Quality of governance and bank valuation in Russia: An empirical study

Bokov, Vassily and Vernikov, Andrei

State University - Higher School of Economics (Moscow)

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Quality of governance and bank valuation in Russia: an empirical study

Vassily Bokov[1], Andrei Vernikov[2]

This paper aims at explaining the differences in valuation ofbanking firms in Russia from the quality of governance point of view. A sample of acquisition deals and public offerings over the last 5 years is taken with view of discovering factors that investors deem to be significant in making a decision whether to invest in a given banking firm and, if so, at what price. We use price-to-book-value of equity (P/BV) multiple as astandard measurement of valuation and the dependent variable. As toexplanatory variables, we put together a set of proxies for quality of bank governance and management, such as: the degree of control concentration, managerial experience,the degree of compliance with corporate governance best practices (e.g. the degree of Board independence, the level of qualification of external auditors), the stability of bank's governing bodies (theManagement Board and the Board of Directors), and the availability of external credit ratings. We find out which factors are statistically significant and relevant. A least squares multiple linear regression model is devised to check how individual variables explain the differences in valuation. We discover that external investors attach value to high concentration of ownership, sheer size of the bank, stability of the governing bodies involvement of well-established external auditors and also that strategic investors tend to pay higher acquisition premiums. The features of the Board of Directors such as its independence, maturity and stability appear to create less value if any.

Introduction

Shareholder value is at the heart of corporate finance theory. We aim to explain the differences in valuation of banking firms in Russia from the quality of governance point of view. It is 'common knowledge' that financial markets and individual investors reward better-governed companies and banks by higher share price. Conversely, shortcomings in the area of governance must lead to a destruction of shareholder value. While this assumption does not cause logical difficulties, its accurate testing with empirical data is a challenge in emerging markets like Russia. There is no single widely-accepted methodology to measure the quality of governance. Data on company valuation are not readily available for econometric analysis because very few banking institutions have equity securities in free float in the stock market. In this paper the authors are trying to do their best to start filling in these gaps.

Thepaper is organized as follows. In *Section 2* we give a concise review of publications devoted to the connection between the quality of governance on a firm level and the valuation of the firm. *Section 3* lists the main theoretical hypotheses that we would like to test on the Russian bank data. *Section 4* indicates the sources of data that we use. *Section 5* offers a detailed discussion of our explanatory variables. *Section 6* contains the description of the model and the results of estimation. In *Section 7* we offer an interpretation of the received results. *Section 8* concludes with the main findings and directions for future research.

1. Review of literature

[1] Banking Department, Higher School of Economics, Moscow, Russia. research@vassilybokov.ru
[2] Professor, Banking Department, Higher School of Economics, Moscow, Russia. a_vern@bk.ru

One can find two main clusters of research related to our subject: one on assessment and quantification of governance quality in Russian banks, and the other on the interplay between governance and firm valuation.

Standard & Poor's, the rating agency, has developed a methodology for appraisal and scoring of corporate governance resulting in corporate governance rating in two different scales – national and international [Standard & Poor's, 2006]. The methodology includes the basic principles and criteria, and differentiates between country background and individual company analysis. The main 4 components of company analysis are: ownership structure and external influence; shareholders' rights and the relations with affiliated persons; transparency, information disclosure and audit; and Board of Directors structure and effectiveness. The coverage of companies by corporate governance rating has remained extremely limited, and to date only one Russian bank has been awarded such a rating.

In 2008 Standard & Poor's published its substantially modified methodology of corporate governance ratingsunder the name of GAMMA — Governance, Accountability, Management Metrics and Analysis [Standard & Poor's, 2008]. The approach shifts its focus away from an abstract appraisal of governance in the given bank against the background of 'best practice' towards an analysis of specific risks taken by investor. GAMMA's main components are: influence by shareholders; shareholders' rights; transparency, audit and risk management system; and Board of Directors effectiveness, the process of strategizing, and compensation system.

Since2004 the Russian Institute of Directors (RID) jointly with Expert-RA rating agency [RID & Expert-RA] have been awarding 'national corporate governance ratings' based on proprietary methodology.

Standard & Poor's also publish regular surveys of transparency and disclosure of Russian banks. The latest survey [Standard & Poor's, 2007] covers the top 30 banks and aims to appraise the degree of disclosure of information relevant for investment community, against 'international best practice'. Thefocusisoncomprehensivenessandintegrityofpubliclyavailableinformationon the main operational parameters, financial soundness, ownership structure and corporate governance mechanisms. Although Standard & Poor's explicitly warn that their transparency and disclosure score should not be used to gauge corporate governance quality, the two concepts have much in common and display a high degree of synchronization.

