47</b> [0.00]	<b>-0.42</b> [0.00]	-0.19 [0.19]	1.00

*Panel C. Governance and performance in Russia*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	CGI	ROA	ROE	AGR	CGR	NPL	RES	Dividend	NII	Int. Exp.	Int. Inc.
CGI	1.00										
ROA	0.16 [0.08]	1.00									
ROE	<b>0.24</b> [0.01]	0.72 [0.00]	1.00								
AGR	-0.09 [0.34]	-0.03 [0.73]	0.08 [0.41]	1.00							
CGR	0.06 [0.50]	0.03 [0.72]	0.13 [0.17]	0.23 [0.02]	1.00						
NPL	-0.05 [0.55]	0.16 [0.08]	0.07 [0.42]	-0.05 [0.60]	0.08 [0.38]	1.00					
RES	<b>-0.22</b> [0.01]	-0.16 [0.08]	-0.32 [0.00]	-0.02 [0.80]	-0.08 [0.39]	0.14 [0.12]	1.00				
dividend	0.08 [0.37]	0.48 [0.00]	0.77 [0.00]	0.01 [0.91]	0.03 [0.74]	0.07 [0.41]	-0.16 [0.07]	1.00			
NII	-0.09 [0.32]	0.14 [0.15]	-0.08 [0.42]	-0.06 [0.55]	-0.11 [0.26]	0.04 [0.68]	0.22 [0.01]	-0.06 [0.50]	1.00		
Int. Exp.	0.04 [0.63]	-0.06 [0.56]	-0.01 [0.91]	-0.04 [0.72]	-0.02 [0.83]	0.01 [0.95]	-0.08 [0.41]	0.05 [0.57]	0.05 [0.57]	1.00	
Int. Inc.	0.00 [0.96]	-0.02 [0.80]	-0.04 [0.65]	-0.14 [0.16]	-0.22 [0.02]	0.03 [0.75]	-0.07 [0.43]	0.05 [0.58]	0.72 [0.00]	0.34 [0.00]	1.00

*Panel D. Governance and performance in Ukraine*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	CGI	ROA	ROE	AGR	CGR	RES	NII	Int. Exp.	Int. Inc.
CGI	1.00								
ROA	0.12 [0.43]	1.00							
ROE	<b>0.04</b> [0.78]	0.82 [0.00]	1.00						
AGR	-0.18 [0.24]	-0.10 [0.51]	0.09 [0.57]	1.00					
CGR	-0.02 [0.88]	-0.04 [0.81]	0.15 [0.32]	0.30 [0.05]	1.00				
RES	0.03 [0.84]	0.08 [0.59]	0.13 [0.37]	-0.19 [0.21]	-0.28 [0.07]	1.00			
NII	0.16 [0.29]	0.57 [0.00]	0.13 [0.38]	-0.09 [0.54]	-0.13 [0.38]	0.15 [0.30]	1.00		
Int. Exp.	-0.16 [0.29]	-0.38 [0.01]	-0.29 [0.06]	-0.01 [0.94]	-0.13 [0.43]	0.17 [0.28]	-0.22 [0.16]	1.00	
Int. Inc.	<b>0.31</b> [0.04]	-0.02 [0.90]	-0.33 [0.02]	-0.21 [0.19]	-0.10 [0.53]	0.12 [0.44]	0.45 [0.00]	0.30 [0.06]	1.00

**Table 5. Determinants of Corporate Governance**

See Table 2 for variable definitions. Robust t statistics in brackets, \*, \*\* and \*\*\* indicate significance at 10%, 5% and 1% respectively.

