Privatization in Central-East Europe and the CIS

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1. Introduction and Background

The wisdom and economic effects of privatization in Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS) are currently the subject of intense re-examination. While today privatization is under debate, in the early 1990s privatization was widely considered one of the keystones of the entire transition process. This view was advocated strongly by proponents of the so called Washington Consensus, which emphasized fast transfer of ownership via privatization and the belief that private ownership, together with market forces, would ensure better and more efficient performance of the economy (see e.g., Roland, 2001, for a discussion). The belief that privatization would be conducive to development of the former centrally planned economies was quite broad-based. In fact, efficiency was the most important argument for privatization. The transfer of ownership rights was viewed as crucial for the efficient allocation of resources. This way, the argument went, long term economic growth would be initiated and sustained.

From the start it was clear, however, that privatization in and of itself would not be sufficient to insure an effective functioning of the newly created market economies. In particular, most of the early writing on the subject of an optimal strategy for the transition stressed an entire series of interrelated systemic changes and policy reforms that were a prerequisite for a successful transition. Since the impact of privatization was often viewed as dependent on the presence of specific accompanying policies and systemic changes, we include in this chapter a brief evaluation of such policies and changes that presumably influenced the effects of privatization.

This chapter is structured as follows. In Section 2, we discuss the key systemic changes and policies that, along with privatization, were carried out, in full or in part, during the transition in CEE and CIS. In section 3, we examine the macro- and micro-economic evidence about the determinants, extent and effect of privatization. We conclude our study in Section 4 with a number of policy-oriented observations.

2. Policies, Institutions, and Privatization

Policies

In the late 1980s and early 1990s, the new policy makers in the countries of the former Soviet bloc and Yugoslavia formulated initial strategies that focused on macroeconomic stabilization and microeconomic restructuring, they then enforced institutional and political reforms to support these strategies. The implementation of the strategies varied from country to country, both in speed and in the specifics of the actual changes that occurred. Almost all the transition governments in the former Soviet bloc and former Yugoslavia plunged ahead in rapid big bang style with what Jan Svejnar (2002a) calls *Type I* reforms, namely macro stabilization, price liberalization and the dismantling of the institutions of the communist system. The macroeconomic strategy emphasized restrictive fiscal and monetary policies, wage controls and in most cases a fixed exchange rate as well. The micro strategy entailed a quick move towards price liberalization even though a number of key prices like those of energy, housing and basic consumption goods often remained controlled along with wages and exchange rates. The institution that governed the Soviet bloc trading area, namely the Council for Mutual Economic Assistance (CMEA), was abolished and most countries rapidly opened up to international

trade. This induced the immediate collapse of traditional trade and gradually allowed for a more efficient allocation of resources based on world market prices and new trade patterns. Most countries also quickly reduced direct subsidies to trusts and SOEs, and allowed them to restructure or break up. Similarly, they removed or stopped altogether the enforcement of barriers to the creation of new firms and banks, as well as carrying out small-scale privatizations. Moreover, early on most governments broke up the "monobank" system, whereby a single state bank (or a system of tightly knit and only nominally independent banks) functioned as a country's central bank as well as a nationwide commercial and investment bank. The brake up of the "monobank" system allowed for the creation of new and independent banks. The final feature of *Type I* reforms was the introduction of at least some elements of a social safety net in order to make citizens more willing to accept the disruptions associated with the introduction of a market economy. The *Type I* reforms proved relatively sustainable and were associated with improving economic performance in Central Europe and in the Baltic countries, although they were less successfully implemented in the Balkans and the CIS.

Svejnar's *Type II* reforms involved the development and enforcement of laws, regulations and institutions that would ensure a successful functioning of a market-oriented economy. These reforms included no only the privatization of large and medium-sized enterprises, but also the establishment and enforcement of a market-oriented legal system and accompanying institutions, the further (in-depth) development of a viable commercial banking sector and the appropriate regulatory infrastructure. This included labor market regulations, as well as the creation of parameters and institutions related to the unemployment, social security and retirement system. The important point

is that these other features of transition, especially the development of institutions and a legal framework, were not absent from the recommendations and policy documents at the time, but they did prove to be particularly difficult to implement (see Svejnar, 2002b).

Legal and Institutional Framework

Various approaches emerged with respect to the implementation of both types of reforms. In reviewing the first two years of transition, Stanley Fisher and Jacob Frenkel (1992) argued that policy makers cannot afford to move gradually and indeed must work fast because of the collapse of the previous non-market system. At the time a similar view was advanced by Anders Aslund(1991a). Yet, Aslund (1992a) argued that a sequencing of political and economic reforms might be desirable, with democratization being a crucial precondition to a change in the economic system. A recent counterpoint to these views was provided by Joseph Stiglitz (1999).