In 2007 the International Finance Corporation published itsnew survey of corporate governance in Russia's banking sector [IFC, 2007], covering 82 private institutions. IFC examines commitment to good corporate governance; practices of the Supervisory and Management Board; transparency and disclosure; internal control and risk management; and shareholder rights. The survey stops short of awarding individual ratings to banks and comparing them against a common scale. This survey insightfully examines the practices of both the Supervisory and Management Boards and their interplay, while most other publications tend to limit their scope to the structure and practices of the Supervisory Board only.

The link between the quality of governance and the valuation of companies is sufficiently researched with regard to mature markets but much less so for emerging markets. Morck*et al.* [2005] reviews the large literature that explores the connection between country-level rules affecting corporate governance and firm behavior and the strengths of securities markets. Klapper and Love [2004] analyze connection between the measure of firm-level governance and share price on a cross-country basis. On the level of oneemerging market country (Korea) Choiand Hasan[2005] examine the effect of ownership and governance on firm performance and discover evidence that: the extent of the foreign ownership level has a significant positive association with the bank return and a significant negative association with the bank risk; the number of outside board of directors does not have any significant affect on performance; the presence of a foreign director on that board is significantly associated with bank return and risk.

Bernard S. Black has made a seminal contribution to the study of the impact of governance on firm valuation in Russia and other emerging markets [Black, 2001; Black *et al*., 2006]. In order to obtain a combined index of governance in Russian firms, 6 indices produced by 6 different agencies

for irregular periods are standardized and put together.Black *et al*. [2006] finds an economically important and statistically strong correlation between governance and market value. However, it matters a great deal *how* one measures governance.

Staryuk usesthe value-based management concept to research how corporate governance has driven the stock market valuation of theRussian 'blue chip' companies [Staryuk, 2008]; banks are not covered.

In August 2008, Bokov and Vernikov made an attempt to explainthe differences in the valuation of Russian banks from a quality of governance point of view [Bokov, Vernikov, 2008]. They discovered that strategic investors appreciate high concentration of ownership and stability of the management team, while broadly neglecting the features of the Board of Directors as well as bank transparency. This article is a revised version of the above-referred conference paper.

2. Theoretical hypotheses

Corporate governance is the system by which companies are directed and controlled. In a narrow definition governance is a mechanism for defending shareholders' interests and property. A positive connection is assumed to exist between broad measures of firm-level corporate governance quality and higher share prices [Black *et al.*,2006].Then specific factors usually associated with 'international best practices' of corporate governance must also display a positive connection with the firm's value. Among such factors we list disclosure of information and transparency of the bank; coverage by major and internationally recognized external auditors and credit rating agencies; existence of a strong, competent and independent Board of Directors; presence of a coherent and competent banking team; fair representation of all shareholders, including minority ones, and reliable systems to protect their interests; and built-in constraints to opportunistic action by bank insiders and affiliated persons. Financial markets are presumed to reward by a higher valuation of equity what they perceive as good governance. Conversely, the perceived insufficient quality of governance leads to loss of shareholder value in companies from emerging market countries including Russia.

These are some of the theoretical hypotheses that we try to test in the paper.

3. Data

We collected a sample of acquisition (takeover) transactions and public offerings of common stock by Russian banks over 2006-2008 to analyze differences in valuation (see **Appendix**). We chose to use only the acquisition deals and stock offerings primarily because they provide a measure of the firm's value that is straightforward to interpret. Data on deals come from a variety of sources, including major industry databases, such as [Hoover's] and [Bankers' Almanac], and media surveys. Initially, the sample consisted of 25 transactions, including several transactions by the same entity (e.g. the consecutive public offerings by *Vozrozhdenie Bank,* and a series of transactions with the shares of *Rosbank*). The sample includes major transactions, i.e. involving entities with over USD100 million, or equivalent in assets. This filter was introduced to avoid looking at the acquisition of licenses, rather than of working businesses. We only managed to collect part of the data necessary for the analysis, and had to exclude more than half of the initial sample for various reasons. Some of the banks did not make adequate disclosure of information. Other banks have reorganized so deeply that any data about the initial entity has been completely pulled from information systems (e.g. *Investsberbank* has removed all pre-acquisition data from public databases). The so-called 'people's IPOs'[3] of *Sberbank* and *VTB* were dropped because, in our opinion, those deals were largely off-market, given the degree of state support received and the emphasis on non-qualified investors. We have also avoided deals between foreign banks (i.e.

[3] Initial public offering

transfers of Russian assets from one foreign owner to another), primarily in view of their off-market pricing, which is usually the case, e.g., with Asian banks.

