NEW MANAGEMENT STATEGIES IN RUSSIA.

Victoria Krivogorsky
Morgan State University

John W. Eichenseher
University of Wisconsin-Madison

September 2002

The authors would like to thank the Center for International Business Education and Research of the University of Wisconsin-Madison for support provided during the execution of this research.

Corresponding Author: Dr. Victoria Krivogorsky
619 McMechen
School of Business
Morgan State University
Baltimore, MD 21251
Email: victoriak92@yahoo.com

NEW MANAGEMENT STATEGIES IN RUSSIA

Abstract

This paper reports the results of in-depth, structured surveys of managers of 207 large Russian enterprises. These surveys, conducted in 1996 shortly after these enterprises had undergone privatization processes, were designed to capture pressures felt by managers to respond to product and capital market requirements to actively market enterprise output and maximize shareholder returns on investment, as well as managerial intentions in the short-run to utilize available resources for investments in enhanced productive assets and processes (research and development).

The theoretical framework and models used for the research rest on the notion that the process of privatization and the institutional structure developed within the enterprise in response to privatization should influence the speed with which market-oriented managerial decisions appear within privatized enterprises. In particular, market-oriented decisions should be more commonplace in firms which created higher levels of outside ownership in the privatization process (variant one privatization in the Russian context) and also created strong channels of communication *ex post* by which outside interests (*e.g.*, institutional investors and creditors) could influence enterprise policy formation.

As might be expected given the high level of uncertainty concerning the future of the Russian economy, formal empirical tests of the hypothesized effects of reformed enterprise structure on surrogates for market-oriented outcomes (managerial perceptions and intentions) provide somewhat mixed results. Support appears strongest (statistically significant at high levels of confidence) for the effects of externally-oriented communication channels on pressures felt by managers to maximize investor returns (ROI) and to focus their attention on marketing and distribution channels. More weakly (.10 significance level), the strength of these communication channels is also positively correlated with stated intentions to invest in productive assets and research and development activities in the short-term. On the other hand, privatization variants (which influenced the level of original outside ownership) appear unrelated to the pressure felt by and short-term intentions stated by managerial subjects.

Based on the empirical evidence and theoretical arguments presented in the paper, we conclude that Western models for enterprise efficiency in a marketized economy, which stress the importance of market forces as well as organization control variables in the mitigation of agency costs, are relevant for the current reform of the Russian economy. Nonetheless, we stress the fact that application of these models to reforming formerly centrally-planned economies must be tempered by a broad understanding of political economic forces, particularly the effects of substantial political uncertainty and inertia from prior employee welfare-oriented managerial practices.

NEW MANAGEMENT STRATEGIES IN RUSSIA

Introduction

Recent history has witnessed economic reform in business enterprises worldwide. A major dimension to this reform process has been the elimination or reduction of state (owned) equity claims in business enterprises, effecting traditional capitalistic economies such as the U.K. [Walker and Vasconcellos, 1997], former centrally-planned economies such as Russia [Chubais, 1994, Boyd, 2000, Berglof & Thadden, 2000, Black et el. 2001] and China [Hannan, 1998], and mixed economies such as Chile [Roberts and Araujo, 1997] and Indonesia [Bresnan, 1993]. This privatization process has been encouraged by trends in private multinational capital flows – the creation of the "global economy" – and policies initiated by multilateral financial institutions such as the World Bank and the International Monetary Fund (IMF). Nonetheless, despite logical claims that privatization should reduce agency problems in resource management and, thus, increase allocative efficiency, the privatization process has met resistance and failed to meet expectations in several national environments.

This paper focuses on managerial perceptions of and reactions to privatization in the Russian economy in the period immediately following substantial ownership restructuring in the first half of the 1990's. This restructuring was accompanied by broad attempts to engender (competitive) markets for goods and services, as well as ownership claims, within the Russian economy. Thus, we broadly consider the effects of changes in ownership structure and corporate governance on managerial attitudes towards both strategic business goals (*e.g.*, return on investment, general investment plans, and labor productivity) and the need for a "marketing " orientation in the distribution of enterprise output in a relatively unsuccessful domain of enterprise reform. Since 1992, the Russian economy has exhibited both declining output and high levels of inflation [Lyasko, 1998; Morozov, 1998, Black, et el, 2001]. The resulting abnormally high level of uncertainty in the Russian economy has combined with inertia in managerial attitudes to produce some unexpected and disappointing behavior, at least from the perspective of many Western observers, in privatized Russian enterprises [Moskovskaya, 1998, Fox & Heller, 1999, Worthington, 2001, Desai & Goldberg, 2001, Gogek, 2001]. Analytical arguments and empirical results provided in this paper are consistent with substantial managerial retention of *de facto* property rights in enterprise assets, even after formal ownership has been transferred to other (private) parties. However, some "good news" flows from empirical results, which indicate under certain circumstances growing managerial awareness of product and capital market forces at play in their environment. These results indicate little effect from these forces on short-term decisions, which still appear driven by massive uncertainty as to future political and legal developments.

A large stream of extant literature addresses the role of legal and financial reforms, in particular, and institution building, in general, in large- scale privatization efforts. Consistent with some of the more thoughtful work in this area, we argue that apparent inefficiencies in privatization efforts are often not the result of a failure to formally change the identity of (outside) owners, but rather stem from incomplete institutional development, even when managers have become aware of new influences from market forces. In short, a full understanding of managerial behavior within large-scale privatization phenomena requires consideration of two sets of factors. First, as the main focus of this paper, one needs to understand how changes in enterprise ownership and governance structures effect managerial perceptions and decisions. These changes can vary across national economies and their variety within the recent Russian experience allow us to test specific notions (hypotheses) empirically.

Second, one needs to understand how the technical details of enterprise accounting system design and use can enhance or constrain the desired effects of privatization. Clearly, the information needed by managers in approaching the allocative efficiency visualized in a market economy depends on the clarity and orientation of the enterprise's accounting information system. However, impediments to "efficient" accounting system design and use may very well mirror the impediments to market-oriented managerial decision-making *per se* asserted in the current research. Thus, the issues considered in this paper, *e.g.*, political uncertainty and failures in enterprise and general social institution building, bear relevance for future research focused more narrowly on accounting issues in reforming economies.

The survey results presented in this paper support a strong relationship between market-oriented managerial perceptions and privatization processes most closely mirroring the structure of Western "capitalist" business enterprises. While similar results are not obvious for the short-term investment intentions indicated by surveyed managers, these results suggest that linkages between agency cost and economy efficiency posited in the West [Jensen & Meckling, 1976] do bear significance for the reforming Russian economy, in particular, and the majority of reforming centrally planned economies, in general. They, furthermore, suggest the reform environments within which efforts to develop Western-styled financial reporting systems may prove most beneficial, *i.e.*, in situations which most closely mirror Western-style corporate governance systems.

The remainder of this paper is structured as follows. Section I provides an overview of the opportunities, problems, and results evident in the reform experiences in the Russian economy over the past decade. Section II provides an analysis of managers' utility functions after privatization and their perceptions and intentions in different privatization settings in light of theories developed in the West. Section III describes the unique survey data assembled for analysis in the current research project and the form of statistical tests used to explore the relationship between privatization variables, on the one hand, and post-privatization managerial perceptions and short-term intentions, on the other. Section IV provides the results of these statistical tests. The paper concludes in Section V with an extended discussion of the implications of the reported results for both future research and policy formation in reforming national economies.

I. REFORM CONDITIONS IN POST-SOVIET ECONOMY

<u>Ongoing Problems in Economic Reform</u>

Due to both initial (early 1992) conditions of the newly independent Russian economy and ongoing problems in reform implementation, the 1990's witnessed continuing economic contraction. Attempts at post-independence management (fiscal and monetary policy) of the Russian economy have met a wide variety of virtually insolvable problems.

