

OWNERSHIP STRUCTURE, CORPORATE GOVERNANCE,
AND CORPORATE PERFORMANCE: EVIDENCE FROM
UKRAINE

by

Vitalii Repei

A thesis submitted in partial fulfillment of
the requirements for the degree of

Master of Arts in Economics

National University of "Kyiv-Mohyla
Academy"

2000

Approved by _____
Chairperson of Supervisory Committee

Program Authorized
to Offer Degree _____

Date _____

National University of “Kyiv-Mohyla
Academy”

Abstract

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Chairperson of the Supervisory Committee: Professor Anatoliy Voychak
Director of the Christian University

This paper attempts to find the most efficient system of corporate governance in economic environment with poor institutions. Ukrainian corporate sector is analyzed as a case. The data from 318 companies from different industry sectors and regions are used to test the effects of different types of ownership structure on enterprise restructuring and economic efficiency. I found that private organization outsiders with high concentration of ownership rights govern enterprises most efficiently. There is evidence to improve institutional structure for successful economic development.

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ACKNOWLEDGMENTS

The author is grateful to Michale Hemeasath, Janush Szyrmer and Gene Ellis for helpful comments, to Valery Antonov and Ivan Maryanchyk for their contribution to data collection, to Oleksiy Isayenko for their help in data processing.

GLOSSARY

corporate governance mechanisms: economic and legal institutions that are called to provide the assurance of return on capital to investors.

going private: the managers buy ownership of a corporation.

insiders: managers and employees of a firm.

outsiders: investors that provide finance to a particular firm but do not run it

PFTS: Ukrainian OTC Electronic Trading System (Pozabirzhova Fondova Torhova Systema).

principal - agent problem (or agency problem): the problem that arises when the interests of the managers (agents) do not naturally coincide perfectly with those of owners (principals).

SPFU: The State Property Fund of Ukraine, state entity which controls privatization process in Ukraine.

UAH: Ukrainian currency Hryvna.

Chapter 1

INTRODUCTION

The privatization in Ukraine started from two main ideas – first, privatization will clearly define ownership rights and second, it will create the institution of private investment, as well as private investors. Thus, the governance of former state assets will be substantially improved with private ownership in market environment, as suggested by Vickers and Yarrow (1988), Megginson et al. (1994). However, the continuous slump of Ukrainian economy turns positive expectations associated with privatization into doubts. Poor institutions are among the main causes of observed decline (Olson et al. (2000), Levine and Szyrmer (2000)). The question arises: what system of corporate governance stimulates better enterprise performance in economic environment with undeveloped institutions?

In this paper I ascertain the effect of private ownership created in the privatization process, and different types of ownership structure in particular, on corporate performance, given weak institutional and legislative settings. I try to find the most appropriate system of corporate governance for economic environment with bad enforcement of contract and property rights. Data from 318 enterprises for 1997-1998 years is used for cross-sectional analysis to check how performance indicators of Ukrainian firms vary according to the main shareholder type and concentration of their power. I test the hypothesis that, when contract and property rights are badly defined and/or enforced, shareholders with high concentration of ownership rights conduct more effective corporate governance than dispersed shareholders do. In other words, concentration of ownership leads to better economic performance. Also, I

presume that private owners significantly excel the state in both economic efficiency and enterprise restructuring. However, private owners themselves are not homogenous. Among them, organization outsiders can demonstrate superiority due to better monitoring of management and access to funds and new technologies.

Two main approaches can be employed to ascertain effectiveness of corporate governance for privatized firms. The first one exemplified by Megginson et al. (1994) is the intertemporal analysis of performance of corporations before and after privatization during some period. However, following this approach it is difficult to purify the consequences of privatization from general economic changes over investigation period. The second approach of Pohl et al. (1997) revised by Frydman et al. (1997) employs cross-sectional analysis of privatized vs. state firms. Thus, it avoids intertemporal problems, but it is very sensitive to data quality and does not control for differences in firm privatization plans. Because of relatively short history of privatized companies in Ukraine and quite unstable ownership structure, I pursue the second approach as more precise one.

Mass privatization in Ukraine has failed to create prosperous widely held corporate sector like one revealed by Berle and Means (1933) and entailed highly concentrated inside control in response (Estrin and Wright (1999)). While theory predicts significant improvements in performance of privatized enterprises in transition economies (Frydman et al. (1997), Pohl et al. (1997)), the results are quite ambiguous for Ukrainian firms. Some studies document no significant amelioration associated with privatization or with any particular ownership type (World Bank (1996), Estrin and Rosevear (1999)). In the meantime, Djankov (1999) finds relative superiority of outside foreign ownership in enterprise restructuring, especially for concentrated ownership rights. There are several explanations of such ambivalence. In Ukraine, either via not privatized and state-controlled incorporated enterprises, dominant part of country assets remains

under state governance. As for privatized firms, one can expect time lag needed for successful restructuring. Also, severe market distortions (barter, shadow economy, *veksels*, rent seeking etc.) inherent in the Ukrainian economy disable efficient corporate governance associated with competition, undermining the approach of Fama (1980). Weak legislative enforcement of investor rights and other institutional weaknesses also seriously harm proper governance of assets as suggested by La Porta et. al. (1997, 1998, 1999). Finally, data quality is hardly good for precise investigations because of poor accounting practice, illegal and shadow activities, and nontransparency in the Ukrainian economy in general. Therefore, the Ukrainian experience demonstrates ambivalent theoretical and empirical findings.

Most goods and services produced in a market economy are produced by firms. The corporation is surely the most important form of firm organization. Since corporate ownership is transferable over time and shareholders have limited liability for company debts, the corporation is superior in business creation and functioning. However, the corporation has its own problem related to the separation of ownership and control. It is namely the *principal-agent problem*. Corporate governance deals with the ways in which this problem is solved, i.e. how suppliers of finance to corporations (principals) can be ensured from appropriation by managers (agents). Actually, the subject of corporate governance has great practical importance. Series of well-known company failures – Maxwell Group, Bank of Credit and Commerce International, Barings Bank etc. – are clear manifestation of such importance. A great number of studies refers to corporate governance in developed economies¹ but relatively small literature – to emerging and transition economies. Asian crisis 1997 demonstrated to all that rotten corporations can lead to severe economic disasters not only at national but also at worldwide level. Jim Wolfensohn, president of the World Bank, asserts

¹ For survey see Shleifer and Vishny (1997).

that with globalization “the proper governance of companies will become as crucial to the world economy as the proper governing of countries.”²

Increasingly for transition countries that recently entered the reform period, strong corporate sector is fundamental for good economic and social progress. The privatization process, associated with shift to hard budget constraint in firm management under private ownership, is aimed to create healthy corporate sector (Vickers and Yarrow (1988); Megginson et. al. (1994)). Unfortunately, transition countries and, especially, those of the Former Soviet Union (FSU) have experienced weak corporate governance mechanisms at internal and external level as well. Decline in output, asset stripping, concentration of power within societies were the results.

While considerable attention has been paid to corporate governance in Central Europe (Frydman et. al. (1997), Claessens et. al. (1996)) and Russia (Boycko et. al. (1995), Earle and Estrin (1997)); Ukraine has been neglected. Ukraine – as the second largest economy of the FSU – is worth careful study. The results can reveal weak points to be improved in future economic policy of Ukraine and other transition economies as well and enrich corporate theory in general.

