MAXIM BOYCKO
Russian Privatization Center

ANDREI SHLEIFER
Harvard University

ROBERT W. VISHNY
University of Chicago

Privatizing Russia

WHEN ANATOLY B. CHUBAIS was put in charge of the State Committee on the Management of State Property (GKI) in October 1991, privatization was not at the top of Russia's reform agenda. Price liberalization and control of the budget were the top priorities. Politicians and the public debated whether Russia should be privatizing at all before macroeconomic problems are solved. No privatization program existed at the time. In fact, the very name of Chubais' agency reflected the government's ambivalence about privatization.

A year and a half later, privatization has become the most successful reform in Russia. By September 1993, more than 20 percent of Russian industrial workers were employed by privatized firms. Privatization has spread even more widely in service firms. More than 60 percent of the Russian people supported privatization, and Chubais has become one of the better known politicians.

[Most of the data in this paper exist in an unpublished form in Russian agencies, where they were collected by the authors. The authors took care to ensure accurate transcription of the data in this paper, but it has not been possible to verify the data as is usually done in the course of editing the paper.—Eds.]

David Fischer and Florencio Lopez-de-Silanes provided excellent research assistance. Some of the results reported in this paper use surveys conducted by Joseph Blasi and Katharina Pistor for the State Committee on the Management of State Property. We are grateful to Stanley Fischer and Jeffrey D. Sachs for their comments at the Brookings Panel.

In this paper, we try to describe and evaluate the progress of Russian privatization. Doing so at this point raises the obvious problem of timing. Privatization in Russia is extremely young. What has been accomplished is largely a formal transfer of ownership of cash flow and control rights of some firms from the state to private parties. Real changes in the operations of enterprises have barely begun. We cannot, therefore, evaluate the progress of Russian privatization based on the actual improvements in efficiency it has delivered. Instead, we need to use a more subjective yardstick to evaluate the accomplishments of privatization, namely our educated estimate of the likelihood that privatization will lead to restructuring of privatized firms. We argue that the key prerequisite for restructuring is *depoliticization* of firms, meaning a change in their conduct from meeting the wishes of politicians to maximizing profits. In this paper, we try to evaluate whether privatization in Russia is in fact depoliticizing state firms.

The second section presents our case for looking at depoliticization to predict restructuring success. We argue that, in most countries, politicians try to influence firms to pursue political objectives, such as overhiring or locating in particular areas. Firms' managers extract subsidies from the treasury in return for addressing these political goals. The result of this politicization of firms is inefficiency in public enterprises. We argue that privatization is just one of several steps that make it more expensive for politicians to influence firms. As such, privatization reduces the amount of inefficiency that firms accept to satisfy politicians, but it does not make firms fully efficient. Creating product market competition, improving corporate governance, and eliminating political control of capital allocation are other important steps that make political influence more expensive. An important message of the second section is that debates about whether privatization, corporatization, or any other single measure is sufficient to make firms efficient miss the point: these are all partial measures of depoliticization.

In the third section, we discuss the design of the Russian privatization program in light of the objective of depoliticization. In particular, we discuss why Russia opted for voucher privatization, rather than for a Polish-style mutual fund scheme. We also show that, quite aside from its objectives, the Russian program was to a large extent shaped by the political constraints on what was feasible.

The fourth section presents the basic facts about Russian privatization, including some evidence on its extraordinary speed. We also address an important puzzle that the evidence raises, namely the remarkably low valuation of Russian firms in the marketplace.

In the fifth, sixth, and seventh sections, we look beyond privatization and ask what other mechanisms can reduce political influence on firms. The fifth section briefly describes the dismal state of product market competition in Russia. The sixth section examines governance of firms through equity ownership. We present some survey evidence suggesting that privatization in Russia is leading to very significant ownership by managers and workers, and some ownership by large outside shareholders. While some management and outsider ownership is a cause for optimism, the extent of insider entrenchment raises concerns about future restructuring. In the seventh section, we turn to depoliticization of capital supply mechanisms as a step toward depoliticization of firms. We first describe the current capital allocation mechanisms in Russia, which are still primarily political and dominated by the financing practices of the government and the central bank. Commercial banks are playing only a minor role in capital allocation. We also describe the role of macroeconomic stabilization and of foreign aid in depoliticizing capital allocation in Russia. The evidence in the sixth and seventh sections suggests that, in the near future, if capital allocation is to contribute to depoliticization of firms, it should avoid the highly politicized commercial banks.

The eighth section presents some evidence on the political effects of Russian privatization. In particular, we include results suggesting that privatization may have helped President Boris Yeltsin to win the crucial April 25 referendum, in which the Russian people endorsed him and the reforms. We conclude in the ninth section by summarizing our findings.

The Goals of Privatization

To focus on the goals of privatization, it is useful to start by asking what is wrong with public enterprises and why. On the question of what is wrong, there is much agreement: public enterprises are inefficient. They employ too many people, produce goods that consumers do not want, locate in economically inefficient places, do not upgrade their capital stock, and so on. While these problems are particularly severe in eastern Europe, public enterprises throughout the world are conspicuous for their inefficiency, as well.[1] This observation is no longer controversial.

The question of *why* public enterprises are inefficient is harder to answer. Standard public finance starts with the assumption that governments maximize social welfare, and views public enterprises from this vantage point. In particular, public enterprises are supposedly productively efficient, and in fact cure monopoly and externality problems caused by private firms.[2] As a positive theory of public enterprises, this one fails miserably. More recent work has stayed with the assumption of benevolent government, but argued that public enterprises are inefficient because the government is poorly informed about their efficiency, and so rationally subsidizes them to pursue uncertain projects.[3] These theories might explain why governments subsidize highly uncertain research and development projects or defense contracts. It does not, however, make much sense as an explanation of the dramatic inefficiency of public agriculture, coal mining, and other relatively routine production. The high costs and inefficiencies of such firms are public knowledge, yet the government still does not insist on their restructuring.

An alternative theory of public enterprise argues that they are inefficient because they become the means by which politicians attain their political objectives.[4] Excess employment, location in economically inefficient places, and underpricing of output all help politicians get votes or avoid riots. For example, it is plausible to argue that the principal objective of the Russian communists was to secure their own survival against (perceived) external and internal threats. Many features of the communist economy follow from this assumption. Russian state enterprises produced so many military goods because the politicians cared about security and not about social welfare. The government lavished capital on military firms at the expense of consumer product firms for the same reason. The communist government invested resources in public health, but not in health care for the elderly, because it needed healthy soldiers,

1. Mueller (1989) and Vining and Boardman (1992) survey the evidence on the relative efficiency of public and private firms.
2. Atkinson and Stiglitz (1980).
3. Laffont and Tirole (1993) and Dewatripont and Maskin (1990).
4. A version of this theory is presented in Boycko, Shleifer, and Vishny (1993a).

not because it was humanitarian. The communist government asked firms to overemploy people because it insisted on full employment to prevent social unrest that would threaten its control. The government created large collective farms to control peasants and so avoid the perceived threat from them. State firms produced large farm machinery to ensure that only these large state farms could survive. Thus, a simple view of political objectives can go some way toward explaining many of the inefficiencies of the Soviet economy. The examples can be multiplied and extended around the world. Public enterprises are inefficient because their inefficiency serves the goals of politicians.

Except in a pure command economy, managers need not automatically do what politicians want them to do. Instead, managers and politicians bargain over what the firm does. Managers' objectives usually are closer to profit maximization than are those of politicians, if only because managers want to maximize resources under their control. To convince managers to pursue political objectives, politicians subsidize firms. In return for those subsidies, managers hire extra people, locate in economically inefficient places, and so on. Note that the relationship between politicians and managers is best described as a bargain: managers might be the ones who come to the politicians and beg for money, threatening to lay off workers if they do not get funds. But such begging works only when politicians care about employment. Because politicians want something other than profits from firms, bargaining between managers and politicians results in payments from governments to firms (subsidies or soft budget constraints) in return for the desired inefficiency.

This framework has an obvious implication for privatization and other restructuring policies. Specifically, the objective of these policies must be to change the terms of trade in the bargain between politicians and managers, making it more expensive for politicians to buy inefficiencies with subsidies. To do that, the cost to the politician of finding a dollar of subsidies must increase, the ability of that dollar to buy extra inefficiency must fall, or both. When subsidies become more expensive and less effective, managers will do less to cater to the objectives of the politicians, and the firm will begin to restructure. In this paper, we will consider privatization and other policies from this perspective of depoliticization.

The first question to ask is whether restructuring actually requires privatization: that is, change in the ownership of cash flows of state firms. It is sometimes argued that all that is really necessary is to change control from politicians to managers: in other words, to corporatize state firms.[5] Once control changes, cash flows can remain publicly owned as long as managers have some incentives to maximize profits. These incentives might come from incentive contracts for the managers, from product market competition, or from hard credit policies; we discuss these issues later. Indeed, in Poland, many state enterprises have begun to restructure in the regime of product market competition and stricter oversight by banks without privatization.[6] This evidence suggests that privatization of cash flows is not necessary for restructuring when control is removed from politicians.

The depoliticization model outlined above suggests that corporatization is one of the key steps that make subsidies less effective. By shifting control from politicians to managers, corporatization enables managers to extract more surplus in the bargain with politicians. Whereas before corporatization, politicians could order firms, for example, to employ extra people, after corporatization, they must pay them to do so, which is more expensive. Because corporatization raises the cost to politicians of getting firms to cater to their wishes, it stimulates restructuring. But how much restructuring it stimulates depends on other factors determining the costs of political influence. For example, in Poland after stabilization, the combination of corporatization and tight budgets significantly reduced subsidies to firms and stimulated restructuring. In Russia, monetary policy is not as tight, and hence the effectiveness of corporatization by itself would likely be much lower, because politicians have too much money to influence firms. More generally, corporatization has often failed to lead to significant restructuring because politicians have attempted to regain their control over firms.[7] In a country like Russia, where the mechanisms of political influence are numerous and the politicians' demand for influence is high, corporatization by itself is a rather weak measure.

5. For a discussion of distinction between cash flow rights and control rights in the characterization of ownership, see Grossman and Hart (1986).

6. See Pinto, Belka, and Krajewski (1993) and Blanchard and Dambrowski (1993).

7. Nellis (1988) presents evidence that incentive contracts of managers of public enterprises are often repealed when managers begin to restructure in earnest and thus violate the goals of the politicians. After their contracts are repealed, managers are told explicitly not to lay off workers, to continue building plants where politicians want them, and so on. Nellis' examples illustrate the fragility of corporatization as a depoliticization strategy.

Of course, everywhere in the world politicians try to exert influence over private firms—let alone state enterprises—by offering them procurement contracts, regulatory and tax breaks, and outright subsidies in return for meeting political objectives. So what does privatization accomplish that corporatization does not? How does privatization depoliticize firms? First, when managers and outsider shareholders receive substantial cash flow rights, the cost of convincing firms to be inefficient by pursuing political objectives rises because they now care about the forgone profits from failing to restructure. This incentive effect makes it more expensive for politicians to get what they want, and hence can accelerate restructuring. Second, in many cases, the mechanisms for political influence over firms are dismantled when firms are privatized. For example, after privatization, ministries are abolished. This change both eliminates one political constituency that wants to control the firm (the ministry) and makes control by politicians operationally more difficult. Third, privatization creates a political constituency of owner-taxpayers who oppose government interference in the economy because it raises their taxes and reduces their profits; this contributes to depoliticization through a political mechanism, rather than an economic one. For all these reasons, privatization by itself is a critical strategy of depoliticization, and hence restructuring.

Beyond Privatization

Important as privatization may be for depoliticization, it is not sufficient. Politicians try and often succeed in getting private firms to pursue political objectives, as well. For example, in Russia, privatized firms still receive subsidies in exchange for keeping up employment. In Italy, many private firms continue close relationships with politicians. Other measures promoting depoliticization must complement privatization. This paper will examine three critical strategies: competition policy, equity governance, and capital allocation.