The final sample includes 10 deals starting with 2006 sale of *Impexbank* to *Raiffeisen,* and concluding with the 2008 sale of *Uniastrum Bank* to the *Bank of Cyprus* in mid-2008. Our data can broadly be classified into two broad categories of transactions: (a) the direct sale of business, or a controlling stake in its equity, a notable example being the sale of *Absolut Bank* to *KBC* of Belgium in September 2007; and (b) public offerings, both IPOs and SPOs[4], such as the IPO of *Bank St.Petersburg* in November 2007, or the SPO of *Vozrozhdenie* in May 2007.

Financial indicators have been taken from [Bankscope] database, and also from [Bankers' Almanac]. Finally, the data on shareholding, personal details of top managers and Directors, and the *quality*of auditors come from the regulatory statements submitted on a quarterly basis by all issuers of securities to the Russian regulatory authority, Federal Financial Markets Service.

4. Variables

We chose price-to-book-value (P/BV) ratio of banks as the *dependent variable* in our model. This indicator has the advantage of being the most commonly used measurement of bank valuation, particularly in the absence of highly developed and sophisticated stock markets that involve a broad range of equities issued by banks. The choice of P/BV allows us to sterilize the effects of banks' sheer size on valuation. At the same time some of the P/BV multiples result from single large transactions, rather than from an infinite number of small market-based interactions. Large single transactions, especially those involving shift of control over the bank, are by definition always unique, and may be concluded on terms well beyond market-proven price corridors at each point in time.

As tothe explanatory (independent) variables, having just one explanatory variable, for differences in bank valuation, would have rendered simplicity to the econometric analysis.(?) At the outset we were tempted to employ one of the existing ratings of corporate governance,e.g. that assigned by Standard & Poor's, but the use of already-available indices is deterred by their meager coverage of banks – e.g., just one Russian bank holds a corporate governance rating from Standard & Poor's, and another one - a rating from RID & Expert-RA.

We focus on the following *range of candidate independent variables*:

1. Asset size (ASSETS) is used as a control variable to account for the possible premium for large acquisitions (market share premium). In other words, we expect the premium to increase with the growth of asset size.
2. Quality of auditors (AUDITORS) is used as a proxy of bank transparency that is an essential component of governance quality. AUDITORS is a dummy variable taking a value of 1 if the bank's external auditor is a 'Big-4' accounting firm (Ernst & Young, Deloitte, KPMG, or PricewaterhouseCoopers), and a value of 0 otherwise. We think that, *ceteris paribus*, it is better-governed banks that undertake efforts to increase transparency, to disclose more information and subject themselves to the scrutiny of external auditors of proven integrity and rigor. The global capital markets generally require the issuer to provide investors with highly reliable financial information. The quality of audit and the integrity of the auditors significantly affect the quality of information available to financial markets, while lack of proper audit impairs a bank's ability to raise funding from those markets. We expect that the more transparent the bank is, the smaller the acquirer's discount for possible risk of accounting fraud.Overall AUDITORS is assumedto have a positive correlation with bank valuation.
3. Rating agency coverage (RATINGS) – a variable counting the number of credit rating agencies that cover the bank. The range of this variable is from 0 when the bank is not rated by either of the major globally recognized ratings agencies - Moody's, Standard & Poor's,

[4] Secondary (seasoned) public offering

or Fitch Ratings, to 3 when rated by all 3 of these agencies. Rating agencies are expected to perform a thorough and impartial risk assessment on behalf of investors. Similarly to AUDITORS, the extent of ratings agencies' coverage could significantly impact the ability of the firm to raise funds from public financial markets. Higher value of RATINGS indicator might reflect greater transparency and better governance.