I find that private ownership has benign effect on corporate performance in Ukraine, supporting the privatization theory. In detailed investigation, home outsiders are doing a lot for enterprise restructuring measured as annualized sales change. Foreign outsiders own the most economically efficient companies but hesitate to restructure them. While the effects of insider ownership are ambiguous, putting private individuals in corporate governance appears to offer no advantages over the state on any performance measure, mainly due to high ownership dispersion. I find distinct evidence that the concentration of

² Wolfensohn, J., 1998, “The battle for corporate honesty”, *The Economist*

ownership rights has a positive effect on both economic efficiency and enterprise restructuring but a negative effect on wage paid. Therefore, as institutions are undeveloped, the most efficient system of corporate governance is characterized by active role of private organization outsiders with high concentration of ownership rights. However, sound institutions are extremely essential for economic growth and development.

The paper is organized as follows. To begin, Chapter 2 outlines of the corporate theory with special focus on the principal-agent problem and the corporate governance. Chapter 3 describes the corporate sector of Ukraine. The privatization process is examined. Finally, Chapter 4 discusses the data and empirical evidence on corporate governance for Ukrainian enterprises.

Chapter 2

CORPORATE THEORY

2.1. The Firm Theory

Most goods and services in the world are produced by firms. Carlton and Perloff (2000) define a firm as an organization that transforms inputs (material, human and financial resources) into outputs (valued products that it sells). The firm is quite efficient economic agent (Coase (1937), Williamson (1985)). The firm earns profit – the difference between revenue from sales and production costs. The main target of the firm is to maximize its profit. Firms are owned and governed variously. Corporation is the most important form of firm organization. In USA, about 90 percent of total sales are made by corporations. In order to raise funds for business, corporations issue stocks that are sold to public. In response, outside investors who buy the stocks obtain proportional to their shares rights for firm assets and generated profits paid as dividends. As Berle and Means revealed in their 1932 classic *The Modern Corporation and Private Property*, in typical corporation the stockholders and managers are separate groups. The stockholders elect the board of directors, who then appoint the managers. Such separation of ownership and control in corporation has several advantages. First, since stocks can be transferred over time, the life of corporations is not limited. Second, the stockholders have limited responsibility for the debts of the company because corporations borrow money in their own name. Thus, the maximum amount the stockholders can lose is what they have invested but not the amount of entire corporate debts. However, there are serious disadvantages of separation of

ownership and control. These are double taxation³ of corporate profits and costs of the principal-agent problem.

2.2. The Principal-Agent Problem

The modern corporate theory refers the essence of the principal-agent problem⁴ to the separation of ownership and control (Fama (1980)). The principal-agent problem stems from the contractual nature of the firm as suggested by Coase (1937) and Fama and Jensen (1983a, b). A manager, raising funds to finance business opportunity, and an investor, proposing funds to earn interests, arrange the contract that specifies conditions of allocation this funds and generated profits. However, the contract is unlikely to cover all manager actions and economic circumstances in full. As such, the manager obtains substantial residual rights not specified exactly by the contract (Hart and Moore (1990)). Since the objective functions of managers need not, and in general do not naturally coincide perfectly with those of investors, residual rights are not realized entirely in the pursuit of investor profits. Managerial opportunism can be resulted in different forms – from plain asset stripping, money stealing and enjoying perquisites to complicated transfer pricing and shareholder diluting. Resistance of nonqualified managers to replacing is also among the most harmful expression of the principal-agent problem (Jensen and Rubak (1983)). Thus, the economic efficiency of a firm depends mostly upon how its shareholders succeed in preventing management from engaging in self-interest activities.

The shareholders can implement long term incentive contracts to bribe managers to work efficiently. Incentive contracts are often employed and in various forms – share ownership, stock options, threat of dismissal etc. In the meantime, they

³ The profits generated by a corporation are taxed twice – as corporation income and as personal stockholder income from dividends.

⁴ The principal-agent problem is named also as the agency problem in some texts.

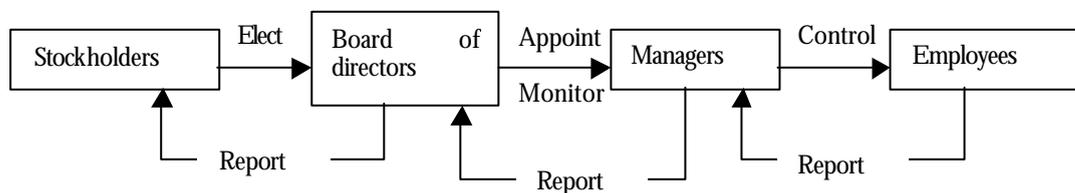
have common idea – in order to mitigate the principal-agent problem, incentive scheme should be build such that manager payoff moves along with shareholder payoff (Grossman and Hart (1983)). However, incentive contracts alone can hardly solve the principal -agent problem completely.

2.3. The Corporate Governance

The principal-agent problem is the main object of corporate governance. Corporate governance (CG) is a set of internal and external arrangements that define and enforce the discipline in relations between managers and shareholders. The corporate governance mechanisms are market, institution and legal settings that protect outside investors from opportunistic behavior of managers or controlling shareholders. In the absence of such protection, asymmetries of information and difficulties of monitoring faced by outside investors enable managers to misallocate corporate resources, often at the expense of the long-term performance. Therefore, efficient CG provides better corporate performance, while poor CG leads to bad corporate performance.

There are internal and external frameworks of corporate governance. At the internal level, CG is conducted via interaction of stockholders, board of directors, managers and employees (See Figure 1).

Figure 1: Internal framework of the corporate governance



The stockholders elect the board of directors. The board of directors appoints and monitors managers, and reports to stockholders at general shareholder

meetings. The managers hire and fire employees and run a corporation. The internal CG is enforced with various arrangements – corporate charter, company laws, shareholder agreements.

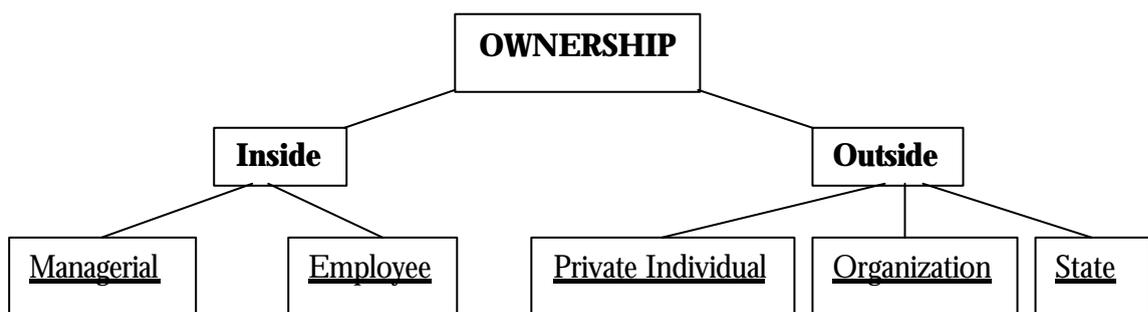
At the external level, corporate governance comprises market, legal and institutional arrangements that reduce costs of the principal-agent problem. Fama (1980) argues the market is the most powerful force toward effective CG. Competition drives badly performing firms out of business. Thus, risk of bankruptcy compels insiders to work efficiently in the market environment. An effective market for corporate control contributes to sound CG. Since, poor management can be replaced in the result of takeover, managers definitely have incentives to improve firm performance to retain their power (Auerbach (1988)). A transparent developed stock market provides clear signals of management quality enhancing CG (Levy (1983), Shleifer and Vishny (1997)). Legislative enforcement of contract and property rights is among the most important conditions for efficient CG (La Porta et al. (1997, 1998)).

