IMF Working Paper

© 1999 International Monetary Fund

This is a *Working Paper* and the author(s) would welcome any comments on the present text. Citations should refer to a *Working Paper of the International Monetary Fund.* The views expressed are those of the author(s) and do not necessarily represent those of the Fund.

WP/99/6

INTERNATIONAL MONETARY FUND

European II Department

Privatization in Transition Countries: A Sampling of the Literature

Prepared by Oleh Havrylyshyn and Donal McGettigan[1]

January 1999

Abstract

This paper reviews a selection of studies on privatization experiences in transition countries. Empirical studies almost invariably show privatized enterprises outperform state enterprises. Moreover, the literature identifies *de novo* firms as being clearly the best performers, followed by outsider-dominated firms, while insider-dominated firms are the least efficient among those newly privatized. The importance of *de novo* firms in enlarging the private sector in transition economies is reviewed, along with the question of whether privatization efforts support or hinder *de novo* private sector development. Finally, the paper discusses the importance of providing a suitable market environment for successful private-sector development.

JEL Classification Numbers: L10; L32; L33; P20; P31

Keywords: Privatization, transition, state-owned enterprises, de novo enterprises, mass privatization, vouchers.

Author's E-Mail Address: ohavrylyshyn@imf.org; dmcgettigan@imf.org

---

[1]We would like to thank, without implicating, John Odling-Smee, John Nellis, Tapio Saavalainen, James Roaf, Mohammad Shadman-Valavi, Bogdan Lissovolik, Clinton Shiells, Michael Mered, Jian-Ye Wang, Jan Mikkelsen, Jens Dalsgaard, and participants at an internal seminar for useful comments. The views expressed in this paper do not necessarily represent those of the International Monetary Fund.

Contents

I. Introduction

1. The privatization of state-owned enterprises (SOEs) in formerly centrally planned economies figured very prominently in both popular and academic writings ten years ago as one of the most important, if not the most important, elements of transformation to a market economy. In popular writings, it was the headline event symbolizing change from socialism to capitalism. In academic writings, it was considered the spearhead of efforts to replace the hierarchial decisions of a command economy with the incentives of a profit-maximizing producer reacting to market signals—incentives that two centuries of economic thinking concluded led to the best possible social outcome. After a decade of transition experience in the post-socialist camp, what can be said about the expected central role of privatization in the process? How far has it gone? What methods have been used to privatize? Has post-privatization performance improved as expected? What other conditioning factors have affected the contribution of privatization to improved economic performance? The aim of this paper is to address these questions by reviewing a selected portion of the vast literature on the topic, and to draw some lessons for the remaining agenda of transition and privatization.

2. The literature on this subject is not only vast, but presents a large number of difficult problems, many alternative proposals each with their pros and cons, and an intricate web of interdependence among factors determining success or failure of different privatization approaches. An extensive reading of this literature sometimes leaves an impression of an unfocused framework, and a lot of "on the one hand or on the other hand" conclusions; it is at best a heavy read, and hinges on being turgid. In order to put some order into this literature, but at the risk of oversimplifying a long and complex issue, we have organized this review around five themes.

- **The labors of Hercules**: The magnitude of the task is vast, and incomparably larger than any previous privatization efforts. A key question here is: can it be done reasonably quickly, i.e., in a decade or two?

- **The bottom line of efficiency gains**: As privatization was meant to introduce the profit motive in order to generate large efficiency gains, the first obvious hypothesis for empirical testing is: has some privatization been better than none; and has more privatization been better than less? Two related hypotheses follow: is privatization sufficient or does one need to consider other associated conditions; and is speedy privatization better than slow but deliberate privatization?

- **The agency problem**: Since owners are not in most cases able to be managers as well, the manager-agent's motivation may be a problem. The simplest formulation of a testable hypothesis here is to ask if all forms of privatization give equivalent results, or whether instead some forms are superior.

- **The Dinosaurs vs. Greenfields Choice**: One of the issues we now see better than was the case early in the transition is that *de novo* or greenfield enterprises are an alternative to privatization or an additional path toward the goal of increasing private sector activity. The questions to be asked under this heading are two. First, what has been the relative importance of privatization versus *de novo* expansion? Second, is there a preference or trade-off between the two; i.e., can dinosaurs learn new tricks once they are privatized or is it better to allow their slow death while relying on new enterprises to build up the private sector?

- **Libra as Economist and the Blind Justice of Market Competition**. In both the theory and practice of market economies, the advantage of private ownership as an institution stems from its profit-maximizing behavior conditioned by a competitive market environment. A logical question follows: can we have profit maximizing behavior, without privatization? This is already stipulated under bullet 2 above as a testable empirical hypothesis. A different hypothesis is also testable, albeit perhaps with more difficulty: does it matter what kind of privatization is done, as long as there is a competitive market environment?

3. The rest of the paper is organized around these five themes, albeit the section titles and the discussion return to a more conventional and necessarily drier style for which the reader's indulgence is sought. Section II (Labors of Hercules), discusses the magnitude of the task and the results achieved so far are put in perspective of previous privatization experiences. Section III (Efficiency Bottom Line) reviews empirical evidence on the effects of privatization, asking if privatization on balance results in efficiency gains Section IV (the Agency Problem) first discusses the arguments for and against particular modes of privatization and then addresses some evidence on whether some of these modes are superior to others. In Section V (Dinosaurs vs. Greenfields), the paper focuses on *de novo* enterprises and their contribution to the two objectives of increasing private sector share and improving efficiency. The last theme (blind justice of market competition) is covered in Section VI; as very little empirical analysis has been done to address this fundamental question, the discussion focuses more on the qualitative thinking about what comprises an appropriate market competitive environment. Finally, Section VII provides a summary and conclusions.

4. A few qualifying comments are appropriate here. First, this paper's review of progress is based on a selected list of writings from a vast literature. Second, the common definition of private ownership is at least 50 percent ownership, but there is no code or standard that is adhered to, and not all studies make clear whether this is the cut-off point used. In any event, it has to be recognized that even if majority ownership is the criterion used, it may be questioned. On the one hand, a small "golden share" of government, as in Belarus, allows control while, on the other hand, in a typical market environment, it takes a lot less than 50 percent ownership to have controlling influence. Third, while transition could be said to have begun nearly a decade ago, for most countries it has been at best 3-4 years since a significant amount of privatization was completed. Add further the time lag for analysis and publication of research results, and one finds that virtually all of the available studies cover a post-privatization period of no more than 2-4 years. It is surely early days to consider the conclusions of such studies as anything but indicative. Indeed, a set of analyses by EBRD

(1997) argues firmly that the cycle of adjustment over several years differs, and therefore any superiority of privatized entities may not be visible.

II. THE EXTENT OF PRIVATIZATION (The Labors of Hercules)

5. As Nellis (1998) describes it, the extent of privatization that has taken place in transition countries since independence is unprecedented. He calculates that, from 1980 to 1991, roughly 6,800 medium- and large-scale firms were privatized in non-transition economies[2]. By way of comparison, Nellis estimates that close to 60,000 such companies were privatized in the transition economies since independence. Added to the privatization of hundreds of thousands of small firms, alongside the formation of a large *de novo* private sector, the overall effect is that a very significant and rapid change in the ownership structure of transition economies has taken place since independence.

6. The result is broadly reflected in estimates of the size of the private sector in transition countries, both for 1990 and 1995, provided in World Bank (1996) and reproduced below as Figure 1 with an update to 1997 from the EBRD (1998). Although the size of the private sector has expanded quite rapidly in most transition countries, this is not true in cases such as Belarus and Turkmenistan. Although, by 1995, the countries of central Europe (CE) and the Baltics generally had far larger private sectors than most of the countries of the CIS, except Russia, this gap had largely narrowed by 1997. Finally, although the private sector now plays a much more important role than was the case at the start of the reform process, in most transition economies a high proportion of economic activity remains in state hands, leaving considerable scope for further privatization.[3] Taken together, these findings suggest that valuable lessons for many countries can still perhaps be learned by reviewing the evidence covering privatization in transition, and, in particular, in CE countries. The extent of remaining unprivatized entities is not easily quantified; however, it is possible to find some numbers on *de novo* privatization.

---

[2]Privatization is defined by Nellis as "a transfer of ownership such that a majority of the shares or equity in an enterprise passes from state or public ownership into private hands" (p. 13).

[3]Given the widespread continuance of commitment to reform in transition countries, it is likely that most privatization needed can be undertaken in a decade or two. However, the magnitude of the task remaining should not be understated. For example, it is interesting to note that, in the Czech Republic—generally held to be one of the transition countries most advanced in private sector development—the state continues to play a major role. The state retains all of, or a majority stake in, the major utilities; majority stakes in 40 large firms and banks designed as "strategic;" majority stakes in 30 non-strategic firms; minority stakes in about 300 other firms; and indirect ownership and control through the portfolios of both bank bail-out institutions, and through privatization investment funds many of whom are owned by state-dominated banks. We would like to thank John Nellis for his information .

7. Unfortunately, not much detailed data exist on *de novo* enterprises in transition countries. However, Johnson et al. (1997) provide rough estimates of the size of the *de novo* private sector as a percentage of GDP for each of the transition countries in 1995 by subtracting from total private sector shares in GDP of the EBRD, the share attributable to newly privatized enterprises. These estimates—which should be considered as tentative—are shown in Table 1. Although the private sector share has increased dramatically in the intervening period, the importance of the *de novo* sector, even at this early stage of the transition process, nevertheless emerges clearly from the table. It is also noteworthy that the average for Central Europe and the Baltics is substantially higher than for the CIS. But the latter is surprisingly high, perhaps reflecting a faster pace of unofficial economy start-ups than privatization, which has generally lagged in most CIS countries apart from Russia.

