THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE QUALITY AND BANK VALUE IN CONCENTRATED OWNERSHIP SYSTEM: THEORETICAL BACKGROUND

This article presents the results of evidence of corporate governance variable endogeneity and proposes different instruments for estimation by instrumental variables approach. Moreover, results by simultaneous equation approach indicate a relation of reverse causality between corporate governance quality and bank valuation. The empirical methodology developed in this article may be further used in the research; the study of relationship between corporate governance quality and bank value under the optimal ratio of ownership concentration is another promising area of study.

Problem definition. Do better corporate governance practices lead to a good bank performance and a greater market valuation? This paper presents evidence that this is the case in Ukraine, and that effort by regulators, stock exchanges, multilateral organizations, and others to improve corporate governance practices do pay off. The paper also discusses why better corporate governance practices may not be a panacea for all banks in Ukraine. There are many ways to represent corporate governance. One of them is through the relationship between the concentration of cash flow rights (voting and non-voting shares) and control rights (voting shares), the so-called voting and cash flow rights separation (or wedge) of major shareholders. Cash flow and control rights, however, may be just part of the story. Good corporate governance practices may also be represented by indexes based on charter measures and banks practices. These indices consider many different aspects of corporate governance and may gauge the quality of overall corporate governance practices better.

The whole corporate governance discussion starts from the hypothesis that governance mechanisms influence bank performance. The basic issue in research boils down to knowing whether banks' market value is determined by internal and/or external governance mechanisms. However, there is no theoretical framework or conclusive empirical evidence on how (and if) corporate governance mechanisms influence corporate performance and on whether the relation between these mechanisms is complementary or substitute.

Literature review. Most research analyzes the possible influence of specific governance mechanisms (ownership structure, board of directors' structure, capital structure, presence of a takeover market, remuneration policy, etc.) on corporate performance variables (such as accounting indicators of profitability and market value metrics) individually. In these studies, governance mechanisms act as explanatory variables and performance variables as dependent variables.

Thus, most studies assume that governance mechanisms are exogenous variables, not determined by other governance mechanisms or firm characteristics. However, some governance mechanisms or corporate governance quality itself may actually be endogenous variables, that is, variables influenced by other governance mechanisms or company attributes. If this is true, different kinds of research aimed at capturing the isolated impact of governance mechanisms on performance may have produced biased and inconsistent results, because they have used the premise that governance mechanisms are exogenous in their influence on corporate performance.

Central Aim of Research. In this context, our study aims to examine what kind of investigations in how corporate governance quality influences book value of Ukrainian banks by means of different econometric approaches could be used in Ukrainians realities. This is considered important in recent literature, as multiple regression approaches by ordinary least squares (OLS) treat corporate governance as an exogenous variable, while those using instrumental variables and simultaneous equation systems treat it as an endogenous variable. The latter are used to mitigate problems of omitted variables and reverse causality between corporate governance and value.

This paper further investigates the relationship of its corporate governance measures with corporate valuation and performance. Non concentrated control (voting rights) may be associated with external shareholders' expropriation and poor corporate governance practices. This is sometimes called managerial entrenchment. More concentrated cash flow rights may be associated with an alignment of controlling shareholders interests with those of external shareholders, possibly leading to better corporate governance practices. This is sometimes labeled managerial incentives.

While investigating the relation between influence of corporate governance quality and company value, almost all corporate governance studies use an econometric approach based on the following suppositions:

- governance mechanisms are exogenous variables;
- a one-way causal relation exists between corporate governance and company value;
- regressions are treated by means of isolated equations, using one or more governance mechanisms.

The most tested governance mechanisms in this context include internal mechanisms (ownership concentration, board structure and executive remuneration), and external mechanisms (market for corporate control, indebtedness level, product markets competition, and investor protection).

There are results of researches we consider more compatible with our study methodology. These studies construct broad corporate governance indices that reduce information related to different governance mechanisms and practices into one single measure, as a way of obtaining a more adequate proxy for corporate governance quality.

Table 1 shows as for Black, Jang and Kim's research new and strong evidence that better governance practices will probably lead to higher stock prices in emerging markets was offered. In general, corporate governance quality appears to be an important factor to predict companies' market value and has a significant effect on it.