The corporate governance varies according to the ownership structure of the corporate sector. At one end of the spectrum there are companies in which ownership is dispersed among small shareholders, while control is concentrated in the hands of managers (Berle and Means (1932)). The dispersed shareholding is observed in countries with “common law” legal system – USA, UK (La Porta et al. (1999)). There, the Anglo-Saxon corporate governance system relies on sophisticated legal protection of investors from appropriation by managers. Generally, voting on important internal (election of the board of directors) and external (mergers and liquidations) corporate matters is the main means of control (Easterbrook and Fischel (1983)). Hence, the enforcement of voting rights is the key issue of the Anglo-Saxon CG system.

At the other end of the spectrum there are companies with concentrated ownership of large investors (Shleifer and Vishny (1986)). In such companies managers act at the dictate of the controlling shareholder or debtor. The concentrated ownership is common for countries where it is quite costly for small investors to exercise their control and cash flow rights. Large investors enjoy economies of scale and reduced traditional free rider problem. The Continental Europe and Japan experience CG conducted by large investors (La Porta et al. (1999)). The empirical evidence suggests positive relation between the concentration and corporate performance. Thus, Gorton and Schmid (1996) find for German corporations that block holders improve company performance. In Japanese corporations large shareholders replace badly performed managers more often than dispersed ones (Kaplan and Minton (1994)).

The ownership structure of the corporate sector deals with ownership concentration as well as with different owner types. Generally, according to the largest owner, ownership of a firm can be divided into two main categories – inside and outside (Figure 2).

Figure 2: Types of ownership structure



The insiders are managers and employees. The outsiders can be separated into individuals, organizations and state. However, each country has specific features

and exhibits some deviations from theoretical classification due to the legislation and the history of establishing of private firms.

Managerial Ownership. The effect of managerial ownership on corporation performance was ascertained early by Berle and Means (1933). They argued that diffusion in ownership renders owners of shares powerless to constraint professional management. What is more, the higher diffusion of ownership is, the less (but in nonlinear relation) incentives for minor shareholders to participate in corporate governance. As a result, managers can seek ways to draw profits from other shareholders.

Employee Ownership. Employee control is not investigated intensively. Nonetheless, it can be suggested that because of relatively high monitoring costs and “free rider” problem, the corporate governance conducted under employee ownership is undermined by managerial opportunistic behavior. Hence, enterprises do not perform at top margin (Hansmann (1996)). However, employee ownership is preferable for companies that for some reasons cannot be privatized, since it is better than being state governed (Earle and Estrin (1996)).

Private Individual Ownership. Individual investors⁵ are supposed to create strong controlling mechanism since their holding in the corporations is non-diversifiable (Shleifer and Vishny (1986)). With higher concentration of individual properties, stake-holders tend to enforce monitoring and, thus, to ameliorate firm performance. However, Demsetz and Lehn (1985) doubt such inference. They assert that the structure of corporate ownership varies systematically in ways that are consistent with value maximization. Among the variables explaining such variations are firm size, instability of profit rate, regulation factors. Therefore, the deviations from the optimal ownership cause additional costs.

⁵ Here, individual ownership refers to one with private individuals as dominant shareholders.

Organization Ownership. Outside control of organizations is affirmed to treat corporations in the most efficient way due to signaling and special abilities of owners. Organizations, either firms (banks, investment funds, industrial groups, concerns, multinationals etc.) and institutions (industrial and financial associations, agencies etc.), can better analyze information, provide new technologies and funds, have special monitoring skills. Organization ownership is typically the most concentrated relatively to others. Therefore, this type of owners need not as much legal protection as individuals need (Shleifer and Vishny (1997)).

State ownership. Traditionally, public enterprises are called to cure market failures. As social costs of monopoly power, externalities, or distribution issues become significant, state control seems to be economically more desirable (Atkinson and Stiglitz (1980)). However, empirical evidence suggests that public firms are highly inefficient in comparison to private ones (Boardman and Vining (1989)) and privatized ones (Megginson et al. (1994)), even in pursuing public interests. There are several reasons of such inconsistency. State-controlled firms are governed *de facto* by the bureaucrats or politicians that have extremely concentrated control rights, but no significant cash flow rights, since generated profits are channeled to government budget. The absence of pecuniary motivation in firm governance is aggravated by political goals of the bureaucrats that are typically different from social welfare (Shleifer and Vishny (1994)). For instance, politicians can form special interest groups that help them in elections. Such enormous inefficiency of state firms has entailed a wave of governance transformation in economies around the world in the last two decades, namely privatization. Generally, privatization is the replacement of public control over firm with private control. The resulting ownership structure of private owners with matched cash flow and control rights provides significant improvements of enterprise performance.

2.5. The Corporate Governance in Transition Economies

Corporate performance under different types of owner structure in transition economies draws special attention of researchers because of enormous actuality of this issue for successful growth. However, there are some obstacles concerning availability of good data. Newly introduced after Soviet era private/privatized enterprises have relatively very short economic history. Poor accounting standards and underdevelopment of institutions create additional toughness.

Frydman et al. (1996, 1997) propose empirical evidence of transition countries. It was found that the outside-owned firms perform better than insider-owned firms on most performance measures. There are, however, enough differences between employee-owned and managerially-owned firms. While the effects of managerial ownership are ambiguous, the employee ownership is not far from state ownership on any performance indicator. Among outsider owners, there is no significant divergence between domestic fund and foreign investors. In addition, it is suggested that foreigners provide less than they potentially can according to authors' expectations. Next, the concentration of ownership during the privatization improved the management of privatized firms (Claessens, Djankov, and Pohl (1996)).

Among the FSU economies Russia has been explored the most (Boycko et al. (1995), Earle and Estrin (1997)). It is suggested that, there, insider ownership is predominant but the influence on performance is ambiguous. Evidence from other FSU economies exhibits similarity to Russian corporate sector (Estrin and Wright (1999)). However, it was found that while ownership by outside local investors or the state is not significantly correlated with enterprise restructuring, high foreign ownership is associated with restructuring (Djankov (1999)).

Chapter 3

UKRAINE IN TRANSITION

Unlike the transition economies of Central Europe, Ukraine has not yet established economic growth and appeared to have done little to restructure enterprises. In this section I summarize the main economic facts of Ukraine during transition in order to set the scene for analysis of its economic problems from corporate governance perspective.

3.1. General Economic Trends of Ukraine

During transition process Ukraine experienced in sharp decline in output in all sectors of economy. According to the official State Statistic Committee (DerzhKomStat) as well as Ukrainian-European Policy and Legal Advice Centre (UEPLAC) indexes⁶, Ukraine's real cumulate Gross Domestic Product (GDP) over the period 1990-1999 demonstrated permanently negative annual changes (See Appendix 1). From 1990 to 1994 GDP falls increasingly and in 1994 slump reached stunning -22.9%. Since 1995 annual decrease in real GDP slow down steadily.

