

DOES CORPORATE GOVERNANCE
WORK IN UKRAINE?

by

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Abstract

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The research tries to find relationship between corporate governance and three firm`s specific indicators in Ukraine. It is found that there is no influence of corporate governance on firm`s performance and firm`s value. Endogeneity issues are controlled by using sales growth of the firm as an instrument for its corporate governance, new instrument for research. Investment strategy which selects well-governed firms long and shorts badly governed firms yields negative excess returns, contrary to evidence from other transition countries. Results suggest that researchers should not consider traditional Anglo-Saxon model of corporate governance in transition countries.

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GLOSSARY

Corporate Governance. Ways in which suppliers of finance to corporations assure themselves of getting a return on their investment (Shleifer and Vishny, 1999)

Chapter 1

INTRODUCTION

Corporate governance issues have raised public attention since 2001, after collapses of large number of US firms like Enron and Worldcom. In 2002 US Congress passed Sarbanes-Oxley Act in order to assure high level of corporate governance of all firms in US, and major stock exchanges strengthen requirements for listed companies. These actions made corporate governance level almost identically high through US-based and US-listed companies (Bauer et al., 2003)

Transition countries follow another pattern: corporate governance varies much among firms. In Ukraine corporate governance is in early development stage. Market self-regulation works partially. Those companies who are preparing or have already issued initial public offerings substantially increased corporate governance standards. But most of the firms do not care about having their shares listed and actively traded: they have one or couple of major shareholders and what management cares are only those biggest shareholders' interests. Minor shareholders are out of interest of managers. Local stock markets also can not afford self-regulation.

Studying government initiatives in corporate governance field, one may observe that some of them work and some do not. In 2003 Securities and Stock Market State Commission adopted Principles of Corporate Governance. But because any implementation of stated Principles was neither required nor stimulated little changes have happen. Second initiative was quite successful. Created by Securities and Stock Market State Commission the web-site www.smida.gov.ua for online publishing of quarterly and annual reports became one of the main source of

information for investors. Though publishing statements online was not required initially for any firms, later State Property Fund of Ukraine required that those enterprises with significant share of state ownership must disclose their statements on www.smida.gov.ua. Other firms followed and overall transparency surged. Third significant initiative which touch corporate governance is an adoption of new version of Law on Joint Stock Companies (further referred as LJSC), which became effective in late April 2009.

As a result, firms behave at their discretion in determining major components of corporate governance. High variability of corporate governance standards in transition economies makes these markets potentially fruitful for studying effects of firm's corporate governance behavior.

In the research I intend to study the three-dimensional effect of corporate governance in transition country Ukraine. The triple question I want to answer sounds as "Whether good corporate governance practices influences (1) equity returns (2) firm's performance and (3) value of companies in transition economy?"

The answer seems to be definitely worthwhile since more and more companies consider costs and benefits of applying high corporate governance standards. While accounting costs of good governance for company may be significant (some includes remuneration of independent directors, creating and maintaining investor relation department in the company, paying higher fees for internationally recognized audits etc.), I do not focus on them leaving to field practitioners. In this research I aim to find opportunity cost of being badly governed for firm in transition economy, which should ideally cover accounting costs.

The structure of remained part of the thesis is the following. Second chapter reviews the literature on the field, presenting results on similar works in other countries around the world. Third chapter covers theoretical foundations of the corporate governance. Fourth chapter describes the data used in the study and unique corporate governance index which is first tested in research. Fifth chapter follows with three models which answer stated questions and results of estimations. Sixth chapter is a discussion of received results. Conclusions are put in seventh chapter of the work. Some descriptive statistics, detailed description of corporate governance index and estimation results may be found in Appendices.

Chapter 1

LITERATURE REVIEW

The concept of corporate governance grows from well-known principal-agent problem between management of the company and its finance providers. According to classical definition by Shleifer and Vishny (1999), corporate governance refers to the “ways in which suppliers of finance to corporations assure themselves of getting a return on their investment”.

With active development of market for corporate control in 1980s, economic literature began to pay attention to corporate governance (CG) issues. First studies were made on Anglo-Saxon model, where equity ownership is much more dispersed and conflict between management and a variety of minor shareholders is logical. In 1980s literature concentrated mostly on issues of structure of ownership (Demsetz et al., 1985) and particularly on management ownership (Randall et al., 1988). Last decade of 20th century became a time when researchers made their works on CG quantifiable, but most of them still concentrated on US economy. Using different aspects of CG they studied whether they affect firm’s performance and market valuation of the companies.

Though, conflicts are needed sometimes to boost attention to the topic. That happened particularly with corporate governance – in 2002 after Enron and WorldCom collapses due to manipulations by management, society became concerned by CG in the same way as in 2008 they are concerned with liquidity issue. After 2002 independent agencies became active in publishing corporate governance rankings all over the world. That allowed researchers to study compound effect of CG on the business, while previous research mostly concentrated on some particular aspects.

In 2003 Gompers, Ishii and Metrick analyzed relationship between overall corporate governance and long-term returns in US equities. They constructed portfolio consisting of companies with numerous anti-takeover amendments which they name a “Dictatorship Portfolio” and second one with well-governed companies named “Democracy Portfolio”. Subsequently, they consider a long position in Democracy portfolio and short position in Dictatorship Portfolio over seven years. This strategy allowed them to gain average annual return of about 8.5% after adjusting for factor exposures of the portfolios according to Carhart (1997) model.

Similar study in Germany made by Drobetz et al. (2003) found substantial annual excess return of 16.4% of investment in well-governed portfolio during 1998-2002. To study whether this effect is consistent in transition economies, the same Carhart (1997) model is employed in this research.

The McKinsey “Global Investor Opinion Survey” made in 2002 revealed that institutional investors are ready to pay 28% premium to well-governed company in emerging markets. Furthermore, cross-country analysis made by La Porta et al. (2001) reveals that market valuation of similar companies is higher in the countries which apply higher overall corporate governance standards. While there are doubts whether cross-country analysis can be meaningful (Klapper, 2002), anyway most researches and surveys show that foreign investors tend to pay premium for the equities which are better.