4. Size of the Board of Directors (BOD_SIZE) – the number of people sitting on the Board. We assume that going over some notional threshold of the Board size[5] would jeopardize the Board's inefficiency for two reasons: (a) an excessive numerical composition is usually an indicator of irrelevance of at least some of Board members; (b) a big size of the Board might inhibit productive discussion,lead to a bureaucratization of the Board functioning and thus adversely impact the ability of the firm to make swift and timely policy decisions. At the same time, too small a Board may not allow different views and interests to be represented.
5. Degree of Board independence (BOD_IND) – the share of independentDirectors in the total number. The Board has to be reasonably independent from the bank management in order to perform its fiduciary duties, and independent directors are expected to be free from the conflict of interest, unlike the managers whose actions the Board must monitor. The Russian legislation expressly limits the maximum number of members of the Management Board to sit on the Board of Directors to 25% of all Directors, but the rest of them can be other insiders unless they declare their 'independent' status.
6. Shareholder concentration (SCR) – the sum of shares of the top 3 shareholders in the charter capital of the bank.We expect this indicator to have a positive impact on price in case of acquisitions, while its impact in the case of public offerings is uncertain.An acquirer,who wishes to quickly gain control and not to have to deal with minority shareholders, must be inclined to pay a premium to book value of the bank. At first glance, SCR appears to express a premium paid for control over the bank. Actually SCR is less about the price at which control over the bank is sold, but more about the dispersion of the remaining stock after acquisition.At the same time, minority stake holders and potential investors in bank shares at an IPO or SPO can reasonably doubt their potential clout over decision-making in a bank where one or a few intimately affiliated individuals have been firmly entrenched (on entrenchment of blockholders against new shareholders see [LaPorta*et al*., 1999]).
7. Stability of the Management Board (MB_STABILITY) – average tenure of Management Board ('*pravlenie*') members. Low turnover among top managers can mean that there are no major conflicts within the Management Board, the management team is coherent and balanced and one of high quality. The assumption stands that an acquirer depends on the cooperation and goodwill of the previous top management, be it only for statutory reasons and for the sake of business continuity. An acquirer should also want to keep in place a successful and competent management team that has performed so well in the past. In turn, a stable management team can be assumed more likely to stay with the bank after ownership change. If so, then high value of MB_STABILITY should lead to an extra premium that an acquirer is prepared to pay.
8. Stability of the Board of Directors (BOD_STABILITY) is average tenure of Directors. This variable can impact valuation with either a positive or negative sign. On the one hand, low rates of turnover in the Board can be viewed as an indicator of maturity, stability, continuity and firm control by the key shareholders, thus attributing a positive sign to this indicator. On the other hand, a protracted period of Directors' duties might be an unequivocal sign of entrenchment of the key shareholder(-s) against all other parties, including minorities. The Russian law does not support the institution of 'staggered boards' and the entire Board is re-elected every year at the regular annual meeting of the shareholders. Voting usually follows the 'cumulative' model, meaning that a single drop-out between regular annual meetings

[5] From practical experience and empirical evidence of corporate governance in Russia we take the number of 7 directors as a tentative threshold of optimal size of a Board.

triggers the full Board re-election at the extraordinary meeting. The absence of such corporate events might reflect various phenomena. Another consideration is that a bank with an overly 'stable' Board is prone to enjoy comfort, becoming lazy and averse to risk-taking, innovation and adjustment. There is also a risk that over time material interests of the Board Directors might become increasingly aligned with those of the bank management rather than its shareholders. The aforementioned phenomena would denote poor governance and explain a possible negative impact of BOD_STABILITY on bank valuation.

9. Time period (TIME) – a variable, representing the quarter in which our observation is made (a transaction is completed). The variable takes on integer values between 1 and 22, with 1 corresponding to Q1 2003, and 22 corresponding to Q2 2008. This variable was included to account for any possible overall increase or decrease in bank acquisition activity over time, thus confounding with the specific company characteristics affecting valuation. We decided to include TIME in our sample, along with variables featuring the quality of governance and management in a bank, in order to exercise control over the effect of natural market evolution. A rising confidence in the Russian banking sector leads to cheaper targets bought first. Variables 1 – 10 (and especially variables 1, 2, 3, 5, 7 and 8) might display co-linearity with TIMEbecause the natural evolution of governance quality is expected to be the one of gradual improvement over time.
10. Strategic nature of the transaction (STRATEGIC) – a dummy variable taking on the value of 1 if the acquisition can be considered strategic, and 0 otherwise. We consider to be strategic the investments with an intention to influence the direction of the bank's development on behalf of the acquirer; and if the acquisition is deemed to be a long term investment, not an intended resale or speculation.

Table 1 lists in the alphabetic order a tentative set of independent variables to be included in the model and anticipates the sign of these variables' impact on the dependent variable (P/BV).