In the second half of 1999 and at the beginning of 2000 the Ukrainian economy seems to start recovering. According to UEPLAC index in 1999 the GDP decline was as small as -0.4%. Over the first quarter of 2000 Ukrainian GDP even grew by 5.6%, as State Statistic Committee reports.

Nevertheless, the total real annual output of 1999 accounts for only half of the same aggregate for 1992.

The transition of Ukraine agriculture suffers the most. Negative growth continues and there are no signs of a possible recovering. Thus, in 1999 the gross agricultural output decreased by 5.7%. However, land ownership reform announced in the beginning of 2000 by Ukrainian government provides hope for changes, especially since the gross production of the private sector (private land plots and farms) grew by 3.9% in 1999.

According to DerzhKomStat, in 1999 the cumulate real industrial output shows trends to rising (4.3%), breaking the negative trend of the 1990-1998 (See Appendix 2). In turn, because of the divergence between the official and UEPLAC's GDP, the 1999 UEPLAC estimation of industrial output is less bright – only 26.1% of 1990 level with annual drop of 1.5%. In the first quarter of 2000 industrial output grew by 9.7% mostly due to increase in export oriented and processing industries. Chemicals and pharmaceuticals, food and wood processing, ferrous metals are the leaders.

Since 1993 Ukrainian industry experienced noticeable structural changes. The share of base industries (power, fuel and metallurgy) in industrial output increased from 38% to 64%, while the share of manufacturing industries (machine building and light industry) substantially decreased. Such alteration of industry structure stems from the excessive state intervention conducted via subsidizing of heavy industry, tax forgiveness etc. In the absence of a solid resource base, the orientation on resource-intensive production, often value added subtracting, is definitely harmful for manufacturing and prospective economic growth in general. Industrial policy should promote growth of value-added intensive sectors (such as light industry, food industry, machinery etc.). The real

⁶ The differences between GDP calculated by DerzhKomStat and UEPLAC stem from methodologies employed. In contrast to DerzhKomStat expense technique, UEPLAC calculates GDP from income side.

privatization and deregulation of the economy are main issues to be implemented by Ukrainian government to develop a vibrant corporate sector.

3.2. Summary of Privatization in Ukraine

Privatization of the state assets in Ukraine can be divided into three periods⁷. At the first period (1992-1994), privatization was conducted through non-competitive methods like leasing with further buy-outs (LFBOs) or management/employee buyouts (MEBOs) at very low prices. The second period (1994-1999) was characterized by mass privatization mainly for privatization papers - Privatization Certificate (PC) and Compensation Certificate (CC) - through the National Network of Centers of Certificate Auctions (NNCCA) with automatic valuation procedures, wide provision of information to public, and active participation of private individuals. Insiders, however, retained privileges in purchase of shares at the nominal value for their PC and CC as well as for money. The third period starts in 1999 with the end of paper privatization. The State Property Fund in 1999 moves to exclusively cash privatization with mechanisms of attracting investments to the enterprises, post-privatization support of strategically important objects, taking into account sector characteristics etc. The most attractive Ukrainian enterprises are planned to be privatized.

By the end of third quarter of 1999, according to DerzhKomStat 53.4% of total assets have been privatized. Small-scale privatization is officially completed. About 85% from total 10243 large and medium scale industrial enterprises have been privatized (UEPLAC (1999)). The share of privatized enterprises in total

⁷ The privatization history in Ukraine is based on information found at official site of State Property Fund of Ukraine, 2000, <http://www.spfu.kiev.ua>

output has reached 55.1%. However, the state still controls main sectors of Ukrainian economy – power utilities, oil and gas, metallurgy, and mining. Additionally, large military complex is out of privatization.

The overall lack of transparency, weak legislation and underdeveloped financial market discourage foreign direct (FDI) and portfolio investments (PI) into Ukraine and participation of foreigners in privatization. The level of FDI and PI per capita in 1998 is among the lowest for the FSU economies – \$14.8 and \$0.98 respectively (UEPLAC (1999)).

The sins of privatization in Ukraine are accompanied with a poor corporate governance system.

3.3. Corporate Governance in Ukraine

Ukraine is one of the worst performing transition economies in corporate governance mechanism development. Table 1 represents EBRD transition indices, that reflect internal and external features of CG, for some transition economies. Ukraine demonstrates one of the lowest levels of attainment. Starting 1994, Ukraine improves slightly the position in governance and enterprise restructuring. However, no positive changes are registered for next 4 years. Overregulation of the economy, soft budget constraints, weak enforcement of property and contract rights continue to harm corporate sector.

The financial sector of Ukraine doubly serves efficient CG. This is supported by very low grade “2” of Ukrainian reforms in development of financial institutions (See middle columns of Table 1). There is no market for corporate control. Since stock market is extremely illiquid, stock prices do not reflect effectiveness of enterprise management. Hence, managerial discretion is hardly monitored externally.

Table 1: Ukrainian progress in transition

Country	Enterprises: governance and enterprise restructuring					Financial institutions: banking reform and interest rate liberalization		Financial institutions: securities markets and non-bank financial institutions		Legal indicators: effectiveness			
	1994	1995	1996	1997	1998	1995	1998	1995	1998	1995	1996	1997	1998
Hungary	3	3	3	3	3+	3	4	3	3+	3	4	4	4
Estonia	3	3	3	3	3	3	3+	2	3	4	4+	4	4
Kazakhstan	1	1	2	2	2	2	2+	2	2	2	2	2	2
Latvia	2	2	3	3-	3-	3	3-	2	2+	2	3	3	2
Russia	2	2	2	2	2	2	2	2	2-	1	2	3	2
Ukraine	1	2	2	2	2	2	2	2	2	2	4	2	2

Source. EBRD (1995-1998)

Note. The classification system is as follows. Governance and enterprise restructuring: (1) Soft budget constraints; few other reforms to promote corporate governance. (2) Moderately tight credit and subsidy policy but weak enforcement of bankruptcy legislation and little action taken to strengthen competition and corporate governance. (3) Significant and substantial actions to harden budget constraints and to promote corporate governance effectively. (4) Substantial improvements in corporate governance, for example, on account of an active corporate control market, significant new investment at the enterprise level. (4+) Standards and performance typical of industrial economies; effective corporate control exercised through domestic financial institutions and markets, fostering market-driven restructuring. Banking reform and interest rate liberalization: (1) Little progress beyond establishment of a two-tier system. (2) Significant liberalization of interest rates and credit allocation, limited use of direct credit or interest rate liberalization ceilings. (3) Substantial progress in establishment of bank solvency and of a framework for prudential supervision and regulation; full interest rate liberalization with little preferential access to cheap refinancing; significant lending to private enterprises and significant presence of private banks. (4) Significant movements of banking laws and regulations towards BIS standards; provision of full set of competitive banking services. Securities markets and non-bank financial institutions: (1) Little progress. (2) Formation of securities exchanges, market-makers, and brokers; some trading in government papers and/or securities; rudimentary legal and regulatory framework for issuance and trading securities. (3) Substantial issuance of securities by private enterprises; establishment of independent share registries, secure clearance and settlement procedures, and some protection of minorities shareholders; emergence of non-bank financial institutions and associated regulatory framework. (4) Securities laws and regulations approaching IOSCO standards; substantial market liquidity and capitalization; well-functioning non-bank financial institutions and effective regulation. (4+) Standards and performance norms of advanced industrial economies; full convergence of securities laws and regulations with IOSCO standards; fully developed non-bank intermediation. Legislation effectiveness: (1) Legal rules are usually very unclear and often contradictory and the availability of independent legal advice is very limited. The administration of the law is substantially deficient (e.g., little confidence in the availability and independence of the courts, no or poorly organized security and land registers). (2) Legal rules are usually unclear and sometimes contradictory. Legal advice is often difficult to obtain. The administration and judicial support of the law is rudimentary. (3) While legal rules are reasonably clear and ascertainable through legal advice, administrative and judicial support is often inadequate (e.g., substantial discretion in the administration of laws, few up-to-date registers). (4) The law is usually clear and legal advice is readily available. Investment laws are usually well administered judicially, although that support is sometimes patchy.