Before the discussion of corporate governance in emerging and transition countries is started, one should note the importance of country-wide CG standards. Both works by La Porta et al. (2001) and Klapper and Love (2002) were based on cross-country analysis of corporate governance. According to their results, standards vary much from country to country, thus CG practice in the company becomes less important than overall country level. In countries like US

where CG minimum level is kept on the high level (after restrictions implemented in 2002), we observe less variety of CG standards between companies. In contrast, governments of emerging countries pay little attention to governance issues, thus it is solely company's discretion to apply any level of corporate governance standards.

In transition countries corporate environment is characterized by weak legal institutions and high ownership concentration (Biletsky et al., 2001, Guriev et al., 2004, CEFIR and IET, 2006, and IFC, 2003 and 2005). Absence of dispersed equity ownership changes the principal-agent problem in this context. While in Anglo-Saxon model main conflict is between manager and variety of small shareholders, in transition countries managers are controlled by one or group of major shareholders (Lazareva et al., 2007). Therefore, principal conflict arises between major and minor shareholders, and sometimes between groups of major shareholders. Another source of conflict arises from government and raider's side – weak corporate governance theoretically makes the company vulnerable to raider's attacks and overall weak legal system increase risk of government intersection in the business. Though, the example of the Yukos, Russian oil extracting company, which applied high governance standards, shows that possibility of government intervention in the business doesn't depend on the CG standards applied by the company.

A weak legal system is costly for the companies but beneficial for research – because corporate governance standards are low in transition and emerging economies (Denis and McConnell, 2003), variation between companies is higher, and therefore we are able to reveal effect of CG more correctly.

Papers that examine emerging economies always find positive effect of corporate governance on equity returns but differ with results on CG relationship with operating performance. Example of evidence that investors widely believe in

positive effect of corporate governance on equity returns is a practice by Deutsche Bank, global investment bank with branches in emerging economies, which publishes reports with stock screening basing purely on corporate governance standards applied in the company. Klapper and Love (2002) using firm-level data mostly from Asian emerging economies found that good governance is positively correlated with market valuation and operating performance.

Bernard S. Black studied corporate governance in series of research. In his article with Khanna (2007) he studied effect of corporate governance reform in India on market valuation. Due to the fact that reform was implemented in two stages: first, for big companies, then for smaller, they were able to measure direct effect of reform. Finally, they found that adopting of the reform accompanied with 4% increase in the price of firms in two-day period, and 10% over two-week period.

In his 2005 paper with Jang and Kim he studied Korean public companies. Motivated by possibility to acquire good governance data, they found 0.47 increase in Tobin's Q for the company during worst-to-best change. Though, specifics of the corporate governance index constructed in this research makes results doubtful.

In his studies of corporate governance in Russia Black's results were also similar – in 2001 he reports 700-fold increase in firm value during worst-to-best change according to governance criteria. 700-fold increase sounds unrealistic, and this research reveals core problem of all corporate governance research around emerging markets – quality of the firm-level corporate governance data. In its “700-fold increase” article Black used data only for 21 companies, and applied similar elements for index construction as he did in developed market studies, literally replicating Anglo-Saxon corporate governance model.

In 2006 using better data Black, Love and Radchinsky found substantial and statistically significant positive impact of the quality of corporate governance on a firm's market valuation in Russia.

In Ukraine, corporate governance environment is similar to Russian, with differences appearing only in the last years. In 2005 and 2006 Zheka studied effect of corporate governance on firm's performance in Ukraine, using wide sample of about five thousand companies and constructing own index for corporate governance. However, any other researches do not use so broad samples, and usually do not study effects on small companies, which are included in this case. Indeed, theoretical foundations for corporate governance differ with the size of the firm. Smaller firms clearly exhibit lower agency problem due to higher ownership concentration and lower level of bureaucracy. Furthermore, costs of high quality corporate governance may easily exceed any potential benefits.

In 2005 article Zheka finds positive correlation between CG and firm's performance and the absence of reversal causality. In this study there is positive influence of shareholder rights and transparency of the company, but surprising negative effect of the independence of the board chairman on performance. Author explains this fact by inability of independent chairman to build effective communication with management and exercise his power appropriately in transition country.

Neither of research made on Ukraine covers the relationship between corporate governance and equity returns.

Chapter 2

THEORETICAL BACKGROUND

A number of different approaches to analysis of corporate governance evolved in the literature. Each framework is based on the discipline where it has grown from. Agency theory evolved from finance and economics, transaction cost theory aroused from economics and organizational theory, while stakeholder theory is grounded in a mix of social disciplines. This research is based on agency theory, though main concepts of all theories will be presented in short. One should note that all frameworks study the same problem and overlap theoretically, so differences may seem to be only minor.

The agency problem was first explored by Ross (1973) and Jensen and Meckling (1976). They consider shareholders of the company as principal who delegate operational decision making to managers, considered as agents. Agency problem is based on the idea that agents are not necessary doing their best in interests of principal, rather pursue their own goals. Presence of conflict between goals of principal and agent is basic assumption in agency theory. Principal goal is maximization of long-term share value, but agents are selfish and prefer maximization of short-term value which is correlated to their remuneration.

In context of transition countries one should consider minor shareholders as a principal while major shareholder and manager should play the role of agents (Lazareva et al., 2007). Instead of maximizing share value, agents are motivated to transfer profit (through cost transfer, price transfer, etc.) to their 100%-owned firms, in order not to share value with principal. Corporate governance system of the entity should solve the conflict.

Transaction cost theory relaxes an assumption of efficient markets and consider the firm as those unit which determines the allocation of resources in the economy. The firm consists from people with different views and objectives. Cyert and March (1963) argue that firms are so large that they can mitigate effects of market mechanisms like price movements inside their firms. Within companies management co-ordinates and controls production, not the market. The organizational structure of the company determines the extent to which company has control over price and production, thus transactions. Transaction cost economics also assumes bounded rationality of all economic agents and opportunism intrinsic to managers (Williamson, 1996). Given the problems of opportunism and bounded rationality managers are intended to organize transactions in their own interest, thus they should be controlled (Solomon and Solomon, 2004).

Stakeholder theory is less formal and is based on the mix of law, economics, philosophy, ethics, political theory and organizational science (Wheeler et al., 2002). Theory is backgrounded on the observation that companies are so large and their impact on the society is so extensive, so they should be accountable not only to shareholders but to much broader category of society, namely stakeholders. Though, there is bunch of ways to define stakeholders, all they use exchange relationship between stakeholder and the company as a ground. Stakeholders are affected by the company and in turn they also affect the company. Usually stakeholders include shareholders, employees, suppliers, customers, creditors, communities in close of company operations.