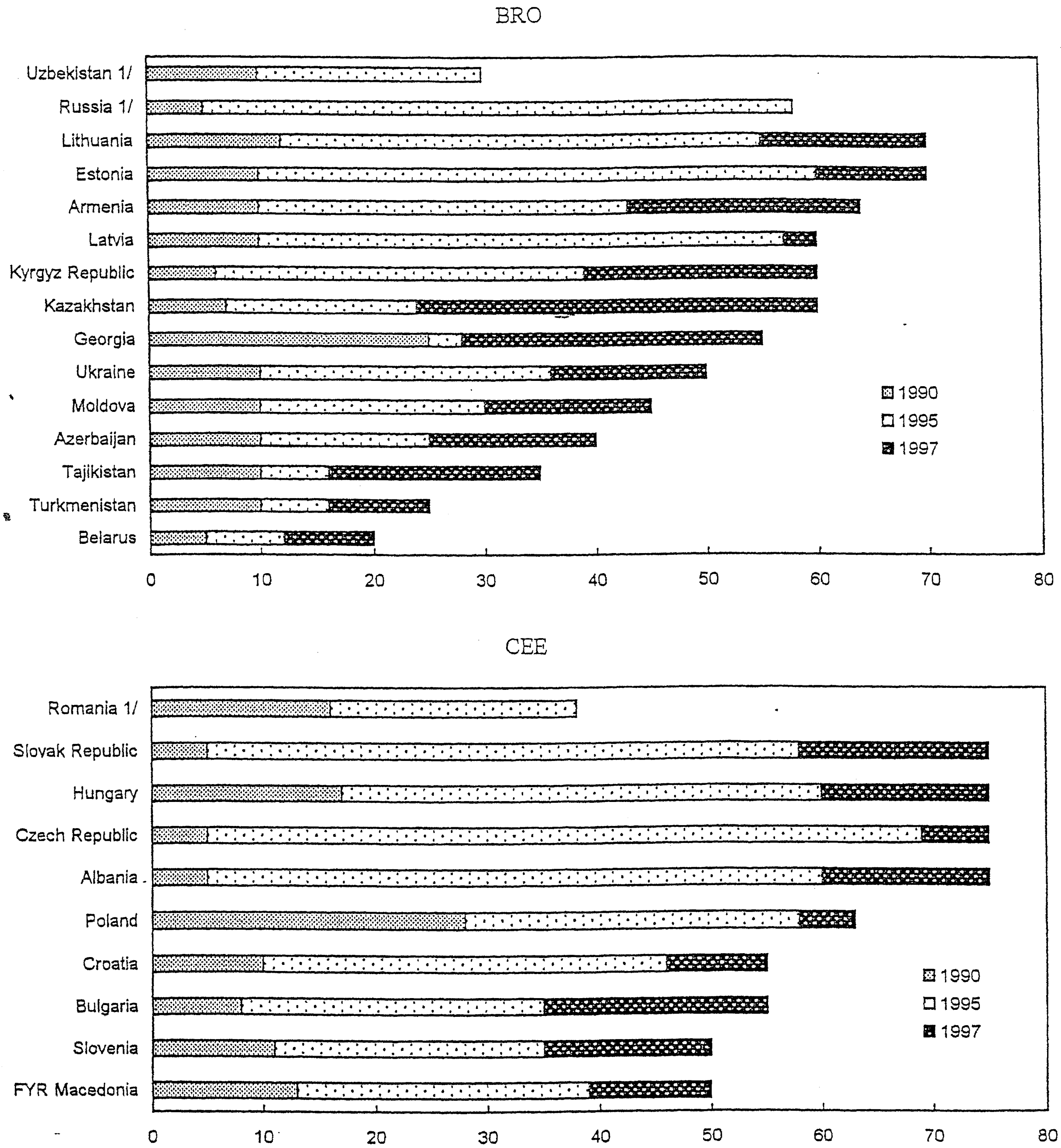
8. Illustrative information on the development of this important sector can, also, be inferred from an examination of the evolution of the size structure of transition enterprises, where such information is available. Table 2 below presents a breakdown of the total universe of enterprises in the Czech Republic by size, both for enterprise numbers and employee share, and does the same for Slovakia for enterprise numbers.[4] A good gauge of the development of the *de novo* sector in these countries can be had by analyzing the growth of those enterprises with less than 100 employees. Most firms of this size are *de novo*—such firms tend to be primarily small scale operations—although, of course, some such firms will be privatized retail firms or spinoffs of larger privatized enterprises. Focussing on small-scale firms (i.e., those with less than 100 employees) in the table below, it can be seen that, in the Czech Republic, the share of such enterprises in total employment increased from just 14 percent in 1993 to 32 percent in 1997.[5] Although the information presented in the table is not sufficient to reach such a conclusion directly for Slovakian firms, the average number of employees in Slovakian firms has fallen sharply over the 1990 to 1996 period, with the fall being particularly sharp for firms with greater than 25 employees. This strongly suggests that the small-scale—or *de novo*—sector has also increased substantially in relative importance in Slovakia.

---

[4]Employee share data are not available for Slovakia. We would like to thank Simeon Ajankov for these data.

[5]The number of micro enterprises (i.e., those employing less than 20 employees) increased from less than 1,000 in 1990 to 85,465 in 1993.

Figure 1. Private Sector Share in GDP
(In percent)



Sources: World Development Report; EBRD Transition Report.
1/ Data for 1997 not available.

Table 1. Transition Countries - *De Novo* Share of GDP, 1995

Country	De Novo Share (Percent of GDP)
Albania	50
Bulgaria	40
Croatia	45
Czech Republic	30
Hungary	45
Macedonia	40
Poland	50
Romania	35
Slovak Republic	25
Slovenia	45
Unweighted Average	41
Estonia	50
Latvia	50
Lithuania	40
Unweighted Average	47
Armenia	35
Azerbaijan	25
Belarus	10
Georgia	25
Kazakhstan	20
Kyrgyz Republic	35
Moldova	20
Russia	20
Tajikistan	15
Turkmenistan	15
Ukraine	30
Uzbekistan	30
Unweighted Average–BRO	23
Unweighted Average–Overall Transition Countries	33

Source: Johnson, et al. (1997).

Table 2. Size Breakdown of Firms in the Czech and Slovak Republics

(a) Number of Units and Share of Employees by Firm Size - Czech Republic - 1993-97

Enterprise Size (No. of Employees)	1993		1997	
	No. of enterprises	Share of employees	No. of enterprises	Share of employees
1-19	85465	0.10	109120	0.19
20-99	1192	0.04	4953	0.13
100+	1917	0.86	2341	0.68
Total	88574	1	116414	1

(b) Number of Units and Share of Employees by Firm Size -Slovak Republic - 1990, 1996

Enterprise Size (No. of Employees)	1990		1996	
	No. of enterprises	Share of enterprises	No. of enterprises	Share of enterprises
1-10	1421	074	4382	0.56
11-24	113	0.06	1,332	0.17
25-100	42	0.02	1364	0.17
100+	348	0.18	793	0.10
Total	1924	1.00	7871	1.00
Average no. of employees in 25+ enterprises	1283		186	
Average no. of employees in all enterprises	250		64	

Source: World Bank

III. Privatization and Enterprise Performance [6]
(The Efficiency Bottom-Line)

A. Theoretical Expectations

9. A decade ago, it was popular to say that there is no theory to guide the practical process of transition, only theories of capitalism and socialism. This may still be true in the sense that a new consensus paradigm is only beginning to emerge from the vast literature on transition, but it is not at all clear how much a unified, cohesive theory is needed. Besides, to the extent it is useful to have a compact rather than complex analytical framework, it is not that difficult to cobble together from a few of the key writings a workable "model" of transition or transformation. Kornai (1994) in describing the special circumstances of the "transformational" recession compared with a market economy recession highlights two key changes that are needed: *forcing a move from a seller' to a buyers' market* (via price liberalization), and *enforcing a hard budget constraint* (via privatization and elimination of various government support mechanisms). These are the two principal incentives for profit-maximizing market behavior by all economic agents. We can add to this—following Blanchard (1997) two elements of the core process of change: *reallocation of resources from old to new activities* (via closures and bankruptcies combined with establishment of new enterprises); and *restructuring within surviving firms* (via labor rationalization, product line change, and new investment). These can be thought of as the dynamic movements resulting from the establishment of the new incentives cited and are reminiscent of the Schumpeterian concept of "creative destruction" by entrepreneurial activity, only with a very much larger impact than Schumpeter's model envisioned. This general framework for transition indeed has, at its center, *enterprises* as the key agents of change, just as the early writings presaged. However, it is less this theory and more the history of market economies that led to the view that *private* enterprises play the key role.

10. There is no disagreement that, at the end of the day, what matters in the transition to market is efficiency improvements of firms, which in turn add up to aggregate growth. The literature can be divided however into two broad schools of thought which have different views on how best to achieve this. One school of thought de-emphasizes the immediate need for privatization and focuses on the creation of a hard budget competitive environment with market signals leading to reallocation gains. This view is reminiscent of the Lange propositions six decades ago, but does not deny the eventual need to privatize much of state assets. The other school of thought argues that privatization was certainly necessary, and the sooner the better, although it admits that other conditions and institutions do have to be put in place eventually. Recently, a revisionist sentiment has modified this second school of thought by saying: while it was not wrong in principle to privatize early and quickly, it was wrong to

---

[6] World Bank (1996) make the important point that small units are easier to privatize than larger enterprises and that positive outcomes in the former category are relatively assured. This is not the case, however, for medium- and large-scale enterprises which this section concentrates upon.

assume that the competitive conditions and market institutions will easily follow regardless of the method of privatization or government efforts.[7] We elaborate briefly on these two schools of thought, then go on to review the empirical evidence, and finally return to the recent "revisionism" in Section IV asking how different methods of privatization affect efficiency performance.

11. The first school of thought questioned the need for immediate privatization in a transition context. As Frydman et al. (1997) describe the views of some writers, "early in the reform period, some assumed that macroeconomic stabilization—budgetary discipline, low inflation, price and trade liberalization, and hard budget constraints for enterprises—would create a sufficiently competitive environment for most viable enterprises to restructure and for others to shrink or go out of business" (p. 29). Murrell (1992) and (1995) in a slightly different vein, argued that concentrating too much on privatization could distract attention away from the more central task of encouraging new startups; in his view privatizing state firms could be done more slowly.

12. Consider the second school of thought. It was generally expected at the start of transition that privatized firms would be associated with greater reform and efficiency gains than state enterprises for the reasons suggested by Barberis et al. (1996). First, private owners have a greater incentive to improve efficiency because they bear the financial consequences of their actions. Second, managers of state-run firms are usually chosen for reasons other than their ability to operate the firm efficiently, such as ideological purity, the ability to make political contacts and to lobby effectively for assistance. Managers of private firms are, in principle, chosen on their ability to run the enterprise efficiently.[8] The arguments were buttressed by recent empirical analyses of both developing and advanced industrial economies where privatization efficiency gains have been confirmed. For example, Vining and Boardman (1992) and Megginson et al. (1994), in two seminal papers, report on strong evidence showing that privatized firms do better than state owned enterprises on several performance criteria. Frydman et al. (1997) suggest an additional argument: private ownership is most important when a firm's environment is very uncertain, as is the case for transition economies. Under such conditions, effective entrepreneurial skills, not generally associated with state-run firms, will be required, regardless of the competitive environment. State ownership is likely to be particularly ineffective under such uncertain conditions, even if such firms operate in a competitive marketplace.[9]

---

[7]We owe the idea of revisionism to John Nellis.