In the final columns of Table 1 there are appraisals of legal system development. In Ukraine the situation in this area is worrisome. After substantial achievements in 1996 Ukrainian legal infrastructure weakened dangerously. Judicial support of corporate governance is rudimentary with high level of corruption.

The privatization process in Ukraine definitely favored insiders (See Table 2). The noncompetitive methods of privatization (LFBO and MEBO) have created dominant power of managers in corporate governance similar to Russia (Boycko et al. (1995)). During the second period of privatization management has increased its influence via purchase shares from financial intermediaries and employees and via privileges in underwriting. Such dominance of insiders is troublesome for successful restructuring and sound CG. Insider ownership may be associated with reluctance to shed labor, lower level of investment, and difficulties in obtaining access to capital (Estrin and Wright (1999)). In contrast, outsiders positively affect enterprise performance through better monitoring and the possibility for foreign owners to provide substantial capital and new technologies (Earle and Estrin (1997)).

Table 2: Dynamics of ownership forming

	Managers	Employees	Individuals	Outside foreign investors	Outside local investors	State
1995	14.6	23.6	0.2	0.3	18.9	42.6
1997	46.2	15.3	4.5	0.9	17.7	15.4

Source: EBRD (1997).

In summary, performance of Ukraine in establishing key mechanisms of efficient CG is unsatisfactory; it is comparable Russia but far from Central European and Baltic economies.

Chapter 4

THE MODEL

4.1. The Data

The empirical work on relative efficiency of various structures of corporate ownership in Ukraine is based on the data from the Public Information Office (PIO) at the State Securities Commission of Ukraine (SSCU). The incorporated firms in Ukraine are obliged to submit annual reports on economic activity to SSCU and PIO as well. The reports provide information on general facts, investments made by firm, stocks and bonds issued, owners that possess more than 5% of equities, managers and board of directors, financial statements, and balance sheets. The full list of reports reachable on-line accounts 1921 firms⁸.

Totally, random 318 reports were processed to obtain the data for 1997 – 1998 years. The sample comprises companies from all regions of Ukraine. It covers 15 sectors including fast moving service and finance (See Table 3).

However, the sample is restricted to only incorporated enterprises. The large military-industrial complex and small *de novo* private firms are excluded. Also, numerous small firms operating in shadow sector of Ukrainian economy are not captured. There are other limitations arising from high inflation and widely used underreporting in income by firms to evade taxes.

⁸ For more information visit <http://www.pio.kiev.ua>

Table 3: Sector distribution of the sample

Sector	Number of companies
Chemicals	28
Communication	3
Construction	18
Electronics	5
Engineering	32
Finance	9
Food	84
Light	21
Metallurgy	16
Mining	8
Oil & Gas	23
Service	7
Trade	24
Transport	20
Power Utilities	20
TOTAL	318

4.2. Descriptive statistics

The sample suggests some important features of Ukrainian corporate sector. As can be seen from Table 4, the state still controls mostly large-scale enterprises⁹. The average number of employees at state-controlled companies is 4404. Individuals and home outsiders are the main owners at medium- and small-scale, as a rule. Foreign outsiders control medium- and large-scale firms.

The average concentration of ownership for entire sample is extremely high – 47.19%. Only individuals unable to get significant property rights in the result of mass privatization and underdeveloped stock market. The ownership at enterprises owned by individuals is very dispersed (less than 2% average).

⁹ Number of employees is used as a proxy of enterprise scale.

Foreign outsiders control the most productive¹⁰ enterprises in the sample — the average annual sales per employee at foreign-controlled firms exceeds 59 thousands Hryvnas. The least efficient firms are individual-owned with productivity 5478 Hryvnas.

Foreign outsiders pay labor the most. The average annual wage is slightly less than 3000 Hryvnas. The least paid workers are employed at individual-controlled firms.

Table 4: Corporate performance with respect to dominant owner

	Owner				
	Managers and Employees	Individuals	Foreign outsiders	Home outsiders	State
Average number of employees	1 018	723	2 600	880	4 404
Average ownership concentration, %	50,17	1,99	49,63	32,52	60,37
Average sales per employee 1998, UAH	23 289	5 478	59 072	19 840	39 130
Average wage per year, UAH	1 860	1 159	2 968	1 729	2 393
Bad receivables change 1997-1998, %	61,97	82,95	286	1216,33	130,8
Number of observations	105	6	35	86	86

Therefore, one can notice that foreign outsiders control the most efficient enterprises. Such situation is explained by two approaches. First, foreigners buy relative more efficient enterprises in Ukraine initially. Second, foreigners conduct

¹⁰ Productivity is measured as the ratio of total sales per employee.

better corporate governance resulted in higher performance. Both approaches are reasonable.

The most numerous owners are insiders – managers and employees. The noncompetitive methods at early stage of privatization entail dominant power of insiders in asset governance. Such inside-controlled firms outperform state- and individual-owned ones in restructuring (bad receivable change is the lowest in the sample).

4.3. The Hypotheses

The privatization in Ukraine started early 1992 and has been not finished yet. Such slow pace of privatization was accompanied with continuous slump of the Ukrainian economy. While theory asserts significant amelioration associated with private ownership (Vickers and Yarrow (1988); Megginson et. al. (1994)), the evidence from Ukraine suggests some ambiguity (Estrin and Rosevear (1999)). In other transition economies the substantial improvements have been observed for firms with foreign outside and managerial ownership (Frydman et. al. (1997)). As for inside-owned companies, the result is not clear.

Since Ukraine has not been investigated intensively, I ascertain the efficiency of main corporate governance systems in Ukraine with special attention to peculiarities of ownership structure established in corporate sector. I test the following hypotheses:

H1. Privately controlled corporations outperform state-controlled ones.

H2. Corporate performance varies according to the shareholder structure. Organization outsiders and managers provide relatively more efficient corporate governance than individuals and state do and, thus, firm performance.

H3. Corporate performance positively correlates with ownership concentration.