Shankman (1999) argue that there is little conceptual difference between agency theory and stakeholder theory:

- 1) Stakeholder theory is the necessary outcome of agency theory and is thus a more appropriate way to conceptualize theories of the firm;

2) Agency theory, when properly modified, is a best narrow form of stakeholder theory.

Chapter 3

DATA

The structure of third chapter will be the following. First, I discuss corporate governance index construction usually used in the research, which will be followed by description of the two indexes available for Ukrainian firms. Needed adjustments of the data are put the end of the chapter. The detailed description of Corporate Governance index constructed by Concorde Capital is put in the Appendix 1.

Corporate governance index construction

Corporate governance is not the easiest thing to measure due to its subtle nature.

There are three approaches to corporate governance data in research. First, smallest part of researchers, construct their own indices basing on publicly available data. In choosing which variables to include they base on codes of best practice, applied locally in the country, or globally in the world (as OECD Corporate Governance Code). Although they exclude personal bias by using only countable data these attempts content solid measurement bias. This bias increases in countries where official statistics organizations do not measure specifically corporate governance issues. Previous studies of corporate governance in Ukraine by Zheka (2005, 2006) were constructed according to this approach.

Second approach is to use survey-based assessment of corporate governance. Usually, researchers send questionnaire with yes/no questions to couple of hundreds firms listed on the stock exchange and construct index by summing up yes-answers in the response (Black, de Carvalho and Gorga, 2008, Denis and McConnel, 2003). Though, if properly written, this method is more consistent, it is time and money consuming. The major bias that exist in such

method of index construction is the fact that employee of the firm who answer questionnaire is related to the company (often she is an investor relations officer) and knows what is good or bad in terms of corporate governance. Thus, firms may artificially increase its corporate governance ranking by answering questionnaire in a misleading way. Additional problem with questionnaire-based corporate governance rankings is a low response rate (around 25%). One may suspect that sample of those who responded such a survey doesn't represent the whole population appropriately. The reason is that firms which have investor relation officers (and they are definitely concerned about corporate governance more) are expected to respond on such questionnaires with higher probability than those which don't care about corporate governance.

Third approach is to use corporate governance indexes issued by independent agencies like Standard and Poors, Deminor or published by investment banks. This research uses data provided by Concorde Capital, Ukrainian investment bank.

Since investment banks are involved in commercial business, the possible bias which may occur due to conflict of interest must be discussed.

Corporate governance rankings produced by investment banks are issued by its equity research department. The main aim of any research issued by equity research department is to provide information for brokerage clients of investment bank. According to the Code of Ethics of investment field professionals, equity research department should be independent from sales, corporate finance and portfolio management departments. Even if the independence is weak there is little motivation to distort the ranking. Portfolio management is the least priority business of the bank thus investment bank is not interested in increasing value of some particular stocks. Brokerage business generates revenue through commission of transactions, and number of deals (not the way) is the crucial determinant of the revenue. Equity research department may influence amount of deals only by issuing high quality research which would

bring more clients to the bank, but not by publishing biased research. Corporate finance business of investment banks generates revenue from the very limited number of deals with short list of companies (below ten per year for Ukrainian banks), and indeed may be interested in artificially increasing corporate governance index of their clients. But due to the fact that number of these stocks is very small, that bias should not be highly significant for the overall ranking. To conclude, there should not be any conflict of interest in investment banks which may mislead the construction of the index.

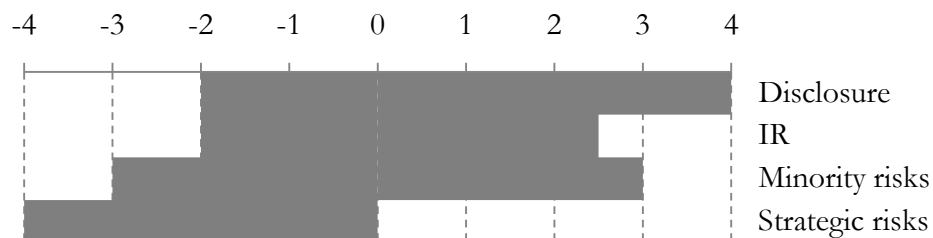
In short the methodology of Concorde Corporate Governance ranking is following. The ranking is the not-weighted sum of four sub-rankings, which assess companies` corporate governance determinants: Reporting/Disclosure, Investor Relations, Minority Concerns and Strategic Risks. Each subsection consists from several questions about the company, which are answered by the analyst who covers this stock. An example of the question may be a question of “quality of Ukrainian accounting standards reporting” of the firm. Basing on his experience with coverage of particular stock, analyst assigns one of three grades for this question: -1, 0 or 1. The detailed description of the index is put in appendices.

Most questions like latter are based on the mixture of publicly available data (accounting statements) and personal perception of this data made by the analyst who works with this stock on the daily basis. I believe this mixture makes the index constructed by Concorde Capital superficial to the self-constructed dataset by Vitaliy Zheka and, in my opinion, one of the best among those used in other countries and studies.

Comparison of corporate governance indexes on Ukrainian firms

Constructed by Concorde Capital	Constructed by Vitaliy Zheka
Issued in mid 2008.	Based on 2002 data.
Covers different aspects of corporate governance. Bases on 12 variables, which could take two or three values.	Bases on only five binary variables – few to measure corporate governance.
Mean of sub-indexes is close to average between minimum and maximum of each sub-index.	Little deviation in binary variables from which index is constructed: means are close to either 1 or 0.
Ranking is constructed for 175 firms, listed on the local (and few on foreign) stock exchanges. Covers all traded stocks.	Both big and very small firms are mixed in the sample – should not be done for measurement of corporate governance.

Figure 1. Ranges of sub-indexes in Concorde Capital Corporate Governance Index*



*The overall corporate governance index is a sum of its four sub-indexes

Importance of the right choice of the data used in research may be shown on comparison of two rankings. Since for Ukraine there were only two attempt to construct such corporate governance index, one by Vitaliy Zheka (2005) based on

publicly available data with data and second by Concorde Capital (2007-2008) based on mixture of publicly available data and analyst's opinions, I compared both these datasets. After extracting intersection data from both Vitaliy Zheka data and Concorde Capital data (used in this research) I made a correlation analysis.