[8]Barberis et al. find that new owners, rather than incentive effects, were critical in determining progress after privatization in Russia.

[9]Frydman et al. (1993) also argue that competition cannot substitute for the effects of ownership.

B. Empirical Evidence

13. We turn now to a review of empirical studies relating privatization and performance, and consider first the aggregate level evidence, that is GDP growth and the contribution of privatization or private sector development. In a burgeoning literature testing econometrically for determinants of growth, one does not find, surprisingly, variables such as share of private sector GDP. However, a wider measure, EBRD's synthetic indicator of progress in restructuring and privatization, does yield a positive and significant coefficient in panel regressions for twenty-five transition countries over the period 1991-1997 (Havrylyshyn et al. (1998)). A quantitative picture of this correlation is also evident in the following data from a recent IMF study (1998). Of the above twenty-five countries, those with sustained growth of three plus years had a share of private sector activity that was 66 percent in Central Europe and the Baltics, and 55 percent in CIS countries while those with growth of only 1 to 2 years had shares of 50 percent (South-Eastern Europe) and 44 percent (in the CIS), while the countries with no growth (all in the CIS) had the lowest share of 38 percent. A number of dramatic cases do not fit this relation, especially four which suffered reversals of growth: Bulgaria and Romania in1996-1997 (though Bulgarian growth resumed again in 1998), Russia as of 1998 after a slight one year recovery, and Czech Republic in 1998 after five years of uneven growth. These have higher private sector shares averaging 65 percent at time of reversal. We now turn next to a much richer—indeed vast—literature at the enterprise level.

14. Some early studies found that very little restructuring followed privatization, while others found the converse, that restructuring proceeded even without a change in ownership. Thus, Carlin et al. (1995) demonstrate, on the basis of case studies conducted between 1990 and 1993 of 450 enterprises in the Czech Republic and Slovakia, Hungary, Poland and Russia, that "there was little evidence that privatized enterprises were more likely to restructure than state-owned enterprises" (p. 450). Certainly the recent sharp deterioration in Russia, as well as evidence that a vast proportion of Russian economic activity is carried on through barter, interenterprise arrears, wage arrears, and tax arrears in a non-cash economy, or virtual economy of unrestructured enterprises provides strong evidence against the sufficiency of privatization for efficiency gains (Gaddy and Ickes (1998)).

15. On whether privatization is even necessary for efficiency gains, many, including Carlin et al. (1995) point to early studies of Pinto et al. (1993) finding that many Polish state owned SOE's began reforms early in transition without being privatized; Pinto and van Wijnbergen (1995) in a good summary of such studies attribute this, *inter alia*, to the hardening of budget constraints and the liberalization of trade. Restructuring involved labor-shedding, product mix changes, the diversion of sales to advanced economies, and instituting marketing improvements. It must be stressed, however, that Pinto and van Wijnbergen (1995) do not consider these results as an argument against privatization—on the contrary, they argue that their results indicate a credible privatization program will have positive results even before it is completed, as firm managers strive to improve firm performance in *anticipation* of privatization, to place themselves in an advantageous position in the future market for

managers.[10] A different explanation is in EBRD (1997): the early transition period was characterized by what it terms "defensive" restructuring by both SOEs and privatized enterprises.[11] Such measures were a response to greater competition and a hardening of budget constraints. They suggest, however, that such defensive adjustment is not sufficient to achieve a sustained improvement in performance and that the evidence shows that privatized firms have done better than SOEs in maintaining an improved performance. Aghion et al. (1994) in defense of the view that "privatization is perhaps not necessary, and certainly not sufficient" argue that restructuring did not appear to be closely related to privatization in transition economies except in the case of foreign direct investment. Based on their findings they suggest that restructuring behavior, rather than privatization, should be put at the center of the analysis of enterprise sector reform.[12]

16. But the early studies may have suffered particularly strongly from the qualification noted earlier; it may take several years after privatization to see its effects. As transition has continued and as more empirical studies have been undertaken, it appears that the views in the first school of thought—that privatization was not central for restructuring and firm performance—have been largely discredited. Most recent studies have found that privatization has almost invariably been associated with some degree of improved enterprise performance in transition economies, irrespective of the background competitive environment. They therefore bring the findings for transition economies into line with earlier findings cited for other developing and advanced economies that privatization generally leads to an improvement in enterprise performance.

17. Rather than providing a detailed description of the studies confirming the positive relationship between firm ownership and performance, the main conclusions of a selection of recent studies are presented in Table 3 below.

18. Many of these studies have addressed the potentially serious problem of selection bias. This arises where enterprises are chosen for privatization based on their higher quality (i.e., "cherry picking"), which could possibly undermine the result that privatization brings positive effects. For example, Frydman et al. (1997) compare the performance of privatized firms with that of state firms both prior to and after privatization to ensure that selection bias is not a problem. Earle and Estrin (1996) and Barberis et al. (1996) employ instrumental variable techniques to mitigate against selection bias problems, while Smith et al. (1997) employ a similar two-stage Tobit least-squares procedure. Even after taking account of possible selection bias, however, the above studies find that privatization is associated with better enterprise performance.

---

[10]This type of incentive for managers was formalized earlier in Aghion et al. (1994).

[11]The EBRD includes such measures as labor shedding and wage restraint as "defensive."

[12]Brada (1996) reviews a number of early studies highlighting the reform that had been undertaken by SOE's in Central Europe.

Table 3. Recent Studies Finding Positive Effects of Privatization in Transition Economies

Study	*Year*	*Country Coverage*	*Main Findings*
Djankov and Pohl	1998	Slovak Republic.	Find that privatization is associated with an improvement in performance across many indicators such as labor shedding, spinning off social assets, finding new markets and products, productivity and profitability performance.
Frydman, Gray, Hessel and Rapaczynski	1997	Czech Republic, Hungary, Poland.	Strong evidence that private ownership - except worker ownership - dramatically improves corporate performance. Privatization also associated with employment increases.
Pohl, Anderson, Claessens and Djankov[13].	1997	Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic, Slovenia.	Privatization had a large impact on restructuring. On average, a firm privatized for four years will increase productivity 3-5 times more than a similar firm that is still in state ownership.
Smith, Cin and Vodopivec.	1997	Slovenia.	Find that a percentage point increase in foreign ownership is associated with about a 3.9% increase in value-added and for employee ownership with about a 1.4% increase.
Earle and Estrin	1997	Russia	Privatization results in higher labor productivity and greater restructuring in a variety of areas.
Earle, Estrin and Leshchenko	1996	Russia	Privatization results in somewhat greater depoliticization and restructuring.
Barberis, Boycko, Shleifer and Tsukanova	1996	Russia	The presence of new owners, which results from privatization, increases the likelihood of restructuring.
Pohl, Djankov and Anderson	1996	Bulgaria, Czech Republic, Hungary, Poland, Slovakia.	Progress on privatization corresponds closely to the extent of restructuring of large firms in terms of export performance, efficiency of labor and material use, and profitability.
Belka, Estrin, Schaffer and Singh	1995	Poland	Privatization is associated with greater restructuring across a variety of areas.

[13]This study finds that, with the exception of Hungary, privatization accounts for 70 to 90 percent of the labor productivity growth observed in countries of the CEE with large privatization programs.

19. One exception to the recent positive findings on the results of privatization is Djankov and Kreacic (1998).[14] Using 4 case studies and a survey of 92 manufacturing firms in Georgia over the 1991-96 period, they find that privatization did not affect restructuring, while import competition (i.e., greater competition) was associated with improvements in enterprise performance. They suggest several possible explanations for this finding, including the possibility that the overall Georgian business environment was not conducive to restructuring irrespective of ownership type, the dominance of insider owners and the underdeveloped market for managers.[15] Another possibility, however, is that overall structural reform in Georgia is only now at the stage one saw in the CE countries in the early 1990's. During this early period, as noted above, discriminating between the performances of SOEs and privatized firms was very difficult, given that both were involved in the same type of defensive restructuring at the time, such as labor shedding and wage restraint. As transition continues in Georgia, differences in the performances of state and privately owned firms may become clearer, just as they did in the CE with further progress of reforms.

IV. DIFFERENT METHODS OF PRIVATIZATION (The Agency Problem)

A. Overview

20. The literature reviewed in previous sections generally found that privatization has led to greater restructuring and better enterprise performance in transition economies. However, it may be possible that different forms of privatization bring different degrees of benefits. Accordingly, the relative merits of different methods of privatization in transition economies have been widely analyzed. This section of the paper reviews the rationale for different privatization techniques used, the pros and cons of these techniques, and empirical evidence on the various approaches to privatization.

21. Many different methods of privatization are possible, ranging from the case-by-case direct sales, as adopted in many Western economies, to mass privatization techniques used in

---

[14]Bilsen and Konings (1997) also fail to find a statistically significant difference between employment performance in privatized and SOEs, based on survey evidence from Bulgaria, Hungary and Romania. Employment is only one aspect of a firm's performance, however, and the result may simply reflect the greater reluctance of SOEs to lay off workers at the start of transition.

[15]A variety of factors affects enterprise performance, including the form of ownership. Accordingly, isolating the effects of privatization may prove difficult. Djankov and Kreacic (1998) (pp. 2-5) argue that the theoretical literature on transition has proffered a number of hypotheses on the determinants of enterprise restructuring, viz., macroeconomic stability, fast liberalization, the allocation of property rights and corporate governance, the imposition of hard budget constraints, competition in the final product market and the injection of new human capital. Such factors are covered in Section VI of the paper.

many transition countries. The main types of different privatization techniques are given below:

- Restitution
- Case-by-case direct sales and equity offerings
- Management buyouts
- Employee buyouts
- Mass privatization

22. In practice, transition countries have used a wide variety of techniques and combinations of them, and radically different outcomes have resulted, both in terms of ownership structure and overall efficiency gains. World Bank (1996) provides a table outlining the major privatization methods applied in a variety of transition countries, reproduced below as Table 4.[16] It can be seen, for example, that while sales to outside owners were important in Estonia and Hungary, this was not the case elsewhere. On the other hand, management and employee buyouts accounted for more than half the firms privatized in Russia, while this method did not feature in the Czech Republic. Equal-access voucher privatization was prominent in the Czech Republic and Lithuania, while at the other extreme it was not employed in Hungary. Restitution appears to have been an important source of privatization in Estonia only. Finally, in most countries, apart from Estonia, a very large percentage of the value of medium and large scale enterprises remained in state hands.[17] There does not appear to be any systematic relationship between the initial conditions of a country and the method of privatization.