Throughout the world, product market competition plays a critical role in depoliticizing firms. When firms face efficient rivals, they must be efficient themselves to survive in the marketplace, or else be subsidized.[8] But keeping an inefficient firm in a competitive market from go-

8. Hart (1983) presents a formal model.

ing bankrupt is much more expensive for a politician than keeping afloat an inefficient monopoly that can waste large monopoly rents before it begins to lose money. Unfortunately, politicians realize that competition raises the cost to them of exerting influence, and often restrict product market competition by political action. First, politicians often protect domestic firms from both foreign and domestic competition, which of course leaves them with rents that can be dissipated on politically desirable activities. Second, bankruptcy procedures are often politicized, and hence inefficient firms are "rehabilitated" rather than allowed to go bankrupt. But when politicians fail to undermine competition, restructuring benefits come quickly. Notably, Poland and the Czech Republic have made great strides in depoliticizing firms by creating a competitive marketplace, both by encouraging domestic competition and opening to international trade.

The second important depoliticization mechanism is equity governance: giving equity ownership to active decisionmakers. Equity governance of necessity entails significant management ownership. It is also fostered by significant shareholdings by large investors—also referred to as core investors or active investors—who can put pressure on managers to restructure and to resist pressures from politicians.[9] The reliance on core investors for governance has characterized privatization programs in France, Mexico, and, more recently, the Czech Republic. Unfortunately, politicians can also disrupt the functioning of this governance mechanism as well by preventing outside shareholders from voting their shares or otherwise exercising their control rights.

The third key depoliticization mechanism is replacing political allocation of capital with private allocation. As long as the allocation of credit in the economy is politicized, the firms that cater to politicians, rather than to shareholders, will get credit. Bankrupt firms will simply seek debt relief from the politicians and satisfy political objectives in return. Even managers with incentives either through their own ownership or through pressure from large shareholders will cater to politicians in exchange for credits and subsidies. The success of restructuring relies critically on depoliticizing credit policies.

9. Shleifer and Vishny (1986) stress the role of large shareholders in governing firms in the West. Frydman and Rapaczynski (1991), Lipton and Sachs (1990), and Blanchard and his colleagues (1991) present privatization schemes that turn on the pivotal role of large shareholders in delivering governance to privatizing firms.

This necessitates two things. First, it requires eliminating soft credits and government subsidies, which have historically been politicians' most effective mechanism of control. But politicians cannot be controlled unless money is controlled. Hardening the budget constraints of firms requires macroeconomic stabilization. Second, depoliticization of capital requires that capital be available on commercial terms. While some restructuring can occur without much new investment (firms can lay off some employees, change their product mix using the existing equipment, reduce waste in inventories, and so on), substantial restructuring usually requires capital. Needless to say, such depoliticization of capital allocation is usually opposed by politicians, who try to control credit policies through bankruptcy regulation, control of banks, and inflationary finance. But while getting private capital allocation to replace political capital allocation may be the hardest task, it is perhaps the most significant for eventual depoliticization of firms.

To summarize, restructuring the Russian economy requires depoliticization of firms. This strategy must be pursued on many fronts, including privatization, competition policy, corporate governance, and capital allocation. To assess the likely success of the Russian privatization, we will need to look at the progress on all these fronts.

Political Goals of Privatization

Even though the ultimate economic objective of privatization is restructuring, privatization is always and everywhere a *political* phenomenon. The goal of governments that launch privatization always is to gain support for the reformist (or conservative) politicians. Mass privatization fits this mandate particularly well because it is perceived by the general populace as the only part of the economic reform that can unambiguously benefit them. Unlike price liberalization, monetary tightening, and reduction of government spending, all of which impose painful costs on some people, privatization allocates shares to the people for free or at low prices—typically a popular measure. The political support for privatization might even spill over to other reforms, such as stabilization. By creating a class of supporters of reform and reducing the power of its opponents, privatization can change the political balance in the country.

The need to gain support for reform is the political argument for privatizing rapidly. If privatization is slow, the benefits to the population are by definition small, and hence the political capital they buy the reformers is small as well. Fast privatization is privatization that offers large political benefits from the start—exactly what a reformist government needs. Critics of fast privatization have argued that it creates fast unemployment and thus drains the government budget.[10] This can produce both political opposition and economic problems for further privatization. This argument overlooks two essential points. First, privatization in eastern Europe is inherently very slow. Slowing it down further beyond what internal political forces accomplish will stop it altogether. Second, and more important, rapid privatization buys enormous political benefits and thus allows reforms to deepen.

The Russian Privatization Program

The Russian privatization program was designed to meet the objectives discussed above.[11] Yet it was also designed in an extremely hostile political environment. As a result, the program had to accommodate the political and economic demands of various stakeholders in state firms, so as to get their support or at least preclude active opposition. The principal stakeholders included enterprise managers and employees—whose lobbies controlled the parliament and who themselves effectively controlled state firms in the transition—and local governments, who gained much of the political influence over firms that the center lost. The second part of this section explains how these constraints shaped the privatization program.

Description of the Program

As a first step, the program divided firms into those that would be sold primarily for cash by the local governments and those that would go into the mass privatization program. In this way, most small shops and some

10. See, for example, Aghion and Blanchard (1993).

11. Shleifer and Vishny (1992) and Boycko and Shleifer (1993) present some ideas that went into the program. A legal description is found in Frydman, Rapaczynski, and Earle (1993).

smaller enterprises were immediately allocated to the local governments, who demanded the revenues from small-scale privatization as their major concession (although later, small shops were sold for vouchers as well).

As a second step, the program delineated larger firms into those subject to mandatory privatization, those subject to privatization with the permission of the privatization ministry, those requiring government approval for privatization, and those whose privatization was prohibited. Mandatory privatization included firms in light industries, including textiles, food processing, and furniture. Firms requiring GKI approval tended to be somewhat larger firms, yet not operating in any of the important strategic industries. Major firms in most strategic industries, such as natural resources and defense, could only be privatized with the agreement of the entire government. Given the antireformist composition of the government in 1993, this restriction meant that these firms in general could not be privatized. Even if some part of their equity could be privately owned, control always remained with politicians. Finally, some firms, including those involved in space exploration, health, and education, could not be privatized at all.

As a third step, all large and medium-sized firms (except those in the last list) were to be corporatized.[12] That is to say, they were to re-register as joint stock companies with all equity owned by the government, adopt a corporate charter, and appoint a board of directors. Initially, the board would include representatives from the property fund (the government's selling agency), the management, the workers, suppliers, and customers. The corporatization decree, signed by President Yeltsin in June 1992, was correctly viewed as the first major step toward subsequent privatization of state firms.

In tandem with corporatization, divisions of state firms had the right to split off from the holding company and become independent. This proved to be rather difficult because of resistance from the management of the holding company and the local officials, who preferred to deal with larger firms. Nonetheless, such splitoffs occurred in many cases.

Once a firm corporatized, its managers and workers got to pick among three privatization options. The first option (variant 1) gave workers 25 percent of the shares of the enterprise for free, yet made

12. Sachs (1992) makes the arguments for corporatization.

these shares nonvoting. Top managers could purchase 5 percent of the shares at a nominal price. In addition, after privatization, the workers and the managers could get an additional 10 percent at a 30 percent discount to book value through something that resembles an employee stock ownership plan (ESOP). The second option (variant 2) gave managers and workers together 51 percent of the equity, all voting, at a nominal price of 1.7 times the July 1992 book value of assets. This, of course, represented a very low price relative to the market value of these assets in a highly inflationary environment. Workers could pay for these shares in cash, with vouchers (to be discussed later), or through the retained earnings of the enterprise, and could pay over some relatively short period of time. As in the first option, an additional 5 percent of shares could be obtained by managers and workers at low prices through the ESOP. Finally, a third option (variant 3), imposed by the managerial lobby in the parliament, allowed the managers to buy up to 40 percent of the shares at very low prices if they promised not to go bankrupt. For a variety of reasons, this option has hardly been used.[13]

Once the managers and workers selected their benefits option, they could submit a privatization plan that described how the rest of the shares were to be sold. While some enterprises are subject to mandatory privatization, in practice, the filing of privatization plans is almost always voluntary. The principal way in which the sale of shares takes place in Russia is through auctions of shares for vouchers. Every person in Russia was offered a privatization voucher for a small fee, and most people picked them up. The voucher had a denomination of 10,000 rubles, was supposed to expire at the end of 1993, and was freely tradable.[14] This voucher could then be used as the sole allowable means of payment in auctions of shares of privatizing enterprises. Each privatizing enterprise enters into its individual voucher auction in the city where it is headquartered; systems have been built to enable people to buy shares of firms located in other cities. Bidding in these auctions is very easy: the principal type of bid is to submit the voucher and to get however many shares it buys at the equilibrium price. Because vouchers are tradable, some investors acquire blocks of vouchers and bid for large blocks of shares. In a typical company, up to 30 percent of the shares are

13. See Frydman, Rapaczynski, and Earle (1993, pp. 55–57).
14. See Frydman, Rapaczynski, and Earle (1993, p. 67).

sold in voucher auctions, although smaller stakes are sold in "strategic" enterprises that are privatized.

Voucher privatization is clearly the defining feature of the Russian program. It was chosen over the alternative mass privatization scheme using mutual funds for four reasons, listed in order of increasing importance.[15] First, a mutual fund scheme would be too difficult to implement in Russia technologically. Second, it was hoped that vouchers would more actively involve people in privatization by giving them a choice of what to invest in, and hence make privatization more popular to the public than a mutual fund scheme, which does not involve choice. Third, a mutual fund scheme that imposed large shareholders on managers would have created serious opposition from the managerial lobby, which would have made made implementation of the program difficult. Fourth, there was a great concern in Russia that large state-sponsored mutual funds owning large stakes in Russian companies would become politicized and hence be unable to enforce restructuring policies. For these four reasons, Russia gave up the instant large shareholder advantage of Polish-style mutual funds and opted for a voucher privatization program.[16]

The fate of the shares neither allocated to the workers nor sold in voucher auctions remains uncertain. About 5 percent of the number of shares sold in a voucher auction can be later sold by property funds (the local government offices selling the shares) for cash, with the proceeds to be used to offset the expenses of privatization, as well as pay bonuses to bureaucrats. This approach has proved popular with property funds that want to sell more for cash they can retain. Another strategy incorporated into the privatization program is to sell shares through investment tenders to domestic or foreign investors, where the means of payment would be investment commitments, rather than vouchers or cash. In practice, this strategy has often amounted to a giveaway of shares to managers, their relatives, and friends. In other cases, some shares can, in principle, be retained by the government for some period of time. In yet other cases, the government might contribute the shares toward in-

15. The case for the mutual fund scheme is presented by Lipton and Sachs (1990). In the context of Russia, Sachs (1992) suggests that the choice of a mass privatization program is not important as long as that program is actually implemented.

16. A more detailed discussion of voucher schemes versus mutual fund schemes is contained in Frydman and Rapaczynski (1991) and Boycko, Shleifer, and Vishny (1993b).

dustry associations and financial-industrial groups; we will discuss this later. In most enterprises, the privatization of the last 20 or so percent of the shares was not fully specified by the privatization plan, and hence shares remain in the government-controlled property funds.

The Program in Light of the Constraints It Faced

The design of the program clearly reflected the political constraints. As we show below, most important stakeholders received major concessions. Local governments gained control over small-scale privatization, as well as most revenues from it. They would have received revenues from large-scale privatization as well, except that the means of payment were vouchers. Most important, voucher auctions were run locally, which gave local governments some limited opportunity to exclude undesirable outsiders. Thanks to these concessions, local governments in most cases did not resist privatization, although many would have preferred cash to voucher payments.

Workers in enterprises being privatized received the most generous concessions of any privatization in the world. They have gotten either 25 percent of the firm for free (plus an ESOP), or 51 percent (plus an ESOP) at a discount. Moreover, they get to choose the privatization option that the firm chooses in a vote. With the benefit of hindsight, workers' benefits in the Russian privatization appear very high, and may have adverse consequences for governance, as discussed below. It is important to realize, however, that at the time the program was proposed, the groups in the parliament demanding total worker ownership appeared to present the greatest threat to privatization. Only by making a coalition with those groups by offering significant worker ownership could the reformers succeed in defeating the managerial lobbies that opposed privatization.