First, government officials have struggled with shortfalls in government revenues and the historical demands placed on public finance in the Soviet tradition. On the one hand, demands for government support of relatively unproductive (unprivatized) enterprises and a large ongoing military complex have continued largely unabated. On the other hand, sources of government revenues have largely disappeared as income taxation has proven a poor substitute for the abandoned expropriation mechanisms of the centrally planned economy. Firms and individuals have shown extreme reluctance to comply with newly instituted income tax laws, and the government's response of higher (but still largely unenforceable) tax rates has only served to exacerbate this problem.

Under pressure from multinational financing agencies (*e.g.*, the World Bank and the IMF), the Russian government has sought to reduce budget deficits and inflation rates by limiting monetary expansion. Unfortunately, the resulting reduced liquidity has combined with general efforts at income tax evasion to produce various "dysfunctional" results at the enterprise level, which seem to permeate the Russian economy. Given the government's anti-inflationary desire to limit the circulation of banknotes throughout the Russian economy, many enterprises are, thus, left with quite limited financial working capital. The obvious result has been a flourishing barter economy, in which enterprises have developed extensive, but relatively inefficient, barter trading networks to obtain production inputs and compensate employees.

A second general problem plaguing reform efforts in the Russian economy has been the underdeveloped nature of the legal system, which has proven woefully inadequate in facilitating business transactions for an emerging privatized and market-oriented economy. It would appear that problems in the legal dimension to economic reform were largely underestimated in original reform initiatives [Aslund, 1995, Investor Protection Association Report, 2000, Worthington, 2001]. Dual failures in the evolution of contract law and property rights (enforcement) have led to substantial transactions costs for newly privatized Russian enterprises as they must either rely on extra-legal, at times violent, measures in enforcing contracts or constantly face the risk of default on exchange contracts. The lack of adequate "business" laws is also often pointed to as a deterrent to expanded foreign investment in the Russian economy.

A third factor in mitigating the increased efficiency anticipated from a privatized, market-oriented economy has been what in general terms might be labeled "political" indecision or uncertainty in Russia in the 1990's. This uncertainty was reflected in the numerous changes and the lack of a stable consensus within the Russian parliament (Duma) for reform policy initiatives. As might be expected during a period of extreme economic contraction and personal hardship, the Russian electorate appears to waffle between the extremes of a desire for return to the old and more stable Soviet era and a hope for substantial prosperity and freedom in a fully reformed economy [Grabowska, 1999]. Failure to reach societal consensus on the proper direction for future economic policies has created a level of economic and political uncertainty in Russia that is largely unparalleled in prior history of market-oriented (capitalist) economic development.

At the micro level of enterprise management, these problems in economic reform appear to have largely negated the expected benefits from privatization policies. While much of the exchange in the current Russian economy is mediated through market (voluntary choice) mechanisms, few of the newly privatized enterprises seem to operate like Western business firms, *i.e.*, in a fashion designed to maximize investor return on invested capital. "Accounting" problems undoubtedly contribute to this condition. Existing accounting systems – including the expertise (human capital) of accounting personnel – appear inadequate to generate meaningful measures of return on assets or equity. Also, the continued dual use of these systems for both financial and income tax reporting purposes provides disincentives for accurate reporting to investors.

Nonetheless, more important constraints to standard "value maximization" in privatized Russian business enterprises are likely to stem from more general problems in economic uncertainty. In short, decision-makers (managers) in these enterprises currently live in a world of quite uncertain future business conditions. Having largely grown up and previously functioned in an environment where enterprise (SOE) goals were circumscribed by central planning and largely reduced to maximizing the welfare benefits available to the existing workforce, current enterprise managers can not be certain that they will not return, at least partially, to this world. Tendencies to think in these terms may be, furthermore, enhanced given a variant of privatization (*i.e.*, V2 described below) that led to original majority employee ownership.

In a general sense, survival strategies in periods of great uncertainty may "rationally" dominate the value maximization strategies assumed in standard neoclassical microeconomic theory, regardless of the specific historical context [Roy, 1952]. In the specific Russian context of the 1990's, it is likely that enterprise managers viewed survival in terms of continued support from a large and hopefully expanding, as well as politically relevant, workforce. The research described and reported in the remainder of this paper explores the effect of differential conditions in ownership and corporate governance in 1996 on Russian enterprise managers' stated intentions and perceived pressures to pursue standard (Western) market-oriented objectives, including long-term value maximization, as opposed to survival-oriented personnel practices.

The Initial Reform and Privatization Initiatives

Recognizing substantial problems in allocative efficiency in the national economy, in general, and the SOE's, in particular, the Russian government moved quickly in 1992 to adopt tough fiscal and monetary policies and a fast and irreversible process of enterprise privatization. As described in Krivogorsky [1999], privatization policies evolved throughout the first year of Russian independence as economic theory gave way to political expedience. Initial plans for massive capital market sale of shares valued at roughly "fair" value (discounted value of future cash flows) were modified to stress (costless) voucher privatization based on unadjusted book values, which were quite low due to high levels of post-independence inflation. Also, as specific privatization rules evolved, shares reserved for current enterprise managers and workers increased to the point where the privatization process often left these parties as the majority owners of newly privatized enterprises.

Enterprises considered in the research described in this paper where privatized in one of two distinct fashions. Variant One (V1) firms had 25% of equity given *gratis* to existing employees in the form of non-voting (preferred) stock; 25% of voting stock allocated for sale at book value or less to employees (15%) and deposited in employee welfare funds (10%); and the remaining 75% of voting stock (56% of total equity) "sold" in open voucher and tender auctions. Variant Two (V2) firms offered 51% of voting stock to existing employees at a price equal to 170% of book value; gave 5% of voting stock to employee welfare funds; and distributed the remaining 44% of voting stock thru open voucher and tender auctions. The choice of privatization variant was, in effect, left to the discretion of current employees. V1 procedures provided lower per-share prices to employees, but less of an opportunity to obtain controlling interest in the aggregate in the privatized enterprise. While subsequent trading was likely to alter the inside/outside ownership configuration differences between V1 and V2, data reported in Section III indicate that these differences were maintained, on the average, at least until 1996.

While privatization was not and still has not been applied to all sectors of the Russian economy, the initial efforts did involve a broad range of sectors and enterprises. The general goal was to separate ownership and control to the extent possible to promote allocative efficiency and reduce public sector financial demands throughout the Russian economy. Private owners with somewhat impersonal investments at risk in individual enterprises would presumably drive managerial decisions in the direction of market-mediated cost-benefit analyses, thus greatly enhancing the overall efficiency of the evolving market-based Russian economy. Obvious problems existed in 1992 in the context of the simultaneous evolution of product, labor, and capital markets. Concessions made to existing employees in the evolution of privatization procedures in 1992 reflected the key role these parties, particularly managerial employees, played in public acceptance of the new economic paradigm.

II. MANAGERS' INTERESTS AFTER THE REFORM OF PROPERTY RIGHTS

The basic premise of privatization efforts was the assumption that changes in property rights would lead to gains in efficiency and increases in social welfare, with corporate behavior showing a discrepancy for the alternative ownership structures. Despite logical claims that privatization should increase the economic efficiency, it failed to meet these expectations in several national environments. In this regard, the main question is whether these predictions can be applied to the transition economies in general, and in particular for Russia?