B. Differences in Privatization Methods—Underlying Reasons

23. The key factor in considering what may be the optimal method of privatization is the goal of efficiency gains. The so-called "agency" problem from industrial organization theory is relevant here: as it is infeasible for owners to also be managers in all situations, a question arises whether the agent (appointed manager) will fully reflect the owner's interest in maximizing profits. Frydman et al. (1997), typify many other writings on the agency problem and summarize a commonly-held view: outside governance mechanisms, such as external competition, securities markets, boards of directors and markets for managerial talent are largely ineffective in transition countries and therefore optimal privatization should have

---

[16]EBRD (1997) also presents a similar type of table for a larger sample of transition countries (see Appendix 1 for details). However, the percentages sold under each method are not given. The EBRD table, which confirms the earlier findings of the World Bank table, highlights the importance of outside sales in the cases of Albania and Bulgaria, the primary role of voucher privatization in a number of BRO countries and the overall popularity of management-employee buyouts across transition countries.

[17]The private sector has, however, expanded rapidly in a number of the countries covered in the table, since the Table was produced.

Table 4: Privatization Methods for Medium-Size and Large Enterprises
(In percent)

Country	Sales to Outside Owners	Management employee buyouts	Equal-access voucher privatization	Restitution	Other	Still in state hands
Czech Republic						
Number of firms	32	0	22	9	28	10
Value of firms	5	0	50	2	3	40
Estonia						
Number of firms	64	30	0	0	2	4
Value of firms	60	12	3	10	0	15
Hungary						
Number of firms	67	13	0	0	3	17
Value of firms	34	3	0	5	7	51
Lithuania						
Number of firms	<1	3-5	70	0	0	25
Value of firms	<1	3-5	60	0	0	35
Mongolia						
Number of firms	0	0	70	0	0	30
Value of firms	0	0	55	0	0	45
Poland						
Number of firms	3	15	6	0	17	59
Russia						
Number of firms	0	55	11	0	0	34

Source: *World Development Report, 1996: From Plan to Market,* page 53.

direct owner monitoring. While this does not imply one method is correct, it does point to a preference for sales to outsiders (including foreigners), and possibly management buyouts, and away from worker buyouts. Mass privatization is also less desirable in this view, unless adequate mechanisms for governance through Investment Funds are in place. Recent skepticism about the effectiveness of governance in the Czech Republic suggests how difficult this is to achieve. A more subtle argument based on achieving the most effective privatization and eventual efficiency gains is that of Lipton and Sachs (1990) who advise great speed via mass equal-access voucher privatization to preclude any opposition slowing down or halting privatization. The complexity of issues is seen in the arguments for speed that favor management (and worker) buyouts in order to co-opt the potential opposition; this view characterized the Russian approach, while the previous one is best exemplified in the approach of the Czech Republic.

24. Note that for an effective and quick mass-privatization approach, it has to be assumed that the sort of outsider mechanisms for control that Frydman et al. mention, either have to be in place, or at least quickly developed to avoid agency problems.[18]

25. The complexity is made even greater in reality since, as Boycko et al. (1994) and Lewandowski (1997) argue, in practice the design of privatization programs in transition economies is largely dictated by political and not economic factors. At the start of transition, because most assets were in state hands, private wealth for buying state assets was inadequate. Although a shortage of domestic wealth is not necessarily problematic for the direct sales approach—it merely implies lower prices for state enterprises—the possibility of state assets being bought at bargain prices by a tiny segment of the population (or foreign buyers), meant that this approach to privatization was politically infeasible in many transition countries. In contrast, because mass privatization allowed a much greater participation by the general population, it was much more politically acceptable than the conventional sales technique. The irony of this may be that in some cases (Russia, Ukraine, etc.) an approach designed to prevent asset concentration in fact may have enhanced it. The shares for loans arrangement in Russia became one mechanism for abusing the aim of greater participation (see para. 31).

26. Similarly, Gray (1996) stresses that for the sake of successful implementation and to minimize opposition, the design of a privatization program must consider the strength of existing stakeholders. Because employees had very little power before independence in East Germany or the former Czechoslovakia, these countries could implement top-down privatization programs. In other countries, such as Poland, and to a certain extent Russia, where workers had greater powers, such an approach was simply not feasible. In Russia, management were given considerable concessions and opportunities as a price for their cooperation. Although allaying the concerns of existing stakeholders may be very important, trade–offs, in terms of economic efficiency, can arise. Gray cites the example of Russia, where the stakeholder power of managers resulted in a heavily insider-dominated privatization process, thereby stalling subsequent restructuring efforts.

[18] The important area of obstacles to outsider intervention and control,warrants further consideration. However, aside from insider resistance discussed in the paper, the literature does not address such obstacles in a comprehensive manner.

C. Pros and Cons of Different Methods of Privatization[19]

27. The pros and cons of the most widely used approaches to privatization are reviewed below,[20] while empirical evidence on the various approaches is covered in the following subsection.

Restitution

28. Restitution involves the return of state assets to their rightful owners in cases where the prior acquisition of the property is deemed unjust. The arguments used in favor of restitution are outlined by Bornstein (1997). It has been argued, for example, that, on moral grounds, it is necessary to redress the worst examples of past injustices. Restitution could also restore public confidence in a country's legal enforcement of property rights. Opponents of restitution contend that it is merely a selective, and therefore unsatisfactory, way of attempting to achieve justice retroactively. Further, certain claims can be complicated and drawn out, thereby prolonging the privatization process unnecessarily. Such delays could stall the overall privatization process by creating an atmosphere of uncertainty about ownership rights. As seen in Table 4 above, except for Estonia and, to a lesser extent, the Czech Republic, restitution has not been a prominent approach to privatization in transition economies.

Direct sales and equity offerings

29. Gray (1996) describes the direct sales and equity offering approaches to privatization. At the start of the transition process, she reports that it was the intention of most countries to privatize through direct sales, thereby following notable examples set elsewhere, such as the United Kingdom and Chile. The initial goal was to sell state assets to outside investors, given the underdeveloped state of domestic capital markets. The purported advantages of this approach include revenue earnings, the introduction of outside expertise and its inherent flexibility. Corporate governance is also likely to be more effective with outside owners. Further, as Boycko et al. (1994) argue, this conventional sales method ensures that, in general, state assets are purchased by the highest-value users.

30. This approach has many drawbacks, however. For instance, lack of domestic capital, weak foreign investor interest, together with the poor quality of information on enterprises,

---

[19]World Bank (1996) produces a table illustrating the relative strengths of the major approaches to privatization. This is reproduced in Appendix 2.

[20]The benefits, or otherwise, of liquidation of unviable, or unsaleable, enterprises, as a method of "privatization," is not addressed in the literature reviewed. Murrell (1992) does, however, raise the important question of whether "privatization is better than simply shutting down existing state enterprises in coordination with the gradual rise of new private enterprises. In the process of privatization, more capital may be used than would be required in the process of creating new firms ..." (p. 59).

has stalled such sales. In addition, the general public may perceive the process as unfair. Indeed, Boycko et al. (1994), while noting the economic advantages of direct sales, argue that the likely resultant distribution of assets after such privatization makes this approach politically infeasible in many transition economies. The direct sales approach also tends to be costly and slow, due to the complex administrative tasks of preparing each state asset for sale individually and subsequently ensuring that buyers fulfill contract provisions. The difficulty of valuing firms to be offered for sale, both for reasons of inadequate accounting and general political and economic uncertainty, further complicates the process. Finally, as argued in EBRD (1997) and Pohl et al. (1996) powerful preexisting stakeholders, such as workers and managers, have, in certain cases, prevented consideration of direct sale privatizations. Equity offerings in state-owned enterprises have been very rare in transition economies. This is due to the underdeveloped state of the stock markets of most transition economies, together with the need for very high quality firms, if this method is to proceed successfully.

31. Given the multitude of disadvantages associated with the direct sales approach, except for Estonia and Hungary sales to outside owners have not been successful in most transition economies, although certain countries pursued this approach vigorously at the start of the transition process[21]. In the former East Germany, although direct sales were a "success," this came at a high price—Brada (1996) reports that the Treuhand in East Germany took in $50 billion but spent $243 billion on privatization. More generally, as Gray argues, even in successful cases, direct sales were undertaken at a very large cost in terms of skilled labor resources and the provision of subsidies to buyers Poland has had the most success with the equity offerings method, although the number of firms it has sold using this technique remains very small. An important example of direct sales gone awry—and contributing to the revisionism and noted earlier—is the shares for loans scheme implemented in Russia in late 1995, in which government borrowings from domestic commercial banks were repaid by shares in state enterprises. While this removed political obstacles and allowed quick privatization, it proved particularly prone to rent-seeking and corruption, severely damaged government credibility, and may not in any event have resulted in expected efficiency gains.

Management-employee buyouts

32. Comprehensive descriptions of the merits or otherwise of management-employee buyouts are contained in Earle and Estrin (1996), Gray (1996), Uvalic and Vaughan-Whitehead (1997) and Bornstein (1997). This approach involves the sale or donation of shares in the relevant enterprises to some combination of managers and employees. The powerful positions occupied by employees and managers in some transition countries (Poland, the former, and Russia, the latter) dictated that this approach had the twin advantages of feasibility and political popularity. Insider privatization also has benefits in terms of speed and ease of implementation. Gray (1996) and others emphasize the costs of yielding to such

---

[21]According to the EBRD table, which is reproduced as Appendix 1, Albania, Bulgaria and Macedonia also relied primarily upon this privatization technique.

interests in terms of efficiency and poor governance. In contrast, it is argued by Earle and Estrin (1996), Shleifer and Vasiliev (1996) and Uvalic and Vaughan-Whitehead (1997) that, under certain conditions, management-employee buyouts can result in more efficient outcomes, in that they align the incentives of workers and owners.