The total correlation between two indexes is low, at about 8%. Secondly, correlation between similar sub-indexes of rankings is again weak or even negative. For Disclosure sub-indices of both indices correlation is around 9%, while for Minority Rights indices correlation is at -10%. If checked for rank correlation, results do not change. Spearman rank correlation for total corporate governance index is about 11%, while Transparency and Disclosure sub-indexes show 13% correlation. Minority Rights sub-index of corporate governance ranking by Concorde Capital still show negative -8% correlation with similar Rights sub-index of Vitaliy Zheka dataset. Correlation tables are put in Appendix 3.

Though such low correlation may be partially explained by six years lag in these dataset, one cannot say that corporate governance is so unpersistent. Thus, this correlation analysis makes the dataset by Concorde Capital new for research.

Data description and adjustments

One should mention that Ukrainian stock market can be doubtfully considered as efficient. Having history of only about fifteen years, it began to show sufficient liquidity only in 2004. In 2007 local stock market index PFTS has shown second highest growth in the world at 127% level, losing only to Chinese index. Year later PFTS plunged 80%, liquidity vanished and 50% spread was not strange in the market. Same time, number of stocks traded increased over 2004-2006 heavily, and around 15 firms chose to issue initial public offering or place depositary receipts on foreign stock markets. Among most popular foreign stock

exchanges for Ukrainian firms are Frankfurt stock exchange, Warsaw stock exchange and London stock exchange.

For studying effects of corporate governance on firm value and performance stock market data is needed. For evaluating monthly returns of stock portfolio the most recent available data from Bloomberg is since end 2006. Data for earlier periods has a lot of missing values. Thus, monthly equity returns are calculated for January 2007 – April 2009 interval.

The monthly return dataset is also cleared for outliers, which have little of change in the price over the time or dilutions of the share capital during observed period.

When constructed, all portfolios are equally weighted.

All the financial data is taken from Bloomberg.

Chapter 5

THE MODEL

Since neither theoretical nor empirical works have well-established model for studying corporate governance, this thesis employs models used at least in two works in corporate governance field: by Gompers et. al (2003) and Bauer et al (2003). Gompers et al (2003) tested these models for US firms during 1990-99 and found excess return of 8.5% for well-governed stocks accompanied with higher firm value and higher profits. Bauer et al (2003) applied models to UK and European Monetary Union (EMU) without UK markets. They found positive influence of corporate governance on equity returns in EMU and UK, on firm's value in EMU (no effect on firm value in UK), and negative effect of corporate governance on net margin and ROE of the firms in EMU (no influence in UK).

Corporate governance on equity performance

To assess stock performance Fama and French (1993) 3-factor model is used. In the essence of the model is the construction of two portfolios and holding long position in one of them and short position in the second one. The first portfolio, named "Well Governed" portfolio, consists of top thirty percentage of the firms which have the best corporate governance index. "Badly Governed" portfolio is built from the bottom thirty percentages of the firms according to governance ranking. The long position in Well Governed portfolio and short position in Badly Governed portfolio is hold, strategy called as Zero Investment Governance Portfolio.

Fama and French (1993) 3-factor model is constructed for assessing efficiency of any portfolio strategy.

$$R_{LS_t} = \alpha + \beta_1 \cdot (R_{m_t} - R_{f_t}) + \beta_2 SMB_t + \beta_3 HML_t + \varepsilon_t \quad (1)$$

where

R_{LS_t} is the excess monthly return of Zero Investment Governance Portfolio,

R_{mt} is monthly return on market portfolio (for Ukraine market local stock market index PFTS is used),

R_{ft} is return on risk-free investment (for Ukraine interbank overnight interest rate is used),

SMB_t is monthly return on size factor portfolio (Small Minus Big). Portfolio is based on market capitalization in the beginning of period. Firms with the highest 30% of market capitalization are defined as “Big”, bottom 30% - “Small”. The return on SMB portfolio is the difference between returns on “Small” portfolio and on “Big” portfolio. Both “Small” and “Big” portfolios are equally weighted.

HML_t is monthly return on portfolio which mimics the market on book-to-price ratio (High Minus Low). HML_t is measured as the difference between returns on top 30% and bottom 30% stocks ranked according the book-to-price ratio.

Papers by Gompers et al (2003) and Bauer et al (2003) use also forth factor suggested by Carhart (1997) works - monthly return on momentum factor portfolio. But due to underdevelopment of Ukrainian stock market, this factor is not used in the thesis.

Estimation results are shown in Appendix 2. Post-estimation Breusch-Pagan / Cook-Weisberg test for heteroscedasticity tells that null hypothesis of constant variance should not be rejected.

General estimation results tell us that three factors chosen to explain return of our portfolio are suitable. Returns of High-minus-Low book-to-value

mimicking portfolio and of Small-minus-Big market value mimicking portfolio are significantly negative. Coefficient near return of the market is also negative but insignificant.

Highly negative coefficient of SMB portfolio may be interpreted as the bigger is the firm the higher its corporate governance standards, which proves our choice of size of the firm as an explanatory variable in other models employed in research.

However, the main result is the negative alpha coefficient which measures the excess return of Well governed portfolio over Badly governed one. According to estimation, investing in Well Governed portfolio leads to -1.3% monthly return comparing to Badly Governed one. The result is contrary to expectations, since most of research shows presence of premium to well governed stocks, while here is found premium for badly governed stocks. In terms of size of a coefficient, it is in meaningful magnitudes if compared to Ukrainian stock market volatility.

Firms` performance

Most common measurement of firm`s performance are net margin and return on equity (ROE). However, not surprisingly, there is no consensus in the research and practice field which variables influences net margin and return on equity. Thus, following Bauer et al. (2003), Gompers et al. (2003) I use simple model which accounts only for size of the company:

$$\begin{aligned} NetMargin_i &= \alpha + \beta_1 \cdot CG_i + \beta_2 \ln(BookValue_i) + \beta_3 Dummies_i + \varepsilon_i \\ ROE_i &= \alpha + \beta_1 \cdot CG_i + \beta_2 \ln(BookValue_i) + \beta_3 Dummies_i + \varepsilon_i \end{aligned} \quad (2)$$

The size of the firm is approximated by log of book value. $Dummies_i$ is a vector of sector dummies. In the first specification of the model corporate governance metric is not separated by sub-indexes, the cumulative score is used.