The Russian economy is characterized by very high levels of monopoly in production and distribution. According to Jensen and Meckling (1976) "owners of firms with monopoly power have the same interests to limit divergences from value maximization as do owners of a competitive firm. Furthermore, competition in the market for managers[1] will generally make it unnecessary for owners to share rents with managers. The owners of a monopoly firm need only pay the supply price for some managers." Hence, the existence of competition in a production market should not fundamentally alter the nature of agency costs, but it makes a big difference in terms of position of the firm. In the transition environment a monopoly position in the market means not just larger then "normal" profit (which is enjoyed by the monopoly firms in capitalist economies according to Johnson and Meckling, 1976) but also greater survival power. These circumstances affect managers' utility functions and related corporate control costs. The position of the monopolistic enterprise during the transition is not just a result of managers' professional capabilities, but it is also a result of the favorable place of the firm such as it's ability to earn hard currency (oil, gas extraction companies, etc.), or close personal relationship with the "governmental structures". Since increased competition within a relatively short period of time is unlikely, given high entry costs in Russian economy, many firms avoid the threat of competition in the medium term. In this context, now the managers' perceptions and interests seem to be more crucial than market competition or ownership structure in enhancing economic efficiency.

Because of the complexity and challenges of privatization, different nations have experimented with alternative approaches, although some economists have argued that from an economic point of view the method may be unimportant, and that the process does not matter (Lazear, 1995). Overall, to succeed, a privatization needs public support and an economy needs efficient corporate governance system. To have public support, privatization must appear to be equitable, afford a taxpayer a fair return, and satisfy at least in part the claims of groups involved in reformed enterprises. To make privatization look fair and to earn public trust, the Russian government used voucher distributions (practically gave away the formerly state-owned firms) in order to reduce the potentially negative effects on the well - being of workers and managers. (Milner, 1998, Berglof & Thadden, 2000) Therefore, privatization put managers in a position of total control in a substantial plurality of Russian firms because 1) the level of outside ownership is not large enough to force managers to promote outside stockholders interests (Investor Protection Association Report, 2000). Enterprise managers tend to dominate nominal enterprise governance structures such as boards of directors and internal control committees (Black, at el, 2001); and 2) managers have rigid control over workers' ownership by keeping proxies from workers and repressing their interests on the boards of directors (Blasi Report, 1996). Thus, for these firms control resides with management, and the assumption of profit maximization no longer has self-interest as its foundation.

Thus, from agency theory standpoint, agents (managers) have broad opportunities to control the firm and bear a substantial share of the wealth effects of their decisions. Having

---

1 Unfortunately managers' market does not exist in Russia.

gained control of the enterprise, top management decided that collusion and expropriation of security-holders' wealth (buy- backs and delutive shares) is better than the competition within the management group (Investor Protection Association Report, 2000).[2]

Therefore in Russia, corporate governance mechanisms have been incompletely or ineffectively installed within enterprise management, thus muting the effect of variant of privatization on enterprise goal and policy articulation. Firms in Russia remain hierarchical pyramids, with the executives at each level being paid a multiple of the salary of their immediate subordinates. (Simon, 1947) The size of the firm offers an index of both the difficulty and responsibility, so larger firms will tend to pay higher managers' salaries, due to the fact that task complexity and importance both correlate with the size and the professional competence of the executive. (Marris, 1964, Rosen, 1982, Demsetz, 1995).

For well -developed market economies, it is argued that the rigors of competition (Watts & Zimmerman, 1986), reputation (Fama, 1980), or the threat of takeover (Manne, 1965) can alter managers' perceptions and force management to maximize the firm's profit as oppose to just self interests. In Russia, as discussed above, product markets lack competition, and the market for corporate control does not serve the role it plays in Western capitalist economies (Friedman, 1953, Barnea 1995). Share prices in Russia are likely weakly correlated to manager's efficiency, but measure instead a firm's ability to earn hard-currency (export market share), or its stability (monopolistic position) in the internal market. Thus, poor managerial performance does not necessary result in lower share prices, and, if it does, takeover is barely possible, particularly for enterprises having privatized under the second variant. In any case, identification of undervalued firms is exceedingly difficult for Russian investors. Firms whose management pursues its own objectives at the expense of other stockholders will not necessarily have their assets undervalued

2 The probability of such collaborative arrangements can be lowered, according to the theory (Fama, 1980), by enhancing the role of outsiders in corporate governance.

in capital markets, unless poor managerial performance is clearly signaled by observable outcomes such as material declines in export earnings, or other observable measures for survival.

Therefore, there is little potential for capital gain, which would invite new management to step in through a merger or takeover. If not constrained by outside control, managers are free to maximize their own utilities or, in other words, they are free to pursue their own objectives and interests, which include both monetary elements (i.e. salaries, bonuses, capital gains from stock options), and non-monetary elements (leisure, prestige, power, etc.) (Gordon, 1964, Monsen & Downs, 1965). Therefore, "safety first, control and wealth accumulation" are the three most important postulates in highly uncertain transition environment. Security as an objective is due to the high level of economic as well as political uncertainty in Russia. The economic uncertainty embraces persistent changes in accounting policy and overwhelming taxes, dependence on other firm's behavior with interdependence created by imperfectly competitive markets, which inherently manifests itself as uncertain demand.

To reduce uncertainty firms tend to be expanded or modernized. Large firms appear to be more stable and even though external financing may be quite costly, expansion provides additional chances to survive in the long run. According to the theory, owners should show more interest in enlarging and modernizing the firm, whereas employees (including managers) often serve as a potential hindrance to modernization under uncertainty. Being risk- averse they prefer the status quo or an expansion of existing conditions over modernization. (Aghion, Blanchard, et al, 1994, Carlin Van Reenen, et al, 1995). It should be noted that in Russia owners, being employees in the same time, suffer from the time horizon problem under uncertainty and unclear property rights and prefer rapid speculative capital gains over the long-term strategies. Also, for the time being, uncertainty in Russian market is accompanied by low rates of trust in the future (Milner, 1998). [3] This invariably forces employees to act in their short- term interests, and variant

3 Results of this study suggest that people in Russia don't really believe that they will benefit from privatization and economic changes in a long run.

of privatization does not create any incentives to act otherwise. For example, under the threat of bankruptcy, assets stripping (Blasi & Shleifer, 1995) was preferred strategy to modernization for all Russian firms. The right for residual return, which theoretically should diminish the time-horizon problem, does not provide strong incentive effects because of economic crisis and political instability, which make the future vague or ambiguous.

Desire to control is also heavily influenced by uncertainty as well as it has a strong psychological foundation, and in conjunction with other utility functions improves overall managerial positions. Theoretically speaking, "the opportunities for distinction, prestige, personal power and the attainment of a dominating position are much more important then material rewards in the development of all sorts of organizations including commercial organization" (Barnard, 1966). Managers' perception of dominance also depends on the size of the firms (assets) they control (Barnard, 1966, Simon, 1947). So, coherently with our previous argument about security it creates an incentive for managers to increase the size of the firm. In addition, larger firms provide some extra benefits to Russian executives, such as governmental subsidies, business and social prestige, access (blat)[4] as well as personal satisfaction. Hence, when managers hold primary control over the firm their behavior should be consistent with their strong interest in larger size (i.e. invest in assets) whenever they have the opportunity (increase in income) to pursue this interest. Besides the new assets usually enhance the quality of the output, allowing firms to have a revenue enlargement with the positive effect on ROI. Implication of the above arguments for the decisions made by V1 and V2 firms' managers would be reflected in similarity of their goals. **Therefore, we think that variant of privatization doesn't create enough sufficient conditions for differentiation in managers' intentions (H1)**

4 In Russia informal relationships with authorities or with any other "useful" people (blat) some would consider even more critical than remuneration or prestige.