Contrary to a widely held view, most of the early advisors stressed the importance of developing and enforcing a market oriented legal framework that would establish a level playing field, create well defined property rights, permit the enforcement of contracts, and limit corruption.[1] Unfortunately, virtually no country succeeded in rapidly developing a legal system and institutions that would be conducive to the preservation of private property and to the functioning of a market economy—although some countries did much better than others. In retrospect, this lack of a market-oriented

[1] Svejnar (1989) stressed that the "first step in the transformation process is the establishment of a clear set of laws on economic activity." He argued that defining the rules of the (new) game was essential for reducing uncertainty and providing an environment that would be conducive to economic decision-making. He also emphasized the importance of having incentives for achieving economic efficiency embedded in the legal system and he recommended that the drafting of laws be carried out as a joint process between lawyers and economists.

legal structure appears to have been the Achilles heel of the first dozen years of the transition. Many policymakers underestimated the importance of a well-functioning legal system, or believed too readily that free markets would take care of all major problems. In addition, many newly rich individuals and groups in the transition economies—especially those who contributed to the corruption of public officials—did not desire the establishment of a strong legal system. Finally, lawyers in the former Soviet bloc countries tended not to propose legal reforms or spontaneously draft bills and other reform measures, unlike economists who were a fertile source of reform proposals. Overall, the countries that have made the greatest progress in limiting corruption and establishing a functioning legal framework and institutions are the central European and Baltic countries. In recent years, an important impetus for carrying out legal and institutional reforms in many of these countries has been the need to develop a system that conforms to that of the European Union (EU) as a prerequisite for accession. The required terminal (EU) conditions, as opposed to initial (communist) conditions, thus gradually became important determinant of progress in reforms.

In general, the ability of transition governments to carry out *Type I* and *Type II* reforms turned on two factors: their ability to collect taxes and finance public programs, and their ability to minimize corruption and rent-seeking behavior. *Type I* reforms aimed at reducing subsidies and centrally planned regulation. Most transition governments quickly abolished central planning. However, a number of them, especially in CIS, had considerable difficulty setting up a reliable tax system. Many of these governments were practically forced to reduce subsidies and the scope of government. *Type II* reforms emphasized not only the withering away of an omnipresent dictatorial state, but also the

creation of an efficient state apparatus able to provide a level playing field for and regulations of the market economy. *Type II* reforms hence required that government have some resources, enforce competition and market-friendly laws, and that they not be dominated or captured by special interests. In this area, most transition economies have faced a major challenge and may still have a long way to go.

Privatization and Enterprise Restructuring

Virtually all advisers and many local policy makers stressed the need to privatize SOEs. The motivation for privatization ranged from perceived gains in economic efficiency, to gains in much needed government revenues, to political appeal (Lipton and Sachs, 1990, Gupta et al., 2000). It is important to note that even those who advocated a rapid approach to the transition (e.g., Svejnar, 1989, Kornai, 1990, and Lipton and Sachs, 1990) differed on the desirable method and speed. Across the board they all warned that it would take a while to privatize the large state sector and generate capable managers and entrepreneurs.

Along with the accent on privatization, issue of restructuring of SOEs emerged. The advice on restructuring of SOEs took a number of forms. Svejnar (1989) cautioned that in the short run most existing firms would have to be run as state enterprises. Svejnar stressed the need to restructure these enterprises by making all of them adopt a standard accounting system, embed them in a competitive environment, gradually phase out their subsidies according to a pre-announced plan, and introduce a system of supervisory boards with external directors as well as strong incentives for managers. Whereas David Lipton and Jeffrey Sachs (1990) argued that privatization would take a number of years

to implement and that in the meantime "state enterprises will have to be kept on a tight leash—with wage controls and curbs on investment—to check their wasteful tendencies." Ronald McKinnon (1990c) found break-ups of large going industrial concerns to be a dubious proposition and argued against a "big bang" privatization by the widespread distribution of shares in large state-owned enterprises or natural resource based industries. In this context it is interesting to note that Jan Hanousek, Evzen Kocenda and Jan Svejnar (2004a) found that spinoffs increased the firm's profitability but did not alter its scale of operations, while the effect of privatization depends on the resulting ownership structure—sometime improving performance and sometime bringing about decline that is consistent with tunneling (looting) by managers or partial owners.[2] As it turned out, most transition countries quickly reduced direct subsidies to trusts and state-owned enterprises, and allowing state-owned enterprises to restructure and even break up. Most countries also removed or stopped enforcing barriers to the creation of new firms.

No matter how intricate the very early stages of the transition process was, the principal question relating to privatization centered on the speed of its conduct. The principal arguments for fast privatization were that (a) price liberalization and other reforms would not provide sufficient incentives for SOEs to restructure and become competitive, (b) the state would not be able to resist intervening in SOEs (Frydman and Rapaczynski, 1991, and Boycko, Shleifer and Vishny, 1993) and (c) managers would decapitalize firms in the absence of a rapid clarification of property rights (Frydman, Phelps, Rapaczynski and Shleifer, 1993). In contrast, M. Dewatripont and Gerard Roland

[2] As we also show below, the effects of privatization are hence much less clear-cut than was suggested in earlier studies. Methodologically, the Hanousek, Kocenda and Svejnar (2004a) study provides evidence that it is important to control for changes in ownership when analyzing spinoffs and generally to control for endogeneity, selection and data attrition when analyzing the effects of spinoffs and privatization.