Several issues are behind the hypotheses. In economic environment with weak enforcement of property and contract rights like in Ukraine, the costs of the principal-agent problem are extremely high. In Ukraine, mass privatization created corporate sector with highly dispersed individual shareholding and concentrated inside shareholding. Asymmetries of information and difficulties of monitoring accompanied with weak legislation lead to heavy free riding of individuals in corporate governance. As such, the insiders, mostly managers, pursue their own interests, often in expense of other shareholders. In this situation, the agency costs can be reduced in two ways:

1. Insiders, and managers in particular, possess significant stakes of firms to motivate themselves;
2. Foreign outsiders with sophisticated skills of monitoring managers conduct corporate governance.

However, both solutions are perceived to work efficiently under high concentration of ownership rights. Since corporate profits (if any in the presence of non-monetary payments) are used for restructuring, for managers large stakes are considered as premiums in the absence of cash dividends. Having underdeveloped legal system, foreign outsiders find themselves secured from manager appropriation only with complete control over the firm.

Therefore, the corporate performance is relatively better with concentrated ownership. However, the concentration effect is not linear. According to

Ukrainian legislation¹¹, there are following limits of power exercised by the owners:

- (0, 25] % of equities provides only passive voting rights;
- (25, 50] % of equities provides the right to block global decision¹² voted at a shareholder meeting.
- (50, 75] % of equities refers to controlling stake. However, there is possibility of blocking global decisions by the rest shareholders.
- (75, 100) % of equities provides complete control over the firm.

Nevertheless, because extremely high concentration prevails in the corporate sector of Ukraine, linear approximation of the concentration-performance relation provides good results.

4.4. The Framework

In order to ascertain the effect of different owner types and concentration on corporate performance, I employ the following model:

$$PI = F(\text{Own}, \text{Concentration}, \text{Sector})$$

where:

¹¹ "Pro Gospodars'ki Tovarystva [On Economic Entities]," Law of Ukraine, #1576-XII with amendments #3709-XII and #3710-XII dated 16.12.1993 and #769/97-BP dated 23.12.1997.

¹² Here, global decisions concern creation of the joint stock companies, their subsidiaries and branches, election board of directors and supervisory board, and granting perquisites to founders. The global decisions are approved with more than 75% equities, other decisions are approved with more than 50% equities.

PI – vector of performance indicators;

Own – ownership type = {privately-controlled (Priv), insider (ME), individual (I), outside home (OH), outside foreign (OF), state} State is used as benchmark;

Concentration – concentration of ownership rights expressed in linear form (CO);

Sector – industry sector of corporation. Light industry is used as benchmark.

The model is based on the theory defining performance of firms with respect to ownership structure, yet controlling for market and production peculiarities (Frydman (1996)).

Table 5: Performance Indicators

Performance Indicator	Measure unit	Description
<i>Wage</i>	UAH	The ratio of total annual wage expenses to number of employees. It is used as a proxy to measure the average productivity of labor.
<i>Sales per employee</i>	UAH/man	The ratio of total annual sales per employee. It shows the relative efficiency of enterprises in production. Higher ratio corresponds to better performance.
<i>Sales change 1997-1998</i>	%	The change of total sales year to year in nominal terms. It reflects the success (positive change) or failure (negative change) in sales promoting of a firm.

The performance indicators are calculated from the financial statements and balance sheets of corporations from the sample. I use two indicators – annual wage and sales per employee – to estimate economic efficiency of enterprises, and one indicator – annual sales change – to measure success in enterprise restructuring. Since poor accounting practice, other performance measures based on income and assets are not reliable for precise estimation. The main problem here is accounting data distortions caused by high inflation and illegal activities. These factors are not reflected in financial statements and balance sheets. For instance, total assets and equity capital often are not indexed for inflation for several years. Therefore, conventional performance indicators and ratios¹³ provide inadequate appraisal of real firm activity.

As explanatory variables I use dummies that control for ownership types and sectors firms operate in. The ownership concentration of firms is quantitative variable.

The corporate ownership is divided into five main categories with respect to dominant shareholder type. These are insider, home outsider, foreign outside, individual and state types of the ownership. The insider ownership is characterized by active role of managers in corporate governance, often in excess of cash flow rights (La Porta (1999)). In Ukraine managers often enforce their power via manager - employee trusts or threats of firing employees in case of disagreement with management actions. Therefore, the insider ownership refers primarily to managerial control.

The home outsiders are represented mostly by investment companies and banks. Industrial groups are much less numerous.

¹³ Du Pont ratios: ROA, ROE. Fundamental corporate finance ratios: quick and current ratios, turnover ratios etc.

Table 6: Explanatory Variables

Explanatory variable	Description
Priv	=1 if the firm is private-controlled, 0 otherwise.
ME	=1 if the firm has insiders as the dominant owner, 0 otherwise.
OH	=1 if the firm has home outsiders as the dominant owner, 0 otherwise.
OF	=1 if the firm has foreign outsiders as the dominant owner, 0 otherwise.
I	=1 if the firm has individuals as the dominant owner, 0 otherwise.
CO	The concentration of ownership rights of dominant shareholder in percent of total equity.
Sector Dummies	
Chemicals	=1 if the firm belongs to chemical industry sector, 0 otherwise.
Communication	=1 if the firm belongs to communication sector, 0 otherwise.
Construction	=1 if the firm belongs to construction materials production sector, 0 otherwise.
Electronics	=1 if the firm belongs to electronics sector, 0 otherwise.
Engineering	=1 if the firm belongs to engineering sector, 0 otherwise.
Finance	=1 if the firm belongs to financial sector, 0 otherwise.
Food	=1 if the firm belongs to food processing sector, 0 otherwise.
Metallurgy	=1 if the firm belongs to metallurgy sector, 0 otherwise.
Mining	=1 if the firm belongs to mining sector, 0 otherwise.
OilGas	=1 if the firm belongs to oil or gas sector, 0 otherwise.
Service	=1 if the firm belongs to service sector, 0 otherwise.
Trade	=1 if the firm belongs to trade sector, 0 otherwise.
Transport	=1 if the firm belongs to transport sector, 0 otherwise.
Utilities	=1 if the firm belongs to power utilities sector, 0 otherwise.

The foreign outsiders, mostly brokerage and investment funds, are engaged in governance of Ukrainian firms. Often, foreigners are off-shore brokerages that manage portfolio of other larger investors.

Despite individuals are among owners at vast majority of enterprises, the individual ownership is dispersed a lot. Hence, other owner groups conduct corporate performance. In the sample less than 2% corporations have individuals as the dominant shareholders.

The state ownership is controlled by the State Property Fund of Ukraine. Also, sector ministries and the National Agency of Corporate Rights Control monitor some corporations. The state is used as the benchmark to test relative efficiency of other forms of ownership.

The sector dummies are used to distinguish industry specific issues like minimum efficient scale, level of industry concentration, input-output peculiarities, marketing etc. The light industry has been chosen as the benchmark as it contracted the most during transition of Ukraine.

4.5. The Empirical Results

I first investigate the impact of private vis-à-vis state ownership on corporate performance for Ukrainian corporations. This yields the following equation:

$$PI = \text{CONSTANT} + \alpha_0 \text{PRIV} + \gamma_0 \text{CO} + \sum_i \beta_i \text{SECTOR} + \varepsilon \quad (1)$$

Here, the constant term reflects the mean transition effect on state enterprises. I expect it to render general downward pressure on all measures capturing unsatisfactory slow pace in establishment key market institutions. The coefficient α_0 is considered as privatization effect. It is presumed to be positive according to

my hypothesis H1. The effect of ownership concentration reflected in γ_0 should have positive sign with reference to the hypothesis H3. Impact of various industry issues are measured by the coefficients β_1 that are positive for export-oriented sectors because of relatively stable demand for their products.

