

CORPORATE GOVERNANCE AND PERFORMANCE: STAKES ON OWNERSHIP? EMPIRICAL RESEARCH OF THE UKRAINIAN BANKS

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Abstract

This paper was aimed to examine the relationship between corporate governance and financial performance in terms of ownership of 41 banks that represent Ukrainian banking system in 2006-2009. Correlation results could be used as an indicator of the weak link between corporate governance dynamics and operating performance. The Corporate Governance Dynamics Ratio was introduced to evaluate the CG in banks from the sample. It was determined during the study that majority of the banks could be found in the “30 to 80 points” range, which indicates the low level of CG practices’ implementation. On the other hand, there were some outliers – 6 banks with Ukrainian ownership have higher rankings than foreign-owned ones (“over 80 points” range), while 5 foreign banks are “outsiders” with CG Ratios in the range “less than 30”. In general it can be stated that the level of corporate governance in Ukrainian banking is in the initial phase, internal and state regulation should be introduced in order international practices to be put into action.

Keywords: Corporate Governance, Bank, Financial Performance, ROA, ROC, Ownership

1. Introduction

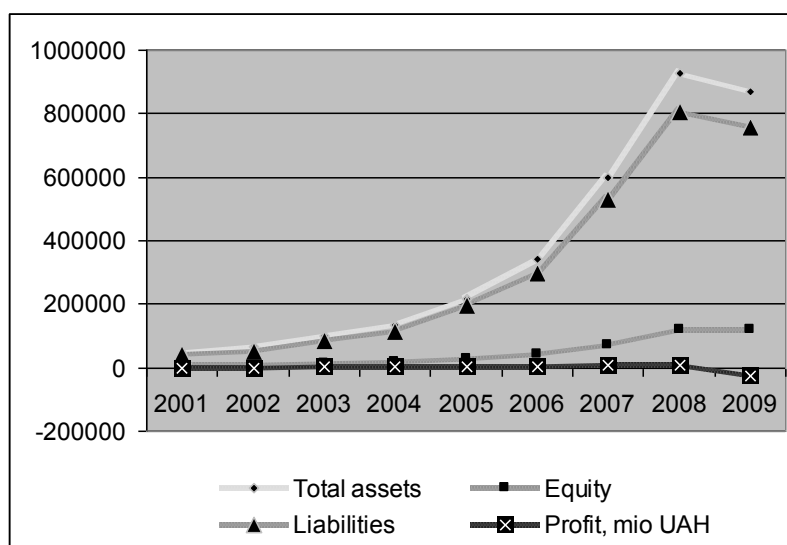
From the beginning of the crisis in 2008, world community began to pay more attention to the issues related to effective management (risk management, in particular) of financial and non-financial corporations. Media coverage and state authorities’ actions have been concentrated on corporate governance issues specifically. Attention on the part of international organizations and forums (i.e. G20 Summit, BIS etc.) resulted in new rules and recommendations on state and international levels. E.g. established by BIS in April 2009 Financial Stability Board can prove serious intentions to strengthen the financial sector of economy. Majority of the anti-crisis measures are risk-management-related, which basically means being focused on the assets’ management.

Ukrainian economy faced the financial crisis as many other countries, and crisis’ influence on the economy was significant. Problems in Ukrainian economy, especially in financial sector (in banking, in particular), began in the end of 2008. Deposits outflows, national currency exchange rate fluctuations and devaluation over 50%, problems with liquidity of banks, markedly growing ratio of bad loans were some kind of indicators showing weakness of the Ukrainian financial system and asked for actions to be taken from the state establishments and direct regulators.

Ukrainian banks, especially the ones with foreign capital, used to have easy access to rather cheap resources, and actually these short-term loans

from foreign-owned banks served as a main source for financing (see figure 1), as the deposit amount could not respond to the money demand (actually, these cheap resources were the financial background for the Ukrainian banks to provide loans – much more expensive - in Ukraine). Looking for the high profits, banks’ management didn’t pay much attention to the risk estimation, credit risk evaluation in particular, and did not pay much attention to the issues related to the liabilities’ quality. Obviously, there were a lot of other problems with banking sector in Ukraine, not only imprudence of risk-taking strategies, but ineffective banks’ risk management was the one of the banks’ biggest drawbacks. And most of all, this applies to the question of improving and/or establishing new, more effective corporate governance mechanisms.

It is also should be noted, that share of foreign capital in Ukrainian banking sector has increased markedly over last few years (capital not as financial resources for domestically-owned banks, but as the background for establishing new or strengthening foreign-owned banks). According to NBU data, as for 01.01.2011 compared to 01.01.2007 share of foreign capital in Ukrainian banking system grew up from 27.6% to 40.6% respectively. This fact brings up the question of effectiveness of the banks with the foreign ownership. And from this point of view it is worth considering possible differences between bank performance and corporate governance in banks with different ownership type.

Figure 1. Dynamics of the main indicators of the Ukrainian banking system

Considering all mentioned above, the necessity of research on corporate governance in banks, its changes, its influence on performance, becomes obvious.

The paper is organized as follows: first section is an introduction; section II presents literature review of the papers on different aspects of corporate governance evaluation and its interaction with bank performance, sections III and IV include data and methodology. Results are presented in the section V, where also brief explanations are given and main tendencies are formulated. Final part of the paper provides conclusions, further research outlines and limitations of the paper.

2. Literature review

Corporate governance and performance

Bhasa, Malla Praveen (2006) stated that the dominant paradigm of corporate governance is based on the argument of Berle and Means in 1932 that separation of ownership and control affects the reported level of income of firms, either positively or negatively. Since Berle and Means we can find various studies devoted to the relation between corporate governance and performance of the firm, the influence of ownership structure etc.

However, skeptical investors and unconvinced firms, and not only in Ukraine, still do not see the existence of the link between good corporate governance, its dynamic and performance of the company. And it is still debatable whether there is any link between them. The empirical studies mainly focus on specific dimensions or attributes of corporate governance (board structure and composition, the role of non-executive directors, other control mechanisms such as director and managerial stockholdings, ownership concentration, debt financing, executive

labour market and corporate control market, executives' compensation, capital market pressure and short-termism, social responsibilities and internationalization). Biswas, Pallab Kumar, Bhuiyan and Md. Hamid Ullah (2008) gave comprehensive review of studies, related to these issues.

Maher & Andersson (1999) conclude that comparing other factors differences in the identity of owners for various corporate governance systems can have important implications for firm performance. Luo Lei (2006) have found that the theory predicts that better-governed firms deliver higher shareholder value.

Brown and Caylor (2006) reported about higher valuation, higher profitability and higher dividends payments for better-governed firms. Some studies, however, had unexpected and mixed results on relation (association) between corporate governance and firm performance. Bauer et al. (2004) analyzed the relationship between corporate governance and stock returns, firm value, and operating performance for European firms. They found that corporate governance was positively associated with stock returns and firm valuation, but an unexpected negative relationship between corporate governance and operating performance was also found. Bebchuk et al. (2005) identified six entrenching provisions that are negatively correlated with firm valuation and stock returns. Such various results may be explained from that point of view that there were taken different methodologies.

Black (2001) found strong correlation between quality of firms' corporate governance and their valuation by the market (share price). In recent times, researchers from different parts of the world are mostly coming forward with strong correlation between these two variables. Rather than examining the impact of a complete set of governance standard on firm performance, these studies mostly investigate

impact of single governance characteristic on firm performance. But focusing merely on specific attribute of governance often fails to capture the total effect, which ultimately leads to questionable result.

However, there are complex indicators of corporate governance effectiveness - researchers attempt to measure overall corporate governance effectiveness level and try to identify the relationship between corporate governance and firm performance.

Corporate governance metrics

Brown and Robinson (2004) created a set of 51 corporate governance indicators (divided into eight corporate governance categories: audit, board of directors, charter/bylaws, director education, executive and director compensation, ownership, progressive practices, and state of incorporation). They analyzed 2,327 firms and concluded that good governance, as measured using executive and director compensation, is most highly associated with good performance. In contrast, good governance like existence of charter/bylaws is most highly associated with bad performance.