[(1992a,b) and Roland in (1994)] argued that gradual privatization was needed to avoid a political backlash to rapid privatization of all firms—and hence the closing down of many of them— which could lead to the need to renationalize. In particular, Dewatripont and Roland's (1992a, b) first argument for gradualism was that it allowed the government to pursue a strategy that necessitated fewer workers/voters being immediately laid off and also permitted adequate compensation of the ones who were laid off. Their second argument was that rapid privatization brought about major uncertainty that might be unacceptable. Gradualism presumably generates less uncertainty and allows any potential difficulties it to be at least in part resolved before the process is fully launched. As a result, Roland (1994) stressed the need to divide firms into "well" and "poorly" performing ones, privatize the good ones and keep these privatized firms under hard budget constraints (i.e. extend no more subsidies to them). As to the bad firms, the state should keep control of the bad firms for a while, and restructure them before privatizing. This line of reasoning of course presupposes that the state is politically strong enough to impose financial discipline on both sets of firms. In a number of countries, including pre-1997 Bulgaria and Russia, the state was unable to do so.

When approaching the practical aspects of privatization, a question that arose from the start was how to privatize thousands of state firms in a manner that would be equitable, politically viable and result in higher efficiency due to effective corporate governance? There was a major concern that managers could seize state property and claim it as their own through the so called "popular privatization"—as occurred early on in Hungary and to some extent a few other Central European economies (Svejnar, 1989, Lipton and Sachs, 1990). Some also feared that workers would claim ownership of their

firms (Hinds, 1990, Lipton and Sachs, 1990), although others have argued that both economic theory and empirical evidence indicated that the possibility of this happening was exaggerated (Prasnikar and Svejnar, 1990, Ellerman, 1993).

Numerous proposals for privatization appeared. Svejnar (1989) proposed a method that relied on first establishing a market-oriented legal and institutional framework and then combining competitive bidding by foreign investors on majority stakes in state firms with free distribution of significant minority stakes in the form of diversified portfolios to citizens at large. The majority stakes could be offered to strategic partners as well as used in part for funding pensions, health benefits and unemployment insurance. Svejnar's proposal was motivated by the goals of (a) improving economic performance through western capital and management, (b) ensuring fairness and minimal risk for citizens by the allocation of shares, (c) achieving the maximum price by the government from sales to foreigners, while enabling citizens to participate in the process and obtaining collateral for bank credit that was needed for launching small enterprises, (d) preventing asset stripping by managers or other insiders, and (e) contributing to the development of a capital market.

Lipton and Sachs (1990) argued that to obtain political acceptability of privatization would require at least a partial transfer of ownership to stakeholders such as workers, state banks and local government. They also pointed out that some shares might stay in the Treasury and/or that the government could sell a leveraged firm and become a rentier rather than capitalist. In his comment on Lipton and Sachs (1990), Stiglitz (1990) argued against the "give away" of firms, stressing the importance of denoting the proper signals about each firm's profitability.

Olivier Blanchard et al. (1991) started from the premise that there was no unique path to privatization or "best" structure of ownership. In particular, they argued that the establishment of a clear system of ownership was urgent to avoid plundering of assets, but that restructuring of firms, by necessity, had to proceed slowly. The need for speed on establishing ownership led them to argue that privatization should proceed by distribution rather than sale of ownership claims. They also stressed that large shareholders were necessary for efficient management. These two propositions, together with a need for fairness, led Blanchard et al. (1991) to conclude that the best program would emphasize the role of holding companies, with shares traded on the stock market and a mandate to restructure and divest themselves of firms in their portfolio over some period of time.

The closure of persistently loss-making enterprises was advocated by a number of advisers, including Stanislaw Gomulka (1989), Svejnar (1989) and Michael Burda (1993). In practice, relatively few firms were completely closed down, although many scaled down their operations and closed down individual plants. The one country that moved aggressively to force bankruptcies on loss making firms was Hungary in 1992.

Many advisers used the CEE experience in formulating their recommendations for privatization in Russia and CIS in general. Hence, drawing on CEE evidence, Aslund (1992) saw Russian privatization as proceeding excellently and advised Boris Yeltsin and Yegor Gaidar to stick to their policies. Sachs (1992) reviewed the early Polish privatization experience and warned against the method that gave a veto to every group of stakeholders as well as any method relying on sales of individual firms. He viewed the not-yet-implemented voucher privatization program in Czechoslovakia and the investment fund program in Poland as promising. Given that Russia was facing a much

larger scale privatization (45,000 state enterprise as compared to around 8,000 in Poland), Sachs (1992) argued that Russia needed to adopt *across-the-board* mechanisms for privatization, in which thousands of industrial enterprises would be moved through the privatization process simultaneously, in a manner that reflected the implicit ownership claims that existed without letting these claims derail the privatization process. He also suggested that for large enterprises the key initial step should be a mass commercialization of these enterprises, in which thousands of them would be transformed into joint-stock companies, with the initial claims over the shares reflecting the balance of interests in the enterprises. Once mass commercialization was accomplished and managers and workers received an initial distribution of the shares, new supervisory boards could be assigned the responsibility for privatizing another tranche of the shares, sufficient to bring the privatized equity to over 51 percent. Sachs (1992) also noted that the crucial aspect of mass commercialization would be the introduction of corporate governance where no clear governance existed. The Russian government could then divest itself of the remaining minority equity stakes.