Table 1 - Summary of major studies on the relationship between corporate government quality and company value

| Authors, year of publication | Market | Main results | Methods to deal with endogeneity and reverse causality |
|---|-----------------------|--|---|
| Black (2001) ¹ | Russia | Strong positive relation between companies' corporate governance quality and market value, suggesting that the company's behavior in terms of governance practices can exert a considerable effect on its market value, mainly in countries where investor protection is weak | As a proxy of corporate governance quality, the authors used a ranking created by the investment bank Brunswick Warburg, which attributed a score from 0 to 60 points, with higher indices pointing towards greater "corporate governance risk" |
| Klapper and Love (2002) ² | 14 emerging countries | High positive correlation between governance quality and market value; avoiding conclusions on any causal relation between governance quality and company performance | least square method for a one-year period - possible endogeneity problem in the relation among variables |
| Bohren and Odegaard (2003) ³ | Norway | Estimate 1 - governance mechanisms are significant for the analyzed companies' performance Estimate 2 - lack of significance or inversed signals in relations between governance mechanisms and value variables | Estimate 1 - isolated regressions with different governance mechanisms acting as independents variables Estimate 2 - simultaneous equation approach |
| Black, Jang and Kim (2006) ⁴ | South Korea | Strong positive relation between governance quality and market value Causal relation between good governance practices and higher market value | Regressions by OLS using different alternative model specifications - possible endogeneity problem in the relation among variables Combining two-stage (2SLS) and three-stage least squares estimators (3SLS) with an exogenous variable determined by law and correlated with governance quality |
| Durnev and Kim (2005) ⁵ | | 3 forecasts: - growth opportunities, need for external funding and ownership concentration are the three main attributes that make companies adopt better governance practices; - companies with better governance practices are valued higher by markets; - adopting better governance practices is more relevant in countries offering weak legal investor protection. | index created by Credit Lyonnnais Securities Asia (CSLA) and another by Standard & Poor's S&P), which only evaluate each country's largest companies and possess important limitations |
| Leal and Carvalhal-da- Silva (2005) ¹ | Brazil | Positive, significant, and robust relationship between CGI and corporate value , suggesting that the improvement of corporate governance practices do pay off in Brazil | The authors constructed a broad corporate practices index (CGI) composed of 24 objective and binary questions for the period from 1998 to 2002. The tests were conducted through panel data analysis using common, fixed and random effect procedures, besides simultaneous equations. |

¹ BLACK, Bernard. The corporate governance behavior and market value of Russian firms. Emerging Markets Review, v. 2, p. 89-108, 2001.

² KLAPPER, Leora, LOVE, Inessa. Corporate governance, investor protection, and performance in emerging markets. World Bank Policy Research Working Paper n. 2818, April, 2002.

³ BØHREN, Øyvind, ØDEGAARD, Bernt Arne. Governance and performance revisited. ECGI working paper series in finance, n. 28/2003, September, 2003. Available at http://ssrn.com/abstract_id=423461.

⁴BLACK, Bernard, JANG, Hasung, KIM, Woochan. Does corporate governance predict firms' market values? Evidence from Korea. Journal of Law, Economics, and Organization, v. 22, n. 2, Fall, 2006.

⁵ DURNEV, Art, KIM, Han. To steal or not to steal: firm attributes, legal environment, and valuation. Journal of Finance, v. 60, n. 3, p. 1461-1493, June, 2005.

Table 2 - Summary of major studies on the relationship between company performance and ownership structures (developed markets)