Brown and Robinson (2004) created their Gov-Score index using created by Gompers, Ishii and Metrick (2003) G-Index. G-Index is based on 24 governance factors thus less linked to firm performance than is G-Index.

Bebchuk, Cohen and Ferrell (2004) investigated the relative importance of the 24 factors included in the Gompers, Ishii and Metrick (2003) governance index, but focus on firm value relation to corporate governance.

Ricardo N. Bebczuk (2007) studied relationship between ownership and corporate governance (CG). He took Argentine 54 firms and studied their CG (3 groups of indicators: Board, Disclosure, and Shareholders) and performance (ROA, Tobin's Q). "Disclosure" measures the level of information of relevant corporate facts disclosure to outside stakeholders. "Board" includes the structure, procedures and compensation of Board and top management members. "Shareholders" measures the quality of information regarding the remuneration of minority shareholders. He found that ownership has positive relation to corporate governance and domestically-owned firms have stronger correlation between these indicators than foreign-owned ones have.

Claessens (2006) stated that "better corporate governance is likely to improve the performance of firms through more efficient management, better assets allocation, better labour practices, or similar other efficiency improvements".

Roche (2005) argued that the effect of corporate governance on share price performance used to be something of a contentious issue. This is because, for a long time, researchers failed to find empirical support for the notion that well-governed firms should

be well-managed as well with (as a result) higher shareholder value.

Based on Gompers, Ishii and Metrick G-Index and Brown and Robinson Gov-Score we selected 40 factors, divided in several groups in order to estimate general corporate governance ratio in Ukrainian banks (Appendix I).

Financial performance metrics

Researches on similar topics use quite typical variables to measure firm performance. Many empirical works employ firm value (as a proxy variable Tobin's Q or market-to-book value is used), operating performance (ROA), or stock returns as the measure of firm performance. Luo Lei (2006) stated that his findings better-governed firms deliver higher shareholder value are generally consistent with the prediction of a positive association between corporate governance and firm performance. Klapper and Love (2004) find higher ROA and Q for better-governed firms in emerging markets. Others prefer to use ROE for their research purposes as variable that measures financial performance.

Previous studies of Ukrainian banks

Concerning Ukrainian banks in the light of relation between corporate governance and firm performance, Vitaliy Zheka (2005) examined the effects of different ownership structures and of the quality of corporate governance on the Farrell measure of efficiency. He found that domestic ownership of the organization is expected to enhance efficiency the most. Foreign owned firms are relatively inefficient. However foreign ownership is found to have a positive and significant effect on corporate governance quality. Concentrated ownership rights (including state ownership) improve efficiency, possibly reflecting country-specific factors. The quality of corporate governance is found to have a positive impact on the efficiency of domestically owned firms.

Inessa Love and Andrei Rachinsky (2007) investigated the relationship between ownership, corporate governance and operating performance in Ukrainian and Russian banks. They found some significant, but economically unimportant relationship between governance and contemporaneous operating performance and an even weaker link with the subsequent performance. They stated 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. They found that there is low correlation between corporate governance and ROA. On the contrary, correlation between corporate governance and ROC is significant.

3. Data

3.1. Sample

Ukrainian banking system includes over 150 banks, which are represented actually by three types of ownership – domestically-, state- and foreign-owned banks. The level of information disclosure is not high in banks in general, so it's hardly possible to gather the information about all system. In our research it was presumed that results obtained for the sample of banks representing substantial amount of assets could be extended to all banking system. With respect to this, data sample includes information about 41 Ukrainian banks, which covers more than 75% of total assets of Ukrainian banking system. Sample includes almost equal quantity of foreign-owned and domestically-owned banks – 20 foreign-owned banks and 21 national private- and state-owned banks (which in this particular research is included in the group of domestically-owned banks).

Data period is from 2006-2009. Since 2005 Ukrainian banks are to provide reports with regard to international standards in financial reporting. Information sources are annual reports of banks, information which is given in specified format by securities issuers to securities state commission, information from the National Bank of Ukraine and questioners banks are obligatory to submit. Such data should ensure the high level of statistical information quality.

3.2 Dummy variables evaluation

We used a set of indicators to analyze the level of corporate governance in banks that operate on the Ukrainian market. We have chosen 40 indicators, divided them in 8 groups of factors and in order to get the scoring for each bank we evaluated every indicator as zero or one.

The evaluating approach and our logic you can find described in Appendix I.

The groups we formed are as following:

- Good Audit,
- Board Composition,
- Annual Shareholders Meeting Competencies,
- Charters/Bylaws,
- Disclosure,
- Requirements to Directors,
- Remuneration practice and
- Advanced Practices.

They define corporate governance from different perspectives and provide overall view of the CG in Ukrainian banking sphere.

4. Methodology

First stage of the research involved calculation of the summary statistics for each CG indicator and correlation coefficients (for ROA, ROC and CG factors).

From the summary statistics we expected to be able to evaluate the character of the distribution and to make the conclusion about normal curve having right or left tail. We predict that if curve describing distribution of the factor has the right tail (average>median), particular CG practice could be described as uncommon, not exploited or majority of the banks in the sample implement the practice at the much lower level than those few banks that have the highest level of implementation. And vice-versa - if curve describing distribution of the factor has the left tail (average<median), particular CG practice could be described as common and majority of the banks in the sample implement this particular practice.

When calculating the correlation coefficients for ROA and ROC and CG factors, we were aimed to check the following hypothesis:

H1: There is a relationship between corporate governance and bank performance in Ukraine.

H2: Different corporate governance practices have different level of influence on bank performance.

H3: The link between bank performance and corporate governance is higher for foreign-owned banks than for domestically-owned banks in Ukraine.

As well, for the purposes of the further research, the computation of the correlation between CG factors was made. The results of this stage of research are presented in the section 5.1 of the paper.

Corporate Governance Dynamics Ratio

As the period of research is 2006-2009, and it is characterized by both economic growth (2006-2007) and economic downturn and crisis (2008-2009), the CG improvement ratio was calculated.

The improvement ratio was calculated as an indicator for each CG indicator. The following formula was used:

$$CG \text{ Dynamics Indicator} = (\text{Number of Years Bank Implements Particular Practice}) - (\text{Number of Deteriorated Changes in CG Practice Implementation})$$

E.g. There is a sample of calculation from the following data about CG in particular bank (table 4.1):

Table 4.1. Example of calculation of the CG Dynamics Ratio

<i>Indicator</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>Calculation</i>	<i>Final ratio for the indicator</i>
<i>Education requirement for the directors – background in banking</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	$(Ind_{2006}+Ind_{2007}+Ind_{2008}+Ind_{2009})-(Ind_{2007}-Ind_{2006})=3-1=2$ <i>(in 2008 the practice faced abolition)</i>	<i>2</i>
<i>External CG consultation is involved</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>1</i>	$(Ind_{2006}+Ind_{2007}+Ind_{2008}+Ind_{2009})=2$ <i>(no negative tendencies or disabling of the practice)</i>	<i>2</i>
<i>Existence of the bylaw on GSM</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	$(Ind_{2006}+Ind_{2007}+Ind_{2008}+Ind_{2009})=4$ <i>(the practice was common for the bank for all 4 years)</i>	<i>4</i>

Next step was to calculate the final indicator for the bank by adding up ratios for every CG factor. Finally, what we could have got as a maximum score for the particular bank is $(40 \text{ indicators}) * (4 \text{ points}) = 160 \text{ points}$.

When calculating the CG Improvement Ratio and its correlation with average annual accession rate ROA and ROC, we were aimed to check the following hypothesis:

H4: There is a relationship between corporate governance dynamics and bank performance (average annual accession rate of ROA/ROC) in Ukraine.