The Table 7 represents the results of OLS regression.

Table 7: Empirical results of private vis-à-vis state control

Coefficient	Sales change 1997-1998	Sales per employee	Wage
CONSTANT	-59.02 (-0.99)	6782.25 (0.88)	1841.31* (9.57)
PRIV	54.13** (1.69)	3114.53 (0.51)	-262.58** (-1.71)
CO	0.97** (1.96)	125.79*** (1.34)	-1.28 (-0.54)
Sector Dummies	Yes*	Yes*	Yes*
R-squared	0.12	0.17	0.2

Note: Figures in parentheses are t-statistics. Significant coefficients are bold-faced.

**Significant at the 5%*

***Significant at the 10%*

****Significant at the 20%*

They demonstrate definite preeminence of firms with private dominant shareholder over ones with the state. The sales for 1997-1998 of state-controlled firms dropped substantially (-59.02%). The private discipline leads to much better restructuring reflected in additional 54.13% of sales augment. Also, the concentration of ownership positively affects restructuring as well as economic efficiency, with 0.97% annual sales increase and almost 126 UAH per employee

for each additional percent of concentration. At state enterprises workers obtain higher wages. This is not surprisingly, because the state often pays (if any) with non-monetary means that are overvalued. Also, at high level of concentration private owners can seek ways to draw cash from employees, paying them less.

The privatization effect estimated from equation (1) is the average effect of all private owners. Further, I explore the impact of different ownership types on enterprise performance.

$$PI = \text{CONSTANT} + \alpha_0 \text{ME} + \alpha_1 \text{OH} + \alpha_2 \text{OF} + \alpha_3 \text{I} + \gamma_0 \text{CO} + \sum_i \beta_i \text{SECTOR} + \varepsilon \quad (2)$$

In the equation (2) private owners are separated into insiders (ME), home outsiders (OH), foreign outsiders (OF) and private individuals (I). Other coefficients are the same as in the equation (1).

As the ownership categorization improves, the equations perform better. Thus, R^2 increases in all three equations, more coefficients become significant. Therefore, it is important for Ukrainian system of corporate governance to define particular owner type in extent to plain privately-/state-controlled classification.

Note the significance of the constant term that demonstrates negative impact of transition on state companies (See Table 8). Even seven years from the start of transition, state enterprises cannot restore their sales. What is more, for all owner types except home outsiders coefficients of restructuring suggest unsatisfactory performance. Therefore, weak institutions seriously undermine economic growth in Ukraine.

The results of refined ownership effects suggest that home outsiders are definitely superior in enterprise restructuring. Only they manage to increase annual sales proving successful production and marketing restructuring. Insiders

are much less bright in doing that but they, nevertheless, outperform foreigners and private individuals. Individuals demonstrate very unsatisfactory restructuring, even worse than the state does.

Table 8: Empirical results of the impact of different ownership structures

Coefficient	Sales change 1997-1998	Wage	Sales per employee
CONSTANT	-64.87** (-1.73)	1795.98* (7.41)	11541.7*** (1.46)
ME	18.04 (0.57)	-417.54* (-2.44)	-4944.83 (-0.71)
OH	112.88* (3.18)	-651.32* (-3.55)	-8637.1 (-1.18)
OF	0.086 (0.00)	453.01* (2.14)	29707.41* (3.45)
I	-11.31 (-0.12)	-1077.37* (-2.30)	-6155.73 (-0.33)
CO	1.19* (2.41)	-3.99** (-1.62)	62.83 (0.64)
Sector Dummies	Yes*	Yes*	Yes*
R-squared	0.13	0.27	0.2

Note: Figures in parentheses are t-statistics. Significant coefficients are bold-faced.

*Significant at the 5%

**Significant at the 10%

***Significant at the 20%

Bad performance of foreigners is somewhat unanticipated. Foreigners purchased mostly strategic enterprises, and the slow progress in restructuring is explained by

significant time lag needed for it. However, foreigners seem to not accelerate restructuring mainly because of unwillingness of Ukrainian government to implement reforms.

As expected, concentration provides substantial improvements in sales increase and its effect is significant.

Economic efficiency of enterprises measured as sales per employee turns to be the highest at firms owned by foreigners and the lowest at firms owned by private individuals. The biggest surprise of all is that the state appears to be quite efficient owner in terms of sales per employee measure. It is behind only foreigners but outperforms other owners. Such conflict between theoretical expectation and empirical evidence is explained by peculiarities of ownership in Ukrainian. First, the state still controls large-scale strategic enterprises with inelastic demand for their products in both domestic and outside markets. Second, even being the dominant owner at enterprises, the state is often passive cash flows receiver while second largest shareholder conduct governance of enterprise.

When I use annual wage per employee as proxy for labor productivity, the results prove that employees at foreign-controlled companies are the most productive and at individual-controlled ones are the least productive. This is also supported by sales per employee data. Both managers and home outsiders are reluctant to pay high wages. The concentration negatively affects wages since controlling shareholders appropriate employees.

It can be easily noticed there is no strict superiority of particular owner type in all performance measures of firms. Foreign outsiders outperform others in sales per employee and wages paid, but home outsiders provide better restructuring of enterprises. Here, the problem lies in heterogeneity of owners and peculiarities of ownership forming. Managers in privatized enterprises include both the ineffective old-styled directors and those who can run firms really effectively. The

outside owners can be predators with goals of value extracting from companies, or real investors that plan to raise companies. The history of ownership establishing suggests that insiders early bought effective enterprises and today unsatisfactory performance is worrisome. Foreigners are oriented on large-scale companies that needed substantial funds for restructuring. However, the passiveness of government in implementing market reforms to improve institutions and transparency of the economy discourages supporting investments.

In summary, it is obvious that in Ukraine the most efficient system of corporate governance is one with concentrated ownership of private outsiders. For the purpose of rapid restructuring, home outsiders suit the best. For static economic efficiency, foreign outsiders suit the best.

CONCLUSIONS

Using large sample of incorporated firms, I have investigated the impact of privatization and different ownership structures on corporate performance in Ukraine. I found that private ownership lead to higher performance than state one. Further, organization outside owners provide much better governance of assets, while private individuals are very ineffective owners due to "free-riding" problem. The state demonstrates failure in enterprise restructuring because of economically harmful political objectives. The effect of insider ownership is ambiguous.

The concentration of ownership rights has turned to be very significant factor with positive effect in successful economic performance of Ukrainian firms. Such result comes from weak property and contract rights enforcement in Ukraine.

Therefore, my question at the start of the paper, concerning the effective system of corporate governance, has the answer. The analysis suggests that when property and contract rights are badly defined and enforced, outside private investors with concentrated ownership rights govern enterprises in the most efficient way. However, success of transition is impossible without rapid development of institutions.