Concessions to the managers do not appear large on the surface, but in truth they are enormous. Although managers' direct ownership stake is only 5 percent in variant 1—perhaps higher in variant 2—in many cases, managers buy additional shares cheaply in voucher auctions or in the aftermarket from employees. A much more important concession to the managers is that the privatization program does not impose large shareholders on the firm, so managerial independence in Russia is much greater than elsewhere in eastern Europe. Recall that in the Czech Re-

Table 1. Corporatization Results by July 1, 1993

	Corporatization procedure			
Corporatization measure	*Mandatory*	*Voluntary*	*Subdivisions*	*Total*
Permission issued	2,918	6,508	1,237	10,663
Registered firms	1,838	4,121	518	6,477
Percent choosing variant 1[a]	30.6	18.1	11.7	21.0
Percent choosing variant 2[b]	68.3	80.5	87.3	77.8
Percent choosing variant 3[c]	1.1	1.4	1.0	1.3

Source: Authors' calculations based on data from the State Committee on the Management of State Property (GKI).

a. Gives workers 25 percent of nonvoting shares for free. Managers can purchase 5 percent of the shares at nominal prices. After privatization, workers and managers can acquire an additional 10 percent through an ESOP.

b. Gives managers and workers 51 percent of equity, all voting, at a nominal price of 1.7 times the July 1992 book value of assets. An additional 5 percent could be purchased through an ESOP.

c. Allows managers to buy up to 40 percent of the shares at low prices if they promise not to go bankrupt.

public firms got core investors as part of privatization, and in Poland they are expected to get mutual funds as blockholders. Because major shareholders were not forcibly imposed on the privatization process, managers tacitly gained a major concession, reflecting their parliamentary influence, as well as their de facto control of enterprises. Insistence on core investors would have aroused strong opposition from managers and made privatization impossible, especially because privatization in Russia is still effectively discretionary.

While granting concessions to many important groups, the Russian privatization failed to address the wishes of the central bureaucracy. The result has been that the bureaucracy has continued to fight privatization every step of the way. Bribing the bureaucracy is one of the greatest challenges of any economic reform.

In short, the Russian privatization program represents a political compromise reflecting the existing property rights and political influences in the country. The real question is whether, nonetheless, privatization is likely to lead to restructuring. We turn to this question next.

The Progress of Russian Privatization

Table 1 presents the results on corporatization. By July 1, 1993, out of 4,972 large enterprises slated for mandatory privatization, GKI and local privatization committees issued decisions to privatize for 2,918 enterprises, or 59 percent, of which 1,838, or 63 percent were actually registered as joint stock companies. In addition, 6,508 enterprises corporatized on a voluntary basis. The apparent enthusiasm for corporatization among many small and medium-sized enterprises suggests that workers and managers concluded that corporatization would give them more benefits and/or better opportunities to keep control over the enterprise than small-scale privatization.[17] Finally, some 1,237 joint stock companies were formed on the basis of subdivisions of state enterprises that separated from their holding conmpany. Overall, by July 1, 1993, 6,477 joint stock companies were registered.

As table 1 shows, in 77.8 percent of the enterprises, workers have chosen variant 2, which gives them and the managers voting control; in 21 percent of enterprises, they have chosen variant 1. In most cases, the ostensible reason for choosing variant 2 is that otherwise control might revert to outsiders. Workers have chosen variant 1 when the enterprise has been too capital-intensive for workers and their families to afford variant 2, or when the relationship between workers and managers has been sufficiently tense that the managers fear giving workers voting shares. Interestingly, variant 3 has hardly ever been chosen, even though it would give the largest ownership stake to the managers.

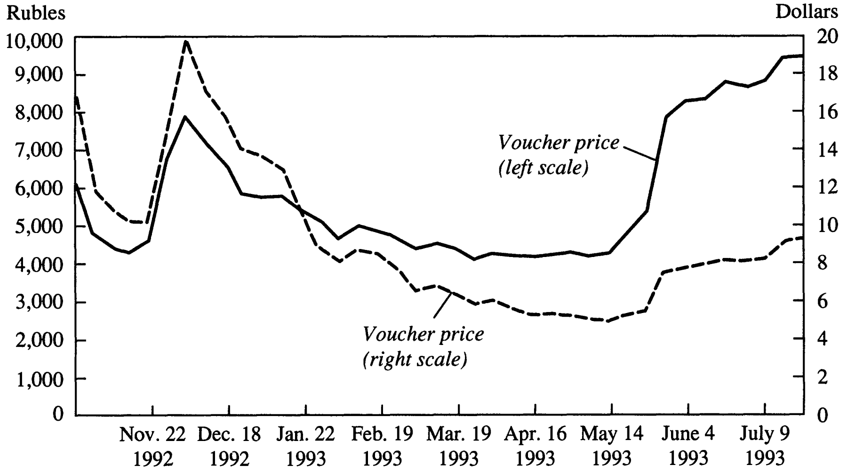
Voucher Distribution and Use

Between October 1992 and January 1993, 150 million Russians could pick up their vouchers at their local savings banks. The fee for the voucher was only 25 rubles (5 cents at the prevailing exchange rate). Because, as we explained, privatization in Russia was much more populist than in the Czech Republic, the idea of charging a reasonable participation fee ($35 in the Czech Republic) to eliminate marginally interested citizens was rejected. By the end of January 1993, almost 97 percent of vouchers had been distributed.

Shortly after its introduction, the voucher became the first liquid security in Russia. It is actively traded on dozens of organized exchanges throughout the country. On the largest exchange in Moscow, the Russian Commodity and Raw Material Exchange, the volume of trade easily

17. In small-scale privatization in Russia, the main benefit provided to workers is a cash payment equaling 30 percent of the price obtained in the auction. If the workers' collective happens to win the auction, workers receive a 30 percent discount.

Figure 1. Voucher Prices in Rubles and Dollars, October 22, 1992–July 23, 1993



Source: Authors' calculations based on GKI data.

reaches 60,000 to 100,000 vouchers per day ($600,000 to $1 million at prevailing prices). Apparently, investors willing to participate in voucher auctions do not face major problems in assembling large blocks of vouchers.

Wide swings in the market price of the voucher, as shown in figure 1, seem to be easily attributable to political developments in Russia.[18] The voucher rose briefly in the second half of November and early December 1992, anticipating demand for vouchers from investors in the upcoming closed subscriptions and voucher auctions. The fall of acting Prime Minister Yegor T. Gaidar in mid-December led to a collapse in the voucher market. From January through April 1993, more than 1,300 voucher auctions notwithstanding, the ruble voucher price stagnated, quickly falling in dollar terms. The voucher price doubled shortly after President Yeltsin's victory in the April 25 referendum, which revealed strong public support for the economic reform.[19]

18. The more puzzling fact that the voucher price is so low is discussed below.

19. After President Yeltsin disbanded the Russian parliament and declared the new election, the voucher price more than doubled by early November 1993 to 27,000 rubles (more than $20).

Table 2. Voucher Auctions, December 1992–June 1993

Voucher auction statistic	*December*	*January*	*February*	*March*	*April*	*May*	*June*	*Period total*
Number of enterprises sold	18	105	188	416	582	477	632	2,418
Number of regions participating	8	19	29	51	58	48	61	75
Number of employees (thousands)	47	191	181	651	898	511	692	3,171
Charter capital sold (millions of rubles)	513	607	1,375	5,318	7,057	4,193	6,102	25,165
Weighted average percent of charter capital sold	17	11	23	20	24	21	23	21
Vouchers accepted (thousands)	158	150	501	2,188	4,854	2,666	3,526	14,043
Weighted average auction rate (shares per voucher)	3.2	4.0	2.7	2.4	1.5	1.6	1.7	1.8

Source: Authors' calculations based on GKI data.

The Pace of Voucher Auctions

Table 2 presents some basic statistics on the pace of voucher auctions in Russia.[20] Voucher auctions began in December 1992, when eighteen firms were sold in eight regions. By April, the pace of sales had accelerated to include 582 enterprises in fifty-eight regions. In May, the rate of sales fell because auction preparations had stopped in April as people waited out the April 25 referendum. In June, sales recovered to 632 firms in sixty-one regions, which seems to be a sustainable monthly rate. Altogether, 2,418 firms had been privatized in voucher auctions by the end of June.

One way to look at the pace of sales is by focusing on the number of employees who work in privatized companies. By the end of June, more than 3.6 million employees worked in firms privatized in voucher auctions, which represents roughly 18 percent of the manufacturing labor force in Russia. In March through June, the privatization rate averaged 700,000 employees per month, or about 3.5 percent of industrial employ-

20. Voucher auctions are the best documented part of the large-scale privatization in Russia. Little aggregate information exists about the actual pace of closed subscriptions, in which workers and managers buy shares according to the chosen variant. In the vast majority of cases, a closed subscription precedes a voucher auction for a given company. Thus, before a voucher auction, some 40 to 51 percent of shares of a typical company have already been sold.

ment. If this rate continues to the end of 1993, another 4 million Russian industrial workers will end up in the private sector, so that the total will amount to about 40 percent of manufacturing employment. This is rather fast for one year of privatization in a country where no other reform has worked.[21]

An average firm whose shares are auctioned has about 1,300 employees and 50 million rubles of charter capital. It sells about 22 percent of its shares (11 million rubles of charter capital) in the auction, in exchange for about 5,300 vouchers. In terms of numbers, medium-sized firms dominate: 71 percent of firms privatized through voucher auctions have fewer than 1,000 employees. However, large firms account for a very large share of privatized assets and employment. Firms with more than 1,000 employees account for 83 percent of employment and 86 percent of assets of enterprises privatized through voucher auctions. As table 3 suggests, large firms on average privatize somewhat faster than medium and small firms.

Asset Values

One of the most interesting aspects of voucher auctions is the prices at which assets sell. Table 2 shows that the number of shares (each with a book value of 1,000 rubles) received per voucher started out at around 3 or 4 at the turn of the year, and fell toward 1.5 in April and May before recovering to 1.7 in June. To interpret these numbers, we can convert them into a dollar price per share. Because vouchers are traded in Russia, we can convert share prices from vouchers to rubles. Figure 1 shows a time series of voucher prices in both currencies. Because the ruble has been freely convertible in 1993, we can then convert ruble prices into dollars. Using this information, we have calculated that, in April and May, the average dollar value of 1,000 rubles of charter capital acquired in a voucher auction was around \$3 and rose to \$5 in June.

A rough computation suggests what these numbers imply. Suppose that enterprises that were privatized by July 1993 are representative of the Russian industry (this is not a perfect assumption because none of the most valuable natural resource industries have been privatized).

21. Through October 1993, 5,925 enterprises had been privatized, with a total employment of 6.35 million workers, or about 32 percent of the industrial labor force. Thus the goal of 40 percent by the end of 1993 appears solidly within reach.

Table 3. Voucher Auctions by Size of Enterprise, December 1992–June 1993

Firm size based on number of employees	*Number of auctioned enterprises*	*Percent of total auctioned enterprises*	*Total number of employees (millions)*	*Percent of total employees for auctioned enterprises*	*Weighted average auction rate*[a]	*Number of employees in Russian industry (millions)*	*Percent of employees in Russian industry*	*Percent of privatized employees*[b]
Less than 500	1,354	56.0	0.28	8.9	2.5	3.02	15.0	9.3
501–1,000	365	15.1	0.25	7.9	1.6	2.35	11.7	10.6
1,001–5,000	584	24.2	1.23	38.6	2.1	7.28	36.2	16.8
5,001–10,000	78	3.2	0.54	17.0	2.4	3.14	15.6	17.2
More than 10,000	37	1.5	0.88	27.6	1.8	4.32	21.5	20.3
Total	2,418	100.0	3.17	100.0	1.8	20.11	100.0	15.8

Source: Authors' calculations based on GKI data.

a. Shares per voucher.

b. Total number of employees in auctioned enterprises divided by the total number of employees in Russian industry, by size of firm.