**Panel A. Russia**

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	CGI	CGI	CGI	CGI	CGI	CGI	CGI
Shareholders	0.067* [1.85]			0.067* [1.86]	0.064* [1.77]	0.080** [2.10]	0.064 [1.56]
Year 2006	0.657*** [3.40]	0.634*** [3.22]	0.626*** [3.22]	0.650*** [3.36]	0.647*** [3.29]	0.611*** [3.05]	0.713*** [3.48]
Size	0.066 [0.82]	0.133 [1.59]	0.091 [1.16]	0.055 [0.67]	0.051 [0.61]	0.089 [1.07]	0.067 [0.71]
Foreign	0.301 [1.23]	0.34 [1.37]	0.443* [1.86]	0.288 [1.18]	0.283 [1.13]	0.306 [1.22]	0.507* [1.94]
State	0.154 [0.79]	0.233 [1.23]	0.232 [1.22]	0.148 [0.76]	0.181 [0.90]	0.118 [0.59]	0.16 [0.75]
Central Region	-0.226 [0.96]	-0.351 [1.62]	-0.299 [1.39]	-0.169 [0.68]	-0.193 [0.77]	-0.194 [0.79]	-0.348 [1.30]
Own capital	-1.014 [0.87]	-1.025 [0.84]	-0.825 [0.65]	-1.385 [1.11]	-0.832 [0.74]	-0.044 [0.04]	0.058 [0.05]
Loans	-0.007 [0.01]	0.071 [0.14]	-0.201 [0.38]	0.024 [0.05]	-0.075 [0.15]	0.108 [0.21]	-0.312 [0.55]
Herfindahl		-0.652** [2.32]					
Small owners			0.359 [1.06]				
Large owners			-0.565** [2.48]				
ROA				3.576 [0.95]			
ROE					0.568 [0.69]		
CGR						0.411 [1.31]	
AGR							0.236 [1.00]
Constant	-1.518 [1.17]	-2.102 [1.57]	-1.446 [1.04]	-1.42 [1.08]	-1.375 [1.03]	-2.262 [1.65]	-1.641 [1.04]
Observations	124	115	115	124	122	117	111
R-squared	0.22	0.23	0.25	0.23	0.22	0.23	0.24

*Panel B. Ukraine*

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	CGI	CGI	CGI	CGI	CGI	CGI	CGI
Shareholders	0.182*** [3.15]			0.185*** [3.57]	0.184*** [3.47]	0.193*** [3.10]	0.142* [2.04]
Size	-0.118 [0.60]	0.091 [0.53]	-0.032 [0.19]	-0.201 [1.07]	-0.184 [0.95]	-0.18 [0.76]	-0.182 [0.97]
Foreign	0.168 [0.47]	0.156 [0.34]	-0.119 [0.19]	0.048 [0.11]	0.107 [0.24]	0.359 [0.87]	0.590* [1.74]
Central Region	0.322 [0.74]	0.426 [1.16]	0.206 [0.58]	0.187 [0.37]	0.194 [0.37]	0.595 [0.98]	0.481 [0.90]
Own capital	-0.179 [0.11]	0.975 [0.66]	0.119 [0.08]	-1.219 [0.75]	-0.074 [0.05]	-0.219 [0.11]	-1.191 [0.54]
Loans	-0.58 [0.86]	-0.12 [0.17]	-0.198 [0.26]	-0.416 [0.63]	-0.287 [0.43]	-2.928** [2.15]	-0.976 [0.56]
Herfindahl		- 1.468*** [3.79]					
Small owners			1.068*** [2.98]				
Large owners			0.1 [0.27]				
ROA				35.553** [2.42]			
ROE					5.122 [1.54]		
CGR						0.01 [0.02]	
AGR							0.578 [1.24]
Constant	1.174 [0.40]	-0.999 [0.39]	-0.504 [0.20]	2.012 [0.74]	1.54 [0.57]	3.39 [0.83]	2.258 [0.77]
Observations	45	47	47	45	45	32	30
R-squared	0.21	0.17	0.15	0.31	0.26	0.32	0.21

**Table 6. Governance and Contemporaneous Performance.**

See Table 2 for variable definitions. Robust t statistics in brackets, \*, \*\* and \*\*\* indicate significance at 10%, 5% and 1% respectively.