| Authors, year of publication | Market | Owner types | Sample description | Main results | Methods to deal with endogeneity and reverse causality |
|---|----------------------------------|---|--|--|---|
| Demsetz & Lehn (1985) ⁶ | US | Blockholders | Cross-section sample, 511 companies, average of variables for 1976-1980 | No relationship between ownership concentration (presence of blockholders) and company performance | 2SLS with instrumental variables; instruments for ownership concentration – size, profit volatility, dummy variables for regulated industries and industries with amenity potential |
| Morck, Shleifer & Vishny ⁷ | US | Insiders (managers) | Cross-section sample, 371 companies, data for 1980 | Piecewise linear regression. Positive impact of ownership on performance (Tobin's Q) for ownership stake intervals 0%-5% and above 20%; negative impact for the interval between 5% and 20% | OLS. No methods to control for endogeneity and reverse causality |
| McConnell & Servaes (1990) ⁸ | US | Blockholders; Insiders (managers) | Cross-section sample, 1000 companies, data for 1976 and 1980 | Quadratic regression. Positive impact on performance for managers' ownership stakes below 30-40%; negative relationship for higher stakes. Total blockholders ownership does not impact performance | OLS. No methods to control for endogeneity and reverse causality |
| Himmelberg, Hubbard & Palia (1999) ⁹ | US | Insiders (managers and board members) | Panel data, about 400 companies, 1982 - 1992 | Reverse U-shared relationship between managers' ownership stake and performance, which persists when instrumental variables are introduced to control for endogeneity and reverse causality | Fixed effects regression to control for unobserved heterogeneity. 2SLS with instrumental variables for ownership: firm size and specific risk (CAPM model residual) |
| Thomsen (2004) ¹⁰ | US, UK, continental Europe | Blockholders | 990 companies, panel data for 1989 - 1998 | No relationship between ownership concentration and performance for the UK and the US. Negative relationship for continental Europe, which may be attributed to higher reinvestment rates and lower dividends of companies with concentrated ownership | Fixed-effects regression, estimated by generalized method of moments (GMM). |
| Kaserer, Moldenhauer (2007) ¹¹ | Germany | Blockholders, Insiders (managers and board members) and their families | About 230 firms included in CDAX index, panel data for 1998 - 2003 | Positive relationship between performance and insider ownership, which persists in instrumental variables estimation | 2SLS with instrumental variables for ownership: number of management board members, dummy for existence of non-voting shares, ratio of intangibles to total assets |

⁶ Demsetz, H., Lehn, K. (1985), The Structure of Corporate Ownership: Causes and Consequences, Journal of Political Economy, 93 (1985) 1155-1177

⁷ Morck R., Shleifer A., Vishny R. (1998), Management ownership and market valuation: an empirical analysis, Journal of Financial Economics, 20 (1998)293-315

⁸ McConnell, J., Servaes, H. (1990), Additional evidence on equity ownership and corporate value, Journal of Financial Economics, 27 (1990) 595-612

⁹ Himmelberg, C., Hubbard, R., Palia, D. (1999), Understanding the determinants of managerial ownership and the link between ownership and performance, Journal of Financial Economics, 53 (1999) 353-384

¹⁰ Thomsen, S. (2004), Blockholder Ownership, Dividends and Firm Value in Continental Europe, http://www.isnie.org/ISNIE04/Papers/thomsen.pdf

¹¹ Kaserer, C., Moldenhauer, B. (2007), Insider Ownership and Corporate Performance – Evidence from Germany, CEFS Working Papier Series, No. 1/2005

Table 3 - Summary of major studies on the relationship between company performance and ownership structures (emerging markets)

| Authors, year of publication | Market | Owner types | Sample description | Main results | Methods to deal with endogeneity and reverse causality |
|------------------------------|-------------------|--|--|---|---|
| Kocenda & Svejnar (2002)12 | Czech Republic | Top blockholder ownership stake, government ownership ("golden sfare") foreign ownership | About 1,200 companies quoted in Prague Stock Exchange in 1996-1999 (panel data) | Companies with dispersed ownership demonstrate the best performance. Presence of government ownership affects performance negatively; foreign investors presence – positively | Regression in percentage differences, which allows ruling out the impact of unobserved endogeous variables (equivalent to fixed-effects model) |
| Earle (1998)13 | Russia | Non-government ownership; insiders; outside investors, independent of management | 383 companies, cross- section for 1994 | Positive effect on non-government ownership on performance (productivity), attributed mostly due to the presence of outside investors | 2SLS with instrumental variables for ownership: prices control, export orientation of the business, government subsidies etc. |
| Kuznetsov,Muravyev (2000) | Russia | Blockholders, insiders (management), Russian outside investors, foreign ownership | 101 companies, panel data for 1995-1997 | Negative relationship between performance and ownership concentration Presence of foreign blockholders positively affects performance. | 2SLS with instrumental variables for ownership: privatization characteristics, social-economic situation in the region of the company's functioning, financial characteristics of the companies' industries |
| Muravyev (2002) 14 | Russia | Government | 4400 companies, cross- sectional data (2001) | Negative relationship between performance measures and presence of the government among blockholders | OLS with lagged dependent variable as regressor. No control for endogeneity and reverse causality: government could have chosen to privatize only better-performing |
| Bokov, Vernikov (2008)15 | Russia | Controlling shareholders | 25 IPO transaction of Russian banks (2005 – 2008) | Companies with higher ownership concentration got higher valuations in IPO, which may proxy for better expected performance | OLS. No methods to control for endogeneity and reverse causality |