In addition, transition economies (including Russian one) are usually experiencing inflation on much higher scale than stable economies. Highly inflationary conditions should also mitigate the managers' behavior in the firms' with different ownership structures. For example, investment in assets should dominate (monetary) liquidity because non-monetary assets prices do not depreciate as rapidly in value and non-monetary assets can be exchanged later in time through barter transactions. In this regard, the decision to buy new modern piece of equipment, which can be exchanged for something valuable later on is consistent with the best interest of stockholders. Thus, corporations' managers with different ownership structures, in different privatization settings presumably should show identical behavior, making similar choices to invest in assets, whenever they have an opportunity to do so (increase in income). **Another words, in highly inflationary economic environment we expect to see a strong income effect on all investment decisions (H2), as oppose to the variant of privatization effect.** Also, presumably the fact that positive change in income correlates with managers' choices to make certain investments witnesses managers' reliance on accounting figures i.e. it shows that a certain level of information content for accounting profit is present in the Russian economy.

Two counter-arguments to the notion that increases in managerial compensation are tied to firm enlargement are possible. First, the market for corporate managers should adjust their salaries to reflect inefficient increases in firm size. This factor is unlikely to change those conclusions, because the market for top executives in Russia is still quite underdeveloped. Also, in a very unstable business environment the mobility of top executives is very low because the familiarity of existing management with the operations of specific firms provides a key competitive advantage to incumbent managers. Second, stock option plans can create a powerful profit incentive. If managers acquire large holdings of their firms' stock, their interests should merge with those of owners. This argument has limited applicability in Russia for several reasons. First, the link between firm performance and the performance of stock prices is quite tenuous as it was discussed above. In general, stock prices in Russia are depressed due to the poor economic conditions in the country. Efficient managerial performance has limited influence on stock prices. Thus, managers are only weakly rewarded for efficiency when compensation systems are based on the market performance of the firm. Exogenous shocks of a macroeconomic nature still dominate both incentive and fixed salary compensation of Russian managers. Secondly, stock-based compensation schemes are of limited importance to Russian managers. They bought stocks in their firms primarily due to the specific design of privatization schemes (vouchers, discounts, payments in installments) and their desire to retain enterprise control, rather than to maximize the value of their investment portfolios. Executives tend to exercise options only to realize the income from the significant (original) discounts and existing option schemes have quite limited incentive effects. Therefore, the only constraints on Russian managers' self interests are inside ("internal" enterprise control agents, *i.e.*, members of the enterprise's special control committee influential in the setting of enterprise financial policies) or/and outside financial control ("external" enterprise control agents, *e.g.*, representatives of institutional investors, creditors, and other providers of capital not represented on the enterprise's board of directors influential in the setting of enterprise financial policies) when/if they exist. Another words, in **highly uncertain economic environment with underdeveloped market forces and established managers' power we expect to see internal and external financial control as major determinants of managers' pressures and intentions (H3)**

And last, but not least, managers attributed firm's means of survival and capacity to recover in the future to its ability to keep firm's experienced employees in place. (Moskovskaya, 1998, Report of IE, 1995, Report of IE, 1996) The loss of their best workers is usually ascribed to their inability to pay competitive wages.[5] Thus, most managers are taking active measures to hold on to their most desirable employees by maintaining competitive salaries. Also, the overall level of payroll is a priority among managers because it is viewed as the continued provision of social

---

5 Consistent with this conclusion, given study finds 40% of sample managers show their concern about payroll, considering difficulties in keeping their skilled workers a major cause of declining incomes.

benefits, and some managers still consider themselves responsible for the survival of their workers, a reflection of continuing paternalistic attitudes.[6] The explanation for these phenomena may lie in Knight's (1921) analysis of the distribution of risk among cooperative parties within the firm. He sees the process of redistributing risk between owners–managers and employees as the main rationale of a firm's existence. The profit and loss consequences of the fluctuations in business outcomes are absorbed by the owners-managers, who contract to pay relatively stable wages to employees. Employees are, thus at least partially insulated from those fluctuations, and the greater proportion of risk is reallocated to the party that more willing to bear it. In return, the owners-managers require employees to allow their activities within the firm to be supervised. To accept this supervision, employees require relatively fixed contracts, which are in a sense insurance that attenuates risk. Therefore, the whole logic should be interpreted as reduction in risk cost[7] through risk reallocation rather than risk redistribution. However, we believe that with an increase in the level of outside ownership and influence Russian firms should start to develop standards economic "rationality" i.e. to gain interest in the future profitability of the company, and to lose paternalistic attitude by displaying less favorable disposition toward their "social responsibilities". **Thus, we expect to find that the level of outside ownership is significantly associated with the perception about the payroll level and intention to increase the payroll costs (H4).**

Limitations

It must be acknowledged that the data used in this study mostly originated from a 1996 survey. Nonetheless it seems very useful to analyze the 1996 situation as the result of mass privatization and as the starting point for future changes related to the new Law on Joint Stock Companies. At

---

6 Similar pattern in Russian managers' behavior was registered by the chain of studies done by Institute of Economics in Moscow. They called it a "specific model of adaptation to the new economic environment" (Moskovskaya, 1998, Report of IE, 1995, Report of IE, 1996).

7 Risk reduction is in the best interests of managers-owners, given that they have taken on a large of the risk inherent in business transactions (Demsetz, 1995)

that time as well now markets in Russia were quite chaotic. Since capital for new investments was heavily constrained, “normal” managerial decisions related to investment and divestment were difficult to observe. Investment in assets decreased on average by 18% and in R&D by 50% in Russian industry in 1996. [8] Because some managers still strongly believed in the priority of their social responsibilities payroll increased by 12% during the same period of time. In addition, Russian enterprises experienced the negative impact of inflation, broken economic relationships and senselessly high taxes. As a result managers could not even maintain adequate working capital. Also many executives in our study reported severe problems in collecting payments for goods delivered. As the result, managers demanded full or partial advance payments, searched for new solvent customers, used barter transactions, and reduced all expenditures, which they viewed as not primarily important. Auktsionek (1998) claims that the majority of Russian firms (about 66%) did not make any investments in new assets in 1996 for a number of months. Among the factors, which limit firms’ ability to make investments in assets, the author mentioned shortage of cash and high indebtedness. It is logical to assume that under such circumstances statistical tests on managers’ intentions are somewhat lacking in power. Nevertheless, it can be argued that even modest correlation between the decision to invest and outside ownership can be taken as support for the theory developed in this paper. It is also logical to argue that in the state of significant economic instability the perceived internal and external party participation levels (the level of internal and external financial control) in setting financial policies seem to be major determinants of managerial pressures and intentions.

The second disadvantage of the data set for describing ownership structure is that it presumably is dynamic. For instance, as the state privatizes its remaining holdings and as employees begin to sell their shares, the ownership structure is likely to change. However, extensive research conducted by Blasi et al., 1997 during the same period of time indicates that few such sales have taken place. Employees have not been very active selling their shares to outsiders, and inside

8 Ekonomicheskoye razvitiye Rosii v 1997, Voprosu Ekonomiki,#3, 1998, pp.137-141.

ownership might actually be rising slightly in 1997 compared to the previous year. State ownership in most companies has changed little. So-called "investment actions" have been very slow and the "loans-for-shares" program focuses on the mining industry, which is not included in the sample (Kokh, 1998). Blasi and Shleifer (1996) suggest that the median for inside ownership sale across all the firms was 0%, with the mean for managers' and workers' ownership sale at 4% and 1% for the trust funds. This implies that ownership structure has not changed at all in more than half of the companies, and that changes are somewhat minimal in the other firms.

In addition to the ownership structure problem, this study (as well as all other existing studies we are aware of) lacks information about the composition of voting and non-voting stocks. The data available so far shows that state holdings are predominantly non-voting shares and that a large percentage of the stakes owned by workers is also non-voting stocks. Therefore, in order to capture outsiders' influence on companies' behavior, which has potentially crucial implications for corporate control in general, and for the role of outsiders in particular, we will use the perceived level of outside financial control as an explanatory variable to measure outsider effect on a firm's governance.