Table 1: Preliminary set of explanatory variables

Variable	Stands for	Expected impact
ASSETS	Natural logarithm of asset size	Positive
AUDITORS	Quality of auditors (1 if auditors are a Big-4 firm. 0 – otherwise)	Positive
BOD_IND	Percentage of independent directors on the Board of Directors	Positive
BOD_SIZE	Size of the Board of Directors	Negative (if over 7)
BOD_STABILITY	Average tenure of directors (in months)	Positive
MB_STABILITY	Average tenure of the members of the Management Board (in months)	Positive
RATINGS	Number of major rating agencies covering the bank	Positive
SCR	Sum of top 3 shareholders' shares of equity	Positive for acquisitions, uncertain for public offerings
STRATEGIC	Strategic nature of acquisition (1 if strategic, 0 - otherwise)	Positive
TIME	Quarter in which the transaction has been completed	Positive

We have also considered several other candidate variables, but decided not to include them in the model either on theoretical grounds or for practical reasons. Western concepts of corporate governance may attach weight to factors that in the Russian circumstances play a different role. For instance, S & P focuses on the ownership structure and external influences as one of four main areas

driving the cumulative rating of corporate governance. Most Russian banks display a very high degree of ownership concentration with a blockholder present in each bank, so this indicator becomes a dummy variable with value next to constant. Another example is a dummy variable reflecting whether the CEO and the Chairman of the Board of Directors is the same person (situation quite common in the American banks). The Russian legislation prohibits such practice, so all companies in the sample share this feature, therefore inclusion of this variable would not add value. Some of the indicators of corporate governance quality suitable for mature markets (e.g. frequency of Board meetings, the number of Board committees, and proportion of outside Directors) become mutilated by the basic Russian cultural institution of tolerating a huge gap between form and substance. Most of the recorded Board meetings may have never taken place; Board committees can exist on paper only; and many Directors positioned as non-affiliated to the executive management of the company are actually insiders or beneficial owners. Foreign nationals' presence in a Board of Directors as a proxy for good corporate governance [Choi, Hasan, 2005] does not convince us: it is most likely to be a pure window-dressing and an attempt to manipulate the investors, which in our opinion constitutes bad governance practice.

5. The model and estimation results

In order to quantify the impact of selected indicators on the valuation of banks, we tried to build a multiple linear regression model explaining the dependent variable – P/BV ratio.

Our first step was to determine the preliminary list of statistically significant regressors. We approached this task by defining a simple least-squares regression model:

(1) $$P/BV = \beta_0 + \beta_1 * VARIABLE_i$$

where$VARIABLE_i$ is one of the dependent variables defined in the preceding section. We have run a series of ordinary least-squares regressions to see which regressors are statistically significant. We had to employ this procedure rather than running a multiple regressiondue to a limited number of data points and a wide array of explanatory variables. Having established the set of significant regressors, we built a multiple regression model using P/BV as the dependent variable and the significant regressors discovered in the previous stage as the independent variables. The results of the estimation appear in **Table 2**.

Table 2: Significance of individual regressors

Variable	Coefficient	Standard error	P-value
ASSETS	-0.3461	0.2191	0.1527
AUDITORS	0.2000	0.3432	0.5761
BOD_IND	-0.6422	0.6491	0.3515
BOD_SIZE	-0.0036	0.0610	0.9539
BOD_STABILITY	0.0075	0.0067	0.2952
MB_STABILITY	0.0071	0.0054	0.2216
RATINGS	-0.2667	0.2436	0.3055
SCR	0.9858	0.7032	0.1985
STRATEGIC	0.1583	0.3532	0.6659
TIME	0.0024	0.0642	0.9709

Comparing these results to *a priori* expectations regarding the impact of our candidate regressors on the dependent variable, it is noteworthy that most variables turned out to have the signs we expected them to, with three major exceptions: RATINGS (the number of rating agencies covering the bank), ASSETS (natural logarithm of asset size) and BOD_IND (Board of Directors' degree of independence from the management) turned out to have a negative sign.

A casual observation of p-values in **Table 2** reveals two obvious outliers: TIME and BOD_SIZE are apparently insignificant and should be dropped from the model. This results in a revised list of regressors which we then use to build the following multiple least-squares model:

(2) $P/BV = \beta_0 + \beta_1*ASSETS + \beta_2*AUDITORS + \beta_3*BOD\_IND + \beta_4*SCR + \beta_5*MB\_STABILITY + \beta_6*BOD\_STABILITY + \beta_7*STRATEGIC + \beta_8*RATINGS$

Having run a least-squares estimation procedure we obtained the following output:

Table 3: Preliminary model - regression statistics

R-squared	0.9936
Adjusted R-squared	0.9428
Standard Error	0.1250
Observations	10

Table 4: Preliminary model - analysis of variance

	Degrees of freedom	Sum of squares	Mean sum of squares	F-value	F-significance
Regression	8	2.4404	0.3050	19.5288	0.1733
Residual	1	0.0156	0.0156		
Total	9	2.4560			