¹² Kocenda, E., Svejnar, J. (2003), Ownership and Firm Performance after Large-Scale Privatization, CERGE-EI Working Papers wp209, The Center for Economic Research and Graduate Education - Economic Institute, Prague

¹³ Earle, J. (1998), Post-Privatization Ownership Structure and Productivity in Russian Industrial Enterprises, Stockholm University of Transitional Economics, Working Paper No. 127

¹⁴ Muravyev, A. (2002), Federal state shareholdings in Russian companies: Origin, forms and consequences for enterprise performance, BOFIT Discussion Papers, No. 12 2002

 $^{^{15}}$ Bokov V.A., Vernikov A.V. Corporate governance quality and bank value in Russia: empirical research, Corporate finance, 2008, N $^{\circ}$ 36 p. 5 – 16.

Another important point is causal relationship between ownership structure elements and corporate performance (or company value/that can be assessed as company value) that describes in Table 2. In the context of the effect on company performance, three corporate governance methods are of most interest because they are formed endogenously: ownership structure, board characteristics and executive compensation. In general, it should be noted that not all studies use relevant econometric techniques to control for the endogeneity of ownership structures, so their results may be under the question. So-called "equilibrium concept" of ownership structure is supported for many developed markets samples (in particular, for the US and the UK data). There should be no systematic relationship between observed ownership structures and performance. The key reason for that is that ownership is always determined endogenously in order to maximize the company's performance, because it is significant for all owners. Nevertheless the presence of such relationship would imply that there is potential for performance improvement as a result of ownership structure reshuffling. At the same time, for the developed market with concentrated ownership (Germany) the equilibrium concept is not supported, and specific investor types (insiders, owner families) may positively affect performance. In terms of the link between company performance and ownership structures (showed in Table 3), performed on emerging markets data it should be noted that many of these studies use productivity as performance measure instead of Tobin's Q and ROA, which is due to the low of emerging markets stocks and the unreliability of accounting data with respect to net income. As far as the emerging markets with undeveloped stock exchange, book variables (ROA, ROC) are used as performance measure. On the contrary, such variables like Tobin's Q and PAYOUT are used by developed countries. In general, the relationship between ownership structure and company performance is subject to the type of the investor. Presence of foreign block holders basically has a positive impact on bank performance, while presence of government ownership affects performance negatively. Positive relationship between ownership concentration and bank performance were indicated with respect to privatization: the companies where government stakes were sold to

private investors demonstrated better performance, and the earlier privatization was conducted, the better was the performance.

Conclusions. Presented article shows that there are many studies that investigate relationship between corporate governance quality and bank value in concentrated ownership system. As corporate governance literature contains strong suspicions about governance mechanisms being endogenous variables, the relation between governance quality and value should be treated more adequately than by OLS. One solution for endogeneity problems would be the use of instrumental variables. These should present two main properties: strong correlation with corporate governance quality and null correlation with the error term in the original equation. In other words, the instruments should affect the value variable only through corporate governance and other observable and controllable variables¹⁶.

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¹⁶ While the correlation between corporate governance and the instrumental variable can be observed, the hypothesis of a null correlation between the instrument and the error term is not directly observable and needs to be based on theoretical suppositions.