Finally, this survey does not use accounting numbers from financial statements for several reasons: 1) Accounting rules in Russia were very dynamic since 1996. Thus, financial results computed according to the different sets of standards cannot be compared. 2) High levels of barter off-book transactions render current financial statements.[9] 3) Endemic non-payment of debts and taxes further complicate the analysis of current financial statements. All three reasons tend to make Russian financial statements unreliable for analysis purposes. Hence, the only clearly intervally-scaled and verifiable data being used in this paper is the size of the firm (# of workers) and the ownership structure (% of total ownership). All other measures derive from

9 Some sources estimate the level of barter transactions as high as more than half of all transactions, WSJ, Aug. 20, 1998, p. A9, others suggest that barter in Russian industry as high as 70% of all transactions and predict that it will increase in the future (Business Eastern Europe, June 1998, Auktsionek, 1998).

largely "self-reported" perceptions and intentions estimates as described in the survey below. In this regard, it must be recognized that clearly, "measurement" risk is present in the sense that managers – perhaps due to skepticism as to the confidentiality of their responses – may have biased their replies in a systematic fashion. Such biases may not, however, strongly bias the differential results presented in Table 3 below, for probable correlations between response bias and model independent variables are not obvious. Nonetheless, in the absence of obvious correlations in measurement error across dependent and independent variables, these results can be viewed as germane.

III. Research Models and Methods

Models for Managerial Perceptions and Intentions

The basic premise underlying the research reported here is that organizational structure, including ownership configuration, matters in the development of a "modern" private business enterprise. Managerial adaptation to the demands of product and capital markets can, in effect, be viewed as a two-step process. First, enterprise managers must develop a deep sensitivity to market demands, *i.e.*, the need to compete effectively in product markets and to focus decisions on maximizing returns in capital markets. Second, this awareness has to be translated into actual investment decisions that serve these demands (goals). In both cases – perceptions and actions – enterprise organizational structure serves as an intervening (catalytic) variable.

The models used in this research assume that four key independent (though interrelated) variables might mitigate against such "dysfunctional" managerial perceptions and behavior at the enterprise level. "Dysfunctional" here refers to perceptions and behavior inconsistent with product market efficiency and value maximization in capital markets in the short and medium term. For all the reasons discussed in Section II, such "dysfunctional" behavior may, in fact, be viewed as both rational and functional given high level of uncertainty, particularly political uncertainty, in the Russian economy in the 1990's. They should, however, prove to be truly dysfunctional or counter-productive in the long run should this economy progress along a straight and short path to full-blown capitalism, as desired by many Russian reformers and outside observers.

As discussed above, these four key variables are:

a) **V1** – the first variant of privatization described above which, in contrast to the second variant of privatization, immediately exposed post-privatization enterprise managers to majority outside (non-employee) shareholdings and, thus, the discipline (control) or owners whose primary interest should be return on investment *per se*.

b) **OO** – outside ownership measured directly by 1996 (substantially post-privatization) outside ownership levels. This variable is included in addition to **V1** since, even though original outside ownership levels were obviously very highly correlated with privatization variants, intervening share sales could substantially alter this relationship as original inside owners reassessed their investment portfolios and altered their holdings in specific enterprises.

c) **IFC** – managerial perception or estimate of the extent to which "internal" enterprise control agents, *i.e.*, members of the enterprise's special control committee, were influential in the setting of enterprise financial policies. In effect, for the effects of outside ownership suggested above – a stronger focus on return on investment in decision-making – strong internal financial control needs to be operative. Substantial outside ownership with weak internal controls for financial decision-making was possible in Russia in the 1990's due to underdeveloped markets for managerial labor and control.

d) **OFC** – managerial perception or estimate of the extent to which "external" enterprise control agents, *e.g.*, representatives of institutional investors, creditors, and other providers of capital not represented on the enterprise's board of directors, were influential in the setting of enterprise financial policies. In a Western context, the parties considered here might represent the analyst and banking communities, as well as institutional investors *per se*. The presumption is that the role of these parties in corporate decision-making is somewhat rudimentary in Russia in the 1990's and potentially quite unevenly developed across individual enterprises.

We posit that each of the four variables listed above should have a positive influence on managerial perceptions of the force of market-based constraints they face in decision-making, *i.e.*, their perceived needs to advertise and focus on distribution channels in product markets (**ADM**) and to focus on return on investment measures in investment decisions (**ROI**). The impact of these market-based constraints on decision-making is also tested more directly by considering the effect of the above four independent variables on managers' stated short-term investment intentions, with the expectation that managers' facing higher levels of these variables would be more likely to invest in (productive) tangible assets (**INASS**) and research and development activities (**INRD**).

In all cases, a fifth independent or control variable is added to the models for managerial perceptions and intentions:

INC – measured as the expected change in enterprise income from the prior year (1995).

This variable, in effect, controls for the flexibility managers face in resource allocation decisions. Given some slack in market discipline in the reforming Russian economy, the presumption is that greater flexibility (increased income) should reduce the pressure managers feel from market forces, *i.e.*, a negative relationship between **INC**, on one hand, and **ADM** or **ROI**, on the other hand, is posited. In terms of intentions to make productive asset investments (**INASS** or **INRD**), a positive relationship with **INC** is expected as increasing income makes such investments more feasible.

Finally, for both managerial perceptions and intentions, a countervailing (apparently non-market-oriented) dependent variable is investigated:

PRL – the perceived importance of maintaining a predetermined level of payroll, *i.e.*, of satisfying existing employees; and

INPRL – intentions to increase payroll investments in the short-term.

While payroll *per se* can be viewed as a form of productive investment under conditions of excess the demand for labor, generally high unemployment rates in Russia in the 1990's would suggest that concessions made to existing employees in managerial decisions represent concessions made to non-market forces in the context of political uncertainty concerning the likelihood of return to the old Marxist-oriented Soviet regime. Thus, the expectation is that these two dependent variables will be opposite from the previously described dependent variables in relationship to the articulated independent variables, *i.e.*, higher when perceived outsider owner influence (**IFC** and **OFC**) and outside ownership *per se* (**V1** and **OO**) are lower.

In summary, the research results reported below test the magnitude and direction of parameters in six models:

Perceptual Models:

$$\mathbf{ADM} = a_0 + a_1\mathbf{V1} + a_2\mathbf{OO} + a_3\mathbf{IFC} + a_4\mathbf{OFC} + a_5\mathbf{INC} \quad (1)$$

$$\mathbf{ROI} = b_0 + b_1\mathbf{V1} + b_2\mathbf{OO} + b_3\mathbf{IFC} + b_4\mathbf{OFC} + b_5\mathbf{INC} \quad (2)$$

$$\mathbf{PRL} = c_0 + c_1\mathbf{V1} + c_2\mathbf{OO} + c_3\mathbf{IFC} + c_4\mathbf{OFC} + c_5\mathbf{INC} \quad (3)$$

Intention Models:

$$\mathbf{INASS} = d_0 + d_1\mathbf{V1} + d_2\mathbf{OO} + d_3\mathbf{IFC} + d_4\mathbf{OFC} + d_5\mathbf{INC} \quad (4)$$

$$\mathbf{INRD} = e_0 + e_1\mathbf{V1} + e_2\mathbf{OO} + e_3\mathbf{IFC} + e_4\mathbf{OFC} + e_5\mathbf{INC} \quad (5)$$

$$\mathbf{INPRL} = f_0 + f_1\mathbf{V1} + f_2\mathbf{OO} + f_3\mathbf{IFC} + f_4\mathbf{OFC} + f_5\mathbf{INC} \quad (6)$$

Data Collection and Variable Measurement

The targeted sample for this research consisted of enterprises in four regions (oblasts) of Russia – Moscow, St. Petersburg, Nizhny Novgorod and the Urals, which met the following qualifications as of 1996: 1) they were classified in either manufacturing or extractive industries; 2) they had been privatized under the general privatization laws, *i.e.*, they were not newly created firms or Privatized Leasehold Companies; 3) they were formally (open or closed-type) joint-stock companies; 4) they had at least 500 employees as of 1996; and 5) their formal privatization process had been completed at least six months prior to the survey date.