Table 5: Preliminary model - regression coefficients

	Coefficient	Standard Error	T-Statistic	P-Value
Intercept	-4.3538	2.8671	-1.5186	0.3707
ASSETS	0.5606	0.3280	1.7089	0.3370
AUDITORS	0.4828	0.1675	2.8824	0.2126
BOD_IND	-0.4808	0.2897	-1.6596	0.3452
SCR	2.5896	0.7221	3.5862	0.1731
MB_STABILITY	0.0150	0.0040	3.7352	0.1665
BOD_STABILITY	0.0095	0.0045	2.1244	0.2801
STRATEGIC	0.9429	0.1861	5.0659	0.1241
RATINGS	0.0287	0.2580	0.1113	0.9294

Considering the output we received from the model, we can further improve our model by eliminating the least significant variables, namely RATINGS and BOD_IND. Thus, the new model can be formulated as:

(3) $P/BV = \beta_0 + \beta_1*ASSETS + \beta_2*AUDITORS + \beta_3*SCR + \beta_4*MB\_STABILITY + \beta_5*BOD\_STABILITY + \beta_6*STRATEGIC$

Running the estimation procedure again we get the following results (**Tables 6**, **7** and **8**).

Table 6: Final model - regression statistics

R-squared	0.9666
Adjusted R-squared	0.8999
Standard Error	0.1653
Observations	10

Table 7: Final model - analysis of variance

	Degrees of	Sum of	Mean sum of	F-value	F-significance

	freedom	squares	squares		
Regression	6	2.3741	0.3957	14.4877	0.0256
Residual	3	0.0819	0.0273		
Total	9	2.4560			

Table 8:Final model - regression coefficients

	Coefficient	Standard error	T-Statistic	P-Value
Intercept	-5.7951	2.1676	-2.6736	0.0755
ASSETS	0.6600	0.2037	3.2401	0.0478
AUDITORS	0.4035	0.1511	2.6705	0.0757
SCR	3.1787	0.6844	4.6445	0.0188
MB_STABILITY	0.0140	0.0047	2.9838	0.0584
BOD_STABILITY	0.0118	0.0054	2.1702	0.1184
STRATEGIC	0.8794	0.1695	5.1868	0.0139

6. Interpretation of results

The model appears to have an excellent fit, i.e. it explains nearly all variations in the dependent variable (P/BV). The model thus successfully passes the F-test[6], and all its regressors (including the intercept) are statistically significant (with a possible exception of BOD_STABILITY, which we have nevertheless decided to keep in the model for the sake of consistency).

Holding all else equal, a 1% increase in the value of total assets leads to an increase of 0.66 of the P/BV multiple at acquisition. The presence of recognized auditors further tends to increase the valuation multiple by 0.40. The increase in stability of Management Board and the Board of Directors (measured in extra months of average tenure of members) by one month further boosts valuation by 0.01, which admittedly is a rather negligible (but still statistically significant) contribution. The strategic nature of acquisition (STRATEGIC) increases the premium paid by the acquirer to book the value of equity by further 0.88. Finally, by far the most visible contribution is made by the shareholder concentration ratio (SCR). A very closely held company with 3 shareholders controlling all 100% of shares would instantly yield a 3.18 P/BV multiple.

Our results might be interpreted in the following wayfrom the viewpoint of economics and the management theory.

Acquirers are likely to attach positive value to the fact that the target bank is closely held, i.e. to the degree of control exercised by the top 3 shareholders (SCR). The higher the ownership concentration, the lower the bargaining power of the minority shareholders, and less cost for the controlling owner to re-align his new subsidiary.

The variable ASSETShas changed its sign from negative, in the preliminary version of our model, to positive in the final version. The premium for a greater amount of assets could mean that investors are anxious to acquire a larger market share and are willing to pay extra for a larger asset base. We believe that the change of sign is most directly explained as a result of an ‘omitted variable bias’ – our initial estimation used simple least squares estimation, obviously omitting several significant variables.

The premium paid by the investors for high quality audit (AUDITORS) could indicate that the acquirers mistrust the local accounting firms and wish to pay up for the comfort provided by an established auditor.

The stability of the boards of the target bank (MB_STABILITY and BOD_STABILITY) increases its valuation. This outcome of our modeling does not come as a surprise. Interestingly, the empirical evidence suggests that within the first year after the ownership change a shake-over of the

[6] F-test is a statistical test of null hypothesis that all regression coefficients are simultaneously equal to zero. Failure to accept the null hypothesis means that at least one of our regressors is linearly related to the dependent variable.

management team takes place (examples: *International Moscow Bank* and *Impexbank*). In most cases it happens at the initiative of the managers themselves who do not accept an inevitable reduction of their status within a larger institution, or do not wish to adjust to a totally different corporate culture, or find the new compensation packages unattractive while opportunities for opportunistic action shrinks. As regards the Board of Directors, the general practice in Russia is the complete replacement of the board with representatives of the new owner (hence the low significance of Board stability as an explanatory variable). By paying a premium for MB_STABILITY and BOD_STABILITY, are investors wasting their money on an asset they will not be able to take full advantage of? This matter requires further analysis.