In practice, remarkable differences existed in the strategies for privatization across the transition economies. Poland and Slovenia, while quick to undertake *Type I* reforms, moved decidedly slowly in terms of privatization of state-owned enterprises, relying instead on their commercialization and on the creation of new private firms. Estonia and Hungary were equally vigorous *Type I* reformers, but they also proceeded assiduously and surprisingly effectively when privatizing individual state-owned enterprises by selling them one-by-one to outside owners. As mentioned above, this method of privatization was originally viewed by many strategists and advisors as too

slow. Yet it provided much needed managerial skills and external funds for investment in the privatized firms, it generated government revenue and effective corporate governance. It also turned out to be relatively fast when carried out by determined governments. Russia and Ukraine are examples of countries that opted for rapid mass privatization and relied primarily on subsidized management-employee buyouts of firms. This method had the advantage of speed, but it led to poor corporate governance in that management usually was not able or willing to improve efficiency. The method also did not generate new investment funds and skills, and it provided little revenue for the government. Czech Republic, Lithuania and to a lesser extent Slovakia carried out rapid equal-access voucher privatization, whereby a majority of shares of most firms were distributed to citizens at large.[3] While this approach may have been the best in terms of fairness and speed,[4] it did not generate new investment funds, nor did it bring revenue to the government. Instead, it resulted in dispersed ownership of shares. Together with a weak legal framework it imposed little control on management and resulted in poor corporate governance.[5] This poor corporate governance resulted in large shareholders appropriating profits or even assets of the firms (by way of tunneling) at the expense of the minority shareholders.

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[3] A general outline of a mass privatization using vouchers emerged in 1988. J. Lewandowski (1997) describes that "Mass privatization was a unique response to the post-communist challenge. The idea of distributing vouchers to promote equitable popular participation in privatization was elaborated by market-oriented advisers to the Solidarity movement in Gdansk, Poland, in mid-1988. Vouchers were intended to make up for insufficient supply of capital; as a special type of investment currency, they would be allocated to all citizens and tradable for shares of privatized companies. The concept was presented at a conference in November 1988—when communists were still in power—in response to a solicitation for proposals on how to transform Polish economy." Description of the method was published by Lewandowski and Szomburg (1990). Voucher scheme were then creatively adopted in several European transition countries.

[4] Filer, Randall K. and Jan Hanousek (2001) show that the voucher scheme is able to rapidly incorporate all available information, public and private. Hanousek and Kocenda (2005) present persuasive evidence that uninformed individuals learnt quickly during the voucher scheme and were able to out perform many privatization funds.

[5] For the assessment of the governance of privatization funds in the Czech Republic see Kotrba, Kocenda, and Hanousek (1999).

In retrospect, it appears that despite clear advice and genuine efforts on the part of a number of policy makers, the creation and enforcement of an adequate legal and institutional framework that would underpin privatization was, in most transition economies, inadequate. Hence, Roland (2001) for instance stresses this lesson when he wrote that "the policies of liberalization, stabilization and privatization that are not grounded in adequate institutions may not deliver successful outcomes." Similarly, Clifford Zinnes et al. (2001) argued that "privatization involving change-of-title alone is not enough to generate economic performance improvements.." What they call "deep" privatization, including institutional and "agency"-related reforms, was in many cases inadequately implemented.

The situation was further aggravated by two developments. First, in a number of countries the governments tended to use instruments such as golden shares to maintain significant control over the privatized SOEs. The state thus created a contradiction in initiating privatization while trying to maintain its control over certain key companies.[6] Second, after the privatization process had begun, a number of governments recognizing the inadequacy of the existing legal and institutional framework quickly established institutions whose quality was often inferior to institutions that could have been established had they taken more time to develop them. If Douglas North (1994) was correct in arguing that the long-run economic performance of a country depends crucially on the way institutions evolve, then the institutional approach to privatization left much to be desired. This is especially poignant when we note that one of the frequently used methods was mass privatization, which usually covered a large part of the economy and depended crucially on a functioning legal and institutional system.

[6] This argument is supported by calculations and more details in Kocenda (1999), Kocenda and Valachy (2002).

3. Determinants, Extent and Effects of Privatization

As may be seen from Table 1, many transition economies moved fast to convert their virtually fully state-owned economies into ones based overwhelmingly on private ownership. As mentioned in Section 2, there were numerous reasons advanced for carrying out privatization—proposals about the extent and speed of the process, and expectations about the effects of privatization on performance. In this section we provide a critical review of these three aspects of privatization.

Determinants and Sequencing of Privatization

The number of studies examining the determinants and sequencing of privatization is relatively limited. Prior to the start of the transition process, privatization occurred in developing as well as developed countries. Patrick Plane (1997) explores the determinants of privatization in a sample of thirty-five developing market economies over the period 1988-92. He used Probit and Tobit models to identify the determinants of successful privatization programs and found that privatization (through divestiture) had a stronger positive effect on economic growth when it takes place in industry or infrastructure rather than other sectors. This study hence suggests that if economic performance is the goal of the government, privatization should occur in industry and infrastructure first.

E.L. Glaeser and J.A Scheinkman (1996) were the first authors to theoretically address sequencing. Their paper examines sequencing strategies that would increase efficiency. They argue that a primary advantage of private ownership is that it enhances efficiency by improving a firms' acquisition of, and responsiveness to, information. In their model private firms respond to

demand and cost shocks, but this information is unobserved or ignored by public firms. In particular, the authors assume that SOEs produce a fixed level of output based on the expected values of demand and cost, while private owners observe the actual values and adjust their production when demand and cost conditions change. Thus if the government is concerned about increasing efficiency in this sense, the Glaeser-Scheinkman model predicts that privatization should begin where demand or cost volatility is the greatest and where it maximizes the flow of information.