33. This approach to privatization suffers from a variety of serious disadvantages, however. The process may be inequitable in that employees, rather than the population at large, reap most of the benefits that result. The literature on labor-managed firms suggests that insider-dominated firms may end up granting excessive wage increases, may maintain above-optimal employment and undertake insufficient investment. Empirical evidence, some of which is reviewed in the following subsection, suggests that insiders may have few of the skills necessary for a market economy. In advanced industrialized countries, insider ownership has tended to evolve into investor ownership over time.[22] In contrast, Gray (1996) provides evidence that in transition economies insiders have engaged in efforts to block subsequent outsider participation in insider-dominated enterprises, thus inhibiting this source of competition in the privatization process.[23]

34. Despite its many disadvantages, management-employee buyouts have been a popular method of privatization in several transition countries. Croatia, Macedonia, Poland, Romania, the Slovak Republic, Slovenia and Russia and other countries of the BRO have all relied heavily on this form of privatization.[24]

Mass Privatization

35. Mass, or equal-access voucher privatization, has been another popular privatization technique in transition countries. Before being employed in these countries, mass privatization was rarely used elsewhere. This approach to privatization generally involves the government giving away, or selling for a nominal fee, vouchers that can be used to purchase shares in

---

[22]See, for example, Earle and Estrin (1996).

[23]Gray argues, however, that providing minority employee ownership rights may be a particularly advantageous approach. Besides the benefit of perceived fairness, minority employee-owners can monitor managers or outside owners, thereby preventing the looting of firms. Uvalic and Vaughan-Whitehead (1997) note several features of insider privatizations in transition economies which could attenuate their adverse effects. For example, enterprises in many CE countries have been only partially privatized through insider ownership and not all employees participated in such privatizations. Further, in some countries, employees have been given shares with no, or only limited, voting rights.

[24]Sometimes privatization vouchers have been used to provide the necessary liquidity to insiders to purchase shares, as in the cases of Georgia, Moldova and Russia.

enterprises. Several authors such as Gray (1996), Bornstein (1997), Marcinèin and van Wijnbergen (1997) and Uvalic and Vaughan-Whitehead (1997) have provided analyses of the pros and cons of this privatization technique.[25] Their arguments are summarized briefly below.

36. Voucher privatization helps to overcome one major problem of privatization in transition economies—the shortage of domestic capital. Voucher schemes were, at the outset of transition, politically popular because they addressed the perceived unfairness of other privatization techniques and avoided the charges of a sellout of national assets to foreigners. Voucher privatization is more transparent and fairer than, for example, privatization by direct sales through tenders. The difficulties associated with valuing enterprises before privatization are also avoided. Mass privatization, as its name implies, is a very quick and simple way of completing large economy-wide privatization programs, of the type needed in transition economies. Early proponents of this approach, such as Lipton and Sachs (1990) argue that the fast pace of reform, facilitated by voucher privatization, would add to the credibility of reform programs, thereby bolstering their chance of success. Also, in certain cases, this speed did not allow existing stakeholders the time to form an effective opposition to the privatization process. Further, the widespread participation of a country's citizens under this approach fosters a greater understanding of reform and creates a new "owner" class in favor of the reform process. Because of this increased participation and understanding, the voucher approach can also help the development of capital market institutions.

37. The main downside risk of mass privatization relates to the possible dispersed ownership structure that results and the negative impact this can have on corporate governance. Such diffuse ownership could also make access to new sources of capital more difficult. These problems have been addressed, at least in part, by the pooling of ownership interests in investment or mutual funds that either accompanied or followed mass privatization programs. In certain cases, initial ownership patterns of privatized firms were radically altered over time as ownership concentrated into the hands of such funds.[26] Pohl et al. (1997) refer to

---

[25] For a detailed description of the design of voucher privatization, the legal and political background, and an array of country experiences with mass privatization, see Lieberman et al. (1997).

[26] Mertlíck (1997) argues that such funds do not have appropriate management, control, and supervisory powers. Further, they suffer from a lack of information, which enterprise managements closely guard. He contends, in sum, that voucher privatization has therefore resulted in the long-run institutionalization of "absentee ownership" (p. 80). Uvalic and Vaughan-Whitehead (1997) and Ellerman (1998) also criticize the investment funds on a variety of grounds. On the other hand, Frydman et al. (1997) provide empirical evidence which suggests that such funds are associated with strong enterprise performance in the Czech Republic, Hungary and Poland. Furthermore, World Bank (1996) cites the ability of Czech funds to monitor managerial performance effectively through both hands-on shareholder monitoring and active share trading. But more recent views on poor corporate governance in

(continued...)

this subsequent concentration of outside ownership, in a Czech and Slovak context, as the "third wave" of privatization. Lieberman (1997) argues that another problem of mass privatization is that, in most cases, the legal framework was assembled hastily, leaving behind a weak legal framework and poorly defined property rights. Other studies, some of which are cited in Marcinèin and van Wijnbergen (1997), criticize mass privatization techniques on revenue and inflationary grounds. However, well-designed voucher programs, in the presence of tight monetary policy, should not be inflationary,[27] while the budgetary implications arising from the design of privatization programs should be of secondary concern. Finally, Uvalic and Vaughan-Whitehead (1997) criticize voucher schemes on the grounds that lack of information on many firms being privatized led to the overvaluation of well-known enterprises and the undervaluation of, or failure to sell, lesser known firms.

38. Voucher privatization has also been a popular form of privatization in transition countries, with the Czech Republic being the most notable example. Other countries that have relied primarily upon this technique include Armenia, Kazakhstan, the Kyrgyz Republic, Latvia, and Lithuania.[28]

D. Effect of Method on Post Privatization Performance

39. Section III reviewed empirical evidence which generally shows that privatization is associated with better enterprise performance. As highlighted above, the form of privatization may also affect performance, for example, because of the relative power of employees, managers and outside owners. As Earle and Estrin (1997) and Frydman et al. (1997) argue, this is especially true in a transition economy context, where the ability of owners to exercise control is very important, given both the scale of enterprise restructuring needed and the weakness of alternative governance mechanisms. Accordingly, in this part of the paper, empirical evidence on ownership structure and firm performance in transition countries is briefly reviewed, with particular emphasis on the distinction between insider and outsider privatization.[29]

---

[26](...continued)
the Czech case posit a contrary view.

[27]Estrin and Stone (1997) argue that "mass privatization injects sufficient liquidity into the system to transfer ownership from the state to private individuals, while limiting the inflationary impact by ensuring that the credits cannot be used to finance consumption directly" (p. 173).

[28]Georgia, Moldova and Russia also enacted voucher-based programs, although significant concessions were made to insiders, which meant that these cases more closely resembled management-employee buyouts than mass privatization programs.

[29]See Frydman et al. (1996) for a number of references discussing corporate governance and
(continued...)

40. A wealth of empirical work exists covering the relative efficacy of insider and outsider ownership in a transition context. Early in the transition process, Lipton and Sachs (1990) argued that dominant ownership by employees could result in the perpetuation of existing inefficiencies. Their argument has been validated by most of the empirical work that has since been undertaken. For example, while Smith et al. (1997) find that employee ownership is associated with higher value-added than SOEs, these efficiency gains are swamped by those achieved under foreign ownership. Using a sample of Slovenian firms over the 1989 to1992 period, they find that a percentage point increase in foreign ownership is associated with about a 3.9 percent increase in value-added, while for employee ownership the corresponding figure is 1.4 percent. Aghion et al. (1994) in an early paper, based upon case studies of more than 450 enterprises in Poland, Hungary, the Czech and Slovak Republics and Russia, found that insider-dominated privatization did not result in significant restructuring.

41. Frydman et al. (1997), in a study covering medium sized firms in the Czech Republic, Hungary and Poland, uncover significant differences in enterprise performance by ownership type. For a variety of measures, such as revenue and employment, improvements are found to be far greater in outsider-dominated firms than in SOEs.[30] On insider ownership, Frydman et al. argue that making a distinction between managerial and employee insider ownership is important. For employee-owned firms, no discernable revenue effect could be found, compared with SOEs. Further, such firms show much greater reluctance to cut employment than outside investors. In contrast, their results suggest that managerial ownership brings a strong improvement in revenue performance compared with SOEs, although they too display a reluctance to shed labor and cut costs.[31]

---

[29](...continued)
enterprise performance, both in Eastern Europe and Russia.

[30]One unexpected finding of the study is that the revenue performance of firms with foreign investors is no better than that of firms owned by domestic outsiders. The authors put forward a number of possible explanations for this finding: difficulties associated with operating in a new environment, delays in know-how and technological transfer, and the possibility that domestic owners have less restricted access to both external financing and know-how than is commonly assumed.

They also find that the performance of partially privatized firms, in which the state remains the largest owner, is indistinguishable from that of other outside owners. They suggest that, in the CEE countries covered in the study, the state acts as a very passive owner, allowing other, minority, owners to take control, thereby accounting for this unusual result.

[31]The authors caution against the possibility of selection bias being responsible for the positive results obtained for management-owned enterprises. For example in the case of Russia, Earle and Estrin (1997) explain the mixed results on effects of ownership type by arguing that insider choice method of privatization resulted in a selection of best firms for insiders,

(continued...)

42. Similarly, Earle et al. (1996) compare the performance of different ownership forms for a sample of Russian firms. As for the objective of breaking the link between the state and the enterprise sector, they find that *de novo* ownership is most successful. A surprising finding is that while insider, especially managerially-dominated, privatization also serves to weaken the links, the ties between outsider owned firms and the state remained as strong as for the case of SOEs.[32] In contrast, on restructuring priorities and enterprise performance across a variety of variables, differences in performance across ownership categories are not that significant (*de novo* firms are, however, again the exceptions in terms of significantly better performance). The authors suggest that the insignificant differences between ownership categories are probably explained by the fact that their data were gathered early in the restructuring process when all firms including state-owned were engaged in restructuring in response to increasing competition and the progressive imposition of hard budget constraints. The disappointing results for outsiders may also be explained by insiders only ceding control in the worst cases (i.e., selection bias) and the inevitable delays involved in establishing control over a newly-acquired enterprise. Under such circumstances, it may take quite some time before better performance by outsider-owned firms becomes apparent.

43. Djankov and Pohl (1998) find, based upon case studies of 21 Slovakian firms, that privatization to insiders did not hamper firm restructuring, at least in the initial years after privatization. New insider owners invested heavily in new technology, initiated substantial layoffs, sought foreign partnerships, and were prepared to sell controlling stakes to outsiders in return for additional finance. Uvalic and Vaughan-Whitehead (1997) also review empirical evidence supporting insider ownership.

44. Finally, models of corporate governance suggest that firms with more concentrated outsider ownership structure perform better than those that have a dispersed ownership structure.[33] Claessens et al. (1998), in a study covering Czech firms over the 1992 to 1997 period, find that outside ownership concentration is positively related to productivity, profitability and restructuring. Although this is also the case for firm valuation, the result is not as statistically significant.