As regards the strategic nature of the acquisition (STRATEGIC), it appears that in such transactions the acquirer is much keener to acquire the target than in speculative transactions. This could stem from the desire to gain quick access to the Russian banking market and thus be less concerned with the economics of acquisition. Our previous research in this area [Bokov, Vernikov, 2008] showed a total lack of significance of profitability ratios, which further reinforces this argument.

The fact that RATINGS (the number of rating agencies covering the bank) as a proxy for bank transparency did not show much impact, contrary to our expectations, might be caused by various reasons. Ratings are,*per se*, a proxy for credit risk and generally substitute rigorous credit analysis. But any acquisition transaction inevitably includes a very thorough due diligence procedure that may reveal more information than a credit opinion from a ratings agency. Another explanation is that international credit ratings remain a rarity among the Russian banks beyond the first tier, while it has been precisely second- and third-tier banks,with the exception of *Rosbank*, to fall prey to strategic foreign investors. Buyers just may not expect target banks to have external credit ratings. Another yet explanation is that investors' confidence in external credit ratings has been eroded by recent scandals when the rating agencies failed to do their job diligently.

Our study did not find statistically significant correlation between Board of Directors' independence (BOD_IND), on the one hand, and bank valuation, on the other. This outcome serves as a reality check for the promoters of corporate governancein Russia. An independent Board of Directors apparently creates insufficient value in the perception of the acquirer. We are still fighting with a credible explanation for it. Perhaps the lack of significance of indicators featuring the qualities of the Board of Directors means that the acquirer intends to reappoint the Board regardless of its qualities. In our sample most transactions represent acquisitions, and it introduces a bias into the regression. Had the sample consisted of a more balanced mix of acquisitions and share offerings, the outcome could have been different because we expect minority investors to appreciate more the *status quo* of governance in the bank since they have little chance of completely overhauling it. (The same bias may have acted against the significance of indicator RATINGS). Anyhow, the rationale for setting up strong corporate boards with a high degree of independence now looks shakier if there are other options besides an IPO – such expense may not be adequately recovered from a strategic investor.

Conclusions

We attempted to quantify the impact of quality of governance on valuation of the banking firms in Russia. In order to formalize the measurement of the quality of governance and management we suggest an original set of variables. A least squares multiple linear regression model includes statistically significant factors and is applied to explain differences in valuation of 10 banks in our sample. Methodological imperfections notwithstanding our attempt yielded some interesting findings.

First, investors clearly prefer closely held banks, probably with the view of avoiding additional hassle of dealing with minority stakeholders and the absence of reliable institutions of corporate law and corporate governance in Russia.

Second, size matters. The larger the assets size, the greater the P/BV multiple, *ceteris paribus*.

Third, investors appreciate the stability of the management team in charge of the target bank and are prepared to pay extra for it. Having in place a strong coherent management team creates value, although in practice the chances of such a team remaining in place after an ownership change are slim.

Fourth, efforts and expenses incurred in the process of upgrading corporate governance to 'best international standards' do not necessarily pay off. Investors seem to broadly disregard the independence, stability, maturity and size of the Board of Directors, maybe because the intention is to reappoint the Board in any case.

Fifth, with regard to transparency, investors do not sufficiently reward a bank's exposure to the scrutiny of rating agencies, while at the same time the quality of external auditors adds value to the bank.

As a *direction for future research*, we plan to broaden the coverage and increase the sample size. M&A activity in the Russian banking sector has picked up in 2007-2008 in the context of the consolidation triggered by the global financial crisis, so we anticipate more deals throughout the rest of 2008 and 2009. We must learn to control price differences between transactions implying shift of control (acquisitions) and those not affecting control (IPOs, SPOs and stock trading). Data on the stock market valuation of the publicly-traded Russian banks will be added at a later stage. We may also try going beyond price-to-book-value multiples to employ alternative methods of valuation of the banking business, e.g. by considering yields on senior bonds or hybrid capital products issued by the Russian banks [Bokov, 2007]. We willstudy the impact of a stable set of explanatory variables on bank 'price' resulting from different valuation techniques.