H5: Corporate governance dynamics is better in foreign-owned banks than in domestically-owned banks in Ukraine.

5. Results

5.1 Descriptive statistics

The descriptive statistics for the variables are given in Appendix II.

Since the total score of banks is amenable to the normal distribution law, we compare the median and mean. As stated above, in case when median is greater than average, particular indicators of corporate governance are commonly used by the banks. These practices are as following:

- number of SB members, which is a common practice for Ukrainian banks to use.
- confirmation of the annual reports by the External Auditor – banks are in commonly implementing that practice. Confirmation of the reports by the External Auditor provides the bank with a right to declare that it is open and has accurate data. That could serve a good

background for bank's attractiveness for investors.

- the right of the ASM/shareholders to influence on the composition of the Supervisory Board enables to make it more independent from the Management Board. It is frequently used by the banks under consideration as well.
- existence of the bylaw on SB, existence of the bylaw on MB – charters and bylaws for these bodies can put a dividing line between their rights and obligations, thus improving corporate governance.
- disclosures on: major shareholders, financial statement, SB and MB composition and activity, charter and internal bylaws – in most cases banks disclose information about major shareholders, they provide financial statements for a wide range of information users; composition of MB and SB and bylaws are also available.

On the contrary, when the median is less than average, particular CG practice could be described as scarce, or the level of its implication by the majority of the banks in a sample is rather lower than at those with the highest level. In terms of the dummy variables that we use the "lower level" stands for 0. These practices are as following:

- number of shareholder meetings - for most banks it is an extremely rare practice of ASM to meet more than once a year. It could be a wise move to meet once in a quarter to input important decisions on how to run bank's activities especially in post-crisis period. However, holding extra ASM enlarges expenses, so Ukrainian banks avoid that.
- number of SB meetings during the year – this indicator doesn't exceed the industry average for

majority of the banks. In fact, the number of SB meetings in Ukrainian banks could be found in a range from 1 to 150 during the year. The importance of SB meetings is considerable: it is responsible for working out socially responsible strategy for bank, ensuring effective monitoring after financial activity of the bank, control over risk management system implication, etc.

- percent of major shareholder representatives in SB, percent of minor shareholder representatives in SB – SB composition is a secondary issue for most banks, so, as we'll see in the next section, this practice is negatively correlated with the financial performance of the banks. Most often the SB is formed by the major shareholders, which makes it less capable for solving bank's internal conflicts.

Concerning other indicators, which were used to assess the level of CG in the Ukrainian banks, their median equals 0, which means that the remaining practices in Ukraine are practically not exploited. At this stage, Ukraine is not the best example to follow in terms of active implementation of good corporate governance practices, particularly in the banking system.

It can be concluded that for today majority of the CG indicators in Ukrainian banking sector represents negative trend: 30 out of total 40 factors are found to obey the normal distribution law and to be asymmetric and shifted to a right-tail curve. That demonstrates a low level of using best corporate governance practices by both domestically- and foreign-owned banks in Ukraine.

5.2 Correlation

The next step in our research was to define the correlation between CG factors and indicators of the financial performance of the banks. Banks in the sample were divided into two groups: foreign-owned and domestically-owned ones.

The final table with all correlation coefficients could be found in the Appendix III.

All the indicators under research were marked out as ones correlated especially negatively and especially positively with ROC and ROA (comparing to one another).

Tables 5.1, 5.2, 5.3 and 5.4 display the most correlative to financial performance indicators according to the type of ownership.

Table 5.1. Strongest positive correlation between ROA and CG indicators

ROA+	For all banking system	r value	For foreign-owned banks	r value	For domestically-owned banks	r value
1	Percent of SB members represented by the Independent Directors on Supervisory Board	0,159559	Existence of the Internal Auditor	0,17927	Existence of the bylaw on MB	0,44603
2	Remuneration package is introduced as a percent of profit or related to the changes of share price	0,127731	Requirements for directors: Personal qualities	0,17648	Percent of SB members represented by the IDs in SB	0,20363
3	Number of SB members that are appointed by Government	0,0469	Existence of the bylaw on profit distribution	0,1674	Existence of the bylaw on SB	0,19719
4	Existence of the bylaw on profit distribution	0,046841	Requirements for directors: Educational background in banking	0,12476	Disclosure on Major shareholders	0,09818
5	Disclosure of the financial statement	0,041392	Disclosure on SB and MB composition and activity	0,12235	Disclosure on SB and MB composition and activity	0,09105

It can be seen from the table 5.1 that for the banks with foreign capital ROA most strongly correlates with following factors: disclosure on SB and MB composition and activity, existence of bylaw on profit distribution, requirements for directors in terms of personal qualities and knowledge in banking and the existence of internal audit. On the other hand, for domestically-owned banks presence of IDs in SB plays an important role.

However, the correlation itself is not considerable enough. The greatest value of it refers to

the banks with national ownership - the correlation coefficient ROA and the existence of MB equals 44.6%. Other positively correlated indicators have the correlation coefficient with ROA that is in a range from 0 to 20%.

Concerning overall correlation it can be concluded that the correlation between ROA and CG factors is weaker for the banking system as a whole than for groups of banks separately.

Table 5.2. Strongest positive correlation between ROC and CG indicators

ROC+	For all banking system	r value	For foreign-owned banks	r value	For domestically-owned banks	r value
1	Percent of SB members represented by the Independent Directors on Supervisory Board	0,138042	Disclosure on Major shareholders	0,18673	Percent of SB members represented by the IDs in SB	0,18281
2	Number of SB members that are appointed by Government	0,059286	Requirements for directors: Personal qualities	0,1602	Existence of the bylaw on SB	0,16897
3	Remuneration package is introduced as a percent of profit or related to the changes of share price	0,052448	External CG consultation is involved	0,12846	Disclosure on Financial statement	0,1442
4	Requirements for directors: Personal qualities	0,049474	Disclosure on Financial statement	0,12183	Existence of the bylaw on MB	0,14017
5	Appointment of the External Auditor by the ASM	0,024705	Requirements for directors: Educational background in banking	0,11989	Appointment of the External Auditor by the ASM	0,09861

Exploring interaction between ROC and CG factors (table 5.2), it can be said that in general the correlation is less significant than for ROA. Moreover the influencing factors differ much for domestically-owned and foreign-owned banks.

Table 5.3. Strongest negative correlation between ROA and CG indicators

ROA-	For all banking system	r value	For foreign-owned banks	r value	For domestically-owned banks	r value
1	Number of SB members	-0,14427	Requirements for directors: no requirements at all	-0,2111	Presence of the representatives of the owners in SB	-0,348
2	The right of the ASM/shareholders to influence on the composition of the Supervisory Board	-0,15325	The right of the ASM/shareholders to influence on the composition of the MB	-0,2088	Percent of minor shareholder representatives in SB	-0,2834
3	The right of the ASM/shareholders to choose the Head of the SB	-0,15669	Charter and internal bylaws	-0,205	Existence of Nominating/ Remuneration/Nominating & Remuneration committee	-0,1279
4	Presence of the representatives of the owners in SB	-0,16829	The securities of the bank are /are planned to be involved in the listing on the stock exchange	-0,1729	The right of the ASM/shareholders to vote on the remuneration practices of the members of the SB	-0,1001
5	Percent of minor shareholder representatives on Supervisory Board	-0,18072	Stability of the External Auditor	-0,1689	Confirmation of the annual reports by the External Auditor	-0,0969

The negative correlation with financial performance indicators for CG factors is found when there is an inverse relation between them which might seem to be illogical for some CG indicators such as percent of minor shareholder representatives in SB or number of SB members.