---

[31](...continued)
consequently they perform better overall only on basis of better initial conditions.

[32]In the empirical section of their paper, Earle et al. proxy such links by variables covering the sales of products to the state, tax arrears, state or central bank borrowing, the granting of preferential credits, and direct subsidies or tax benefits.

[33]See Shleifer and Vishny (1997) for a survey of the corporate governance literature. Frydman et al. (1996) provide a number of references dealing with corporate governance issues in the context of Eastern Europe and Russia.

E. Conclusions on Post-Privatization Performance

45. A brief summing up may be useful here. On balance, despite some mixed evidence and the difficulties of having a too a short time period of post-privatization experience, and the narrowness of the set of countries that have been studied, a consensus view from empirical studies is emerging. As one can infer from Table 5, there is no one method of privatization that comes out as unambiguously superior to others. However, it also appears that those methods which can be labeled as insider privatization and perhaps particularly worker-dominated cases, generally led to poorer performance than in cases of outsider-dominated privatization. But this conclusion is by no means universally found in available studies, with some noted above finding that, especially in Russia, ties with government remained stronger for outsider cases, with the associated risk that hard-budget discipline is poorly enforced. The one finding that quietly but forcefully surfaces from many empirical studies on "privatization" is that *de novo* firms, as opposed to recently privatized firms, when included in the study, invariably show better performance than any privatized firms, outsider or insider. We turn in the next section to review the limited evidence on the role of *de novo* firms in promoting development of the private sector and the fundamental goal of efficiency improvements in the economy.

46. Indeed it is in particular the dramatic reversals of Russia in mid-1998 that have fed the revisionist spirit noted in para. 10. It is a bit difficult in a literature survey to capture this revisionism as it is rather recent and consists more of conference presentation and journalistic essays than completed research.[34] But the very fact that empirical evidence does **not** find rapid and mass privatization is clearly better, does give grounds for revision. While it is impossible to dispute the evidence that privatization can, and does generally, contribute to efficiency gains, the corollary that it has to be done correctly appears to be equally indisputable.

47. Finally, it is notable that the literature does not provide an explicit test of the simple hypothesis: does speed help or hurt? Perhaps this is explained by the difficulty of separating out the many different determinants of performance, or the fact that only two clear cases of great speed for large-scale privatization (Czech Republic and Russia) can be identified. It may be remarked that each used very different methods of achieving speed, Russia by insider privatization to help overcome opposition, Czech Republic by mass voucher privatization with investment funds. It may also be remarked that both have been criticized—albeit to a greater degree in Russia—for creating a system of ownership without adequate governance

[34]Some studies do point to the danger of insider privatization leading to vested interests that thrive on rent-seeking corruption and monopoly profits and consequently oppose complete reforms. See, for example, Shleifer and Vishny (1997).

Table 5. Studies on Privatization Technique and Enterprise Performance

Study	*Year*	*Country Coverage*	*Main Findings*
Claessens, Djankov and Pohl.	1998	Czech Republic.	Concentration of *outside* ownership positively related to productivity, profitability and restructuring.
Djankov and Pohl.	1998	Slovakia.	*Insider* privatization did not hamper enterprise restructuring.
Frydman, Gray, Hessel and Rapaczynski.	1997	Czech Republic, Hungary, and Poland.	All forms of private ownership–except for *worker* ownership–dramatically improves corporate performance. *Outsider*-owned firms outperform *insider*-owned firms, but *manager*-owned firms in turn outperform *worker*-owned firms. *Foreign* ownership no more favorable than domestic outsider ownership.
Smith, Cin and Vodopivec.	1997	Slovenia.	*Foreign* ownership increases value added at a rate three times faster than does *employee* ownership.
Earle, Estrin and Leshchenko.	1996	Russia.	No significant differences between different forms of ownership of privatized firms. (*De novo* firms perform significantly better, however, on a number of criteria.)
Aghion, Blanchard and Carlin.	1994	Poland, Hungary, Czech Republic, and Slovak Republic.	*Insider*-dominated privatization not associated with significant restructuring.

mechanisms.[35] While this serves to emphasize the early warnings of agency problems, the different approaches of these two cases mean one cannot easily draw from them clear lessons about avoiding poor governance.

V. THE DE NOVO PRIVATE SECTOR (Dinosaurs vs. Greenfields)

48. We noted at the outset one important correction to the original views on privatization, namely recognizing that privatization is only one of the mechanisms to reach the goal of a large private sector, the other allowing and promoting entry of new firms. As EBRD (1997) argues, new, or *de novo*, private firms not only exert competitive pressure on SOEs and privatized firms, but also provide one of the main sources of economic growth in transition

[35]As noted int he conclusions, Estonia and Latvia, made fast and successful progress on privatization.

economies.[36] Indeed, Section II of the paper demonstrated the quantitative importance of the *de novo* sector in overall economic activity across most transition countries. Earle et al. (1996), after failing to find a significant difference between privatized and SOEs in Russia, while uncovering a significantly different performance in *de novo* firms, reach the policy conclusion that governments should concentrate more on the development of small and medium-size enterprises compared with privatization itself.

49. It is important to recognize, however, the interdependence between privatization and new enterprise development. As Earle and Estrin (1997) argue, "the growth of the new private sector depends to a significant extent on assets, including structures and equipment as well as human capital, that are bottled up in state and former state companies, until released by restructuring" (p. 85). If privatization leads to successful restructuring and the release of valuable assets, then it could be considered to be complementary to the development of the private sector. Of course, *de novo* firms can build up their assets with new investments, land or building space from individuals, privatized or small-scale, retail privatization, but the scope for this is limited. Johnson and Loveman (1995) provide evidence that, in the case of Poland, the failure to privatize and restructure large state enterprises increasingly retards the growth of private firms as the reform proceeds.[37] This is due to the valuable resources tied up in SOEs in low-productivity uses, rather than being made available for private enterprises. On the other hand, Murrell (1992) argues that there is a direct trade-off between privatization and the development of a new private sector, as privatization is a slow and costly process, using up valuable resources that could otherwise be devoted to providing a market environment that facilitates private sector growth. The question of whether privatization efforts support or hinder *de novo* private sector development is an important one that deserves greater attention than it has received to date; it is likely to do both, but the interface of the two, and conditions under which complementarity dominates hindrance require further analysis.

50. The background environment discussed in the next section is all important in fostering the growth of the *de novo* private sector. As World Bank (1996) argues, political and macroeconomic stability, price and market liberalization, clear and stable ground rules, and freedom from crime and corruption are all essential in promoting private sector growth as well as providing the stimulus to efficient operation of newly privatized firms. Further, they argue that, although these conditions have generally been met in central Europe and to a somewhat lesser extent in the Baltics, this is not so for the CIS, where many barriers remain. Foreign investors can also provide much of the growth in the *de novo* sector, with the same set of

---

[36]Rondinelli and Yurkiewicz (1996) argue that the development of small- and medium-sized enterprises played a far more important role in Poland's moves toward a market economy than the privatization program, which had tended to lag behind other economic reforms.

[37]Although this may be correct in a narrow sense, the successful development of the private sector in Poland, despite its cautious approach to privatization, strongly suggests that factors other than the freeing-up of state-owned assets play important role in private sector development.

factors influencing their decision to invest. Reflecting these factors, Johnson et al. (1997) find that the size of the share of the *de novo* private sector is generally higher in CE countries and the Baltics than in CIS countries.[38]

51. The capacity of *de novo* firms to provide the engine for growth in transition countries has been highlighted by authors such as Murrell (1992) Johnson and Loveman (1995) and Richter and Schaffer (1996). The infusion of new human capital associated with *de novo* firms, alongside the absence of a need to undertake fundamental restructuring, both provided newly established firms with an advantage over privatized firms. Furthermore, as demonstrated by Earle et al. (1996), significantly fewer linkages exist between *de novo* firms and the state than is the case for privatized enterprises. *De novo* firms are, therefore, associated with a dilution of links between the enterprise sector and the state, thus further improving growth prospects. On the relative performance of new private firms, the results of Earle et al., showing *de novo* Russian firms performed much better than either SOE's or privatized firms, have already been highlighted. Richter and Schaffer also find that, according to a variety of performance indicators, *de novo* manufacturing Russian enterprises performed far better than their state-owned and privatized counterparts. *De novo* firms grew faster, enjoyed higher levels of capacity utilization, expanded employment more rapidly, and invested more. Finally, Bilsen and Konings (1997), in a study of newly privatized firms in Bulgaria, Hungary and Romania, find that *de novo* firms are far more dynamic in terms of job creation, than SOE's or privatized firms. Belka et al. (1995) find that *de novo* firms in Poland outperform privatized enterprises across a variety of indicators. In another study covering Polish enterprises, Johnson and Loveman (1995) provide evidence that *de novo* firms have been the main source of growth and that they have considerably outperformed both SOE's and privatized firms.

VI. BACKGROUND MARKET ENVIRONMENT
(Libra as Economist)

52. Up to now, the paper has not concentrated upon the backdrop against which privatization efforts have taken place. Nevertheless, if a country is to foster sustainable private sector development, not only must it enact a well-designed privatization program, it must also ensure that an accommodating market environment is in place. In the abstract, one can stipulate two diametrically opposed hypotheses: the *first* states that a background environment with ease of entry, competition, along with hard budget constraints is the dominant determinant of eventual performance and the method of privatization is irrelevant. The *second* in contrast would specify that choosing the right method of privatization is critical, because in some cases (e.g., management or insider buy-outs), the result could be development of monopoly interests that will prevent future evolution of a competitive, hard budget environment. Perhaps the right way of putting the question in practice is to ask: in the development of the private sector, what is the relative efficacy of, on the one hand, fostering an appropriate market environment and, on the other, implementing an effective privatization

[38]For details of their findings, see Table 1.

program? This question has not been widely tested empirically. Ganiev (1997) is a recent exception, whose results suggest that restructuring the market environment may be the more important influence. Even with a fully specified model, however, it may be difficult to separate out these two influences because of endogeneity problems. The method of privatization may, for example, depend on the market institutions in place. Further, certain types of privatization and ownership structures may result in the development of better market institutions than others. Indeed, Ganiev notes that the problem of multicollinearity affects his results. Broadly speaking, such a market environment comprises four essential elements, namely, macroeconomic stability, hard budget constraints, competitive markets, and adequate property rights. To place the discussion of privatization in context, therefore, this section of the paper discusses briefly each of the above four aspects of the market environment in turn.[39]

53. *Macroeconomic stability* is vital if the private sector is to prosper. High and variable inflation is widely known to effect an economy's growth prospects adversely.[40] The difficulties of operating in an uncertain environment, and the resultant shortening of business decision horizons, have a particularly negative effect on private sector development. High inflation is usually accompanied by high nominal and real interest rates, thus adding to the costs of private sector investment and constraining private sector borrowing. Furthermore, high inflation is likely to be accompanied by macroeconomic instability in many other areas. For example, high inflation generally reflects an underlying fiscal profligacy. Unsustainably high fiscal deficits are likely to engender uncertainty among private sector agents. Moreover, exchange rate depreciation and volatility, which typically accompany high inflation, add uncertainty to international trading arrangements, thus further stalling private sector development.