Time-series analysis is not possible to be applied since there is no variation in corporate governance: the fixed corporate governance score is assumed for every year. Cluster OLS regression is used instead.

Among two measures of performance I prefer Net Margin due to the fact that both Net Margin and Book Value used in the regression are accounting based measures, while ROE incorporates stock market data. Thus, there would be more consistency when net margin and book value are put together. Unfortunately, ROE and Net Margin cannot be used interchangeably due to unexpected very weak correlation between them – at 4%.

Results of cluster OLS regressions of equations (2) are presented in Appendix 2 in columns 1 (net margin) and 4 (ROE). The corporate governance coefficient is not significant in either model. In order to check hypothesis that overall corporate governance index is insignificant but its sub-indexes from which it is constructed are significant, I run regression where corporate governance variable is substituted by four sub-indexes. However, this doesn't help much. Columns (2) and (5) present estimation results for models with this specification. Either corporate governance sub-index is insignificant.

The possible endogeneity which may exist in estimation relationship between corporate governance and performance usually is explained in the following way (Beiner et al. 2005). Firms with higher profitability may be interested in preserving its performance level and thus in improving its corporate governance. Second explanation is that firms with higher margins definitely have more resources and thus may spend some of them on costly corporate governance.

To deal with possible endogeneity, we need good instrument to be employed. As in Value section of the research, sales growth of the company is used to instrument corporate governance index. I run equations (2) but with CGI variable instrumented by sales growth of the company (coefficients are put in Appendix 2, columns 3 and 6).

I find that instrument fits regression quite well. Underidentification Anderson test is clearly rejected with p-value smaller than 0.0001, and weak identification test measured by Cragg-Donald Wald F statistics is also rejected at 10% maximal IV size level.

However, instrumental variable estimation leads to same results as other specifications. For both ROE and net margin, corporate governance coefficient is insignificant. I leave explanation of corporate governance insignificance to next chapter.

Corporate governance on firm value

Since corporate governance is relatively stable over time, it may be already accounted in the firm value of the companies. This research uses Tobin's Q (Q_i) as a measure of firm's value. Tobin's Q is a ratio of market value of assets divided by the replacement value of assets:

$$Q_i = \frac{\text{Market Capitalization} + \text{Book value of total assets} - \text{Book value of equity}}{\text{Book value of total assets} - \text{Book value of equity}}$$

In line with Bauer et al. (2003) and Gompers et al. (2003) several variables which affect Tobin's Q measure are added into regression. Size of the company again is proxied by log of book value ($\ln(\text{BookValue}_i)$), performance of the firm is measured as ROE (ROE_i).

The following regression is run to estimate effect of corporate governance on firm value:

$$Q_i = \alpha + \beta_1 \cdot CG_i + \beta_2 \ln(\text{BookValue}_i) + \beta_3 ROE_i + \beta_4 \text{Dummies}_i + \varepsilon_i \quad (3)$$

Dummies_i is a vector of sector dummies. Since I have five years of data but no variation in corporate governance, I use cluster OLS regression.

Estimation results from running models (3) are presented in Appendix 2 in the first column. As expected, corporate governance coefficient is positive, but

not as high as ROE coefficient. Moving from worst to best in corporate governance ranking would result in increase of Tobin Q by 1, which may be interpreted that this change is valued by the market at price of book value of assets of the firm. However, corporate governance coefficient is not significant in regression. To improve the model I add sales growth for the current year and net margin variable. As explained in previous section, ROE and net margin are unexpectedly very weakly correlated, thus both may be included in regression. Thus, I run specifications with only sales growth added (column 2, Appendix 2), with both sales growth and net margin included (column 3, Appendix 2) and with net margin included instead of ROE (column 4, Appendix 2). In any of these three specifications corporate governance coefficient is twice higher – at 5.6%-5.7% level, very close among specifications, though still insignificant. I explain this increase by adding sales growth variable, which is significant at 1% level.

The main result from any of four specifications employed is the insignificance of corporate governance coefficient on measurement of Tobin Q. Though, endogeneity is suspected here as well. The idea behind endogeneity in this model is that firms with higher value might have more resources to spend on corporate governance (which is definitely costly).

To check endogeneity I use sales growth as an instrument for corporate governance. I find that sales growth is weakly correlated with other explanatory variables but significant when corporate governance is regressed purely on sales growth. Thus, I run instrumental variables regression of model 3 where corporate governance is instrumented by sales growth.

Fortunately, Anderson underidentification test is clearly rejected and weak identification test measured by Cragg-Donald Wald F statistics is rejected at 15% level, which suggest us that instrument is chosen in a right way. Results of regression are presented in Appendix 2 in column 5.

The instrumental variable regression proves the result derived from other specifications – corporate governance coefficient is insignificant in explaining

Tobin's Q of the company. However, the sign of the coefficient is other in IV specification. Corporate governance coefficient is negative and quite high.

To sum up, I find no evidence that corporate governance may explain value of the firm, even when accounted for endogeneity issues.

Chapter 7

DISCUSSION OF RESULTS

From the study on corporate governance we can conclude that Ukrainian firms do not exhibit expected positive influence of corporate governance. All three hypothesis of positive effect of corporate governance are refuted.

As found, there is no significance of corporate governance in explaining performance of the firm, nonetheless of which measure of performance is chosen – net margin or ROE.

Stock market behavior is also seems to be independent of corporate governance ranking. Models employed find insignificance of corporate governance on Tobin's Q, measure of the value of the firm, which implies that corporate governance is not accounted in value by the market participants. The hypothesis that corporate governance is repaid by excess return of investments is refuted. The strategy that invests long in the portfolio of well governed stocks and short in badly governed stocks lead to -1.3% excess monthly return. That means that corporate governance was not a good indicator for investment decision in Ukrainian stocks over observed period.

I find several hypotheses to explain why corporate governance does not work in Ukraine.

Corporate governance does not matter for speculative investors

The assumption used in this research, namely that corporate governance influences stock returns and value of the firm, is based on idea of stock market where stock valuations are made on firm-specific factors. However, most of investors in Ukrainian stocks are foreign mutual funds. The share of Ukrainian

stocks in their portfolios is definitely small, and they probably consider all Ukrainian stocks as high-risk investment opportunities. Though, they definitely make valuations of stocks, probably, corporate governance is not a first criterion they may consider. If country risk premium is high as it is for Ukraine, the difference in risks between two stocks due to difference in corporate governance would be less relevant than the same difference in mature markets with low country risk premium.