These enterprises constitute about 15 percent of the Russian industry, and approximately 20 percent of the value of these enterprises has been sold in voucher auctions. That is, a total of 3 percent of all equity was sold through June 1993. As table 2 indicates, about 15 million vouchers were accepted for this equity, with a price per voucher consistently below $10. Because most transactions took place in later months, an optimistic estimate of the dollar value of accepted vouchers is $150 million. That puts the total value of the Russian industry at about $5 billion. It is possible to make these calculations differently and to come up with numbers as high as $10 billion. The point, however, is inescapable: the entire Russian industrial complex is valued in voucher auctions at something like the value of a large Fortune 500 company.

Perhaps an even more dramatic way to look at the numbers is to examine the prices in some focal transactions. Table 4 presents the results of voucher auctions and lists the implied dollar values of the ten largest companies by employment and the ten most valuable transactions. The market value of ZIL, the truck and limousine maker with more than 100,000 employees, with a ready market for as much of its product as it can make, and with a large chunk of Moscow real estate, is about $16 million. The market values of Uralmash and Permsky Motors, two household names in Russian manufacturing, are $4 million and $6 million, respectively. The Caterpillar and General Electric of Russian manufacturing thus appear to be virtually worthless.

The list of most valuable companies contains some new names. Next to ZIL, the most valuable company is Hotel MINSK in the center of Moscow (with 154 employees), whose management made a futile attempt to keep the price of shares low by disguising the name of the company (presumably they wanted to buy more shares themselves). A Moscow chocolate factory with 1,500 employees is worth 50 percent more than Uralmash, with 34,000. Some businesses do have value, although the overall level of prices is quite low.

One way to calibrate how low the prices of manufacturing companies are is to note that U.S. manufacturing companies have market value of about $100,000 per employee. Russian manufacturing companies, in contrast, have market value of about $100 per employee—a 1,000-fold difference!

What might explain such a low price level of Russian assets? The first hypothesis is that most of these firms really are worthless, because they

Table 4. Ten Largest Enterprises Sold in Voucher Auctions by Employment and by Value as of July 1, 1993

Employees	*Name of enterprise*	*Industry*	*Month of sale*	*Implied dollar value of enterprise*
		Ten largest enterprises by employment		
103,000	ZIL	Truck manufacturing	April	15,857,826
44,817	Preobrazhenskaya	Fishing	April	118,477
42,928	Rostselmash	Automobile manufacturing	April	771,477
35,000	Permsky Motors	Engine manufacturing	March	6,276,015
34,041	Uralmash	Machine production	April	3,908,214
32,769	Zapadno-Sibirsky Metallurgical	Metal production	March	3,890,820
27,351	Ribinsky Motors	Aircraft engines	March	988,241
26,417	Volgograd Tractor Factory	Tractor manufacturing	March	570,747
24,198	Pervouralsky Novotrubny	Metal production	April	2,548,514
17,942	Dalnevostochnoi Morskoi Parochodstvo	Shipping	April	. . .
		Ten largest enterprises by implied dollar value		
103,000	ZIL	Truck manufacturing	April	15,857,826
154	Na Tverskoi	Hotels	May	8,412,378
8,056	Sayan Aluminum Plant	Aluminum production	December	6,716,613
35,000	Permsky Motors	Engine manufacturing	March	6,276,015
1,490	Russian Chocolate Factory	Chocolate production	January	5,724,558
34,041	Uralmash	Machine production	April	3,908,214
32,769	Zapadno-Sibirsky Metallurgical	Metal production	March	3,890,820
16,500	Vladimir Tractor Factory	Tractor manufacturing	March	3,692,419
10,373	Bratsky Aluminum Factory	Aluminum production	May	3,597,752
4,940	Koksokhim	Chemical production	May	3,343,053

Source: Authors' calculations based on GKI data.

have a very outdated capital stock. We submit, however, that this hypothesis goes only part of the way in explaining the pricing. Consider the following rough calculation. At the purchasing-power-parity value of the dollar of about 300 rubles, Russian manufacturing wages average about $200 per month, which is about one-tenth of Western manufacturing wages. In fact, estimates of the Russian standard of living as about one-tenth the Western standard are suggested by more detailed calculations. If the value of the Russian companies were in the same proportion to wages as it is in the West, then these companies should be worth about one-tenth of what their Western counterparts are worth. On this calculation, the value ratio of 1,000 still seems implausible.

The low quality of Russian assets thus fails to explain their low market value by a factor of 100. Additional explanations are needed. One line of argument is that private wealth in Russia is limited, and hence the low value of assets is explained by this low value of private wealth, which translates into the low value of the voucher. This theory is implausible once it is realized that there was perhaps $15 billion of capital flight from Russia in 1992.[22] Moreover, foreigners can participate freely in voucher auctions, which again raises the available pool of capital. Why wouldn't a foreign investor buy 20 percent of ZIL for $3 million, when foreigners are paying billions for automobile and truck companies in eastern Europe? The capital shortage story cannot plausibly explain the low valuation.

The plausible explanations fall under a general category: expropriation of shareholders by stakeholders. That is, while assets themselves have some value, the part of the return to these assets that is expected to accrue to outside shareholders after the stakeholders have taken their own cut is very small. Three important types of stakeholders take a cut. The first is employees. As one very progressive Russian manager has put it, the goal of his privatized company is to raise its efficiency and make profits so that it can increase wages. Many Russian firms continue to pay for kindergartens, hospitals, schools, and other services for their workers. There is little doubt that, particularly with the high levels of employee ownership in Russian companies, some of the profits will continue to be spent on wages and benefits to the workers. One sobering fact in this regard is the experience of the German privatization agency, Treuhandanstalt. Because it had to make up-front payments to buyers to get them to agree to maintain employment after privatization, the agency experienced a net loss of $200 billion from its sale of firms. The cost was so large because of the excessive wages that eastern German companies had to pay their workers after privatization. Even so, the dramatic losses reflect the extraordinary value of workers' claims even in a country like Germany, where, unlike Russia, workers are not majority owners of firms.

The second important set of stakeholders is managers, who are likely to expropriate shareholder wealth through asset sales to their own privately held businesses and other forms of dilution. This theft by managers is probably the principal reason for the remarkably high capital flight from Russia. As we will explain further below, shareholder rights

22. See Celeste Bohlen, "Billions Bleed Out of Russia As Its Wealth Is Sent Abroad," *New York Times*, February 1, 1993, p. A1.

in Russia are not protected, and few companies expect to pay dividends in the near future, leaving more for managers to take.

The last stakeholder responsible for reducing firm value to outside shareholders is the government, which expropriates firm value through taxes, regulations, restrictions on product mix and layoffs, custom duties, and many other interventions, including potential nationalization. The fear of government expropriation is often referred to as political instability, and surely explains some of the low value to outside shareholders. Of course, expropriation of shareholders by the government is nothing other than continued politicization of now-privatized firms. Evidently, the Russian market estimates that such politicization is likely to continue so that, among them, the three types of stakeholders will grab about 99 percent of shareholder wealth.[23]

In sum, voucher auctions have been a great success and have helped move a substantial part of the Russian industry into the private sector, even though the implied asset values have been very low. The next question is whether rapid privatization is likely to lead to restructuring.

Product Market Competition

In the second section, we argued that privatization is only one of several steps needed to depoliticize Russian firms. In the next three sections, we discuss the other steps, beginning with product market competition. As we argued above, product market competition is extremely important in raising the cost to politicians of influencing firms. For this reason, competition strategy, including facilitation of entry and openness to imports, has been a critical reform strategy in Poland and the Czech Republic. Unlike these countries, Russia has not had much success with competition as a depoliticization strategy, both because it started out with an extremely uncompetitive economy and because policies failed to foster competition.

Russia inherited from central planning a highly uncompetitive economy. To facilitate central control, most industries were highly concen-

23. Following Yeltsin's victory over the parliament in October 1993, the voucher price doubled to more than $20. Even with this increase, the total value of Russian assets remains very low. Nevertheless, the event demonstrates that the possible increase in the security of property that accompanied the demise of the parliament doubled the valuation of assets.

trated.[24] Import penetration in most sectors has been extremely low, and trade collapsed with the collapse of COMECON. Finally, central planners have established very rigid supply chains and built a transportation and storage system to match these rigid supply chains. As a result, most Russian firms, even if they were not unique producers of particular goods, bought their inputs only from specifically designated suppliers and sold their outputs only to specifically designated customers. No competition worked or could easily begin to work in most goods markets.

Of course, competition policy could address these problems. Unfortunately, in Russia, such policy has done the reverse. Moscow bureaucrats—whose personal financial concerns have not been allayed by privatization—have plotted to resurrect their ministries in the form of trade associations and financial-industrial groups, so as to facilitate both collusion and subsidized finance from the central bank. To this end, they have tried to consolidate, rather than break up, firms. Nor is there much talk about opening up foreign trade and stimulating competition in this way: existing firms rarely fail to get protection. Even at the local level, where competition could probably be the single most reliable strategy of depoliticization, politicians have restricted it. Many local governments have already taken actions to protect incumbent firms from entry through licensing and other anticompetitive strategies. The Russian antimonopoly committee has been captured by the interests of bureaucracy and managers fearing competition. It has no interest in breaking up large firms or encouraging entry. It has shown a strong interest in preventing privatization of those firms with market power (that is, most firms) on the grounds that it is easier to regulate prices of state firms. In fact, the antimonopoly committee argued for the consolidation of firms into monopolies so as to make price regulation easier. Finally, privatization of transport, which may be the single most effective procompetition strategy, has been slow in most regions.

Moreover, competition is most effective when companies that lose money actually go bankrupt. The Russian bankruptcy law, written under close supervision of the managerial lobby, allows for effectively

24. Joint Study (1991) presents some evidence on industrial concentration in the Russian economy. Brown, Ickes, and Ryterman (1993), however, argue that the Russian economy is no more concentrated than the U.S. economy, and simply does not have as many small firms.

Table 5. Workers, Management, and Outside Ownership in the Blasi Sample of Privatized Firms

Company type or name	*Firm employment*	*Percent ownership*: *Management and workers*	*Workers*	*Management*	*CEO*	*Outsiders*	*Blockholders*	*Property fund*	*Privatization variant*[a]
Food	130	80	20	60	60	20	5	0	2
Zil	103,000	40	35	5	n.a.	35	20	25	1
Machine tools	1,500	60	n.a.	n.a.	n.a.	10	0	30	2
Radio	5,000	60	55	5	0	20	0	20	1
Trucking	n.a.	93	90	3	1	7	4	0	1
Chalk	120	60	55	5	n.a.	9	9	31	1
Trucking	80	80	n.a.	n.a.	n.a.	0	0	20	1
Steel	181	100	89	11	8	0	0	0	[d]
Steel	342	64	29	35	2	26	23	10	2
Metal	350	84	66	18	10	16	1	0	2
Furniture	1,200	51	46	5	[b]	[b]	[b]	[b]	2
Textile	1,200	97	92	5	[c]	3	0	0	n.a.
Women's wear	2,300	90	90	0	0	0	0	10	1
Machine tools	3,500	51	33	18	[c]	19	18	30	2
Pasta	320	61	57	4	[c]	18	n.a.	20	2
Wheat	2,000	73	28	45	3	9	1	18	2
Department store	1,100	40	10	30	n.a.	40	28	20	1
Trucking	526	75	45	30	n.a.	3	1	22	1
Trucking	1,300	63	58	5	3	7	1	30	2
Mean	6,897	70	53	17	7	13	7	16	. . .

Source: Authors' calculations based on surveys conducted by Joseph Blasi of GKI.
n.a. Not available.
a. Privatization variants are those explained in the notes to table 1.
b. No voucher auction has occurred yet.
c. Value less than 1.
d. Firm is leased.

permanent "rehabilitation" of bankrupt companies under existing management. In part as a response to this law, and in part as consequence of a long history of borrowing from the government, Russian companies rarely repay their debts. As long as debts and negative cash flows do not result in hardships for the management but simply lead to help from the government, depoliticization will remain an elusive goal.