In the Glaeser-Scheinkman (GS) model there are three sectors: upstream, downstream and retail. In our analysis, we test two predictions of the model pertaining to sequencing privatization across industries. First, the authors argue that when demand uncertainty is greater than cost uncertainty, downstream industries should be privatized before upstream industries, because downstream industries are better positioned to transmit information between the retail and upstream sectors. When the retail sector is private, the authors show that privatizing downstream firms should occur before upstream privatization so that the flow of information between the private upstream and the private retail sectors is not disrupted by the intermediate state-owned downstream sector. Second, Glaeser and Scheinkman argue that industries that experience the highest demand or cost volatility should be privatized first since firms in these industries need to respond to changing market conditions and hence are likely to benefit the most from privatization. The authors also note that the informational gains from privatization may be offset by a loss of consumer surplus if firms with significant market power are privatized and allowed to engage in monopoly pricing.

The GS model provides a different set of predictions than have been obtained in the previous models. In the empirical section we test whether downstream industries and industries that faced the greatest demand shocks were privatized first or not. We also test if the market share of a firm affects the probability of it being privatized early. If the government maximizes public goodwill or privatization revenues (section 2.5), firms with high market share should be

privatized first since this variable may also act as a proxy for profitability. Thus the market share variable also allows us to compare the relative priority placed on revenue and public goodwill versus efficiency.

Gupta, Nandini, John Ham and Jan Svejnar, (2000) note that while privatization of state-owned enterprises has been one of the most important aspects of the economic transition from a centrally planned to a market system, no transition economy has privatized all its firms simultaneously. This raises the question of whether governments privatize firms strategically. Gupta, Ham and Svejnar examine theoretically and empirically the determinants of the sequencing of privatization. This is the first study to obtain theoretical predictions regarding a firms characteristics, by ascertaining if these characteristics are likely to determine the sequence of privatization and finally to test these predictions. By identifying the nature of sequencing of privatization, our analysis contributes to a better understanding of the behavior of governments and firms.

To obtain testable predictions about the factors that may affect sequencing, Gupta, Ham and Svejnar (2000) investigate theoretical models that consider the following competing government objectives: i) maximizing efficiency through resource allocation; ii) maximizing public goodwill from the free transfers of shares to the public; iii) minimizing political costs stemming from unemployment; iv) maximizing efficiency through information gains (Glaeser-Scheinkman) and v) maximizing privatization revenues. Next, they use firm-level data from the Czech Republic to test the competing theoretical predictions about the sequencing of privatization. The authors find strong evidence that the government first privatized firms that were more profitable, firms in downstream industries, and firms in industries subject to greater demand uncertainty. Privatizing more profitable firms first is inconsistent with maximizing Pareto efficiency but it is consistent with the model of maximizing privatization revenues, maximizing public goodwill and minimizing the political cost of unemployment. However, the implication of the political cost model—that employment growth in the firm's industry should affect

sequencing—is not supported by the results. Gupta, Ham and Svejnar's finding that firms in downstream industries and in industries with greater demand uncertainty were more likely to be privatized early suggests that the government placed emphasis on efficiency in the Glaeser and Scheinkman (1996) sense, namely by privatizing first firms that required flexible management. However, in contrast to the GS recommendation, but consistent with the general evidence regarding profitability, firms with higher market share were more likely to be privatized first.

In the non-economic literature, Hilary Appel (2000) explores how ideology interacts with the distribution of power and the formation of material interests in society. She suggests that there are four mechanisms by which ideology determines the design and implementation of privatization programs 1) The ideology determines how privatization programs are drafted; 2) The ideological context shapes the definition of interests and the distribution of power in society; 3) The ideological compliance reflects how leaders attempt to gain support for and agreement to a new property rights system; and 4) The ideological compatibility address how privatization policies and ideas and beliefs in society differ. Appel (2000) provides several empirical examples of how these ideological factors interfere with privatization policies, in particular she discuss how these factors affects the ease of implementation and the distortion of privatization programs over time.

Another approach worth examining is taken by Harvey Feigenbaum and Jeffery Henig (1994) who argue that privatization takes the form of a strategy that realign institutions so as to privilege the goals of some groups over the competing aspirations of other groups. They develop a political typology that distinguishes between privatizations undertaken for different reasons—whether pragmatic, tactical, or systemic. In terms of determinants it means that conventional assumptions about political rationality become

problematic in the face of opportunities to achieve privatization. Further, structural shifts in governmental capacity and responsibility should be the central focus in distinguishing between types of privatization. Also, the most important political criterion for evaluating privatization alternatives is whether they represent substantial and not easily reversible reduction in state responsibility and capacity. Finally, some policy decisions are less readily reversible than others.

A philosophically similar approach is taken by Julio De Castro and Klaus Uhlenbruck (1997) who examine how the characteristics of a county relate to the nature of the privatization deal of a formally state owned enterprise and the strategy of the acquiring firm. They claim that there are differences with respect to the characteristics of privatization and government policies that translate into differences in firm strategy in former communist, less-developed and developed countries. Country characteristics, government privatization policies and firm strategies play a prominent role.