Good corporate governance is an indicator of bad performance?

The model by Leland and Pyle (1977) tells that firms which are going on initial or secondary public offerings are selling a signal that they are bad in terms of asset value. The idea behind this model may be translated to corporate governance. The firm which improves corporate governance may have better and cheaper access to external finance, at least in bonds market. Thus, by analogy to the model by Leland and Pyle (1977), when market observes improvement in corporate governance by the firm it may conclude that firm is going to raise money and thus is underperforming to finance its business itself. Second reason why the firm may need money is to finance its rapid growth which may not be financed by own resources. I find some evidence that needs further investigation that there is strong relationship between sales growth and corporate governance of the company in Ukraine. If that is true that high growth companies improve their corporate governance, then because high growth is usually accompanied with low margins, it may explain why corporate governance does not influence performance of the firm.

Usual corporate governance mechanisms are not applicable in transition context?

As noted before, the agency problem in the firms in transition context differ from that of Anglo-Saxon context. Most firms have one or two major

shareholders which have sufficiently enough resources to control and monitor management. Thus, the conflict is between major and minor shareholders rather than between management and shareholders. If that is the case, are Anglo-Saxon principles applicable to this agency problem?

Endogeneity?

Though there are theoretical foundations for endogeneity issues in relationship between corporate governance and firm`s performance, value and equity returns, I don`t find evidence for that. As I control for endogeneity in performance and value models using sales growth as an instrument, results do not alter. The issue of endogeneity of influence of corporate governance on stock returns, however, still may influence results in this part of research.

Dirty data?

It is a common knowledge that accounting figures may be manipulated, especially bottom line measurements which are used to calculate performance. For Ukraine the quality of accounting data is of more importance, and even included as a determinant of corporate governance index.

Second issue with data which may influence results is the fact I use only five years for performance and value measurement. For equity returns study I have only 26 month of data, with impacts of financial crisis inside of this interval. Overall low liquidity and high spreads of Ukrainian stock market could mislead our results on stock returns and value of the firm.

CONCLUSIONS

Contrary to expectations corporate governance is not helpful in explaining firm`s performance or value of the company. Investing in stocks of well-governed firms also does not lead to excess returns as it does in European Monetary Union and US. Received results also contradict with similar studies in Russian stock market which generally finds positive influence of corporate governance on value of the firm.

I explain the insignificance of corporate governance for stock market by high country risk premium and relative unimportance of firm-specific risk premium (part of which is for corporate governance). Short period of data availability and well-spread accounting manipulations could also affect thesis results.

For performance indicators where I also do not find significance of corporate governance, the modification of Leland and Pyle (1977) model is suggested as an explanation. The main idea is that firms, which show high corporate governance, are sending signal to the market of their willingness to borrow money to finance their growth or underperformance. Since desire to decrease costs of borrowing is one of the main reason of improvement of corporate governance in transition countries (contrary to Anglo-Saxon countries), we may find the explanation that firms with high corporate governance may be with bad performance.

As a methodological improvement, this work suggests new strong instrument for corporate governance which might be used in further research in the field. I find that sales growth of the firm is a good instrument of the firm`s corporate governance.

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APPENDIX 1. CGI INDEX DESCRIPTION

Description of Concorde Capital corporate governance index

In its research Concorde Capital focuses on four aspects of corporate governance – Reporting&Disclosure, Investor Relations, Minority Concerns and Strategic Risks. This description is taken from Initiating research on corporate governance “Ukrainian Corporate Governance” issued in February 2007¹, while data is taken from recent research published in May 2008.

In **Reporting & Disclosure**, they look at the willingness of companies to be forthcoming with their financial data and ownership structure. With the principle belief that the more willing a company is with its financials and ownership, the more developed in terms of corporate culture and well run the company would be. Three aspects were considered: availability of IFRS accounting, quality of Ukrainian accounting standards reporting and disclosure of ownership. Judgments were based on public sources (f.e. www.smida.gov.ua), the companies’ own publications, and Concorde Capital additionally contacted the top-level management from each of the companies to judge their willingness to provide investors with financial information. Possible scores in this section have a range of [-2;4].

IFRS scoring ranged from 0.0/0.5 depending on whether or not the company prepared financials in accordance with IFRS to 2.0 if they were willing to provide IFRS reports to inquiring investors or made them publicly available. In looking at how closely companies adhered to Ukrainian Accounting Standards, the scoring window ranged from -1.0 for statements that were obviously heavily distorted to zero for those that suggested some manipulation but remained reliable for

¹ Report may be downloaded from <http://concorde.ua/research/corporate-governance/>

analytical purposes, and 1.0 if the statements contained little or minor discrepancies. In cases where companies were clearly against sharing financial information, a score of 0 was given. With companies incorporated in foreign jurisdictions which obviously do not use UAS reporting, a score of 1.0 was assigned so as to not punish these companies over a technicality. When looking at ownership structure, the scoring range was - 1.0/1.0. Highest score 1.0 was given only to companies where ownership was common knowledge or provided at a reasonable level.

Investor Relations. Concorde Capital judged investor relations using three criteria: management accessibility, public face and the quality of company websites. The total possible score in this section has a range of [-2.0;2.5]. Management accessibility looks at the willingness of top management to meet with investors, arrange site visits, discuss company operations and share business strategies with the financial community - a key factor for giving investor insight into the company. This section allowed a range of scores from -1.0 for companies that provided no access to +1.0 for quality, entailing a willingness to meet and have frank discussions about the company's business. Public face is the term Concorde Capital devised to encompass a company's efforts to keep the public informed of its activities and present itself to potential investors. Scoring ranged from -0.5 for companies that rarely can be found in the media or at public events, 0.0 for those who appear sporadically and +0.5 for companies that can be regularly found in the news and initiate contact with the investment community.

An examination of websites was included in Investor Relations section of Concorde Capital ranking, as a high quality website serves as one of the easiest and most effective ways to get valuable information including everything from ownership structure to financials. Scoring ranged from -0.5 for companies without a site, 0.5 for sites that contained little useful data for investors, and +1.0

for sites that had a section designed specifically for investors with data including, in particular, financials and ownership information.