In this context, policy recommendations naturally arise. First, Ukrainian government should improve the institutional structure. This includes establishment of clear laws in all areas of economy, liberalization of industrial and financial sectors, removing soft budget constraints and enhancing market competition. Second, the government should encourage participation in corporate governance of real outside investors that have long-term interests. Since providing significant stakes for the investors reduces the costs of the agency problem in transition economy, further privatization policy in Ukraine should rely on selling large stakes for cash to outside investors with significant experience.

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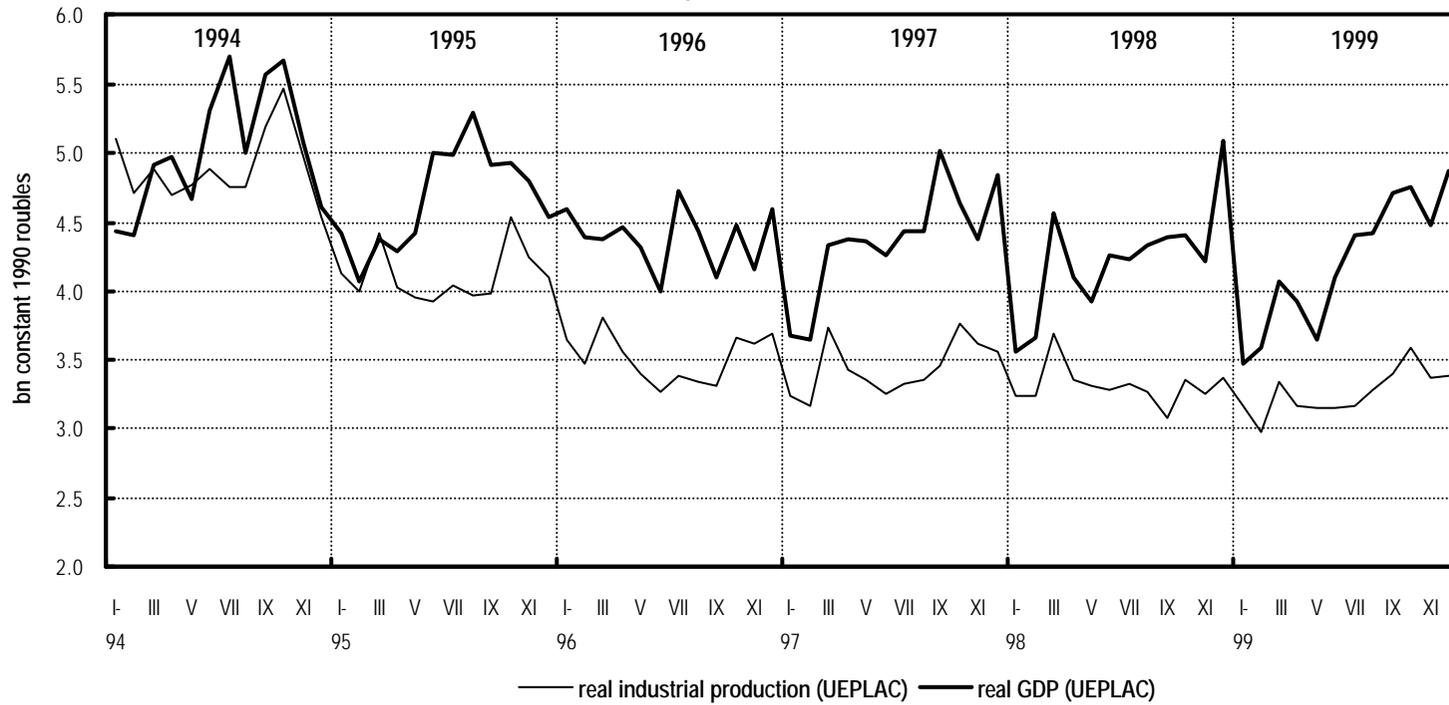
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APPENDIX 1

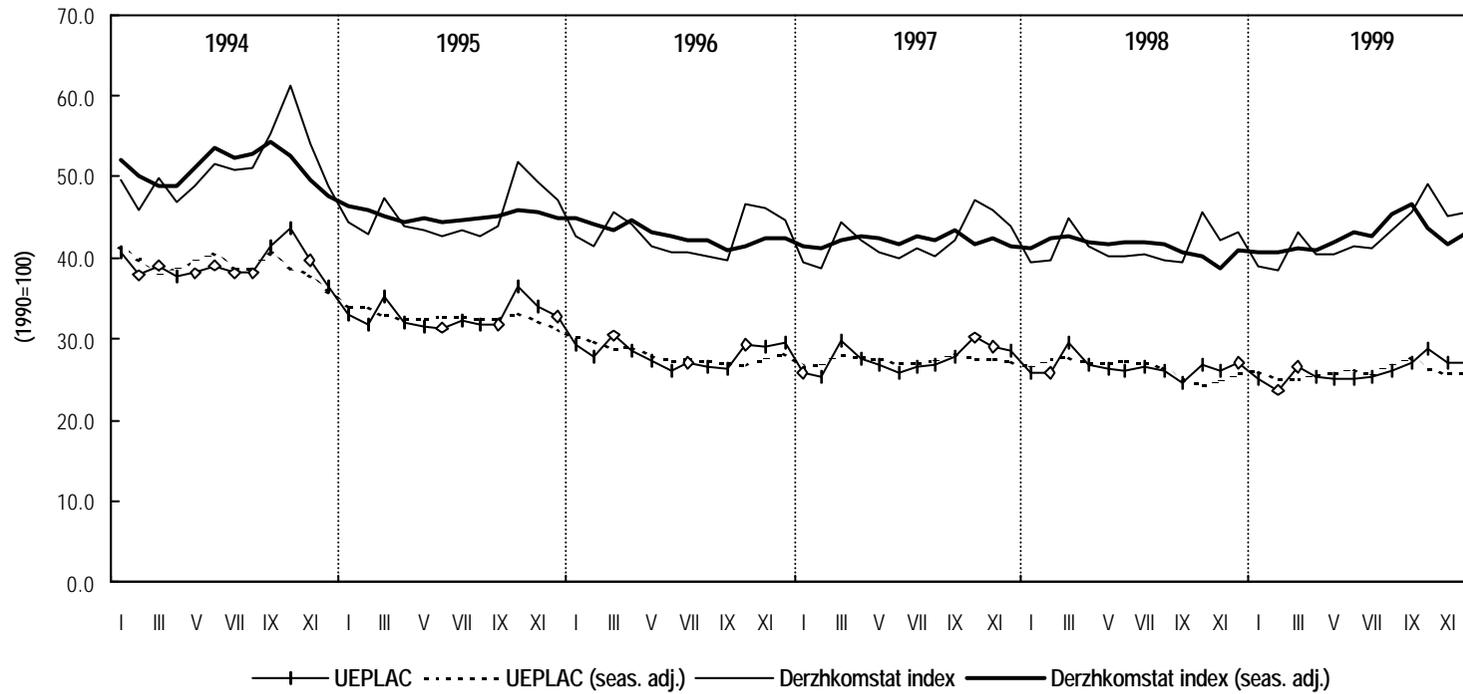
Real GDP and real industrial production
(January 1994 - December 1999)



SOURCE: *Ukrainian-European Policy and Legal Advice Centre (UEPLAC)*

APPENDIX 2

Index of industrial production
(January 1994 - December 1999)



SOURCE: *Ukrainian-European Policy and Legal Advice Centre (UEPLAC)*