54. The enforcement of *hard budget constraints* plays an important role in the development of the private sector. Schaffer (1998) examines soft budget constraints across transition economies. Following Kornai's approach, he defines a soft budget constraint as "a subsidy paid, typically by the state, to loss-making firms to guarantee their survival" (p. 81). Subsidies can take a variety of forms including direct budget subsidies, the provision of soft credit from the state, banks or other institutions, a toleration of interenterprise and persistent tax and energy arrears and the selective lowering of taxes charged to firms in need of assistance. The empirical evidence suggests that "enterprises subjected to financial discipline show more aggressive collection of receivables, a closer link between profitability and investment, and a reorientation of goals from output targets to profits" (World Bank, 1996, p.45). On the effect of competition, Djankov and Hoekman (1996, 1997) found for Bulgaria import competition had no significant effect on productivity growth since it was offset by soft

---

[39]For a discussion of the institutional backdrop very early on in the privatization process in BRO countries, see Im, Jalali and Saghir (1993).

[40]See, for example, Fischer (1996). For the strong relationship between macroeconomic stabilization and growth in a transition country context, see Fischer, Sahay and Végh (1996, 1998) and IMF (1998).

credits to the affected firms; however, market structure had a significant effect on productivity changes.

55. Without hard budget constraints, enterprises have little incentive to become more efficient, as argued by EBRD (1997). The EBRD provides evidence that, while direct budgetary subsidies have been dramatically cut across countries since the start of transition, the stock of tax arrears has been increasing and interenterprise arrears have become increasingly common. Indeed, Schaffer (1998) argues that tax arrears are now one of the most important routes by which budget constraints are softened across a variety of transition countries. The magnitudes are substantial if measured as stocks, ranging from 1–2 percent of GDP to as much as 12 percent of GDP (Russia 1996). Surprisingly these values were very high for CE countries at least to the mid- nineties, at about 7 percent for Poland and Hungary. This raises some questions about how tax arrears affect performance differently in say Poland vs. Russia. Energy arrears and heavily subsidized energy prices are another form of government support in many transition economies. Interenterprise arrears, which are pervasive in transition countries, become a source of soft budget constraint when governments subsequently provide liquidity to support net debtors or put pressure on suppliers to continue supplying firms that are in arrears. Soft bank loans from the banking system, another source of soft budget constraint, have also become widespread. The EBRD provides evidence suggesting that non-performing loans are a very serious problem in transition countries.[41]

56. A radically different approach to economic policy is required if soft budget constraints are to be effectively removed in transition countries. Commitment by governments to programs of international organizations, such as the Fund, can help governments resist the temptation to provide soft budget constraints. Reforms under such programs have included the moderation of direct budget subsidies, the lowering of tax and interenterprise arrears and tackling pricing and arrears problems in the energy sector. Two approaches to address bad loan problems are the liquidation and/or conditional recapitalization of troubled banks. A set of comprehensive prudential banking regulations and effective bankruptcy legislation are also needed for banks to become a source of financial discipline.

57. *Competitive markets* are also important if private sector enterprises are to prosper. As World Bank (1996) argues, firms under central planning were protected from competitive forces, and operated in shortage economies, where everything produced was in demand. Accordingly, under central planning, firms did not need to concentrate on quality, variety or customer service. As discussed above, the elimination of soft budget constraints is essential if competitive conditions are to prevail. The abolition of central planning and the liberalization of prices and trade have also been important additional sources of competitive pressure as transition has progressed. Many studies have shown the positive contribution of increased competition, including that arising from increased openness to trade, to enterprise

[41]See Table 5.3, page 85, in EBRD (1997).

performance.[42] An important domestic source of competitive pressure has been the entry of newly established, or *de novo*, private firms, which were discussed in the previous section of the paper. Such firms have become increasingly important as transition has progressed and as legal barriers to entry have been dismantled. Finally, a competitive labor market is important if private sector development is to flourish. The tightly controlled labor market that prevailed under central planning has largely been replaced by a more flexible labor market environment. For example, Borish and Nöel (1996a, 1996b), in discussing private sector development in the Visegrad countries,[43] argue that, although labor protection legislation remains in place, the general approach in this area was far more flexible than the paternalistic system that prevailed under central planning.

58. Finally, *property rights* lie at the heart of a properly functioning private market economy. Property rights include the right to make use of an asset, to decide on its use by others and to sell and profit from the use of an asset. A properly functioning system of property rights provides appropriate incentives by helping to ensure that the rewards from risk-taking and effort are adequately protected. Borish and Noël (1996a, 1996b) analyze the development of the legal framework covering property rights in a Visegrad context. They note that, although the Visegrad countries had made considerable progress in the legal area of property rights, serious difficulties remained.[44] These include Civil Code shortcomings concerning property rights, weak Collateral Laws, inefficient court proceedings on property rights, and multiple registration of ownership of certain properties. On bankruptcy and liquidation procedures, continuing problems included uncertain values resulting from restitution claims, problems with seizure and resale, a weak judicial infrastructure, theft of assets before bankruptcy proceedings, and social pressure against liquidation in certain cases. Moreover, Rapaczynski (1996) argues that guaranteeing the security of property rights by merely implementing a set of laws and regulations is not possible. He contends that comprehensive property rights must evolve in the context of a market environment—they cannot be simply be implemented from above by the state.

---

[42]EBRD (1997) is a good source of references demonstrating the positive relationship between various forms of competition and enterprise performance (pp. 69-70). A recent study of Russian manufacturing firms in the period 1992–94 (Earle and Estrin, 1997) found a positive correlation between import competition and several enterprise adjustment indicators (labor productivity, total layoffs, new product lines), but the study failed to find an effect on enterprise performance of domestic product market structure. Konings (1997) finds for Hungary and Slovenia that competitive pressure (measured by a market concentration index) has a positive impact on performance, as does the degree of outsider ownership.

[43]The Visegrad countries are the Czech Republic, Hungary, Poland and the Slovak Republic.

[44]Shortcomings in the property rights area are even more fundamental in the former Commonwealth of Independent States (CIS) countries.

59. Overall, this section has provided a brief overview of some areas in which the government must provide an appropriate enabling environment if the private sector is to be allowed to develop. The approach toward providing a proper market environment should be as comprehensive as possible, as reforms in the different areas tend to reinforce each other. In each of the four major areas of reform—macroeconomic stability, hard-budgetary constraints, competitive markets, and property rights—more fundamental difficulties exist in CIS countries. Addressing the remaining difficulties is vital if the private sector is to prosper in the CIS.

VII. Summary and Conclusions

60. The central role of privatization in economic reforms, and its positive contribution to growth in transition economies, make it important and useful to reflect on the experience of a decade. The aim of this paper was to review the literature on privatization in transition countries to date and draw some key lessons for the period ahead. We summarize the conclusions from the literature under the five headings noted in the introduction.

The Labors of Hercules

61. The magnitude of privatization already achieved is historically unprecedented, with hundreds of thousands of small firms and service establishments, and perhaps 60,000 medium- and large-scale units privatized in less than a decade. For comparison, non-transition economies privatized about 6,800 medium- and large-scale entities over the period 1980 to 1991. A first conclusion might then be: *privatization can be done quickly and massively. But beyond privatizing state assets*, which was the key task highlighted early in the transition, we have learned that *permitting rapid development of de novo private sector firms may be just as important.* The magnitudes here have also been unprecedented. Though comprehensive data for all transition countries are hard to come by, it is clear that new entries also number in the hundreds of thousands for many of the large-transition countries—indeed in the millions for the entire group of 25 or so non-Asian transition economies.

62. But the impressively large numbers on expansion of the private sector in these economies hide a more mixed story concerning the efficiency improvements that have so far resulted from the private sector's evolution. The broadest indicator of efficiency improvement is growth of GDP, and with positive growth rates now being recorded in most transition countries, despite a handful of reversals and slowdown in 1998, this is at least indicative of the positive impact of increased private sector involvements in such economies.[45] Any conclusions on firm-level performance are still tentative since the period of time from the beginning of significant private sector activity is limited; in a very few countries in central Europe it is nearly a decade, but for many others and in particular the CIS countries, it is not much more than 2-3 years.

---

[45]Of course, the Russian crisis is expected to have a dampening influence on growth prospects in transition countries in general, and in BRO countries in particular.

The Efficiency Bottom Line

63. So far the empirical evidence strongly suggests that some privatization of any form is better than none. Very early evidence from Poland showing state enterprises could improve efficiency surprisingly quickly, led some observers to the view that efficiency was possible without privatization, not only in theory as has been known since Lange, but in practice. But the authors of these studies themselves never claimed such an interpretation explaining the phenomenon as follows: managers expected eventual privatization and hoped their good performance would assure their survival after privatization. Since these early results on Poland, *substantial numbers of recent empirical studies have been done for other countries. They almost invariably show privatized enterprises perform much better than state enterprises*. For example, Pohl (1997), using survey data for several thousand privatized and state-owned firms from seven Eastern European countries, shows that, on average, privatized firms have annual total factor productivity growth as high as 4-5 percent, five times higher than still state-owned enterprises even when one controls for the degree of bank lending and subsidies, and other country-specific conditions. Privatized firms reduced their labor force by 20 percent more than comparable, state-owned firms, and ceased to receive direct government subsidies. Many studies find strong evidence of positive effects of private ownership on several measures of enterprise performance.

64. While *the conclusion is clear that privatization is necessary*, the above results do not assure that all privatizations are sufficient to achieve the best possible efficiency gains. Though it is early to reach a definite conclusion, the empirical analysis and quantitative assessments of experience so far, do suggest that the form of privatization does matter, as do the pressures of competition and market environment.