**Panel A. Russia**

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	ROA	ROE	AGR	CGR	NPL	RES	dividend	NII	int_exp	int_inc
CGI	0.003* [1.74]	0.011 [0.93]	-0.009 [0.38]	-0.014 [0.51]	-0.002** [2.04]	-0.006 [1.53]	-0.002 [0.48]	0.003 [0.99]	0.005* [1.77]	0.004 [1.64]
Size	0.001 [1.11]	0.017** [2.13]	0.022 [1.12]	0.037 [1.66]	-0.001 [1.29]	0.000 [0.18]	0.006** [2.00]	-0.009*** [4.18]	-0.011*** [4.50]	-0.013*** [6.21]
Year 2006	0.003 [0.98]	0.03 [1.34]	-0.145** [2.51]	0.019 [0.37]	0.006** [2.54]	-0.004 [0.52]	0.005 [0.70]	-0.015** [2.43]	-0.008 [1.06]	-0.019*** [3.17]
Shareholders	0 [0.92]	-0.005 [1.12]	-0.016* [1.72]	-0.002 [0.13]	0.000 [0.23]	0.000 [0.35]	-0.002 [1.04]	0.000 [0.05]	-0.001 [0.98]	0.000 [0.07]
Foreign	0.004 [0.86]	0.03 [0.88]	0.012 [0.14]	0.226** [2.06]	0.008** [2.25]	-0.015** [2.03]	-0.003 [0.31]	-0.005 [0.75]	0.005 [0.37]	-0.006 [0.93]
State	-0.001 [0.26]	-0.005 [0.21]	-0.063 [1.50]	0.047 [0.78]	0.002 [0.71]	0.001 [0.10]	0.002 [0.30]	0.000 [0.05]	-0.01 [1.65]	0.006 [1.23]
Central region	-0.008** [2.42]	-0.076*** [2.90]	-0.056 [0.86]	-0.047 [0.80]	-0.005* [1.95]	0.014** [2.29]	-0.035*** [4.11]	0.008 [1.24]	0.003 [0.40]	-0.01 [1.46]
Own capital	0.054 [1.43]	-0.581*** [3.82]	-0.901** [2.33]	0.111 [0.21]	-0.011 [0.50]	0.165** [2.54]	-0.151*** [3.05]	0.119** [2.50]	-0.124** [2.09]	0.01 [0.24]
Loans	-0.012 [0.90]	-0.05 [0.77]	0.323* [1.69]	0.1 [0.67]	0.012 [1.34]	0.091*** [4.86]	-0.016 [0.96]	-0.002 [0.09]	0.016 [0.73]	-0.039** [2.15]
Constant	0.009 [0.49]	0.069 [0.56]	0.141 [0.39]	-0.411 [1.01]	0.021 [1.46]	-0.039 [1.02]	0.008 [0.19]	0.216*** [5.53]	0.285*** [6.62]	0.384*** [10.50]
Observations	120	120	114	108	121	121	121	114	113	114
R-squared	0.15	0.28	0.16	0.13	0.18	0.34	0.26	0.31	0.2	0.47

**Panel B. Ukraine**

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ROA	ROE	NII	AGR	CGR	RES	int_exp	int_inc
CGI	0.004* [1.95]	0.023** [2.13]	0.008** [2.09]	-0.004 [0.09]	0.004 [0.12]	0.005 [0.66]	-0.003 [0.81]	0.007* [1.98]
Size	0.004** [2.10]	0.028** [2.33]	0.010** [2.32]	0.049 [0.67]	0.080* [1.78]	0.008 [1.64]	-0.015*** [3.16]	-0.003 [0.75]
Shareholders	-0.002*** [3.15]	-0.015*** [2.95]	-0.003** [2.06]	-0.052** [2.62]	-0.005 [0.31]	-0.001 [0.60]	0.003 [1.62]	0 [0.12]
Foreign	-0.004 [1.67]	-0.034** [2.65]	0.029** [2.58]	-0.084 [0.74]	0.023 [0.12]	0.016 [1.16]	-0.011 [1.30]	0.017 [1.32]
Central Region	-0.003 [0.34]	-0.056*** [3.25]	0.006 [0.25]	-0.269* [1.76]	-0.086 [0.85]	0.039** [2.33]	-0.004 [0.43]	0.011 [0.86]
Own capital	0.026 [1.03]	-0.016 [0.14]	0.219*** [3.89]	0.018 [0.03]	0.319 [0.47]	0.092 [1.64]	-0.027 [0.52]	0.054 [1.16]
Loans	-0.02 [1.08]	-0.002 [0.03]	-0.044 [0.98]	-0.033 [0.07]	-0.056 [0.21]	0.113*** [3.57]	0.136*** [4.62]	-0.027 [0.96]
Constant	-0.022 [0.72]	-0.225 [1.18]	-0.06 [0.85]	-0.001 [0.00]	-0.722 [1.15]	-0.152** [2.03]	0.207*** [2.81]	0.214*** [3.11]
Observations	45	44	45	41	42	45	41	43
R-squared	0.24	0.4	0.42	0.21	0.11	0.32	0.43	0.34

**Table 7. Governance and Subsequent Performance**

See Table 2 for variable definitions. Robust t statistics in brackets, \*, \*\* and \*\*\* indicate significance at 10%, 5% and 1% respectively.