Extent of Privatization

Theoretical models have come up with a number of competing predictions about the extent of privatization that is most desirable. At the early stage of the transition, Chaim Fershtman (1990) analyzed the interdependence between the ownership status and market structure. Using the A. K. Dixit's framework, he examined a duopolistic market, considered the implications of privatization on the attractiveness of entry, the possibility of deterring entry, and the incumbent position as a natural monopoly. He demonstrated that a partly state-owned firm might realize higher profits than its private, profit-

maximizing, competitor.[7] This implies that partial rather than full privatization may be desirable in the conditions of imperfect competition, which is a feature of the early transition stage.

Michael McFaul (1995) reviews early transition events in Russia and demonstrates that future progress in developing private property rights will require not only sound economic policies but also more robust state institutions. Based on his research, McFaul claims that the set of political institutions comprising the first post-communist Russian state were not capable of either dismantling Soviet institutions, governing property rights, or creating and supporting new market-based economic institutions regarding private property. The conclusion one walks away with is that the extent of privatization ought to be limited.

Edward Leamer and Mark Taylor (1994) develop a Bayesian pooling technique to estimate aggregate production functions for the previously centrally planned economies (PCPEs) of Eastern Europe and also for Western economies, and even for a group of developing countries. This technique adjusts for the low quality of the PCPE data and also possible differences between PCPE and Western and developing-country technologies. They find that if the transferability of assets to the new technology is low and Western capital is unavailable, it can be better not to privatize than to have full (big-bang) privatization. Large-scale privatization is also less desirable if Western capital is available for new projects. Thus, in some instances it may be desirable to use Western support to slow the rate of privatization rather than hasten it. This study predicts that

[7] This result is to a certain extent supported by Kocenda and Svejnar (2003) who study the performance of privatized firms and provide results that portray the state as a more economically and socially beneficial agent than other recent studies.

large-scale privatization may be more desirable in the CEE countries than the CIS ones because western capital is more available for the former than the latter.

Effects of Privatization on Performance

Theory

A number of theoretical models provided competing predictions about the effects of privatization on performance, these predictions range from positive, to negative, to ambiguous. In Thorvaldur Gylfason’s work (1998), privatization is shown to increase national economic output in a two-sector full-employment general-equilibrium model by enhancing efficiency as if a relative price distortion were being removed through price reform, trade liberalization, or stabilization. Gylfason shows that the static output gain from privatization may be large he also shows that the potential dynamic output gain from privatization appears to be substantial. Nico Hansen (1995) presents a GE imperfect competition model and shows that a broad distribution of ownership rights can have favorable influence on micro-economic efficiency and may therefore lead to a 'good' aggregate outcome. Yet the sales to single or core investors, if accompanied by workers' equity shares, may perform worse. Furthermore only a so-called “big bang” rapid approach to privatization might lead to favorable outcomes.

Macro Evidence

A number of studies use aggregate data to assess the effect of privatization on economic performance. Using data from developing as well as developed countries, Plane (1997) finds that privatization (through divestiture) has a significant positive effect on economic growth. Daniel Berkowitz and David De Jong (2001) analyze whether

regional differences in reform policies in Russia can account for regional differences in growth rates and conclude that to a considerable degree they can. The authors find that regions with significant large-scale privatization create a greater number of new legal enterprises, which in turn exhibits a strong positive correspondence with growth. The inequality due to privatization are studied by Michael Alexeev (1997) who examines the Russian privatization process through the end of voucher privatization and considers how its deviation from the competitive sale standard was likely to affect inequality. He argues that empirical evaluation is all but impossible due the lack of reliable data. But he finds that it is feasible to analyze the institutional features of Russian privatization in terms of their effect on the redistribution of wealth. Alexeev claims that given the rent seeking character of the privatization process and differences in opportunities for various wealth groups, privatization systematically redistributes wealth and causes an increase in wealth inequality.

Privatization and economic growth are also often related through fiscal performance. Steven Barnett (2000) carried out an empirical investigation of the relationship between privatization and measures of fiscal performance. was Using macroeconomic and privatization data from 18 countries, Barnett found that when privatization proceeds are transferred to the budget, they tend to be saved and used to reduce domestic financing. His other main finding was that total privatization, as opposed to just the proceeds transferred to the budget, correlates with an improvement in macroeconomic performance as manifested by a higher real GDP growth and lower unemployment. However, this result needs to be interpreted cautiously as the evidence it provides is not sufficient to establish causality. Arthur E King (2003) provides more

evidence on fiscal issues. King argues that the neoliberal policy package of "shock therapy"[8] creates severe supply-and-demand shock for enterprises and induces firm failure. This leads to a fiscal crisis for the state, and an erosion of its bureaucratic character and capabilities. The author tests the neoliberal theory against a neoclassical sociological theory by examining the experience of 12 post-communist countries and two reform Asian communist countries. He concludes that the application of the neoliberal transition program results in a less liberal outcome than neoliberal theory has envisaged.

In a cross-country aggregate study, Sachs, Jeffrey, Clifford Zinnes and Yair Eilat (2000) find that privatization does not in and of itself increase GDP growth, but they suggest that a positive effect is present when privatization is accompanied by in-depth institutional reforms.