Table 5.4. Strongest negative correlation between ROC and CG indicators

ROC-	For all banking system	r value	For foreign-owned banks	r value	For domestically-owned banks	r value
1	Number of SB members	-0,15881	Percent of minor shareholder representatives in SB	-0,2153	Percent of minor shareholder representatives in SB	-0,3091
2	The right of the ASM/shareholders to influence on the composition of the Supervisory Board	-0,16244	The securities of the bank are /are planned to be involved in the listing on the stock exchange	-0,1985	The right of the ASM/shareholders to vote on the remuneration practices of the Directors	-0,2605
3	The right of the ASM/shareholders to choose the Head of the SB	-0,1661	The right of the ASM/shareholders to choose the Head of the MB	-0,1825	The securities of the bank are /are planned to be involved in the listing on the stock exchange	-0,2214
4	Existence of the Internal Auditor	-0,19406	Charter and internal bylaws	-0,179	Existence of Nominating/ Remuneration/ Nominating & Remuneration committee	-0,1921
5	The securities of the bank are /are planned to be involved in the listing on the stock exchange	-0,21721	Number of SB members	-0,1707	Presence of the representatives of the owners in SB	-0,1782

The most negatively influencing factor on ROC for both groups is minor shareholder representatives in SB. From the theoretical point of view, good corporate governance is associated with this practice as it is important to protect the rights of the minority shareholders and to avoid conflict of interests between

shareholders. Another CG factor that has weak negative correlation on ROC is bank's securities listing on stock exchange or intention to be listed. As a matter of fact, Ukrainian banks (operating on the national banks-centered financial system with undeveloped stock market) can't get enough financial resources from securities emission and stock floatation.

5.3. CG Dynamics Ratio

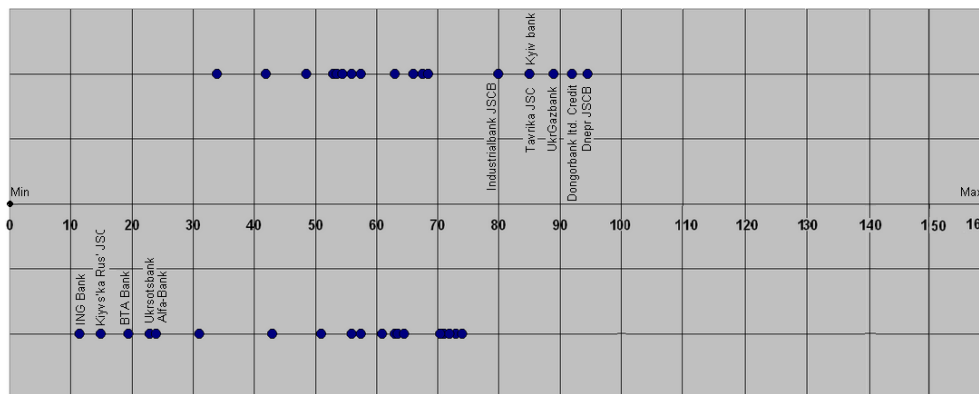
Using described in the Methodology section of the paper approach the CG Dynamics Ratios were evaluated for each bank in the sample. The possible minimum score was 0 (in case bank have never during the 4-year period implemented any of the CG practices under research), the possible maximum

score was 160 calculated as maximum score of 4 for 4-years' implementation of the CG practice multiplied by 40 – number of indicators.

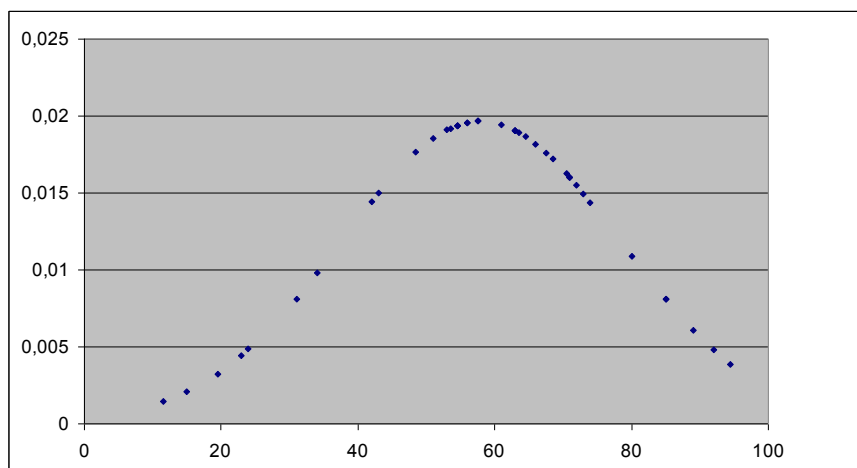
Final table with the resulting CG Dynamics ratios and average annual accession rates ROA and ROC for banks is presented in the Appendix IV.

The points on the graph (Figure 5.1) represent banks: points over axis – domestically-owned ones, points under axis - foreign-owned ones. As could be seen from the picture the majority of the banks were evaluated to have CG Dynamics indicator equals value in a range from 30 to 80 points. Figure 5.2 – normal curve build for the CG dynamics ratios of the banks in the sample - backs up the idea that the level of CG in majority of Ukrainian banks doesn't differ much.

Figure 5.1. CG Dynamics Ratio in some Ukrainian banks



- There are some outliers also:
- 6 domestically-owned banks have relatively higher scores:
 - o Credit Dnepr JSCB - 94,5,
 - o Dongorbank Ltd. - 92,
 - o UkrGazbank - 89,
 - o Tavrika JSC - 85,
 - o Kyiv bank -85,
 - 5 foreign-owned banks have relatively lower scores:
 - o Industrialbank JSCB – 80;
 - o Kiyvs'ka Rus' JSC - 11,5,
 - o ING Bank - 15,
 - o BTA Bank - 19,5,
 - o UkrSotsbank – 23,
 - o Alfa-Bank - 24.

Figure 5.2. Normal distribution of the CG Dynamics Ratio

From the summary statistics (Table 5.5) the following could be concluded:

- 68% of the banks in the sample have the CG Dynamics Ratio from 37 to 77 which comparing to the maximum of 160 are low scores.
- Asymmetry of the distribution is low; distribution is skewed to the left.
- The huge range (83 points) applies to the huge differences in the CG practice implementations (basically, in approaches to the CG) in different banks. The lowest score of 11.5 and the highest of 94.5 are clear indicators of the need for national CG regulation.

Table 5.5. CG Dynamics Ratio Summary Statistics

Mean	57.96341463
Standard error	3.207621937
Median	61
Mode	54.5
SD	20.53880177
Range	83
Min	11.5
Max	94.5

Correlation coefficients for the CG Improvement Ratio and average annual accession rate ROA and ROC are low and negative (relatively -0.17148 and -0.17231), which stands for the low relations between CG and performance dynamics.

H1: There is a relationship between corporate governance and bank performance in Ukraine.

Analyzing correlation between financial performance and indicators of corporate governance, we can conclude that the overall relationship between the observed issues is weak. Thus, this hypothesis has not been confirmed. Even though there is no evidence of this relationship, corporate governance in Ukrainian banks is looking for internal and external improvement in post-crisis period. Ukrainian conventional corporate governance rules and regulations often do not meet the requirements of the international best practices so it is of huge importance to review them by the national authorities and state regulators.

H2: Different corporate governance practices have different level of influence on bank performance.

The hypothesis was proved. Different indicators make different impact on banks' performance. The most influencing factors differ for domestically and foreign-owned banks as well.

H3: The link between bank performance and corporate governance is higher for foreign-owned banks than for domestically-owned banks in Ukraine.

The hypothesis proved to be of some kind true as far as foreign-owned banks turned to have greater link between their financial performance and CG, but for both groups that correlation is extremely weak.

H4: There is a relationship between corporate governance dynamics and bank performance (average annual accession rate of ROA/ROC) in Ukraine.

Judging from the data there was no strong correlation determined between the four-year dynamics of CG indicators and average annual accession rate of ROA/ROC. That means that improvement or deterioration of one group of factors did not necessarily assume direct change of other group. The strongest correlation did not exceed the level of 20%, which implies refuting of the hypothesis 4.

H5: Corporate governance dynamics is better in foreign-owned banks than in domestically-owned banks in Ukraine.