**Panel A. Russia**

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	ROA	ROE	AGR	CGR	NPL	RES	dividend	NII	int_exp	int_inc
CGI	-0.002 [1.12]	-0.015 [1.22]	0.005 [0.21]	-0.01 [0.43]	0.001 [0.61]	-0.003 [0.45]	-0.002 [0.55]	-0.002 [0.74]	0	0.002 [0.55]
Size	0.003** [2.56]	0.026*** [3.00]	0.048* [1.97]	0.059** [2.31]	-0.001 [1.08]	0.002 [0.33]	0.006** [2.04]	-0.005** [2.65]	-0.008** [2.05]	-0.011*** [3.84]
Shareholders	0 [0.41]	-0.001 [0.19]	-0.005 [0.48]	0.01 [0.94]	0 [0.07]	0.001 [1.06]	-0.002 [1.49]	0 [0.37]	-0.002 [1.42]	-0.001 [0.52]
Foreign	0.01 [1.61]	0.051 [1.35]	0.018 [0.27]	0.118 [1.42]	0 [0.01]	-0.036** [2.33]	-0.002 [0.31]	-0.005 [0.47]	-0.007 [0.93]	-0.005 [0.45]
State	0 [0.13]	-0.016 [0.68]	0.019 [0.31]	-0.004 [0.07]	0.003 [0.81]	-0.001 [0.12]	-0.009 [1.31]	0.007 [0.92]	-0.009 [1.04]	0.007 [0.94]
Central region	-0.010** [2.34]	-0.076** [2.44]	-0.078 [1.16]	-0.124** [2.04]	-0.005 [1.36]	0.015 [1.22]	-0.026*** [2.74]	0.003 [0.38]	0.017 [1.63]	-0.012 [1.52]
Own capital	0.04 [1.57]	-0.488*** [3.03]	-1.449*** [3.07]	-0.977** [2.22]	-0.036 [1.18]	0.285** [2.49]	-0.130* [1.95]	0.217*** [4.11]	0.016 [0.22]	-0.023 [0.36]
Loans	0.01 [1.12]	0.061 [0.76]	0.538** [2.40]	0.454** [2.66]	0.009 [0.93]	0.127*** [2.90]	0.023 [1.07]	-0.025 [1.52]	-0.038 [0.93]	-0.077*** [2.92]
Observations	48	48	47	48	48	48	48	48	48	48
R-squared	0.28	0.45	0.38	0.44	0.19	0.38	0.37	0.44	0.29	0.45

**Panel B. Ukraine**

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ROA	ROE	NII	AGR	CGR	RES	int_exp	int_inc
CGI	0.003 [1.65]	0.024** [2.50]	0.005 [1.43]	-0.015 [0.60]	-0.083*** [2.94]	0.003 [0.83]	-0.002 [0.87]	0.002 [0.38]
Size	0.003* [1.77]	0.026** [2.55]	0.002 [0.47]	0.107*** [3.84]	0.124*** [4.01]	0.003 [1.06]	-0.002 [0.89]	-0.005 [1.34]
Shareholders	-0.001* [1.78]	-0.010** [2.57]	0 [0.09]	-0.040*** [3.09]	-0.003 [0.17]	0 [0.30]	-0.001 [0.42]	-0.001 [0.77]
Foreign	0.003 [0.88]	0.002 [0.12]	0.039 [1.50]	-0.108 [1.36]	0.077 [0.50]	0.017 [1.02]	-0.013 [1.06]	-0.021* [1.86]
Central Region	0.012** [2.15]	0.041 [1.52]	0.013* [1.69]	-0.141* [1.83]	0.06 [0.62]	0.021*** [2.47]	-0.018** [2.06]	-0.004 [0.34]
Own capital	0.044* [1.95]	-0.027 [0.33]	0.127*** [3.47]	0.259 [0.87]	0.633* [1.86]	0.067** [2.18]	0.084** [2.52]	0.032 [0.64]
Loans	-0.004 [0.39]	-0.024 [0.36]	-0.084** [2.48]	-0.067 [0.30]	-0.317 [1.07]	0.01 [0.40]	0.044 [1.56]	-0.078** [2.46]
Constant	-0.023 [1.11]	-0.204 [1.54]	0.068 [1.10]	-0.761** [2.05]	-1.241** [2.61]	-0.025 [0.68]	0.082* [1.91]	0.268*** [4.63]
Observations	45	45	45	45	45	45	44	44
R-squared	0.35	0.43	0.54	0.45	0.41	0.28	0.32	0.4