With **Minority Concerns**, Concorde Capital looked specifically at factors that are of the utmost interest to minority shareholders, including the risk of dilutive action, the existence of a depository receipt (DR) program, the presence of institutional investors, and the company's use of equity market instruments. The total possible score in this section had a range of [-3;3]. In section on risk of dilution, the top score, meaning low risk, was zero. Companies whose minorities faced a moderate risk of dilution scored -1.0 and those with a recent track record of diluting minorities or with a high chance of doing so received a punishing -2.0. As DR programs generally signal greater interest in attracting investors and equity financing, companies with available depository receipts were given a score of 1.0, equity warrants earned 0.5, otherwise companies received zeros. Concorde Capital gave companies that initially placed their shares on international exchanges rather than locally the maximum score in this section to avoid penalizing them over a technicality.

The presence of institutional investors was considered as a strongly positive factor in instilling exemplary corporate governance standards. Concorde Capital gave companies with a substantial institutional presence +1.0, those with insignificant institutional holdings scored zero, and those without institutional presence -1.0. As plans for private equity placements or IPOs generally entail higher corporate governance and greater openness to minority shareholders, companies that had completed an IPO or private placement were given 1 point, those who had officially announced plans and taken steps to complete them got 0.5 and those without known plans for an equity placement got a zero score.

In **Strategic Risks** section, Concorde Capital looked at risks related to inappropriate corporate governance practices that hurt the business of a company directly or indirectly, or lead to minority shareholders being deprived of their part in the value generated by the company. The total possible score in this section has a range of [-4;0]. One of these risks is the risk of suboptimal business decisions by management due to abuse of control by majority shareholders. This may involve related-party transactions, transfer pricing, other misrepresentations, asset stripping, unjustifiable acquisitions or divestitures, etc. The best possible score in this section was zero for companies that had normal business risks. Companies where the described risk cannot be disregarded picked up 1.0, and companies with obvious abuses got -2.0.

Additionally, authors looked at the possibility of the company being involved in either internal or external corporate conflicts - with rival business groups, minority shareholders and in some instances, regulators. The highest score possible in this section was zero, while companies that had been or were in danger of conflicts got -2.0.

Total score which company may receive in Concorde Capital ranking is between [-11; 10.5]. For purpose of this research scores are normalized to [0;100] scale.

APPENDIX 2. ESTIMATION RESULTS

Effect of corporate governance on equity returns. Estimation results

	governance
HML	-0.417* (-2.30)
SMB	-0.753** (-3.21)
MARKET	-0.102 (-1.06)
_cons	-0.0113 (-0.93)
N	28

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Effect of corporate governance on firm`s performance. Estimation results

	netmargin1	netmargin2	netmarginIV	roe1	roe2	roeIV
cgi	0.034		-0.173	-0.004		0.033
	0.40		-1.27	-0.24		0.24
lbook	0.610	0.482	0.241*	0.086	0.105	0.075
	1.89	1.76	2.30	1.27	1.54	0.71
oilgas	-0.561	-0.920	1.042	-0.181	-0.192	-0.153
	-1.07	-1.19	0.72	-1.47	-1.32	-0.10
consumer	0.638	0.466	1.684	0.097	0.172	0.153
	1.28	0.99	1.20	0.95	1.09	0.11
ironsteel	-0.671	-0.756	0.829	0.242	0.244	0.407
	-1.65	-1.38	0.81	0.81	0.92	0.39
financial	-1.248	-1.537	1.827	-0.165	-0.157	-0.247
	-1.42	-1.42	1.03	-1.11	-0.75	-0.14
engineering	0.024	0.048	1.327	-0.213	-0.141	-0.129
	0.09	0.16	1.08	-0.84	-0.45	-0.10
realestate	50.334	49.879	47.604***	0.196	0.179	0.245
	1.78	1.79	21.47	1.21	0.84	0.11
chemicals	-0.339	-0.570	1.216	-0.033	-0.063	0.072
	-1.10	-0.86	1.00	-0.44	-0.49	0.06
tmt	0.401	-0.207	0.799	0.000	0.000	0.231
	1.80	-0.29	0.69			0.19
elutilities	-0.182	-0.433	1.313	-0.047	-0.050	0.052
	-0.69	-0.98	1.05	-0.73	-0.30	0.04
metalfabricate hardware	-0.188	0.057	1.176	-0.401	-0.449	-0.286
	-0.71	0.16	0.99	-1.03	-1.37	-0.23
cokecoal	-0.375	-0.107	0.956	-0.047	-0.106	0.108
	-1.23	-0.29	0.88	-0.57	-0.57	0.10
construction materials	0.155	-0.476	1.136	-0.042	0.050	0.105
	0.75	-0.89	0.97	-0.72	0.31	0.09
transportation	0.000	0.000	0.836	-0.070	-0.099	0.131
			0.69	-1.88	-0.39	0.11
gasutilities	0.288	0.046		-0.382**	-0.417	
	0.71	0.12		-2.62	-1.68	
rd		0.268			0.047	
		0.98			0.75	
ir		0.513			-0.143	
		1.16			-1.32	
mc		-0.408			0.039	
		-1.26			0.53	
sr		-0.850			0.070	
		-1.37			0.87	
_cons	-3.887	-3.371	-2.533	-0.456	-0.604	-0.549
	-1.85	-1.79	-1.67	-1.10	-1.45	-0.36

Effect of corporate governance on firm's value. Estimation results
Regressand is Tobin's Q