This leaves us with a fairly pessimistic view of the role of product market competition in depoliticizing Russian firms in the near future, despite the fact that free trade, free entry, and other policies promoting competition have been essential in depoliticizing firms in eastern Europe. While we argue below that other depoliticization strategies have worked better in Russia, competition policy remains a gaping hole in the reforms.

Corporate Governance through Equity Ownership

In discussing equity governance, we will distinguish between management and outside shareholder ownership. As we argued in the second section, management ownership works as a governance device when managers refuse to cater to the preferences of the politicians. Ideally, managers must have high ownership stakes, yet at the same time not be completely entrenched, so that outside investors can oust them when they fail to maximize profits. To begin, we briefly discuss the evolution of management ownership in Russia.

Systematic data on management and other shareholder ownership in Russia do not exist. Two researchers working at GKI, Joseph Blasi and Katharina Pistor, have conducted small surveys of firms that ask managers about the ownership structure of their firms. The surveys ask not only about the results of voucher auctions, but about the actual ownership structure that emerges after some trading of shares. Tables 5 and 6 present the preliminary results of these two surveys, which together cover fifty-five firms. The data in these surveys are self-reported and hence in some cases may be incorrect. Nonetheless, the overall results present a very clear picture.

In the Blasi sample, shown in table 5, between closed subscription, ESOPs, and subsequent acquisition of shares, managers and workers together end up owning an average of 70 percent of the company. Of that,

Table 6. Workers, Management, and Outside Ownership in the Pistor Sample of Privatized Firms

		Percent ownership						
Company	Employment	Management and workers	Workers	Management	Outsiders	Blockholders	Property fund	Privatization variant[a]
1	1,161	83	65	18	17	2	0	2
2	479	0	0	0	100	100	0	2
3	479	51	26	25	24	24	20	2
4	915	70	n.a.	n.a.	30	0	0	2
5	772	53	n.a.	n.a.	27	3	20	2
6	568	62	52	10	18	12	20	2
7	812	72	n.a.	n.a.	28	19	0	2
8	n.a.	62	47	15	18	16	20	2
9	5,000[b]	51	n.a.	n.a.	49	38	0	2
10	300	56	n.a.	n.a.	44	36	0	2
11	450	56	n.a.	n.a.	24	18	20	2
12	3,500	41	14	5	0	0	59	1
13	2,869	51	36	15	31	20	18	2
14	27,351	48	n.a.	n.a.	15	0	37	2
15	1,800	80	n.a.	n.a.	9	9	11	2
16	7,401	70	n.a.	n.a.	5	5	25	2
17	800	80	42	38	0	0	20	2
18	n.a.	78	n.a.	n.a.	2	0	20	2

19	2,766	59	n.a.	n.a.	21	20	20	1
20	3,358	80	n.a.	n.a.	0	0	20	1
21	3,993	80	75	5	0	0	20	1
22	5,026	75	70	n.a.	0	0	25	1
23	3,787	75	n.a.	n.a.	0	0	25	1
24	4,600	75	70	n.a.	0	0	25	1
25	3,500	51	n.a.	n.a.	29	4	20	2
26	5,456	63	n.a.	n.a.	17	10	20	2
27	22,500	68	n.a.	n.a.	11	8	20	2
28	430	60	49	11	20	20	20	2
29	3,814	54	n.a.	n.a.	26	0	20	2
30	1,091	80	n.a.	n.a.	0	0	20	2
31	34,041	40	10	5	29	18	31	1
32	7,392	64	n.a.	n.a.	0	0	26	1
33	10,000	50	20	5	18	3	32	1
34	3,839	61	n.a.	n.a.	19	4	20	2
35	24,198	56	n.a.	n.a.	24	4	20	2
36	1,788	54	48	6	26	8	20	2
Mean	5,545	61	42	12	19	11	19	. . .

Source: Authors' calculations based on surveys conducted by Katharina Pistor of GKI.
n.a. Not available.
a. Privatization variants are those explained in the notes to table 1.
b. Low-end estimate.

about 17 percent on average is owned by the management team, of which about 7 percent on average (and less than 3 percent if one company is excluded) is owned by the CEO. The ownership of the additional shares is divided between outsiders and the property fund (the government), with the outsiders owning an average of 14 percent and the property fund owning an average of 16 percent. Note that in many cases a good chunk of the shares of the property fund is claimed. In many companies, 10 percent of the property fund shares are going to be transferred to the ESOP, and in a few cases, such as ZIL, an investment tender is planned. Thus the 70 percent figure probably underestimates insider ownership.

Pistor's sample, shown in table 6, covers larger firms than Blasi's but also oversamples a few specialized regions. For example, Pistor's sample includes six firms (observations 19–24) from the Ivanovo textile region, which had peculiar variant 1 privatizations with virtually no outside investors. Nonetheless, Pistor's results are surprisingly similar to Blasi's. On average, management and workers in her sample together own about 61 percent of the equity. Her data do not allow us to divide this between managers and workers. Outsiders on average own about 19 percent, as does the property fund. Pistor's sample appears to have fewer completed ESOP transactions, so property fund ownership is likely to fall. Pistor's sample thus confirms the overwhelming insider ownership of Russian firms.

The evidence suggests that management teams end up owning considerably more than they get in the closed subscription. They usually get 5 to 10 percent of the shares of their companies from the combination of the subsidized distribution and shares they get through the ESOPs. In Blasi's data, however, they end up with 17 percent, on average, even though ESOPs have not yet been distributed in most companies. Managers usually try to enhance their ownership stake by buying more shares both in the voucher auctions and from workers. Sometimes the managers get loans from the company to supplement their stakes. In the end, managers end up with much higher ownership than they got in the closed subscription.

High as the managerial ownership of cash flows is, it probably underestimates their degree of control. Indeed, managers in most companies aggressively consolidated their control beyond that warranted by their ownership of shares by getting workers' voting support either informally or through formal trust arrangements. In several takeover situations, managers succeeded in keeping their jobs only because of worker support. In many companies, managers actually encourage workers to buy more shares to consolidate their own control.

This emerging picture of workers as allies of the managers—who not only fail to provide any monitoring of the managers, but actually contribute to their entrenchment—is unique in Russia. In Poland and elsewhere in eastern Europe, workers' collectives often counterbalance managers' control—although not necessarily with the best results for restructuring. In Russia, in contrast, workers' collectives appear to be passive, although of course this passivity might be a reciprocation for highly accommodating managerial practices. Thus, while worker passivity allayed the fears of many who worried about worker control, the price managers pay for worker support may well be the slowdown of restructuring. The greatest fear is that when credit constraints begin to tighten, workers will become natural allies of politicians in preventing restructuring, and thus will disrupt depoliticization of firms.

In sum, Russian managers are often emerging from privatization with quite substantial ownership of cash flows. They are also emerging with a tremendous amount of control, particularly because of their influence over workers' collectives. In smaller companies, this ownership structure may well be efficient because it provides managers with a strong incentive to maximize profits, as long as they do not get captured by workers' collectives. In the largest companies, however, some external checks are needed on managers to prevent their entrenchment and capture by politicians.

Table 5 provides some data on large shareholders from the Blasi sample. On average, about 14 percent of the shares is owned by outside investors. Of that, about 9.5 percent is owned by blockholders whom managers were willing to identify to the interviewer. Thus, in this sample, blockholders acquire almost two-thirds of the shares that outsiders get in the voucher auctions (recall that managers and workers also participate actively). Pistor's data in table 6 present a similar picture. Of the 19 percent of shares owned by outsiders in the companies in her sample, about 10.6 percent on average is owned by blockholders. In Pistor's sample, investment tenders have been completed more frequently than in Blasi's, and so the blockholders have gotten their shares through those, as well as through voucher auctions.

Evidence from the largest companies, where blockholders are particularly important for restructuring, suggests an even greater presence. In ZIL, the largest Russian enterprise privatized so far, out of the 30 percent of shares offered in a voucher auction, 28 percent were bought by seven large investors. Moreover, all these investors appear to have business ties, so ZIL might end up with a single shareholder controlling 25 to 30 percent of the shares. A private company holds an 18 percent stake in Uralmash, another industrial giant. A Russian graduate of Harvard Business School bought a 6 percent stake in his former employer, Vladimir Tractor Works, and tried to become the CEO. Alpha Capital, an aggressive investment fund, bought a 10 percent stake in the Bolshevik cake factory. Similar stories can be told about other well-known privatizations.

This evidence underscores the importance of voucher tradability for the formation of blockholdings in Russia. Accumulating blocks of vouchers and then bidding them in a voucher auction is the principal strategy by which potential large investors can get their blocks. Without voucher tradability, the only strategies for accumulating large blocks would be to start an investment fund, which some large blockholders are clearly doing, or to buy shares in the aftermarket, which is very difficult. The creation of a liquid market for vouchers has enabled the Russian privatization to do what for political reasons it could not accomplish directly: to create core investors for many major companies.

Who are these large blockholders in Russia? They appear to be of three types. The first is private voucher investment funds that were created following the Czech model. These funds collect vouchers from the population in exchange for their own shares and then invest them through voucher auctions. GKI evidence indicates that so far 550 funds have been formed. They have 12 million shareholders and have collected 25 million vouchers, or one-sixth of the total. The largest funds are located in Moscow: the three largest had 1.8 million, 1.1 million, and 0.95 million vouchers, respectively, at the end of June 1993.

What do the funds do with the vouchers? Apparently, about one-third of the vouchers have been invested in privatizing companies. But until recently, funds were also actively speculating in vouchers, buying and selling them across Russia to take advantage of price differences across space and time. Most Russian funds appear disinterested in corporate governance. But some funds, led by Alpha Capital, the second largest fund, have acquired large stakes in several companies and have actively challenged the management. This corporate governance role of investment funds is only likely to increase.

The second type of large investor consists of wealthy individuals and private firms that made their fortunes in the last few years in trade and other commercial activities. These investors often have the financial and perhaps even the physical muscle to stand up to the managers. While managers try to discourage these investors, in some cases, their presence is clear: these investors, for example, purchased the largest share of ZIL, Uralmash, and Vladimir Tractor Works.

The third category of large investors is foreigners. To them, the market prices in voucher auctions present a major attraction. At the same time, they do not usually openly challenge the managers, for fear of a political reaction. Indeed, they usually acquire their stakes through Russian intermediaries. Foreign investors are still insignificant relative to other large shareholders, but they might come to play an important role in restructuring.

Anecdotal evidence suggests that large shareholders often try to use their votes to change company policies, although less often to change management. Alpha Capital, for example, has started campaigns to get firms it invested in to pay dividends. Other large investors want firms to sell some of their land holdings. In some cases, such as Vladimir Tractor Works, an outside investor offered his candidacy to run the company, but lost to the incumbent manager.

So far, corporate managers have resisted these challenges fiercely and rather successfully. Managers threaten the workers with dismissals if they do not support the incumbent, and appear to be getting the critical worker support. But managers also physically threaten challengers at shareholder meetings, rig shareholder votes, illegally change corporate charters (from one share–one vote to one shareholder–one vote, for example), refuse to record share trades in corporate share registers, and so on. Most of these activities are not reported in the press. The current situation is best described as a stalemate: large outside shareholders are clearly posing a challenge to the existing management, but management, in turn, often with the support of the workers, has managed to repel most threats. The market for corporate control in Russia is very lively; it remains to be seen whether it is effective enough to get restructuring going.

The key question is whether the large shareholders will be able to play their role without being stopped by the political process. Many managers are appealing to the local governments and to the central government to restrain large investors. The management of Bolshevik has unsuccessfully lobbied GKI to force Alpha Capital, its large investor, to sell its shares. The government of Primorsky Krai (the southeastern seacoast region of Russia) has temporarily stopped privatization after a couple of enterprise managers were sacked in a shareholder vote. And perhaps in the most extraordinary action so far, the head of ZIL, the ubiquitous truck maker, has appealed to President Yeltsin to keep the government's control of the company through a "golden share" (with no dividend rights and a veto power over major restructuring decisions) that will be kept by the government, thus eliminating the controlling influence of the outside investors.