References

1. Bankscope Database *www.bankscope.bvdep.com*
2. Bankers' Almanac *www.bankersalmanac.com*
3. Black, Bernard (2001), The corporate governance behavior and market value of Russian firms, *Emerging Markets Review*, **2**: 89-108.
4. Black, Bernard, Inessa Love and Andrei Rachinsky (2006), Corporate governance and firms' market values: Time series evidence from Russia, *Emerging Markets Review***7**(4): 361-379.
5. Bokov, Vassily (2007), The use of hybrid financial products for commercial bank valuation. - M.A. thesis, Higher School of Economics (Department of Banking), Moscow. - in Russian.
6. Bokov, Vassily and Andrei Vernikov (2008), Measuring the impact of governance quality on bank valuation in Russia. - Conference paper, EACES (European Association for Comparative Economic Studies) 10th Conference, Moscow, 29 August 2008.
7. Choi, Sungho and IftekharHasan (2005), Ownership, governance, and bank performance: Korean experience, *Financial Markets, Institutions and Instruments* (New York University), **14** (4): 215-242.
8. Hoover's Database *www.hoovers.com*
9. IFC (2007), Russia banking sector corporate governance survey: A snapshot on improvements made, International Finance Corporation, Moscow.
10. Klapper, Leora F. and Inessa Love (2004), Corporate governance, investor protection, and performance in emerging markets, *J. of Corporate Finance***10**: 287-322.
11. La Porta, Rafael, Florencio López-de-Silanes and Andrei Shleifer (1999), Corporate ownership around the world, *J. of Finance***54** (2): 471-517.
12. Morck, Randall, Daniel Wolfenzon and Bernard Yeung (2005), Corporate governance, economic entrenchment, and growth, *J. of Economic Literature***43**: 655-720.
13. RID & Expert-RA. National Rating of Corporate Governance./ Russian Institute of Directors & Expert Rating Agency. *raexpert.ru/ratings/corporate/*
14. Standard & Poor's (2006), Corporate governance ratings: Criteria and methodology. *www.standardandpoors.ru*

15. Standard & Poor's (2007), Transparency & Disclosure Survey of Russian Banks 2007.www.standardandpoors.ru
16. Standard & Poor's (2008), Criteria: Corporate governance rating GAMMA — Governance, Accountability, Management Metrics and Analysis.www.standardandpoors.ru/page.php?path=gammawww.standardandpoors.ru/page.php?path=gamma
17. Staryuk, Pavel (2008), Impactofcorporate governance on the valuation of Russian companies (an empirical analysis). – PhD thesis, Higher School of Economics, Moscow. – in Russian
18. Vernikov, Andrei (2007), Corporate governance and control in Russian banks, Working Paper WP1/2007/02, State University – Higher School of Economics, Moscow.

Appendix

Appendix 1: Sample of transactions*

Date	Target	Acquirer	Type	P/BV
21.04.2005	KMB-Bank	Intesa	Sale	3.90
12.08.2005	DeltaCredit	Société Générale	Sale	3.20
26.10.2005	Monchebank	DnB NOR	Sale	2.20
31.01.2006	*Impexbank*	*Raiffeisen*	*Sale*	*2.90*
01.08.2006	*Vozrozhdenie*	--	*IPO*	*4.00*
14.09.2006	National Standard	OEMK-Invest	Sale	1.15
10.10.2006	International Moscow Bank	UniCredit	Sale	2.90
01.11.2006	Investsberbank	OTP	Sale	3.90
08.11.2006	*Orgresbank*	*Nordea*	*Sale*	*4.30*
27.11.2006	*Probusinessbank*	*Merril Lynch*	*Sale*	*3.00*
27.11.2006	Probusinessbank	RennaissanceCapital	Sale	3.00
04.12.2006	*Promsvyazbank*	*Commerzbank*	*Sale*	*3.40*
28.12.2006	Gorodskoy Ipotechny Bank	Morgan Stanley	Sale	5.00
01.03.2007	Sberbank	--	SPO	3.70
11.05.2007	VTB	--	IPO	2.40
18.05.2007	*Vozrozhdenie*	**--**	*SPO*	*3.80*
25.07.2007	Extrobank	Banco Santander	Sale	4.40
10.09.2007	*Absolut Bank*	*KBC*	*Sale*	*3.80*
06.11.2007	*Bank SPB*	**--**	*IPO*	*2.90*
14.02.2008	Rosbank	Société Générale	Sale	4.00
03.03.2008	*Expobank*	*Barclays*	*Sale*	*4.00*
26.06.2008	Investtorgbank	hedge funds	Sale	4.20
27.06.2008	*Uniastrum Bank*	*Bank of Cyprus*	*Sale*	*3.10*

***** *transactions included in the modeling and calculations are shown in italics*

Sources: public disclosure; media; our database