	(1)	(2)	(3)	(4)	(5) IV
cgi	0.0290	0.0559	0.0570	0.0570	-0.326
	(0.76)	(1.10)	(1.04)	(1.04)	(-1.58)
lbook	-0.234	-0.225	-0.3	-0.307*	0.11
	(-1.94)	(-1.47)	(-1.92)	(-1.98)	(0.45)
roe	0.197	0.223	0.125		0.224
	(0.84)	(0.76)	(0.62)		(0.84)
sales_g		-0.00254**	-0.00279**	-0.00275**	
		(-2.63)	(-2.99)	(-2.95)	
net margin			2.760	2.844	
			(1.30)	(1.35)	
oilgas	1.330	2.532**	167.7	172.7	4.670
	(0.66)	(3.25)	(1.31)	(1.36)	(1.72)
consumer	1.408	1.774*	166.2	171.3	5.486
	(0.72)	(2.30)	(1.30)	(1.35)	(1.80)
ironsteel	1.360	1.995**	166.6	171.7	4.323
	(0.70)	(3.03)	(1.30)	(1.35)	(1.70)
financial	-0.807	-0.293	164.4	169.4	4.140
	(-0.41)	(-0.45)	(1.28)	(1.33)	(1.24)
engineering	0.322	0.994	165.6	170.7	4.100
	(0.17)	(1.98)	(1.29)	(1.34)	(1.47)
realestate	1.125	1.695*	0	0	6.776
	(0.52)	(2.49)	(.)	(.)	(1.75)
chemicals	0.795	1.384	166.0	171.0	4.777
	(0.40)	(1.53)	(1.30)	(1.35)	(1.64)
tmt	0	0.662*	165.1	170.2	2.565
	(.)	(2.30)	(1.29)	(1.34)	(0.79)
elutilities	0.760	1.511**	166.2	171.3	4.536
	(0.39)	(2.93)	(1.30)	(1.35)	(1.64)
metalfabricate hardware	1.627	2.273***	166.9	172.0	5.088
	(0.83)	(3.97)	(1.30)	(1.36)	(1.88)
cokecoal	1.769	2.521**	167.2	172.2	4.969
	(0.90)	(2.86)	(1.31)	(1.36)	(1.92)
construction materials	-0.291	0.396	165.0	170.1	3.374
	(-0.14)	(0.69)	(1.29)	(1.34)	(1.18)
transportation	5.930*	6.637***	171.3	176.3	8.583**
	(2.20)	(25.78)	(1.34)	(1.39)	(2.64)
gasutilities	-1.119	0	164.7	169.8	
	(-0.51)	(.)	(1.29)	(1.34)	
_cons	4.095*	3.412**	-160.8	-165.8	-1.182
	(2.01)	(2.94)	(-1.26)	(-1.31)	(-0.33)
N	290	268	268	268	268

t statistics in parentheses

* p<0.05, ** p<0.01, *** p<0.001

APPENDIX 3. CORRELATION ANALYSIS

Correlation analysis between corporate governance indexes in Ukraine

Correlation between sub-indexes of corporate governance in Concorde Capital and Vitaliy Zheka datasets

		Vitaliy Zheka data				
Concorde Capital data		Rights index	Transparency Index	Board Structure Index	Board Procedure Index	Total
	Disclosure	8%	9%	7%	25%	20%
	IR	7%	12%	-8%	-16%	-8%
	Minority	-10%	19%	5%	4%	6%
	Strategic Risks	10%	9%	-7%	-5%	-1%
	Total	6%	20%	0%	4%	8%

Spearman rank correlation between sub-indexes of corporate governance in Concorde Capital and Vitaliy Zheka datasets

		Vitaliy Zheka data				
Concorde Capital data		Rights index	Transparency Index	Board Structure Index	Board Procedure Index	Total
	Disclosure	8%	13%	14%	28%	27%
	IR	6%	15%	-9%	-18%	-7%
	Minority	-8%	13%	7%	8%	8%
	Strategic Risks	-1%	6%	-2%	-1%	3%
	Total	2%	16%	4%	6%	11%

APPENDIX 4. DESCRIPTIVE STATISTICS

Descriptive statistics for Concorde Capital Corporate Governance Index

Descriptive statistics for Reporting/Disclosure and Investor Relations sub-indexes

	REPORTING/DISCLOSURE [-2..4]			INVESTOR RELATIONS [-2..2.5]		
	IFRS	UAS Fin Statements Quality	Ownership Disclosure	Management accessibility	Public Face	Web site
	N-NPub-Y	Dist/some mnpt/ok	incom/ful	Lim/fair/good	N/sporadic/A	N/Y/inform
Mean	0.36	0.33	0.37	0.14	-0.05	0.30
Median	0	0	1	0	0	0.5
Standard Deviation	0.69	0.71	0.93	0.69	0.38	0.50
Range	0/0.5/2	-1/0/1	-1/1	-1 ...1	-0.5/0/0.5	-0.5/0.5/1
Minimum	0	-1	-1	-1	-0.5	-0.5
Maximum	2	1	1	1	0.5	1
Sum	63	57	65	24.5	-9.5	52
Observations	175	175	175	175	175	175

Descriptive statistics for Minority Concerns and Strategic Risks sub-indexes

	MINORITY CONCERNS [-3..4]				STRATEGIC RISKS [-4..0]	
	Risk of Dilutive Action	warr/DR	Presence of Institutional Investors	IPO, PP	Risk of sub-opt biz decisions	Corp Conflicts
	H/M/L	N/warr/DR	non/insg/signif	N/A/C	serious / some concrn / min	serious/minor
Mean	-0.18	0.37	0.46	0.26	-0.37	-0.08
Median	0	0	1	0	0	0
Standard Deviation	0.40	0.47	0.72	0.42	0.55	0.39
Range	-2/-1/0	0/0.5/1	-1/0/1	0/0.5/1	-2/-1/0	-2/0
Minimum	-2	0	-1	0	-2	-2
Maximum	0	1	1	1	0	0
Sum	-31	65.5	80	45.5	-65	-14
Observations	175	175	175	175	175	175

Descriptive statistics for cumulative Corporate Governance index and its determinants

	Reporting and Disclosure	Investor Relations	Minority Concerns	Strategic Risks	Corporate Governance Index
Mean	1.06	0.38	0.91	-0.45	1.90
Median	1	0.5	1	0	2
Standard Deviation	1.61	1.33	1.44	0.75	3.92
Range	[-2..4]	[-2..2.5]	[-3..4]	[-4..0]	0
Minimum	-2	-2	-2	-4	-6.5
Maximum	4	2.5	3	0	9.5
Sum	185	67	160	-79	333
Observations	175	175	175	175	175

Descriptive statistics for non-governance variables
Variables used in performance and value models

	Net margin	Log of book value	ROE	Sales growth	Tobin Q
Mean	0.28	6.60	0.05	42.06	5.37
Median	0.03	6.56	0.06	24.50	3.19
Observations	610	608	597	546	316
Maximum	60.35	10.70	25.37	1137.86	9.17
Minimum	-10.66	-0.67	-25.38	-96.31	1.06