It can be inferred from Figure 5.1 that the majority of the banks have the similar level of the CG dynamics, while a few domestically-owned banks have got better ranking in terms of CG dynamics than a few of those with the foreign ownership. The group of banks with highest assessments is represented by the domestically-owned banks, while the weakest group is formed by foreign-owned ones. That statement disproves hypothesis 5. Perhaps this trend stems from the fact that there is much more difficulty for foreign banks when adapting to the Ukrainian market.

Conclusions

It can be concluded from the research that in general CG in Ukrainian banks during the period of study doesn't apply to using progressive world practices. Calculated correlation coefficients dispute the existence of relationship between corporate governance and bank performance in Ukrainian banks, which is common to results derived by Inessa Love and Andrei Rachinsky (2008). However it can be stated that future research using regression analysis will provide us with more efficient and powerful results.

The CG dynamics Ratio for the majority of the banks in the sample was found to be in the range from 30 to 80 points. The grounds for such situation can be explained from general conditions of corporate governance standards, their implementation in Ukraine.

Another group of banks was represented by those that were lying out of the range (30;80). They were mentioned to be "outsiders".

"Outsiders" are foreign-owned banks, which were bought out by foreign investors in the second half of researched period. Such banks own middle sizes of assets. The process of owner changing in such banks can cause implementation of their own CG standards by new investors. According to the results of the study several banks turned to have low CG Dynamics Ratio. Summing up we can mention that such standards are not the best to implement in that particular banks or, alternatively, such standards were not yet well-adopted for Ukrainian business environment. It is commonly expected that changes in the ownership go along with implementing new rules

(e.g. standards in corporate governance). However, it could be inferred that these changes in listed above banks were not effective enough. Possibly, foreign investors had to focus on investing in smaller banks with well-established market share and associated with lower systemic risks.

During the crisis period banks are usually acting under more strict regulation. And the greater the bank is - the more drastic measures are introduced for it. Small banks somehow benefit from that situation and they are more "free" in their activities. Ukrainian banking sector is facing problems with reporting and regulation etc., so it could be a smart move for potential investors to pay attention to small banks. As far as the bigger banks are more sensitive to systemic risks, the owner or new investor in fact will take that risk, so from this point of view small banks in Ukraine are less risky and apply to using step-by-step strategies for foreign investor. Another strategy for the investors could be directing their funds to more risky operations: buying big banks with their disposition towards systemic risks and slow dynamics in changes. On the other hand this big bank could be possibly found at the top of the rating for foreign-owned banks and will open broader perspectives for its owner.

Retrospectively saying the risky scenario was put into effect. It can be explained by undeveloped disclosure practices in Ukrainian banks, especially small banks. This fact could be treated as an indicator for the National bank of Ukraine and Stock Market Commission to pay attention to the question of implementing world reporting standards. Consequently, it can draw foreign investors' attention to small Ukrainian banks.

Further research on small and medium-sized banks, ownership structure and its influence on CG could serve as a background for a separate scientific investigation. Regression analysis can be useful to establish presence or absence of the relationship between corporate governance, bank performance and the influence of the ownership structure. Other parameters or their different combinations could also help to define the link between variables etc.

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Appendix I

Factors definitions

1. The group of indicators under the heading “Good Audit Indicators” was assessed according to the best practices of corporate governance in European countries.
 - Existence of the Internal Auditor defines the level of day-to-day audit inside the bank and its influences positively on the performance, that is why the bank got “1” if it implements such practice, “0” – if avoids it.
 - Stability of the External Auditor. In best corporate governance practices an External Auditor is obliged to be impartial to provide an objective assessment of bank activity, so “1” was earned by the banks in which the Auditor was changed during last three years. On the contrary “0” stated the stability of an Auditor in a certain bank which is meant to be a negative trend.
 - Appointment of the External Auditor by the ASM. Basing on the UK corporate governance Code one of the responsibilities of shareholders is the selection of External Auditor for the bank (“1” – if the ASM of the bank chooses the External Auditor, “0” – if that duty is delegated to other body).
 - Confirmation of the annual reports by the External Auditor (External Auditor confirms annual reports which makes the users of the information sure that it is unbiased (“1”), non-confirmed information could be treated as subjective - “0”).
2. The group of factors that explain the Board composition was analyzed from the effective-performance-of-SB point of view
 - Number of SB meetings during the year – since good corporate governance requires SB to run open discussions with the MB and other stakeholders, the effectiveness of its work is in direct ratio to the number of meetings, so “1” was allocated to the banks where the number of SB meetings exceeds the average on the industry, “0” – otherwise.
 - Number of SB members – objectivity and efficiency of decision making is directly proportional to the number of members in the Supervisory Board, so “1” was made by the banks in which the number of SB members exceeds the average on the industry, “0” – if not.
 - Percent of major shareholder representatives in Supervisory Board answers for contraction of the SB works’ transparency (“0” – if the number exceeds the average on the industry, in other case - “1”).
 - Percent of minor shareholder representatives in Supervisory Board implies more work aimed for different kinds of stakeholders’ welfare (“1” – if the number exceeds the average on the industry, “0” – if not).
 - Percent of the Independent Directors in Supervisory Board – basing on the Toronto CG Code the Board should have a majority of Independent Directors and disclose them as a percentage of the board. So “1” was allotted to the banks, where the number of IDs exceeds the average on the industry, “0” – for those, where it is less then the average.
 - Number of Board Committees – the committees are aimed at carrying out specific functions, programs, or projects assigned by the board, so they separate different duties of the board. Committees simplify the work of the whole management system, so “1” was appointed if the number of board committees exceeds the average of the industry, “0” – otherwise.
 - Number of State Representatives in the Supervisory Board/ Number of SB members that are appointed by Government - “0” was allotted to the banks, where the number of IDs exceeds the average on the industry, “1” – for those, where it is less then the average.
3. Group of ASM competencies indicators – according to the German, UK, Norwegian and US Codes of CG the ASM is responsible for composition of the MB and SB, so sticking to these rules means Ukrainian banks are following the best practices of CG. The banks that fit that got “1” for each indicator of the group and “0” if they failed to follow the line.
 - The right of the ASM/shareholders to influence on the composition of the Management Board (“1” if the bank implements that practice, in other case - “0”).
 - The right of the ASM/shareholders to choose the Head of the MB (“1” if the bank implements that practice, in other case - “0”).
 - The right of the ASM/shareholders to influence on the composition of the Supervisory Board (“1” if the bank implements that practice, in other case - “0”).
 - The right of the ASM/shareholders to choose the Head of the SB (“1” if the bank implements that practice, in other case - “0”).
4. In case of Charters/Bylaws group we used the “precision” approach: the more requirements are documented – the more accurate the job is done.
 - Existence of the bylaw on GSM – the great volume of the responsibilities of shareholders and their rights as well calls for having a document with all that included into it. So the banks that have a bylaw on the GSM received “1”, “0” – otherwise.