Industry classification, privatization status, and number of employees were obtained from lists provided by the Oblast Property Funds. Block sampling by region was employed to allow for tests of the regional (and hence industry) specificity of results and, in general, to provide focus on relatively industrialized regions of the Russian economy, which these specific regions represent.

A total of 295 enterprises met these sampling criteria. 88 of these 295 firms declined to fully participate in the survey process, largely for reasons of confidentiality. Of the remaining 207 (finally) sampled firms, 59 had undergone privatization through the first variant (V1) process described above, with greater amounts of ownership originally accruing to non-employees, while 148 had used the second, more "inside" form of privatization.

For the 207 sample firms, Chief Executive Officers (CEO's) were directly surveyed (in-person) by local (Russian-speaking) correspondents sometime in 1996. The core (experimental) set of independent variables described above are of two types:

1) data obtained from Oblast Property Fund Lists, *i.e.*, current percentage of outside (non-employee) ownership (**OO**) and variant of privatization (**V1**), a dummy variable equal to one for first variant privatization; and

2) perceptions of the extent of inside (**IFC**) and outside (**OFC**) party participation in the setting of enterprise financial policies – see the discussion above - on a Likert-scale from 1 to 7, with 7 being the greatest extent.

The control variable **INC** was elicited from managers' on a seven-point Likert scale with zero indicating no expected income change and +3 (-3) indicated a large expected increase (decrease) in income in the current year (1996). This broad elicitation related to income changes, not absolutely quantified in terms of current income level, was deemed superior to publicly-available numbers due to the high level of (off-the-books) barter transactions in the Russian economy [*Business Eastern Europe*, June 1998] and enterprise reluctance, in general, to provide forecasted income numbers.

The six dependent variables described above are all based on (subjective) managerial elicitations:

1) Perceptions of the extent to which there was pressure to focus on marketing activities (**ADM**), measures of return on investment (**ROI**), and the maintenance of existing payroll levels (**PRL**) in managerial decision making, all measured on a seven-point Likert scale, with 7 indicating the most presssure; and

2) Stated intentions to invest in tangible assets (**INASS**), research and development activities (**INRD**), and increases in payroll (**INPRL**) in 1996, measured as a percentage allocation of investment activities for the year across these three alternatives, as well as other options (*e.g.*, acquiring financial assets and other intangible assets, in general).

<u>Statistical Test Procedures</u>

The following section uses this data to statistically tests for non-zero model parameters consistent with the arguments made above. In particular, that:

A) a_1 to a_4 (effects on product marketing pressure), b_1 to b_4 (effects on ROI pressures), d_1 to d_5 (effects on investments in productive assets), and e_1 to e_5 (effects on investments in R & D) are all positive, *i.e.*, that outside ownership and non-employee participation in managerial decisions are likely to increase managers perceptions of and reactions to product and capital market pressures, with the availability of incremental income enhancing reactions;

B) c_1 to c_4 (effects on payroll maintenance pressure) and f_1 to f_5 (effects on payroll “investments”) are all negative, *i.e.*, that these “outside” dimensions to ownership and participation in policy-setting are likely to decrease the perceived need to and the short-term intention to maintain and enhance payroll levels, with the availability of incremental income decreasing the relative importance of payroll in investment intentions;

C) incremental income is likely to decrease perceived pressures to respond to market-based constraints, *i.e.*, a_5 and b_5 are negative, while it is likely to increase managers' perceived need to maintain existing payroll levels, *i.e.*, c_5 is positive.

Formal statistical (t) tests assume that error terms attached to each of the six models are normally and identically distributed within each model, but independent across models. It is also implicitly assumed in this analysis that the Likert scales used for eliciting managerial perceptions of various pressures on their operating decisions provide intervally-scaled data.

IV. Empirical Findings

Descriptive Statistics

Tables 1 and 2 provide descriptive statistics and correlation matrices for the variables considered in this research.

[Insert Table 1 here]

[Insert Table 2 here]

In terms of levels (means and medians), Table 1 shows that the three "intention" dependent variables clearly do not add to 100%, *i.e.*, that enterprise managers anticipated substantial "other" investments, such as financial assets and general intangibles, during 1996. Incremental investments in payroll (**INPRL**), on the average, seem to dominant intentions in the area of tangible productive assets and R&D expenditures. Pressures to respond to product market or distribution (**ADM**) and capital market (**ROI**) demands seem quite similar overall (medians equal to 5), while pressures to maintain existing payroll levels (**PRL**) are marginally higher (median equal to 6). Independent variable means indicate a moderate level of outside ownership (slightly above 50%), on the average, and much greater inside control agent (**IFC**) participation in setting enterprise policies than that for outside parties (**OFC**).

Table 2 indicates moderate levels of correlation within set of both of independent and dependent variables. Particularly noticeable are the positive inter-correlations among the three "pressure" dependent variables (**ADM**, **ROI**, and **PRL**), indicating manager-specific (mean-level) differences in responding in general to this set of elicitations. Such levels of inter-correlations among dependent variables call into question the assumption of independence in error terms across the six regression models pursued in this research. Nonetheless, *ex post* analysis of the magnitude of this problem does not indicate major concerns in this area. The average correlation coefficient between estimated error terms for any two of the six pursued models is only +.04, with a range from -.20 to +.29 over the 15 (6x5/2) pair-wise comparisons possible. Furthermore, the level of correlations among the independent variables reported in Table 2 indicates no substantial problems in multicollinearity in statistical inference. Variance inflation factors calculated for each of the independent variables are all less than 1.04 (4% inflation), supporting this assertion.

Regression Results

While part of the strategy in sampling was designed to allow for tests of industry and region-specific differences in post-privatized Russian enterprises, we found no such differences, in general, in the level of estimated regression parameters when the sample was partitioned along either industry or regional lines. Thus, the OLS regression results reported below in Table 3 are for the aggregate models (1-6), which contain neither constant nor slope (dummy) variables for industry and/or region.

[Insert Table 3 here]

Significance levels reported in this table are for two-tailed tests. Major findings can be summarized as follows:

1) When one partitions the models in terms of managerial perceptions (of pressures) as opposed to short-term (stated) investment intentions, it becomes quite evident that our models, in general, do a much better job explaining perceptions than they do in explaining stated investment intentions. Consistent with arguments presented in Section III, this might be expected in the sense that the perception of market pressures is a necessary, but not sufficient, condition for

managerial behavior consistent with shareholder value maximization. The strength of the markets for managerial control and managerial talent *per se* mediates the link between perception and behavior.

2) Independent variables designed to capture the effects of ownership levels *per se* provide relatively little explanatory power. The variant of privatization variable (**V1**) is uniformly insignificant, and often of sign opposite to prediction, across all six models. The current level of outside ownership (**OO**) does prove significant in the hypothesized (negative) direction for payroll pressures (**PRL**) and intentions (**INPRL**), indicating less focus on payroll (employee satisfaction with increased outside ownership.

3) The perceived internal (**IFC**) and external (**OFC**) party participation levels in setting financial policies, on the other hand, seem to be major determinants of managerial pressures and intentions. The predicted positive associations between these variables and market-based intentions (**INASS** and **INRD**) and, particularly, pressures (**ADM** and **ROI**) are strongly supported by the regression results, which are consistently positive and statistically significant for **OFC** in all four non-payroll models and for IFC for two of the four non-payroll models.