Finally, John Bennett, Saul Estrin, James W. Maw, and Giovanni Urga (2004) classify 25 of the 27 transition economies according to the type, extent and timing of the privatization that was carried out in each country. The authors then pool the data across countries and over time and regress the rate of growth of GDP on the privatization variables and controls. They find that mass-voucher privatization is the privatization form most conducive to economic growth. This is a provocative finding that deserves further study.

Since in a number of economies pre-privatization firms were to a large extent controlled by workers, Barthold Albrecht and Marcel Thum (1994) discuss how policy measures such as labor participation (with wage ceilings) can help avoid the destructive trend towards mass bankruptcy and the resulting negative macroeconomic impact. Gupta,

[8] Shock Therapy consists of the radical transition to a market economy through rapid and extensive price and trade liberalization, stringent monetary and fiscal stabilization, and the implementation of a mass privatization program.

Christian Schiller and Henry Ma (1999) discuss the impact of privatization on labor markets as well as other fiscal issues. This work is further expanded by Gupta (2001) when he examines policymakers' different options for mitigating the social impact of privatization. Gupta discusses the adverse impacts of privatization in the form of economic efficiency and growth versus job losses and wage cuts the then surveys the existing empirical evidence. He found that public sales and auctions can have strong negative effects on workers but maximize the government's revenue.

Micro Theory and Evidence

A theoretical analysis and overview of privatization and firm performance in transition is provided by Gerard Roland (2000). Surveys of firm-level studies examining the effects of privatization on a firm's performance provide a considerable range of results. Some find a large variation of outcomes but no systematically significant effect of privatization on performance (Bevan, Estrin and Schaffer, 1999) others cautiously concluding that privatization improves firm performance (Megginson and Netter, 2001), and still others are fairly confident that privatization tends to improve performance (Shirley and Walsh, 2000, and Djankov and Murrell, 2002).

This astonishing variation in the interpretation of results is brought about in part by the fact that those conducting early studies had access to different and often very limited data on firm ownership. For these reasons, many studies treat ownership as a relatively simple categorical concept (e.g., private v. state or state v. foreign, domestic private outsider v. domestic private insider). Such studies are often unable to distinguish

the exact extent of ownership by individual owners or even relatively homogeneous groups of owners.

Equally important is the fact that three types of interrelated analytical problems generate the diversity of interpretations and findings. These problems may be expected in early studies, especially those in the context of the rapidly changing transition economies. First, the early studies examine only a short time periods with most observations concentrated immediately before and after the privatization. Second, the early studies (a) use small and often unrepresentative samples of firms, (b) are frequently unable to identify accurately who has ownership because privatization is still ongoing or because the frequent post-privatization changes of ownership are hard to detect, and (c) often combine panel data from different accounting systems. Third, many of the early studies were not been able to control adequately for endogeneity of ownership (firms not being selected for privatization at random), and their estimates of the effects of privatization may hence be biased. Indeed, Simeon Djankov and Peter Murrell (2002, p. 744) note that almost one-half (47%) of the surveyed studies do not take into account the fact that firms may not be assigned for privatization at random and that as a result many of the remaining studies treat the problem in an inadequate way. In view of this limitation of the existing literature and the vast effect this literature has on policy making around the world, Gupta, Ham and Svejnar (2000) analyze the problem of ignoring the fact that better firms may be privatized first. They show that even one of the most popular methods for controlling for selection or endogeneity in the existing studies— namely a difference-in-difference estimation (equivalent to fixed effects) approach—is unlikely to address this problem. Hence the entire literature on privatization suffers from a serious

problem of potential selection (endogeneity) bias. Gupta, Ham and Svejnar's (2000) study provides econometric evidence that better performing firms tend to be privatized first, thus indicating that studies that treat the sequencing of privatization as random are likely to overstate the positive effect of privatization on performance.

Hanousek, Kocenda, and Svejnar (2004b) alleviate the aforementioned methodological and data problems by using a virtually complete sample of privatized firms in the Czech Republic. They also implement an instrumental variable technique to account properly for ownership endogeneity bias. As a result they find present a positive effect of foreign owners—yet contrary to a number of previous studies it is not that overwhelming. In a similar manner, the effect of the state is not only negative as indicated earlier. The effect of domestic owners was largely favorable and far from being solely harmful. All these provocative results were made possible by the meticulous methodological account of ownership endogeneity. The authors also presented results from estimations by the OLS where ownership endogeneity was not fully accounted for. This approach is in line with the majority of previous studies that found a positive effect of foreign ownership and a negative effect of the state. Had the appropriate control for endogeneity been adopted, the earlier results might have shifted more towards the conclusions made by Hanousek, Kocenda, and Svejnar (2004b).

In view of these problems, we have enlarged the survey of privatization studies reported by Djankov and Murrell (2002) to include additional studies and pertinent information about the data and econometric techniques used by the various authors. On the basis of this new information, collected as of December 2003, we came up with a relatively sobering assessment of the effects of privatization on the total factor

productivity (TFP), labor productivity, profitability, sales, revenues, employment, wages, and other indicators of performance in the transition economies of Central and East Europe.