- As mentioned in Finnish CG Code the board shall draw up a written charter for its work and describe its essential contents. Correspondingly existence of the bylaw on SB gave “1” for the bank and existence of the bylaw on MB as well. Contrariwise they got “0”.
 - Existence of the bylaw on the distribution of profits signifies transparency of the performance of the bank, so “1” means occurrence of that (“0” stands for the lack of such a bylaw).
5. Disclosure indicators show how transparent and accessible the information about banks is. Greater transparency here improves clarity and attractiveness of particular bank to consumers and investors
- Disclosure of the financial statement (“1” if bank annual report discloses its financial statements for any kind of information user, “0.5” – if the information is available for the shareholders only, “0” – if the information is not available).
 - Disclosure of the information about major shareholders (“1” if the information about the major shareholders is accessible for any kind of information user, “0.5” – if the information is available for the shareholders only, “0” – if the information is not available).
 - Disclosure of the information about SB and MB composition and activity (“1” if the composition of SB or MB is provided to any kind of information user, “0.5” – if the information is available for the shareholders only, “0” – if the information is not available).
 - Disclosure of the charter and internal bylaws (“1” if the bank gives out the Charter and internal bylaws to a free access for any kind of information user, “0.5” – if the information is available for the shareholders only, “0” – if the information is not available).
 - Disclosure of the information about remuneration (“1” if bank's annual report discloses information on remuneration of members of Board for any kind of information user, “0.5” – if the information is available for the shareholders only, “0” – if the information is not available).
6. Requirements to Directors determine that each requirement sets the competence of the director up to a higher level, so the bank received “1” for providing each point of requirement to the directors.
- Educational background in banking (“1” – if it is required from the director, “0” – contrariwise).
 - Educational background in management/finance (“1” – if demanded from the director, “0” – otherwise).
 - Calling for personal qualities of a director was evaluated as “1”, lack of that claim gave “0” to a certain bank.
 - Absence of the conflict of interests (“1” – for having it in a list, “0” – in other case).
 - No requirements at all – If the requirements were entirely avoided the bank got “0”, having at least one alter claim to the director brought in “1”.
7. Remuneration practice was treated to be following the best practices.
- If the package was formed as a percent of profit, the bank got “1” (“0” otherwise).
 - If the package was related to the changes of share price or was introduced in the form of securities of the bank, the bank got “1” (“0” otherwise).
 - The ones that had their remuneration package introduced as a fixed amount in cash earned “0”. “1” was allotted if they did not follow that pattern.
 - Existence of Nominating/Remuneration/Nominating & Remuneration committee is a crucial factor for addressing the issue of remuneration of the management (“1” if bank has Nominating/Remuneration or Nominating & Remuneration Committee in a Board structure, “0” otherwise).
 - The right of the ASM/shareholders to vote on the remuneration practices of the Directors (“1” if the bank implements that practice, in other case - “0”).
 - The right of the ASM/shareholders to vote on the remuneration practices of the members of the SB (“1” if the bank implements that practice, in other case - “0”).
8. Advanced practices group includes indicators that have significant importance to assess the corporate governance of banks that act on Ukrainian market, but can not be classified on the grounds of the previous 7 groups.
- Financial reports are formed according to the requirements of the International Accounting Standards. The International Accounting Standards are oriented on providing the uniform accounting reporting, so the banks are treated as those that are more internationally oriented if they formed their reporting according to the IAS (“1”, “0” otherwise).
 - The securities of the bank are /are planned to be involved in the listing on the stock exchange – the banks’ target is operating on the international market, which is a positive trend and costs “1” or “0” - if not.
 - Presence of the representatives of the owners in SB puts the performance and the reporting of the bank at a risk that it would lack objectivity. “0” stated that the bank has an owner in SB structure. If not then “1”.
 - External CG consultation is involved and brings “fresh” view on the CG practice in particular bank (“1” – if yes, “0” – if not).

- Number of shareholder meetings – the more meetings held, the more managerial decisions are controlled (“1” – if the number exceeds the average on the industry, “0” – if not).

Appendix II						
	MEAN	MEDIAN	StdDev	StdError	Minimum	Maximum
ROA	-0,0008	0,0038	0,0353	0,0027	-0,3263	0,1036
ROC	-0,0206	0,0284	0,2909	0,0223	-2,6727	0,4922
CG Indicators						
Existence of the Internal Auditor					0	1
Stability of the External Auditor	0,4012	0	0,4916	0,0375	0	1
Appointment of the External Auditor by the ASM	0,4222	0	0,4953	0,0369	0	1
Confirmation of the annual reports by the External Auditor	0,0944	0	0,2933	0,0219	0	1
Number of SB meetings during the year	0,7167	1	0,4519	0,0337	0	150
Number of SB members	16,9833	8	28,4624	2,1215	0	15
Percent of major shareholder representatives on Supervisory Board	3,8389	4	3,3927	0,2529	0	1
Percent of minor shareholder representatives on Supervisory Board	0,4143	0,3333	0,4000	0,0359	0	1
Percent of SB members represented by the Independent Directors on Supervisory Board	0,3057	0,1429	0,3524	0,0316	0	1
Number of Board Committees	0,2662	0	0,4009	0,0360	0	3
Existence of Nominating/Remuneration/Nominating & Remuneration committee	0,2389	0	0,6547	0,0488	0	1
The right of the ASM/shareholders to influence on the composition of the Management Board	0,0389	0	0,1939	0,0145	0	1
The right of the ASM/shareholders to choose the Head of the MB	0,1333	0	0,3409	0,0254	0	1
The right of the ASM/shareholders to influence on the composition of the Supervisory Board	0,2167	0	0,4131	0,0308	0	1
The right of the ASM/shareholders to choose the Head of the SB	0,7500	1	0,4342	0,0324	0	1
The right of the ASM/shareholders to vote on the remuneration practices of the Directors	0,7444	1	0,4374	0,0326	0	1
The right of the ASM/shareholders to vote on the remuneration practices of the members of the SB	0,0444	0	0,2067	0,0154	0	1
Existence of the bylaw on GSM	0,3722	0	0,4847	0,0361	0	1
Existence of the bylaw on SB	0,2333	0	0,4241	0,0316	0	1
Existence of the bylaw on MB	0,6833	1	0,4665	0,0348	0	1
Existence of the bylaw on profit distribution	0,7556	1	0,4310	0,0321	0	1
Disclosure of the financial statement	0,2389	0	0,4276	0,0319	0	1
Disclosure of the major shareholders	0,7139	1	0,4391	0,0327	0	1
Disclosure of the SB and MB composition and activity	0,5833	1	0,4683	0,0349	0	1
Disclosure of the charter and internal bylaws	0,6333	1	0,4441	0,0331	0	1
Disclosure of the remuneration practices	0,3889	0,5	0,3151	0,0235	0	0,5
Requirements for Directors: Educational background in banking	0,1278	0	0,2187	0,0163	0	1
Requirements for Directors: Educational background in management/finance	0,1889	0	0,3925	0,0293	0	1
Requirements for Directors: Personal qualities	0,2278	0	0,4206	0,0313	0	1
Requirements for Directors: Absence of the conflict of interests	0,2222	0	0,4169	0,0311	0	1
Requirements for Directors: No requirements at all	0,2556	0	0,4374	0,0326	0	1
Remuneration package is introduced as a fixed amount in cash	0,2611	0	0,4405	0,0328	0	1
Remuneration package is introduced as a percent of profit or related to the changes of share price	0,2111	0	0,4092	0,0305	0	1
Remuneration package is introduced in the form of securities of the bank	0,0333	0	0,1800	0,0134	0	0
Financial reports are formed according to the requirements of the International Accounting Standards	0,0000	0	0	0	0	1
The securities of the bank are /are planned to be involved in the listing on the stock exchange	0,3333	0	0,4727	0,0352	0	1
Presence of the representatives of the owners in SB	0,4167	0	0,4944	0,0368	0	6
External CG consultation is involved	0,4500	0	1,0742	0,0801	0	1
Number of shareholder meetings	0,2111	0	0,4092	0,0305	0	9
Number of SB members that are appointed by Government	2,4500	2	1,9441	0,1449	0	15