4) Control (**INC**) variable effects are generally consistent in direction with expectations and statistically significant in four out of the six models.

Two theoretical caveats are necessary in the evaluation of test results. First, the tangible asset investment (dependent) variable (**INASS**) must be considered in light of the highly illiquid and inflationary Russian economy in the 1990's. In this context, investments in tangible assets can, in fact, be motivated by factors basically unrelated to "growing" the enterprise within a market-oriented economy. Given incomplete markets for financial assets that can serve as a hedge against inflation, many tangible asset acquisitions may be substitutes for financial assets in the Western context, *i.e.*, merely short-term investments largely unrelated to the assets used in the enterprise's manufacturing process. This inflationary problem is confounded by the growth of barter trade in the Russian economy, where enterprises need to diversify the tangible assets they have available for trade in the acquisition of productive inputs. Thus, the very weak explanatory power for the **INASS** model reported in Table 3 may be due to the relatively weak relationship between tangible asset acquisition and production intentions found in the current Russian economy.

Second, the models for payroll pressure (**PRL**) and "investment" intentions (**INPRL**) are a bit more theoretically complex than developed in Section III. A fully market-based economy involves not only product and capital markets, but also competitive labor markets. In some sense, investments in payroll can, therefore, be very similar to investments in R&D and productive tangible assets. The survey utilized in this research attempted to stress payroll for *existing* employees, arguing that the attention paid to the payroll-related variables, in effect, signaled a lack of concern for shareholder interests *per se*. This is obviously not always the case, particularly if competitive constraints from labor markets are crucial for future enterprise profitability. Some of the anomalous results reported in Table 3 may reflect this ambiguity. For example, non-managerial party participation in setting financial policies might positively effect pressures felt to maintain payroll in certain situations.

V. Discussion and Policy Implications

The results of survey research presented in this paper indicate that under certain conditions, *i.e.*, high(er) levels of influence by non-managerial parties in enterprise decision making, the managers of newly-privatized Russian firms are more likely to feel and respond to the "efficiency" demands of an impersonal market-based economy.

The major stated goal of most reform efforts in countries such as Russia has been the imposition of market-oriented economic regimes in the search for much greater allocative efficiency. Reform efforts center, first, on the creation of (product and service) markets *per se*, within which resource managers at a micro (enterprise) level can voluntary exchange inputs and outputs; and, second, on the creation of within enterprise conditions such that managers actually respond to the price (and return) signals coming from voluntary markets in the allocation of resources.

In this context, the results reported in this research can be viewed as "good news" for the current transition economies. They support the notion that attention to some details in the evolution of privatized enterprise structure, *i.e.*, in particular, to providing vehicles for outside (non-managerial) parties to interact with and influence managerial decision-makers, is likely to bring market pressures to bear on enterprise activities. One would presume that further research, in effect, exploring dimensions of the **IFC** and **OFC** variables used in this research would provide meaningful results for policy-making purposes. For example, exactly what composition of enterprise boards of directors and what regularized forms of interaction between managers and "outside" financial agents bring market awareness to bear in managerial decision- making?

In a broader context, of course, it must be remembered enterprise managers function in a specific macroeconomic setting. Reform of enterprise-level institutions can be expected to achieve economy-wide efficient resource allocations only to the extent that macro-level economic and political institutions support this process. Research of the sort pursued here, while useful, can not be expected to bear full benefit until uncertainty concerning the future of the Russian political and economic systems is reduced.

As indicated by the "intention" results provided in this paper, even when cognizant of pressures to respond to developing markets, managers of privatized Russian enterprises show little inclination to act accordingly. Their stated intentions often seem to be consistent with their de facto control of enterprise assets, regardless of formal ownership and control structures. This situation is confounded by the continued massive uncertainty evident concerning the future of the Russian economy, within which concern for enterprise survival can dominate standard computations of net present value.

Thus, the benefits of the enterprise structural changes considered in this research are largely conditioned on the further evolution of the Russian property rights regime and secondarylevel (capital and managerial control) markets. Only when strong and enduring political support for economic reform is manifest in effective enforcement of evolving, but still largely nominal, business law and regulation can the anticipated effect of market-based reforms be fully realized.

Finally, it should be noted that "accounting" research ultimately is quite relevant in understanding the reform issues faced in the Russian or any centrally-planned economy. If the goal of full reform is enterprise-level decisions, which maximize returns on investment, an accounting system, which provides unbiased and reduced variance measures of such return is quite germane. Many issues remain in the evolution of Russian enterprise financial reporting systems, *e.g.*, how can this system produce information usable for investors without simultaneously harming investor interests in the area of income taxation? Also, to what extent is there adequate human capital development in the financial reporting area? In short, a wide range of economic, political, legal, and accounting questions remain to be meaningfully addressed in future research on the evolving Russian economy.

Table 1

Summary Statistics

Dependent Variables	Mean	Standard Deviation	Median
Measured as Percentage of Available Funds:			
INASS (Productive Assets)	11.22	19.82	0.00
INRD (R & D)	10.24	18.28	5.00
INPRL (Payroll Increases)	21.97	23.90	15.00
Measured as Pressure on a 7-Point Likert Scale:			
ADM (Product Marketing)	4.71	2.04	5.00
ROI (Return on Investment)	4.71	2.13	5.00
PRL (Maintain Payroll)	5.49	1.58	6.00

Independent Variables	Mean	Standard Deviation	Median
Dummy Variable:			
V1 (Variant 1 Privatization)	0.29	0.47	0.00
Intervally-Scaled Variable:			
OO (% Outside Ownership)	50.60	24.21	51.00
Measured as Influence on a 7-Point Likert Scale:			
IFC (Internal Control Agents)	6.10	1.43	7.00
OFC (Outside Control Agents)	3.29	2.28	3.00
Measure as Anticipated Income Increase on –3 to + 3 Scale			
INC	-0.05	2.13	0.00

(207 observations, in all cases)

Table 2

Correlation Matrices

Dependent Variables

	INASS	INRD	INPRL	ADM	ROI
INRD	+.04				
INPRL	-.23*	-.19*			
ADM	+.16*	+.09	-.18*		
ROI	+.22*	+.12	-.12	+.27*	
PRL	+.11	-.08	+.07	+.37*	+.30*

Independent Variables

	V1	OO	IFC	OFC
OO	+.14*			
IFC	+.12	-.01		
OFC	-.18*	+.15*	+.23*	
INC	+.01	+.01	+.08	+.05

*Significant at .05 level (N=207)

Table 3

OLS Regression Results (Estimated Model Parameters)

Dependent Variable

	Short-Term Intentions			Currently-Felt Pressures		
	INASS	INRD	INPRL	ADM	ROI	PRL
Intercept	+3.05	+9.79	+33.09	+2.03	+0.70	+2.98
VI	+0.37 **(0.12)**	-2.43 **(-0.85)**	+13.40 **(3.77)**	-0.07 **(-0.22)**	-0.05 **(-0.17)**	+0.16 **(0.71)**
OO	+0.09* **(1.52)**	-0.05 **(-0.85)**	-0.16*** **(-2.40)**	+0.00 **(0.70)**	-0.00 **(-0.34)**	-0.01*** **(-2.56)**
IFC	+0.07 **(0.07)**	+0.05 **(0.06)**	-1.36 **(-1.17)**	+0.35*** **(3.54)**	+0.59*** **(6.07)**	+ 0.47 **(6.64)**
OFC	+0.99* **(1.54)**	+0.97* **(1.62)**	+0.40 **(0.54)**	+0.10* **(1.59)**	+ 0.16*** **(2.50)**	+0.04 **(0.82)**
INC	+1.09** **(1.71)**	-0.02 **(-0.03)**	-2.08*** **(-2.79)**	+0.07 **(1.14)**	-0.13** **(-2.04)**	+0.06* **(1.41)**
Adj. R^2	0.02 **[1.85]**	0.00 **[0.98]**	0.09*** **[5.24]**	0.08*** **[4.52]**	0.20*** **[11.43]**	0.22*** **[12.66]**