In sum, the transition from political to private governance is clearly very painful. Politicians do not give up their control over enterprises very easily. They have resisted privatization from the start, and they are still trying to bring firms under the control of industry associations and financial-industrial groups. Moreover, the residual equity stakes that remain in the hands of property funds may well be used in the future to reassert political control over enterprises.

As political governance recedes, it is replaced to a significant extent by managerial control. Such control is better than control by politicians because managers with significant ownership stakes have more interest in value maximization and restructuring. Nonetheless, in many cases, managerial ownership needs to be supplemented by large outsider ownership to put pressure on the managers and workers' collectives to restructure. As of now, large outside shareholders face tremendous resistance from both managers and politicians in exercising their control rights. Still, they remain the most effective source of external governance in Russia. In the future, their role will increase when they become a source of capital, and not just oversight.

Capital Allocation

Effective restructuring is thwarted by political allocation of capital. When politicians lavish capital on some firms because they want them to maintain high output and employment, these firms have no incentive to restructure, even if they have made headway in other dimensions of depoliticization. Moreover, firms that do not get capital as part of the political allocation can achieve only limited restructuring, because substantial restructuring usually requires capital. In this section, we show that capital allocation in Russia now is completely politicized and suggest some strategies for improving this dismal situation.

Current Capital Allocation

Most capital of Russian enterprises still comes from the state, which includes both subsidies from the budget and directed credits from the central bank. In 1992, total subsidies from the budget accounted for 21.6 percent of GDP.[25] Most of these subsidies went to enterprises and included import subsidies, energy subsidies, and subsidies for making interest payments on already subsidized credits. Directed credits from the central bank to enterprises added up to an additional 21 percent of GDP. Agriculture was the principal beneficiary of these directed credits, taking up 7.5 percent of GDP, but energy and industry received substantial subsidies as well. Credit expanded very rapidly in the beginning of 1993 but slowed down by mid-1993.[26]

The allocation of credits and subsidies is highly politicized, in terms of who benefits and by how much. Agriculture, energy, and very large manufacturing firms are the main beneficiaries of the government and central bank policies. Firms fortunate enough to get credits through the central bank obtain them at negative real interest rates. In addition, the government often subsidizes the enterprise's interest payments to the central bank. Finally, enterprises often do not repay the loans, except from proceeds from the new loans. Thus, the combination of subsidies and loans reallocates massive resources to some sectors of the economy. It is not surprising, in this regard, that Russia has made no progress in privatizing agriculture: what farmer would take the fat of the land over that of the central bank?

In its allocation of credit, the central bank does not discriminate between state-owned and privatized firms. All firms deemed worthy of

25. Data in this section come from World Bank (1993a, 1993b).
26. Sachs (1993) discusses recent Russian monetary policies.

credits get them.[27] This, of course, does not bode well for the effectiveness of privatization in getting restructuring going.

Central bank credits are channeled through commercial banks. Many of the banks are descendants of former Soviet sectoral banks, in which case they simply allocate central bank credits to enterprises in their respective sectors. Such is the situation in agriculture and construction, for example. In addition, some enterprises have themselves formed commercial banks that take credits from the central bank and then pass them through to the enterprises that founded them, their suppliers, and customers. Commercial banks thus do not make credit allocation any less political, or any more conducive to restructuring.

While some selected sectors are getting credits, it appears that smaller firms in Russia have been substantially cut off from the public subsidies and credits. For example, the majority of firms in Blasi's sample did not report receiving subsidies or subsidized credits from commercial banks, and complained about not having enough capital to restructure. The central bank explictly denies credits to new firms on the grounds that lending to them is unsafe. The question is: can these firms find capital elsewhere if they want to restructure?

It appears that private capital markets do not meet this need. Some privatized firms are planning a public equity issue in the fall of 1993, although it is not entirely clear how much they can raise without promising investors dividends, restructuring, or at least a governance role. Some commercial banks are providing credit from their own resources, but that situation usually occurs only when there are noncommercial reasons for making loans or when debt contracts can be enforced by physical force. This is not surprising: lending as a practice does not make sense without a bankruptcy procedure that gives creditors access to the borrower's assets, but such a procedure does not exist in Russia. Without bankruptcy, debt contracts cannot really work. Rapid inflation is an additional factor that undermines long-term lending by banks of their own funds. Finally, many privatized firms—and even state enterprises—are forming joint ventures with private domestic and foreign in-

27. According to a senior official at the central bank, the question of public versus private ownership does not come up in the decisions to allocate credits by the credit commission. The same official, when asked whether the central bank would always give credit to a firm on the verge of shutting down, said that "the bank would never let things go that far, and would lend at a much earlier stage."

vestors, which gives them access to some capital and know-how.[28] Despite the success of joint ventures, they remain a trivial part of the Russian capital market. Political risk remains great, and the exchange rate, tax, and bribery policies toward foreign investors are predatory. Thus, at least in the near future, private markets will not address the capital needs of restructuring Russian enterprises.

In sum, capital allocation in Russia is the main roadblock to restructuring. Central bank lending policies are highly politicized, whereas the rapid inflation undermines whatever private capital allocation might be emerging. Firms not benefiting from central bank credits face a harder budget constraint and are beginning to restructure. However, substantial restructuring of these firms requires capital, which is not forthcoming from the commercial banks until inflation subsides. Stabilization will obviously improve this situation greatly. In the meantime, the question of how to deliver capital to the private firms must be addressed.

Privatization and Stabilization

An essential step to rationalizing capital allocation in Russia is to control aggregate credits and subsidies and thus to stabilize the ruble. Indeed, most Western attention and aid have been focused on stabilization. This attention raises the question of the relationship between privatization and stabilization. Some analysts have argued that privatization disrupts the existing economic structure, and so monetary stabilization should take the first priority. Once the economy stabilizes, privatization and restructuring can take place. This position is best described as "stabilizing socialism." An alternative position argues that privatization should take the first precedence. Once firms are private, stabilization can work.

Both these views are wrong. The main expense of the Russian government, and hence the main reason for money creation, is cheap credit to state industry and agriculture. As long as firms remain public, the basic demand for subsidies—and hence money creation and inflation—will

28. Foreign investors prefer joint ventures over outright ownership of Russian companies because they can focus on the part of the Russian company's business that actually has some promise, do not inherit the liabilities from the remaining businesses, and allow the incumbent management to retain control over the rest of the firm. Moreover, the firm can usually still draw on state credits to support nonviable businesses.

not go away. Foreign aid can temporarily plug the hole by replacing money creation with dollars in subsidies to state firms. But such stabilization is only temporary. As long as the basic demand for politically driven credit remains, stabilization cannot succeed without privatization.

For a similar reason, privatization cannot lead to restructuring if the government continues to print money and subsidize selected firms and sectors. Privatization of agriculture in Russia has been subverted by the government's credit policies. Politicization of capital allocation is made possible precisely by the ability of the government to print money. When this ability is limited, subsidizing selected firms as long as they do not restructure will prove much costlier. This will allow private governance and capital supply mechanisms to begin to play a role, and hence create a hope of restructuring.

Privatization and stabilization policies are thus complementary. Privatization allows the demand for state credit to fall, which in turn makes stabilization possible. Stabilization cripples the political credit mechanism, and in this way stimulates restructuring.

Foreign Aid

Foreign aid to Russia has been designed in part to solve the problem with the allocation of capital. Stabilization aid will partially replace loans to state firms financed with newly created money. While this approach will not encourage the restructuring of state firms, it may reduce money creation and inflation, and so benefit capital allocation. In addition, G-7 countries have offered a package of privatization assistance, designed at least in part to provide capital for restructuring enterprises. We discuss this element of the aid package below.

The first question to answer is, why should Western governments provide aid money for investment in Russia when private investors do not want to invest there? Russia does not evidently have a capital shortage, as evidenced by enormous capital flight. The returns on aid projects will probably not exceed the returns on private projects, which suggests that, economically, investment assistance is hard to justify. Arguably, aid-financed Western investment will demonstrate that there are profitable investment opportunities in Russia. It is hard to believe, however, that such a demonstration requires billions of dollars.

The main reason for foreign capital assistance is political. It is essential to restructure some of the Russian enterprises reasonably fast to gain support for privatization, and such restructuring might not be forthcoming without capital in the form of aid. The projects in the first place are unlikely to earn market returns because of the likely expropriation by politicians and workers. The high returns—both political and economic—on such aid will come when enterprises begin to restructure, and Russia moves more solidly into the market economy.

The critical question is how to provide some badly needed investment finance in a country like Russia. We have already argued that conventional loans will not work in Russia because the bankruptcy procedure gives so few rights to creditors. In addition, the obvious providers of loans in market economies—commercial banks—remain controlled to a significant extent by the central bank and the enterprises, and hence cannot be relied upon to allocate the loans commercially. And if the loans are processed through the government or a new government lending institution, they are also sure to become politicized and worthless from the viewpoint of restructuring.

In part to circumvent the problem with politicization of loans, the Russian government has proposed a system of capital allocation through regional enterprise funds. These funds would be originally capitalized with Western aid money, but would also be able to raise both equity and debt in the public markets. Other than the initial capitalization, these funds will be managed privately and have an incentive to maximize their returns. Having raised their capital, these funds would then invest it in equity of restructuring Russian firms, which would give them a more significant governance role than they could get with debt. In addition to capital, these funds might bring know-how and foreign partners to the table. The reason for making funds regional is, first, to make them compete with each other and, second, to keep them away from Moscow to reduce political influence on them. While located in the regions, the funds could invest elsewhere in Russia to avoid their capture by local politicians as well. Finally, creating many small funds would further reduce the likelihood of their capture by politicians.

Most G-7 countries have accepted the idea of regional enterprise funds as the basis of post-privatization assistance to Russia. Several such regional funds are expected to start up in 1994. But even if they work extremely well, it is hard to believe that these funds could do nearly as much for depoliticizing credit in Russia as macroeconomic stabilization.

Aid to privatized firms through such enterprise funds, along with stabilization, can improve the capital allocation process. Given the pivotal role of capital allocation in depoliticization, progress with these two strategies will determine the success of restructuring in Russia.

The Political Success of Privatization

As we mentioned in the introduction, privatization began in late 1991 as a low-priority policy and emerged in 1993 as the Russian government's most popular reform. According to GKI opinion polls, more than 60 percent of the Russian people support privatization, with fewer than 20 percent opposing it. Younger and richer people support privatization more strongly than older and poorer ones. Perhaps most importantly, privatization is a very important part of the social landscape in Russia. The Number 5 song on the hit parade for several months was called "Wow! Wow! Voucher!"

Privatization has benefited both other reforms and the reformers (although it began too late to prevent most reformers from being sacked from the government). The managerial lobby is no longer as strenuously opposed to reform as it was in 1992, in part because many managers have gotten a lot of shares and hence are quite excited about privatization. Privatization is going much better in reformist regions, such as St. Petersburg and Nizhny Novgorod, and makes other reforms in those regions easier to carry out.