Appendix IIIa

1. ROA
2. ROC
3. Existence of the Internal Auditor
4. Stability of the External Auditor
5. Appointment of the External Auditor by the ASM
6. Confirmation of the annual reports by the External Auditor
7. Number of SB meetings during the year
8. Number of SB members
9. Percent of major shareholder representatives in Supervisory Board
10. Percent of minor shareholder representatives in Supervisory Board
11. Percent of SB members represented by the Independent Directors in Supervisory Board – to make the decisions more objective.
12. Number of Board Committees
13. Existence of Nominating/Remuneration/Nominating & Remuneration committee
14. The right of the ASM/shareholders to influence on the composition of the Management Board
15. The right of the ASM/shareholders to choose the Head of the MB
16. The right of the ASM/shareholders to influence on the composition of the Supervisory Board
17. The right of the ASM/shareholders to choose the Head of the SB
18. The right of the ASM/shareholders to vote on the remuneration practices of the Directors
19. The right of the ASM/shareholders to vote on the remuneration practices of the members of the SB
20. Existence of the bylaw on GSM
21. Existence of the bylaw on SB
22. Existence of the bylaw on MB
23. Existence of the bylaw on the distribution of profits
24. Disclosure of the financial statement
25. Disclosure of the major shareholders
26. Disclosure of the SB and MB composition and activity
27. Disclosure of the charter and internal bylaws
28. Disclosure of the remuneration practices
29. Requirements to Directors: Educational background in banking
30. Requirements to Directors: Educational background in management/finance
31. Requirements to Directors: Personal qualities
32. Requirements to Directors: Absence of the conflict of interests
33. Requirements to Directors: No requirements at all
34. Remuneration package is introduced as a fixed amount in cash
35. Remuneration package is introduced as a percent of profit or related to the changes of share price
36. Remuneration package is introduced in the form of securities of the bank
37. Financial reports are formed according to the requirements of the International Accounting Standards
38. The securities of the bank are /are planned to be involved in the listing on the stock exchange
39. Presence of the representatives of the owners in SB
40. External CG consultation is involved
41. Number of shareholder meetings
42. Number of SB members that are appointed by Government

Appendix IIIb

		Financial indicators		CG indicators																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
Financial indicators	1	1																						
	2	0,623179	1																					
	3	-0,10024	-0,19406	1																				
	4	-0,09952	-0,01578	-0,08332	1																			
	5	0,010887	0,024705	0,04691	0,031624	1																		
	6	-0,06204	-0,09096	0,006849	0,287888	0,076586	1																	
	7	0,010493	0,016707	0,031164	0,086497	-0,07076	0,166863	1																
	8	-0,14427	-0,15881	0,246715	0,253485	-0,00708	0,334466	0,150566	1															
	9	-0,0321	-0,10005	0,37549	-0,14679	0,07948	-0,11973	-0,08804	-0,17881	1														
	10	-0,18072	-0,08894	-0,2138	-0,00096	-0,00975	-0,05215	0,141787	-0,05453	-0,3096	1													
	11	0,159559	0,138042	-0,15599	0,081834	-0,07214	0,185671	-0,06372	0,207213	-0,6349	-0,47239	1												
	12	-0,08722	-0,04601	0,013362	0,100688	0,027318	0,135646	0,096449	0,243783	-0,04112	0,183443	-0,11705	1											
	13	-0,07692	-0,02817	0,071552	-0,05559	-0,06496	0,062708	0,097312	0,136984	-0,08286	0,236081	-0,11642	0,674632	1										
	14	-0,02273	-0,02554	-0,1242	0,161032	0,208633	-0,00725	0,15109	0,100798	-0,07488	0,185833	-0,07567	0,006675	-0,0789	1									
	15	-0,03264	-0,1506	0,095033	0,09647	0,152938	-0,08828	0,112436	0,140636	0,03552	0,198523	-0,2008	0,096733	-0,03604	0,666457	1								
	16	-0,15325	-0,16244	0,255281	0,467572	0,186453	0,320311	0,336422	0,332768	0,254392	0,213089	-0,44958	0,211249	0,116136	0,226455	0,303642	1							
	17	-0,1185669	-0,1661	0,264308	0,475072	0,145662	0,309982	0,331285	0,333516	0,218191	0,197602	-0,40046	0,214379	0,117856	0,22981	0,308141	0,985401	1						
	18	-0,05049	-0,05427	-0,12444	0,033961	0,022533	0,075778	0,004876	-0,06941	0,079946	0,089131	0,037915	0,00367	-0,04338	0,153321	0,148323	0,124515	0,126359	1					
	19	-0,0478	0,024002	-0,07001	0,272503	-0,05218	0,331133	0,264861	0,301632	0,016805	0,190257	-0,22414	0,316754	0,201787	-0,09917	-0,1539	0,444567	0,424805	0,16607	1				
	20	-0,07339	-0,05091	0,031785	0,299627	0,091327	0,142832	0,034107	0,204863	-0,06163	0,052954	-0,01865	0,4017	0,228737	-0,10046	0,060579	0,318511	0,293115	0,008498	0,336035	1			
	21	-0,02974	-0,10187	0,22751	0,267594	0,138169	0,340569	0,241545	0,500617	-0,10843	0,166377	-0,035	0,249081	0,136934	0,26701	0,242062	0,599886	0,586869	0,146813	0,35124	0,262604	1		
	22	-0,00309	-0,11718	0,304469	0,407717	0,05108	0,359553	0,306186	0,572804	0,058939	0,047573	-0,0307	0,20812	0,114415	0,2231	0,299144	0,776206	0,763337	0,12267	0,331011	0,252664	0,75218		
	23	0,046841	-0,02057	-0,00685	0,12779	-0,00272	0,236607	0,160532	0,176868	-0,26168	0,282394	0,069353	0,293902	0,156873	0,010221	0,116487	0,323455	0,328247	0,068842	0,188519	0,307018	0,297356		
	24	0,041392	-0,0364	0,253175	0,430108	0,124242	0,264889	0,339552	0,44138	0,256344	-0,1112	-0,16064	0,103044	0,000182	0,181633	0,266639	0,736145	0,722489	-0,013	0,358761	0,255468	0,618881		
	25	0,013206	0,016492	0,190238	0,341241	0,044072	0,389429	0,249507	0,374215	0,092436	0,066241	-0,11706	0,226261	0,148717	0,104995	0,223808	0,611327	0,60917	0,048109	0,342511	0,225031	0,44118		
	26	-0,00964	-0,10413	0,255094	0,390306	0,074355	0,272832	0,340953	0,490821	0,107938	0,081485	-0,20283	0,254917	0,166551	0,177142	0,237521	0,70981	0,708501	-0,00406	0,352083	0,249152	0,622975		
	27	-0,04586	-0,12241	0,092596	0,391713	0,053731	0,326916	0,260443	0,463871	0,029513	0,201924	-0,20799	0,4272	0,253994	0,112673	0,164487	0,632785	0,623697	0,033359	0,455089	0,424925	0,519362		
	28	0,004936	-0,04658	0,041445	0,118052	-0,015	0,255334	0,20318	0,167197	0,304941	-0,09452	-0,12319	0,175795	0,079791	0,144881	0,001031	0,308857	0,28488	0,059059	0,312968	-0,02208	0,12504		
	29	-0,0447	-0,00888	0,219236	0,219674	-0,01025	0,240431	0,072792	0,215959	-0,08513	-0,02596	0,108353	0,040821	0,049759	-0,10577	-0,04708	0,147501	0,152579	0,102544	0,098198	0,304257	0,236974		
	30	-0,01824	0,017585	0,126733	0,233031	0,005788	0,282695	0,067991	0,319513	-0,0773	0,10241	-0,01457	0,369372	0,164822	-0,13509	0,003751	0,191197	0,196729	-0,11713	0,294277	0,42072	0,284288		
	31	0,01657	0,049474	0,139085	0,327672	-0,03554	0,27678	0,109071	0,250592	-0,19207	0,066263	0,10108	0,254707	0,168961	-0,13104	0,010812	0,246885	0,251905	0,079254	0,19658	0,368605	0,248966		
	32	0,002293	-0,07295	0,068244	0,246992	-0,05856	0,2836	0,249851	0,321552	0,037296	0,048482	-0,08265	0,273339	0,013908	-0,04246	0,001031	0,308857	0,314082	0,059059	0,365666	0,218833	0,289327		
	33	-0,1019	-0,03484	-0,2357	0,260063	0,154016	0,065025	-0,06694	0,106816	-0,07279	-0,04378	0,119771	-0,10128	-0,05416	0,39936	0,147878	0,314002	0,290301	0,055919	0,091723	-0,08872	0,241537		
	34	0,024872	0,011863	-0,00698	0,026337	0,158787	0,174213	0,33892	0,149371	-0,00962	-0,03949	-0,01274	0,331992	0,318432	-0,04272	-0,0738	0,267228	0,24067	-0,04551	0,362035	0,19741	0,118035		
	35	0,127731	0,052448	-0,02631	0,029242	-0,05997	-0,0206	-0,06641	-0,10093	-0,06495	-0,07842	0,1016	-0,06794	-0,03735	-0,07284	-0,09766	0,035737	0,037843	-0,04005	0,049085	-0,02927	-0,07319		
	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	37	-0,0537	-0,05047	0,048041	0,302235	0,053731	0,209226	0,30975	0,089407	0,16816	-0,09117	-0,0557	0,084237	-0,02032	0,173344	0,143032	0,381032	0,360258	0,133436	0,089392	0,222911	0,177343		
	38	-0,14267	-0,21721	0,189277	0,258572	0,112387	0,281332	0,189875	0,270069	0,20353	0,11259	-0,29659	0,346633	0,17972	0,066299	0,020515	0,48795	0,469344	-0,01823	0,304992	0,306394	0,405763		