(N = 207 in all cases)

(t-statistics) – one-tailed tests per expectations stated on page 19

[F-Statistics]

*Significant at .10 level
**Significant at .05 level
***Significant at .01 level

References

1. Aghion, P., O. Blacnchard & R. Burgess " *The Behavior of State Firms in Eastern Europe, Pre-Privatization"*, Economic Review 38, 1994, pp. 1327-1349

2. Aslund, A. [1995], *How Russia Became a Market Economy*, The Brookings Institute, Washington, D.C.

3. Auktsionek, S."*Barter v Rosiiskoi Promushlennosti",*Voprosu Ekonomiki #2,1998, pp.51-61.

4. __________ *"Kapital'nuye Vloszheniya Promushlennuh Predpiyatii*", Voprosu Ekonomiki, #8, 1998 pp.136-147.

5. Barnard, C. "*The Function of the Executive*", Cambridge: Harvard Press, 1966.

6. Barnea, A. "*Agency Problem and Financial Contracting*" Prentice Hall, NJ, 1995.

7. Ball, A.M. [1987], *Russia's Last Capitalists: The Nepmen, 1921-1929*, University of California Press, Berkely.

8. Berglof, E., E-L. Thadden [2000],"The Changing Corporate Governance Paradigm: Implications for Developing and Transition Economies" in *Corporate Governance and Globalization* edited by S. Cohen and G. Boyd, E. Elgar Publishing Limited, USA

9. Black, B., R.Kraakman, and A. Tarassova [2001], " Russian Privatization and Crorporate Governance: What Went Wrong?" Working paper #269, 2001,University of Michigan

10. Blasi, J.R. "*Corporate Governance in the Russian Federation*" Research Report of the Federal Commission on the Capital Market, May 1996

11. Blasi, J.R. & A. Shleifer "*Corporate Governance in Russia: An Initial Look*" in "Corporate Governance in Central Europe and Russia" ed. by R. Frydman, J. Gray and A. Rapashinsky vol. 2, CEU Press, Budapest, 1996.

12. Boyd, G. [2000], "Managing Globalization" in *Corporate Governance and Globalization* edited by S. Cohen and G. Boyd, E. Elgar Publishing Limited, USA

13. Bresnan, J. [1993], *From Dominoes to Dynamos: The Transformation of Southeast Asia*, Council of Foreign Relations Press, New York.

14. Carlin, W., J. Van Reenen, & T. Wolfe "*Enterprises Restructuring in the Transition: An Analytical Survey of the Case Study. Evidence from Central and Eastern Europe*" EBRD, Working paper, no 14 1995.

15. Chubais, A.M. [1994], "Privatization in Russia: An Overview," in A. Aslund, *Economic Transformation in Russia*, St. Martin Press, New York.

16. Desai, R. and I. Goldberg [2001], “The Politics of Russian Enterprise Reform: Insiders, Local Governments, and the Obstacles to Restructuring,” *The World Bank Research Observer*, Vol. 16: 219-240.

17. Demsetz, H. ”*The Economics of the Business Firm*”, Cambridge University Press, 1995.

18. “Economic Transition in Eastern Europe and Russia” Ed. by E.P. Lazear, Hover Press, 1995.

19. Fama, E.F. “Agency Problems and the Theory of the Firm” *Journal of Political Economy*, 88, n 21, 1980, pp.288-307.

20. Fox, M.B. and M. A. Heller [1999], “*Lessons from Fiascos in Russian Corporate Governance*”, Working Paper # 282, University of Michigan

21. Friedman “The Methodology of Positive Economics” In essays in Positive Economics, Chicago: University of Chicago Press, 1953, p. 22.

22. Gogek, D. [2001], “Russia Takes the First Steps on Private Equity Path,” *International Financial Law Review*, Vol. 20: 29-33.

23. Grabowska, M. [1999], “Russia: A Black Hole or a Volcano,” Working paper, University of Wisconsin-Madison.

24. Gyrkov, I. [1998], “Ownership and Control in Russian privatized Companies: New Evidence from a Repeated Survey”, *Communist Economics and Economic Transformation*, Vol.10, # 2

25. Hannan, K. [1998], *Industrial Change in China: Economic Restructuring and Conflicting Interests*, Routledge, London.

26. Ikonnikov, A. [2001], “*Board of Directors: Role, Functions and Responsibilities” Presentation on fourth meeting of the Russian Corporate Governance Roundtable*, Moscow, June 2001

27. Investor Protection Association Report [2000], *Central European*, September, Vol.10, Iss. 7.

28. Jensen, M., and W. Meckling [1976], “Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure,” *Journal of Financial Economics*, October: 305-360.

29. Knight, F.H. “Risk, Uncertainty, and Profit”. NY: Harper Row, 1965. First published in 1921.

30. Kokh, A. “The Selling of the Soviet Empire”, Liberty Publishing House, NY, 1998.

31. Krivogorsky, V. [1999], *Managers Behavior During the Post-Privatization Period:The Russian Example*, unpublished doctoral dissertation, University of Wisconsin-Madison.

32. Lysako, A. [1998], “Realizatsiya Programu Stabilizatsii ne Spospbna Preodolet’ Krisis,” *Voprosu Ekonomiki*, #9: 4-26.

33. Manne, G.H.” Mergers and Market for Corporate Control” 73 J. Pol. Ec.110, 1965.

34. Marris, H. “The Economic Theory of “Managerial” Capitalism”, NY: Press of Glencoe, 1964.

35. Milner, B. “Factor Doveriya pri Provedenii Ekonomicheskih Reform” *Voprosu Ekonomiki,#4*, 1998 pp. 27-39.

36. Monsen, R.J. & A. Dowms “A Theory of Large Managerial Firms” *J. Pol. Ec*., June 1965.

37. Morozov, V. [1998], “Anatomiya Krisisz Politika Otsrichennoi Inflyatsii,” *Voprosu Ekonomiki*, #1.

38. Moskovskaya, A. [1998], “ Uzbutichnaya Zanyatost” na Promushlennuh

39. Predpriyatiyah Rossii: pro et contra,” *Voprosu Ekonomiki*, #7: 59-73.

40. Roberts, P.C. and K.F. Araujo [1997], *The Capitalist Revolution in Latin America*, Oxford University Press.

41. Roy, A.D. [1952], “Safety First in the Holding of Assets,” *Econometrica*, XX: 431-449.

42. Rosen, S. “Authority, Control, and the Distribution of Earnings”, *Bell Journal of economics,* 1982, pp. 311-322.

43. Simon, H.A. “Administrative Behavior”, NY Maximillian, 1947 pp.117-118.

44. Walker, J.S. and G.M. Vasconcellos [1997], *A Financial-Agency Analysis of Privatization: Managerial Incentives and Financial Contracting*, Lehigh University Press, Bethlehem

45. Watts, R. & J. Zimmerman “Positive Accounting Theory”, Prentice Hall Inc. 1986.

46. Worthington, S. [2001], “*Corporate Governance: Legal and Market Mechanisms in Transition Economies”,* Presentation at the Fourth Meeting of the Russian Corporate Governance Roundtable, Moscow, (www.oecd.org)

47. Yabuki, S. [1995], *China’s New Political Economy*, translated by S.M. Harner, Westview Press.