Total Factor Productivity

Seventeen studies have analyzed the impact of ownership on TFP, using value added, total product or sales as the dependent variable, fourteen studies control for endogeneity and all but one use sample sizes with several hundred or more firms. The results are mixed. The overall effects of private or non-state ownership range from positive to insignificant to negative. The diversity persists across regions (CEE vs. CIS), although relatively few studies analyze the CIS countries. Foreign ownership is mostly found to have a non-negative effect, but in a number of instances the effect is statistically insignificant. The effect of employee ownership is estimated in seven instances, with six being statistically insignificant and one being positive.

Labor Productivity

Estimates related to the effect of ownership on labor productivity are based on twenty-one studies, with thirteen controlling for endogeneity/selection of ownership. The results are again mixed, but private ownership in these cases register primarily positive and insignificant effects. The diversity again persists across regions (CEE vs. CIS) and there are now more studies analyzing the CIS countries. Foreign ownership is again found to have a non-negative effect, while the effects of employee and management ownership are estimated to be almost statistically insignificant. Finally, newly established firms are found to be less efficient than others.

Profitability

The effects on profitability were examined in eleven studies,and once again the results are mixed. But these studies consider specific ownership categories and the extent of ownership concentration. Concentrated foreign ownership (especially by industrial companies) appears to have a positive effect on profitability and in some studies a positive effect of municipal ownership was found. The effect of domestic private ownership is for the most part insignificant or depends on the particular type of ownership (bank, fund, individual, etc.). In this finer categorization, however, the effects vary across studies.

Sales

Estimates of the effect of ownership on sales are reported in Table 4. They are based on ten studies, with all but one controlling for endogeneity/selection of ownership. The results are again mixed, with private ownership (of all types) displaying a positive effect in Manuela Angelucci et al.'s (2002) study of Poland, Bhaumik and Saul Estrin's (2003) paper on Russia, David Grigorian's (2000) study of Lithuania, and Derek Jones and Niels Mygind's (2002) study of Estonia. However, the effect of private ownership is insignificant or negative in the other studies. Among the recent studies that control for endogeneity of ownership, Kocenda and Svejnar's (2003) study finds ownership by foreign industrial firms to have a positive effect but ownership by foreign non-industrial firms is found to be insignificant. Further, Hanousek, Kocenda, and Svejnar (2004b) find a positive effect of foreign owners on a firms' performance, yet contrary to a number of previous studies is the conclusion is not overwhelming.

Revenues

Six studies deal with the effect of ownership on revenues. In some cases revenues overlap with sales and in some cases it covers non-sale revenues as well. Most of the estimated effects are small or nearly insignificant. This suggests that different types of ownership do not exert systematically different effects on revenues. The exception is when there is ownership by an outsider –which is found to have a significant positive effect, such as in Roman Frydman et al.'s (1999, 2000) studies of Central Europe, but a negative effect in Jones' (1998) study of Russia.

Employment

Fourteen studies have examined the effect of ownership on employment. The results are again quite varied, but there is a discernible tendency for privatized firms, especially those with foreign owners, to increase employment relative to firms with state ownership. Worker ownership and control appear to have zero effect, or in one case a positive effect on employment.

Wages

Studies of the effects of ownership on wages find that state ownership is associated with lower wages in Russia and former Czechoslovakia, but not so in Poland. Moreover, SOEs are more likely to exhibit wage arrears than firms with mixed ownership and *de novo* firms, but not domestic private and foreign-owned firms. The fact that domestic private and foreign owned firms are about as likely to generate wage arrears as state owned firms is interesting.

Other Indicators of Performance

Finally, a number of studies have analyzed the effect of ownership on other dependent variables. The results are again diverse, but the following patterns of private

ownership effects do emerge when we examine the data: private ownership does not have a major effect on return on assets, investment, environmental emissions, and the price cost margin, but it has a non-positive effect on costs and a positive effect on exports.

4. Concluding Observations

While the earlier surveys of CEE and CIS differed in their conclusions about the effects of privatization on performance, most of them created a general presumption that the effect was positive. More recent studies have used larger data sets and controlled more thoroughly for potential endogeneity/selection of ownership. The results presented in these surveys suggest that the estimated effects of ownership on performance vary with data sets, econometric techniques and the time period under consideration. Moreover, while foreign ownership is at times associated with superior economic performance, domestic private ownership has much less definite impact on performance than had been claimed in some of the earlier surveys. Our study hence suggests that privatization of state-owned firms to domestic owners in Central and East Europe and the Commonwealth of Independent States—one of the largest transfers of wealth in history—did not have the strongly positive effect on economic performance that was expected.

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Table 1: Private Sector Share of GDP

	1992	1994	1996	1998	2000	2001	2002
Czech Republic	30	65	75	75	80	80	80
Hungary	40	55	70	80	80	80	80
Poland	45	55	60	65	70	75	75
Slovak Republic	30	55	70	75	80	80	80
Slovenia	30	45	55	60	65	65	65
Estonia	25	55	70	70	75	75	80
Latvia	25	40	60	65	65	65	70
Lithuania	20	60	70	70	70	70	75
Bulgaria	25	40	55	65	70	70	75
Romania	25	40	55	60	60	65	65
Russia	25	50	60	70	70	70	70
Ukraine	10	40	50	55	60	60	65