39	-0,16829	-0,07889	0,190274	-0,0021	0,094877	0,033952	0,214945	0,217751	0,132227	0,127355	-0,24013	0,060768	0,103279	-0,02746	0,244851	0,242536	0,246129	0,010066	0,052034	0,123846	0,196779
40	-0,06931	-0,03881	0,307528	0,164148	-0,07396	0,144003	0,021407	0,173513	0,34887	-0,22007	-0,15188	0,165185	0,177602	-0,16286	0,025334	0,298667	0,303092	-0,11157	0,193065	0,133037	0,000975
41	-0,12671	-0,14658	0,075138	0,242515	0,07202	0,222256	0,259	0,098294	0,119037	0,096101	-0,19011	0,090635	0,08671	0,161853	0,218759	0,544313	0,530186	0,144614	0,24216	0,305562	0,392098
42	0,0469	0,059286	0,131781	-0,08206	-0,07504	0,146091	-0,11425	0,444997	-0,24295	-0,17191	0,402755	-0,08501	-0,04674	-0,09113	-0,1222	-0,3407	-0,33528	-0,05011	-0,12361	-0,06498	0,158168

Table (continued)

		CG indicators																				
		22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Financial indicators	1																					
	2																					
	22		1																			
	23	0,318662		1																		
	24	0,80921	0,202406		1																	
	25	0,710543	0,262736	0,727904		1																
	26	0,755081	0,316764	0,74105	0,678351		1															
	27	0,662716	0,488277	0,606667	0,545766	0,725186		1														
	28	0,33326	0,089944	0,382818	0,386414	0,384451	0,349		1													
	29	0,274486	0,029218	0,088415	0,15704	0,223284	0,23836	-0,12004		1												
	30	0,308917	0,25491	0,188477	0,271853	0,330032	0,444917	0,04623	0,787017		1											
	31	0,304034	0,295979	0,196663	0,27663	0,276609	0,401587	-0,06808	0,732112	0,761159		1										
	32	0,33326	0,29904	0,266469	0,359138	0,398832	0,450323	0,211551	0,433151	0,562516	0,544659		1									
	33	0,249835	-0,09574	0,301757	0,124143	0,16375	0,149805	0,231661	-0,25456	-0,2927	-0,28733	-0,2903		1								
	34	0,199212	-0,00248	0,213645	0,199211	0,151654	0,161237	0,13386	0,132934	0,141017	0,181916	0,071438	0,095389		1							
	35	0,033607	0,04113	0,050652	2,83E-17	-0,09085	-0,08207	-0,03784	-0,01054	-0,02706	0,049629	-0,1088	0,030533	0,358966		1						
	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
	37	0,347354	0,211894	0,354356	0,22714	0,266123	0,3625	0,261187	0,140507	0,121767	0,21733	0,234168	0,143097	0,038504	-0,06565	-		1				
	38	0,480721	0,266475	0,384936	0,331813	0,483479	0,478091	0,228213	0,139148	0,266449	0,198772	0,305719	-0,01497	0,308344	-0,03139	-	0,119523		1			
	39	0,202739	-0,06507	0,2271	0,180477	0,224854	0,107266	-0,11534	0,022525	0,019167	0,049899	-0,05588	0,045458	0,202062	-0,04912	-	-0,022	0,234061		1		
	40	0,294242	0,029443	0,229189	0,344975	0,289987	0,334506	0,258703	0,167713	0,238394	0,312895	0,196281	-0,02858	0,166049	-0,02022	-	0,154017	0,170279	0,036854		1	
	41	0,485425	0,165657	0,43305	0,366664	0,318367	0,346493	0,225346	0,04173	0,037921	0,110284	0,03482	0,233884	0,209953	0,132499	-	0,285705	0,245577	0,137901	0,146756		1
42	0,132157	-0,10124	0,010943	-0,05688	0,006655	-0,02908	-0,06542	0,27135	0,231704	0,053854	-0,00414	-0,0679	-0,12019	-0,04315	-	-0,0727	-0,14215	-0,0976	-0,12019	0,26074	1	

Appendix IV

	Banks	TOTAL Score (CG Dynamics Ratio)	average annual accession rate <u>ROA</u>	average annual accession rate <u>ROC</u>
Domestically-owned banks				
1	PrivatBank	53	1,51%	14,63%
2	Finance and Credit Bank JSC	67,5	0,46%	4,45%
3	First Ukrainian International Bank	54,5	2,08%	-1,57%
4	Brokbusinessbank	68,5	0,47%	2,87%
5	Delta Bank	53,5	0,56%	7,14%
6	Pivdennyi JSC	66	-0,11%	-3,04%
7	Dongorbank Ltd.	92	0,49%	4,53%
8	Khreshatyk JSC	63	0,54%	7,84%
9	Bank Financial Initiative	56	1,58%	8,95%
10	Credit Dnepr JSCB	94,5	0,93%	6,26%
11	Express Bank JSC	63	1,69%	8,43%
12	Industrialbank JSCB	80	0,65%	6,15%
13	Kliringovniy Dim JSC	54,5	-9,51%	-21,41%
14	Tavrika JSC	85	0,65%	2,99%
15	Kyiv bank	85	-0,44%	-2,19%
16	Aktiv-Bank Ltd.	57,5	-0,71%	-11,83%
17	UkrInBank	54,5	0,60%	4,81%
18	Expobank	34	0,58%	7,13%
19	Ukrexim Bank	42	0,96%	10,00%
20	Oschadny Bank	48,5	1,27%	6,78%
21	UkrGazbank	89	-2,57%	-11,62%
Foreign-owned banks				
22	National Investments JSC	71	0,04%	-1,07%
23	Raiffeisenbank Aval	63	-1,45%	-20,50%
24	Ukrsibbank	51	0,76%	7,03%
25	Ukrsotsbank	23	-1,13%	-11,33%
26	Prominvestbank	73	0,04%	0,48%
27	Alfa-Bank	24	0,51%	4,44%
28	OTP Bank	63,5	-0,23%	-58,09%
29	Nadra Bank	57,5	-3,00%	-29,60%
30	Forum Bank	64,5	-3,36%	-24,70%
31	SEB Bank	71	0,07%	0,91%
32	KreditPromBank JSC	31	1,80%	12,57%
33	ING Bank	15	0,48%	0,78%
34	Unicredit Ban	74	-0,16%	-2,22%
35	Prokredit Bank	70,5	-1,51%	-12,20%
36	Pravex Bank	56	-3,23%	-29,95%
37	Kredobank	61	-0,06%	0,96%
38	BTA Bank	19,5	4,52%	31,46%
39	Citibank	43	-0,78%	-9,28%
40	BM Bank	72	0,06%	0,66%
41	Kiyvs'ka Rus' JSC	11,5	0,44%	1,55%