But rather than just cheerlead for privatization, we can offer some statistical evidence concerning its political impact. Table 7 presents cross-regional regressions interpreting the results of the April 25 referendum, in which voters expressed their support for President Yeltsin and economic reform. Separate regressions are shown for the full sample, for regions with auction results, and for regions with substantial sales of firms. The results are rather striking in the subsample of regions where substantial privatization took place. Controlling for urbanization and relative income, both of which are associated with higher support for Yeltsin and reform, regions with more privatization had significantly higher support for Yeltsin and for reform. Also, support for Yeltsin ran

Table 7. Regressions of Referendum Results on Privatization Variables and Regional Characteristics[a]

Independent variable	Sample for question 1 regressions: Full sample	Sample for question 1 regressions: Regions with available auction results	Sample for question 1 regressions: Regions having sold more than ten large enterprises before June 1993	Sample for question 2 regressions: Full sample	Sample for question 2 regressions: Regions with available auction results	Sample for question 2 regressions: Regions having sold more than ten large enterprises before June 1993
Intercept	0.0608	0.2075[f]	0.2004[f]	0.0769	0.1994[f]	0.1951[f]
	(0.0064)	(0.0571)	(0.0591)	(0.0573)	(0.0503)	(0.0517)
Charter capital sold per capita[b]	0.0001[h]	0.0001[g]	0.0001[g]	0.0001[h]	0.0001[g]	0.0001[g]
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Technical dummy[c]	0.0205	0.0668[f]	0.0554[f]	0.0193	0.059[f]	0.0498[g]
	(0.0246)	(0.0214)	(0.0216)	(0.0220)	(0.0188)	(0.0189)
Urban population[d]	0.5764[f]	0.3535[f]	0.3844[f]	0.4981[f]	0.3100[f]	0.3376[f]
	(0.0986)	(0.0858)	(0.0863)	(0.0881)	(0.0756)	(0.0755)
Relative income[e]	0.0678[f]	0.0664[f]	0.0549[g]	0.0526[f]	0.0521[f]	0.0404[h]
	(0.0245)	(0.0165)	(0.0239)	(0.0192)	(0.0141)	(0.0209)
Summary statistic						
Number of observations	77	60	57	77	60	57
$\bar{R}^2$	0.48	0.56	0.50	0.45	0.55	0.49

Source: Authors' regressions based on GKI data.

a. The dependent variable for question 1 is the share of people who responded yes to the question, "Do you support the President?" The dependent variable for question 2 is the share of people who responded yes to the question, "Do you support the economic reform program of the government?" Regressions are ordinary least squares of referendum questions 1 and 2 on privatization variables and regional characteristics. Numbers in parentheses are standard errors.

b. The amount of charter capital sold per capita, by region, in the sale of large enterprises.

c. Reflects whether a region has received technical assistance for privatization.

d. Percentage of inhabitants of a region who live in cities.

e. Relative income reflects the income of a region in relation to the national average.

f. Significant at 1 percent.

g. Significant at 5 percent.

h. Significant at 10 percent.

5.5 percent higher in regions that received technical assistance for privatization than in regions that did not.

One interpretation of these results is that privatization has helped Yeltsin and the reformers win the referendum. This, of course, is not the only interpretation. It is possible that the more reformist regions both supported Yeltsin and reform, and have privatized more. Unfortunately, we do not have an independent control for how strongly a region backs reforms. The relationship becomes weaker once the regions with no privatization are included. One possible reason for this weaker relationship is that regions where privatization has not even begun for some exogenous reason, such as corruption of the local administration, do not fit the model.

To summarize, privatization has been popular and arguably has enabled other reforms to proceed. It is also at least plausible to infer from the available data that privatization helped President Yeltsin and the reformers win the crucial April referendum.

Conclusion

This paper presented a view of privatization as a step in the depoliticization of firms—the severance of public influence on private enterprises. In this regard, we focused on four aspects of change in the way firms are run and financed that could influence the success of depoliticization: privatization itself, competition policy, equity governance, and capital allocation. We then evaluated Russian privatization from this vantage point.

In some respects, Russian privatization has been a great success. Firms are being privatized at a breathtaking pace. Equity governance mechanisms are emerging very rapidly, and some of them, particularly large shareholder activism, are beginning to shake up Russian firms. The population approves of privatization and actively participates in the process.

At the same time, large-scale privatization in Russia is less than a year old. Most firms remain state-owned, and many have been prohibited from privatizing at all. Politicians are not giving up their control of firms easily and are actively resisting depoliticization. Competition policy has not been effective. And most importantly, the allocation of capital is still completely dominated by the central bank, with commercial banks playing a relatively passive role in financial markets. Nor is it clear that a responsible monetary policy will emerge in Russia in the near future.

Last, and most important, the political landscape in Russia is treacherous. Old-line politicians—in the government, in the parliament, and in the bureaucracy—by and large have not been replaced and continue undermining all reform, including privatization. The reformers have failed to either destroy or win over these politicians. Without question, the greatest success of Russian privatization has been to undermine the influence of the old-line politicians. The fundamental open question about the success of privatization and other reform in Russia is whether the days of these politicians are really over.[29]

29. This paragraph was written before President Yeltsin's violent confrontation with the parliament in October 1993. Even after this confrontation, old guard politicians in Russia remain powerful.

Comments and Discussion

Stanley Fischer: Privatization stands out as the most successful element in the Russian reform program. Indeed, Russian privatization is even outpacing privatization in other countries in the former Soviet Union and in eastern Europe. This interesting paper, written by some of the important thinkers behind the program, helps explain why.

As in other reforming formerly socialist countries, small-scale privatization has gone well. Smaller firms, especially in retail distribution and services, are being sold for cash or leased, by local governments. The importance of such privatization for the consumer should not be underestimated; shopping was difficult and time-consuming in the old system, and that problem has disappeared. The impact of small-scale privatization and the entry of new retail firms is visible to any visitor.

The paper by Maxim Boycko, Andrei Shleifer, and Robert Vishny is about privatizing firms that account for 20 percent of employment; all of light industry is included. Excluded are firms in defense, natural resources, health and education, and much of agriculture.

The paper clearly sets out the three privatization options. The key result of the process is summarized in table 5, which shows that managers and workers own 70 percent of the shares of privatized firms; managers account for 17 percent. The authors say that labor and management form an alliance, with labor the weaker partner. The paper provides little independent evidence on this point.

The key question posed by the authors at the start of the paper is whether privatization will lead to restructuring. While they do not answer this question explicitly, they indicate that the privatization may have gone too far in the direction of labor management. They also argue that restructuring will require nonpolitical control over credit allocation, and nonpolitical governance of firms, neither of which yet obtains. Apparently, the authors, like other observers, do not yet see much in the way of restructuring taking place.

Does that mean that the authors should have urged delaying privatization until they had invented a scheme that would guarantee rapid restructuring? The answer is no, because it was crucial to move these firms out of direct state control. Should the lack of restructuring cause a slowdown of the privatization process? Again, the answer is no, for the same reason. Nonetheless, this initial privatization may not result in much restructuring. The tightening of credit and macroeconomic stabilization would increase the efficiency of privatized firms, but it might be necessary to attempt further restructuring later to reduce the role of labor in management.

Was there an alternative that would have produced more rapid restructuring? The answer is yes, but that decision belonged not to the privatizers but to Boris Yeltsin. He could have pushed for a more aggressive reform program, but chose instead to confront his congressional rivals more slowly.

The authors emphasize the importance of political factors in their discussion of the design of the privatization program. They argue that privatization is the one reform that brings immediate benefits to consumers and voters. That is true of the first stage of the process, when vouchers are distributed and consumers are given ownership of firms. However, it is not true at the restructuring stage, when unemployment is likely to grow—and that may help explain why restructuring has been so slow.

For all the discussion of political factors, politics nonetheless plays the role of a deus ex machina in much of the paper. Whenever the authors are uncomfortable with a decision—for instance the inclusion of privatization option 2—they attribute the decision to politics. Presumably there was usually more than one way to meet the political constraint, and more discussion of the choices that were considered would have been helpful.

The paper gives the impression that all politicians are bad. But at some point it becomes clear that Anatoly Chubais, Boris Yeltsin, and the reformers are good politicians. So this is really a paper about the good guys versus the bad guys, and we do not know what drives the good guys, and what differentiates them, except that we are on their side and they on ours.

Turning to financing mechanisms, the authors' emphasis on the lack of capital markets is important. It will take time for commercial banks to play any major role in the financing, and especially the restructuring, of Russian industry. The authors' support for the creation of enterprise funds and equity, rather than debt, financing is problematic in light of their argument that the allocation of capital should not be dominated by the public sector. The enterprise funds likely to be set up with foreign assistance will have government shareholders. If these funds are to take a leading role in enterprise governance, then they will have to be run on a commercial basis. That will not be an easy trick to carry off either.

Discussing other factors influencing the privatization process, the authors are skeptical that competition through imports is likely to play an important role in increasing market discipline and reducing political interference. While the obstacles to increased competition through trade liberalization are obvious, the international agencies and advisers to the Russians should nonetheless keep pounding on this issue—for there are few other pressures pushing in the right direction.

The authors are absolutely right to emphasize that stabilization is essential for restructuring. The credit expansion that now enables firms to avoid restructuring would end if the economy were stabilized. That is the main reason that the opponents of reform are so hostile to stabilization.

In their paper, the authors do not sufficiently emphasize the role of new firms. Entry has been at least as important as privatization in the development of small firms. In the Chinese industrial expansion, it has been more important. New firms will be crucial to the Russian reform program as well, not least because new firms will be needed to absorb the labor that will be shed by restructuring privatized firms.

Beyond the privatization of industrial firms lies the challenge of privatizing agriculture and housing. Given the speed at which the current privatization is proceeding, the authors will soon be able to turn their talents to those problems.

Jeffrey D. Sachs: This paper offers us a vivid look at the tactical choices made in the Russian privatization program, by three of the key participants in the process. They have much to be pleased about. In just two years, privatization has gone from being an abstract idea of a few radical reformers to an operational fact for tens of thousands of enterprises and millions of workers—and this after seventy-five years of the brutal repression of private property.

Nonetheless, as the authors make clear, privatization to date amounts mostly to a formal transfer of ownership rights, rather than real operational changes in most enterprises. It is still too early to answer the authors' central question: will privatization really lead to restructuring of the Russian economy? They offer one straw in the wind: the low value placed on Russian corporate capital in the voucher auctions, suggesting that the newly established property rights have not yet passed the market test. Significantly, after Yeltsin's showdown with the hardline parliament in October 1993, the price of voucher tickets jumped sharply, presumably a reflection of increased public confidence in the long-term success of the reforms.

Russia's political and economic reforms are so far only half formed, and a bruising and long struggle lies ahead if the reforms are to be completed successfully. Many of the formal structures have been put in place, but Russia is only fitfully putting in place one of the central features of a market economy and a democratic society: open competition. Most of Russia's elite owes its position, wealth, and power to an inheritance from the communist regime, rather than to inventiveness and hard work. For part of the elite, real competition is mortally threatening. It is therefore not surprising that the breakthrough to free parliamentary elections in December 1993 came only after a violent confrontation with the Soviet-era parliament, which become the chief political protagonist of the entrenched old guard. (The public had voted new elections in the April 1993 referendum, but the parliament leadership had merely sneered at the results.)

On the economic side, there has been a similar ferocious battle to lock in advantages. Managers of state enterprises and newly privatized enterprises seek to shield themselves from shareholders, foreign competition, and new domestic rivals. As Maxim Boycko, Andrei Shleifer, and Robert Vishny make clear, privatization has gone forward rapidly only by meeting the stakeholders more than halfway. The managers and workers are receiving a substantial proportion of the enterprise capital virtually free of charge. The authors state that "voucher privatization is clearly the defining feature of the Russian program." This is not really true. The very high distribution of shares to insiders should be judged as an equally defining feature of Russia's privatization process to this point.

Russia's situation can be compared with other countries in the region. In eastern Europe, early elections eliminated much of the communist political class, although postcommunist parties continue to enjoy some electoral success in open competition with centrist and right-wing parties. Similarly, many state managers were thrown out by postcommunist governments (as in Czechoslovakia in 1991) or by anticommunist trade unions (as in Poland in 1990). In Estonia and Latvia, Russian politicians and enterprise managers have been deposed by young nationalist politicians. In an earlier case of deep systemic change, Japan after World War II, the old managerial elite was summarily forced out by the U.S. occupation authorities, bringing in a new generation of managers.

In Russia, by contrast, there were no national elections between the coup attempt and December 1993, so that reformers had to struggle to privatize the economy while key political actors and enterprise managers from the old regime remained in place. The managers were able to capture a part of the privatization proceeds far in excess of the achievements of the old guard in the other economies. As early advisors on the privatization process, the authors and I argued strongly for speed above perfection in the distribution of shares. For the general success of the reforms, which were extremely precarious at the start, it was important to "make facts," by establishing widespread private property rights. If that meant heavy insider representation, that was a cost that should be accepted. As could be expected, many state managers and workers who were initially opposed to market and political reforms became supporters after being vested with property rights in their enterprises. From a distributional point of view, the inequities of insider distribution were tempered by the government's insistence that workers, not managers, receive the bulk of the shares.

Recent news from the trenches amplifies the fact that incumbent managers are attempting to dig in yet further. The existing corporate law gives weak powers to the board of directors (or "supervisory board," in Russian law), and strong powers to the managers. Moreover, managers in many enterprises are leading efforts to reissue corporate charters to lengthen their tenure and weaken the boards still further. These are unsettling conclusions of a survey of firms that the authors and I cosponsored this summer carried out by Katharina Pistor.[1] This may be a major

1. Pistor (1993).

explanation of the low voucher prices, since as minority owners of the enterprises, voucher investors will have little protection over their interests. It would be worthwhile to test whether investors are willing to pay much more for enterprise shares when they obtain a controlling block as part of the purchase.

Does a precedent for Russia lie with China, where the old elite has kept its position but economic dynamism has nonetheless been established? Not really, since the control of the state enterprises on the Chinese economy was always markedly less than in Russia.[2] State enterprises in China never employed more than 20 percent of the labor force, compared with 90 percent in Russia. China's dynamism has come in the nonstate sector, which grew from the bottom up after 1978. In Russia, nearly everybody is still tied to the state system through budgetary subsidies, trade protection, and financial credits, so that bottom-up growth will be as dynamic as in China only if the subsidy system can first be dismantled.

The most important question for Russia is whether real competition will accompany privatization, since competition together with private property is a *sine qua non* of a functioning market system. Will Russia's existing enterprises, whether state-owned or newly privatized, be put on a level playing field with new entrants and foreign competitors? This question will be as important as formal ownership transfer and corporate governance in determining the nature of Russia's economic restructuring. Indeed, in *BPEA, 1:1993*, Brian Pinto, Marek Belka, and Stefan Krajewski demonstrated that hard-budget constraints and vigorous product markets in Poland are provoking restructuring even in enterprises still in state hands.

The authors are skeptical about the prospects for vigorous product market competition in Russia. They are also pessimistic about the prospects for effective banking institutions procedures and bankruptcy procedures. They might be right about prospects for instilling market competition in Russia, but then the consequences would be devastating. With or without privatization, Russia will have a crippled economy and society.

Fortunately, the authors' judgment is premature. The struggle for competition and openness is hardly lost. On the political front, Yeltsin's showdown with the parliament is likely to be viewed in retrospect as the

2. See Sachs and Woo (1993) for a detailed comparison.

last stand of communism in Russia, and the beginning of open democratic competition. The breakthrough to new elections gives the best chance for the rise of a new, competitive political class representing a much broader array of interests than the old guard. On the economic side, the success of the reformers in pushing for real competition has tended to move in parallel with their political strength. For example, after the October confrontations with the parliament, the reform-minded finance minister was able to cancel cheap central bank credits to enterprises; eliminate the practice of "netting out" interenterprise arrears, thereby hardening the enterprises' budget constraints; and tighten overall credit conditions in the economy in order to reduce inflation and promote restructuring.

I found myself a bit perplexed at the paper's policy conclusions. The authors put great stress on regional enterprise funds capitalized by Western aid, yet early on they rejected Polish-style mutual funds for fear that "state-sponsored funds owning large stakes in Russian companies would become politicized and hence be unable to enforce restructuring policies." They also rather boldly dismiss the entire banking system as hopeless, even though Russian banks differ enormously in structure, capital adequacy, and reliance on central bank financing. The World Bank is currently undertaking a major program to help restructure and strengthen Russian banks, and it is finding many cases of serious, professional, market-oriented banks. A more balanced assessment of priorities, including banking reform, trade liberalization, and capital market development, would add credibility to this otherwise excellent paper.

General Discussion

Several panel members discussed the prospects for reform in Russia. Richard Cooper emphasized Jeff Sach's argument that no modern economy could work well without product market competition, and asked where that was going to come from in the case of Russia: from new entrants at the small firm level, as in China, or from foreign trade, as in Poland, Hungary, and the Czech Republic? He suggested that foreign trade is the only practical alternative for Russia, and that it is therefore important to focus on the barriers to import competition. Charles Schultze noted that privatization would fail so long as firms could rely on subsidies rather than painful restructuring. Consequently, subsidies must be made expensive for politicians to offset pressure for them from interested parties, including managers, workers, and shareholders. Barry Eichengreen suggested that the variation in success of privatization across regions mostly reflects the presence of moribund elements of the military-industrial complex in certain regions. In these regions, privatization is not very advanced, and politicians are not inclined toward reform.

Responding to these comments, Robert Vishny agreed that although product competition might be the long-run savior of the Russian economy, in the short run it presents many local and regional political problems. For example, foreign trade becomes highly politicized where domestic monopolies exist. Andrei Shleifer reported that although there are antimonopoly commissions in every region, there is no interest in competition; these commissions are primarily interested in protecting their region's firms. He also indicated that, although there is some entry of small firms in services, new entrants have played a much smaller role in Russia than in China, Poland, or the Czech Republic. Sachs added that, in 1992, only 4 percent of the industrial labor force worked in private firms that were not once owned by the state.

In response to questions about the outlook for reform, the authors indicated that they were gloomy about the short-run prospects. Shleifer indicated that the paper focused on Russian privatization not because it has been particularly successful, but because for now it appears to be the only avenue for making progress in corporate governance. Vishny added that, nonetheless, there are at least some hopeful elements in the privatization underway. Privatization provided workers and managers with more opportunity to benefit from efficiency, an incentive that could lead to a reduced demand for subsidies as firms began to pursue efficiency in their own interest. He also stressed that under privatization, managers' reputations become important; they have shareholders to answer to and they can be embarrassed in the press.

In response to questions, Maxim Boycko elaborated on the paper's explanation for the low relative valuations of Russian firms. First, potential investors may fear that firms will be controlled by politicians and will not maximize profits. Second, potential investors may fear that, even if value is created, workers and managers, rather than shareholders, will capture it. Robert Shiller found these explanations insufficient, arguing that it is hard to believe that the average investor gives the average firm almost no chance of earning profits and returning them to investors.

Several participants focused on the issue of who does and who should control these enterprises. Paul Romer drew a parallel between the political control of capital allocation in Russia and the role of government in the United States. He noted that the role of the government in U.S. capital allocation also presents problems, with the savings and loan crisis providing an example of drastic failure. He stressed that to devise the best policies, it is necessary to learn much more about which sorts of institutions and political mechanisms actually work and which are vulnerable to failure. Fred Pryor noted that the information about Russian firms available to investors and shareholders was woefully inadequate, making it difficult for them to become knowledgeable about firms and to exercise any control. William Black, making a similar point in starker terms, suggested that inexperienced investors would be vulnerable to fraud and that this might provide important political ammunition for opponents of reform. Vishny agreed with Pryor's suspicion that outside shareholders are not sufficiently informed, and that this helped keep control in the hands of insiders.

Olivier Blanchard said that privatizations in Poland, the former Czechoslovakia, and Hungary are different than in Russia, and that the authors' description of the process should not be generalized to these other countries. In these other countries, there is not much of a problem with politicians attempting to retain control of firms, although firms do lean on politicians for help when they get into trouble. Nonetheless, with firms more or less on their own, workers and managers face different incentives than they now do in Russia. Ned Phelps raised the possibility that workers may have more power to resist management than the authors suggested; otherwise, why was it necessary to give them the opportunity to hold so many shares? He also noted that the wave of protection rackets and bribery is probably an important drag on private investment and enterprise.

References

Aghion, Philippe, and Olivier Jean Blanchard. 1993. "On the Speed of Transition in Central Europe." Unpublished paper. Massachusetts Institute of Technology (June).

Atkinson, Anthony B., and Joseph E. Stiglitz. 1980. *Lectures on Public Economics*. London: McGraw-Hill.

Blanchard, Olivier, and others. 1991. *Reform in Eastern Europe*. Cambridge, Mass.: MIT Press.

Blanchard, Olivier J., and Marek Dabrowski. 1993. "The Progress of Restructuring in Poland." In *Post-Communist Reform: Pain and Progress*. Cambridge, Mass.: MIT Press.

Boycko, Maxim, and Andrei Shleifer. 1993. "The Politics of Russian Privatization." In *Post-Communist Reform: Pain and Progress*. Cambridge, Mass.: MIT Press.

Boycko, Maxim, Andrei Shleifer, and Robert W. Vishny. 1993a. "A Theory of Privatization." Unpublished paper. The State Committee on the Management of State Property, Harvard University, and the University of Chicago (May).

———. 1993b. "Voucher Privatization." Working Paper 85. Chicago: Center for the Study of the Economy and the State, University of Chicago.

Brown, Annette N., Barry Ickes, and Randi Ryterman. 1993. "The Myth of Monopoly: A New View of Industrial Structure in Russia." Unpublished paper. World Bank (June).

Dewatripont, Mathias, and Eric Maskin. 1990. "Credit and Efficiency in Centralized and Decentralized Economies." Unpublished paper. Université Libre de Bruxelles and Harvard University (July).

Frydman, Roman, and Andrzej Rapaczynski. 1991. "Markets and Institutions in Large Scale Privatization: An Approach to Economic and Social Transformation in Eastern Europe." In *Reforming Central and Eastern European Economies: Initial Results and Challenges*, edited by Vittorio Corbo, Fabrizio Coricelli, and Jan Bossak. Washington: World Bank.

Frydman, Roman, Andrzej Rapaczynski, and John S. Earle. 1993. *The Privatization Process in Russia, Ukraine, and the Baltic States*. Budapest: Central European University Press.

Grossman, Sanford J., and Oliver D. Hart. 1986. "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration." *Journal of Political Economy* 94(4): 691–719.

Hart, Oliver D. 1983. "The Market Mechanism as an Incentive Scheme." *Bell Journal of Economics* 14(2): 366–82.

Joint Study. 1991. *A Study of the Soviet Economy*, 3 vols., by the International Monetary Fund, the World Bank, the Organisation for Economic Cooperation and Development, and the European Bank for Reconstruction and Development. Paris: Organisation for Economic Cooperation and Development.

Laffont, Jean-Jacques, and Jean Tirole. 1993. *A Theory of Incentives in Procurement and Regulation*. Cambridge, Mass.: MIT Press.

Lipton, David, and Jeffrey D. Sachs. 1990. "Privatization in Eastern Europe: The Case of Poland." *BPEA, 2:1990*, 293–333.

Mueller, Dennis C. 1989. *Public Choice II*. Cambridge: Cambridge University Press.

Nellis, John. 1988. "Contract Plans and Public Enterprise Performance." World Bank Staff Working Paper 118. Washington: World Bank.

Pinto, Brian, Marek Belka, and Stefan Krajewski. 1993. "Transforming State Enterprises in Poland: Evidence on Adjustment by Manufacturing Firms." *BPEA, 1:1993*, 213–61.

Pistor, Katharina. 1993. "Privatization and Corporate Governance in Russia—An Empirical Study." Paper prepared for the Workshop on Economic Reform, Center for International Security and Arms Control, Stanford University (November).

Sachs, Jeffrey D. 1992. "Privatization in Russia: Some Lessons from Eastern Europe." *American Economic Review, Papers and Proceedings* 82(2): 43–8.

———. 1993. "Prospects for Monetary Stabilization in Russia." Unpublished paper. Harvard University (June).

———, and Wing Thye Woo. 1993. "Structural Factors in the Economic Reforms of China, Eastern Europe, and the Former Soviet Union." *Economic Policy* (forthcoming).

Shleifer, Andrei, and Robert W. Vishny. 1986. "Large Shareholders and Corporate Control." *Journal of Political Economy* 94(3): 461–88.

———. 1992. "Privatization in Russia: First Steps." Unpublished paper. Harvard University and the University of Chicago (October).

Vining, Aidan R., and Anthony E. Boardman. 1992. "Ownership versus Competition: Efficiency in Public Enterprise." *Public Choice* 73(2): 205–39.

World Bank. 1993a. "Russia: The Banking System in Transition." Unpublished paper. Agriculture, Industry, and Finance Division, Country Department III, Europe and Central Asia Region, World Bank (May 26).

———. 1993b. "Subsidies and Directed Credits to Enterprises in Russia: A Strategy for Reform." Unpublished paper. Country Operations Division 2, ECA Country Department III, World Bank (April 8).