65. *On speed, the hypothesis* "Tis better 'twere done quickly" *remains unverified and indeed virtually unresearched.*[46] Students of the problem are tempted by the comparisons of three cases: Poland (slow but deliberate progress), Russia and Czech Republic (speedy). The former appears to be far more successful, and the latter somewhat less successful; Russia dramatically less so. But two difficulties preclude a clear conclusion. Most other countries are in the slower group, their success is decidedly mixed, and in most cases far less of a success than Poland. Moreover, Estonia and Latvia made fast and successful progress. Also, the other conditioning factors in the three cases vary a great deal. In the recent revisionist view, the risk of great speed is that privatization may be done incorrectly, institutional developments may be given too little emphasis, and the process may be captured by rent-seeking, anti-reform interests. That this has happened can be demonstrated; that it was inevitable cannot. But perhaps, to noneconomists (certainly historians), this is all a moot question. At the pace of privatization seen since 1989, it will be almost complete for most of these countries in another decade, and twenty years for such a large task will be judged to have been very quick indeed.

---

[46]Another area of the literature that appears to be unresearched is the impact of alternative methodologies on fiscal outcomes and revenue proceeds from privatization.

The Agency Problem

66. The *method of privatization does seem to matter a great deal in explaining efficiency improvements*, confirming the concerns of those that emphasized early on the agency problem: non-owner managers, or agents, may not have the same profit incentives as owners, and may therefore not operate in the optimal way assumed in theory. Though the evidence is far from clear, there does fall out of the empirical literature an approximate ordering of superiority. *De novo firms are clearly the best performers showing the greatest efficiency gains; outsider dominated firms, especially with foreign investors involved, generally show good improvements; insider-dominated firms are the least efficient among the newly privatized, with an unclear distinction between management and worker dominated cases; the least efficient of all are the remaining state-owned enterprises.*

67. Furthermore, the method of privatization appears to matter a great deal in a way not foreseen earlier: *some forms of insider dominated privatization may generate rent-seeking oligopolistic vested interests which will work against the establishment of an open, competitive environment, and against providing a level playing field for de novo entrepreneurial activity.* With government privileges added (most commonly so far in the form of tax exemptions) the result is a continuation of a soft-budget and a distorted allocation of resources toward the less efficient, and the politically favored.

The Dinosaurs vs Greenfields Choice

68. On the question of whether it is possible to expect old dinosaurs to learn new profit-maximizing tricks after privatization, or whether it is better to give up on them, the evidence suggests that a combined approach may be best. *De novo* or greenfield activity has been very important in expanding the size of the private sector and also in achieving efficiency gains in the economy. *De novo firms are overwhelmingly shown to be most efficient and superior to even the best privatized* firms. But the ordering of privatization forms noted in para. 66 also means that *some dinosaurs can learn new tricks and not all should be dismissed as hopeless.* Perhaps an equally important conclusion emphasizing the underestimated *importance of de novo firms*, is how *their presence contributes to the appropriate competitive environment and puts pressure on newly privatized firms of all types to achieve comparable efficiency.* Of course this relies on "ease of entry" to permit *de novo* firms to be set up and thrive.

Libra as Economist and the Blind Justice of Market Competition

69. A *major explanation for differences in performance* among different forms of privatization as well as *de novo* firms *lies in the role of hard budget constraints.* Continued direct subsidies, imprudent bank lending, and write-offs of bad debt by the government retards enterprise restructuring. Further, it may be rational for managers to spend more time lobbying the government for support rather than undertake painful restructuring measures. But soft budget constraints are not necessarily restricted to state-owned units and can be provided in ways other than direct government subsidies, including tax arrears. There is no evidence yet

on whether such support is limited to recently privatized firms, as one would expect, or if sometimes *de novo* firms benefit as well. An important complementary factor is the degree of competition enterprises face, though the existing empirical evidence on this is still limited. Such arguments illustrate clearly that, *in order to foster the emergence of an effective private sector, not only is the implementation of a well-designed privatization program important, but the institution of an appropriate enabling market environment is also vital.* It is tempting to conclude that the general market and competition environment is much more important than the method of privatization. Eventually, evidence may support this, but the literature so far does not clearly permit such a conclusion. In favor of it are two findings: *de novo* firms out–perform others no matter what privatization method is used and they clearly face the winds of competition; also central European private sector development is more successful than that of CIS countries partly reflecting a better property rights business environment. But these are impressionistic "facts." Against reaching such a conclusion is the fact that so far almost no empirical studies have controlled for market environment, degree of competition, rule of law and other institutional factors.

Progress and Methods of Privatization of Medium-Sized and Large Enterprises[1]

	EBRD large-scale privatization transition indicator score	Sale to outside owners	Voucher Privatization: Equal access	Voucher Privatization: With significant concessions to insiders	MEBO[2]	Other[3]
Albania	2	Primary	-	-	-	-
Bulgaria	3	Primary	Secondary	-	-	-
Croatia	3	-	-	-	Primary	-
Czech Republic	4	Secondary	Primary	-	-	-
FYR Macedonia	3	-	-	-	Primary	-
Hungary	4	Primary	-	-	-	Secondary
Poland	3+	Tertiary	Secondary	-	Primary	-
Romania	3-	Secondary	-	-	Primary	-
Slovak Republic	4	-	Secondary	-	Primary	-
Slovenia	3+	Secondary	-	-	Primary	-
Estonia	4	Primary	-	-	Secondary	-
Latvia	3	Secondary	Primary	-	-	-
Lithuania	3	-	Primary	-	Secondary	-
Armenia	3	-	Primary	Secondary	-	-
Georgia	3+	-	-	Primary	Secondary	-
Kazakhstan	3	Secondary	Primary	-	-	-
Krygyzstan	3	-	Primary	-	-	-
Moldova	3	Secondary	-	Primary	-	-
Russian Federation	3+	Secondary	-	Primary	Tertiary	-
Tajikistan	2	-	-	-	Primary	-
Ukraine	2	-	Secondary	-	Primary	-
Uzbekistan	3	-	-	-	Primary	Secondary

Source: *EBRD Transition Report 1997*, page 90.

1/ Progress in privatization of medium-sized and large enterprises is measured by the EBRD's transition indicators. A score of 2 indicates that up to 25 percent of state-owned enterprises assets have been privatized, a score of 3 that up to 50 percent of these assets have been privatized, and a score of 4 that more than 50 percent have been privatized. A+ or - indicates a borderline score. Primary, secondary and tertiary denote the first, second and third most important privatization methods in a particular country, according to their contribution to privatization of state-owned enterprise assets.

2/ Management-employee buy-outs.

3/ Includes asset sales through insolvency proceedings and a mass privatization program based on preferential credits.

Tradeoffs Among Privatization Routes for Large Firms					
Method	Objective				
	Better corporate governance	Speed and feasibility	Better access to capital and skills	More Government revenue	Greater fairness
Sale to outside owners	+	-	+	+	-
Management-employee buyout	-	+	-	-	-
Equal-access voucher privatization	?	+	?	-	+
Spontaneous privatization	?	?	-	-	-

Source: *World Development Report 1996, From Plant to Market*, p. 52.

References

Aghion, Philippe, Olivier Jean Blanchard and Wendy Carlin, 1994, "The Economics of Enterprise Restructuring in Central and Eastern Europe," CEPR Discussion Paper No. 1058 (London: Centre for Economic Policy Research).

Barberis, Nicholas, Maxim Boycko, Andrei Shleifer and Natalia Tsukanova, 1996, "How Does Privatization Work? Evidence from the Russian Shops," *Journal of Political Economy*, Vol. 104, pp. 764-790.

Belka, Marek, Saul Estrin, Mark Schaffer and I. Singh, 1995, "Enterprise Adjustment in Poland: Evidence from a Survey of 200 Private, Privatized and State-Owned Firms," CEPR Discussion Paper No. 233 (London: Centre for Economic Policy Research).

Bilsen, Valentijn and Jozef Konings, 1997, "Job Creation, Job Destruction and Growth of Newly Established Private Firms in Transition Economies: Survey Evidence from Bulgaria, Hungary and Romania," mimeo., Leuven Institute for Central and East European Studies, Katholieke Universiteit Leuven, Belgium.

Blanchard, Olivier, 1997, *The Economics of Transition in Eastern Europe* (Oxford: Clarendon Press).

Borish, Michael and Michel Noël, 1996a, "Ahead and Still Gaining? Where the Private Sector Stands in the Visegrad Countries," *MOCT-MOST*, Vol. 6, pp. 25-57.

Borish, Michael and Michel Noël, 1996b, *Private Sector Development During Transition - The Visegrad Countries*, World Bank Discussion Paper No. 318 (Washington: The World Bank).

Bornstein, Morris, 1997, "Non-Standard Methods in the Privatization Strategies of the Czech Republic, Hungary and Poland," *Economics of Transition*, Vol. 5, pp. 323-338.

Boycko, Maxim, Andrei Shleifer and Robert W. Vishny, 1994, "Voucher Privatization," *Journal of Financial Economics*, Vol. 35, pp. 249-266.

Brada, Josef, 1996, "Privatization is Transition - Or Is It?," *Journal of Economic Perspectives*, Vol. 10, pp. 67-86.

Carlin, Wendy, John Van Reenen and Toby Wolfe, 1995, "Enterprise Restructuring in Early Transition: The Case Study Evidence from Central and Eastern Europe," *Economics of Transition*, Vol. 3, pp. 427-458.

Claessens, Stijn, Simeon Djankov and Gerhard Pohl, 1998, "Ownership Structure and Corporate Performance: Evidence from the Czech Republic," mimeo., The World Bank.

Djankov, Simeon, 1998, "Business as Unusual: Enterprise Restructuring in the Commonwealth of Independent States," mimeo., The World Bank.

Djankov, Simeon and Bernard Hoekman, 1996, "Fuzzy Transition and Firm Efficiency: Evidence From Bulgaria, 1991-94," CEPR Discussion Paper No. 1424 (London: Center for Economic Policy Research).

_______, 1997, "Trade Reorientation and Post-Reform Productivity Growth in Bulgarian Enterprises," World Bank Policy Research Working Paper No. 1707 (Washington: World Bank).

Djankov, Simeon and Vladimir-Goran Kreacic, 1998, "Restructuring of Manufacturing Firms in Georgia: Four Case Studies and a Survey," mimeo., The World Bank.

Djankov, Simeon and Gerhard Pohl, 1998, "Restructuring of Large Firms in the Slovak Republic," forthcoming, *The Economics of Transition.*

Earle, John and Saul Estrin, 1996, "Worker Ownership in Transition," in *Corporate Governance in Central Europe and Russia, Vol. 2*, ed. by Roman Frydman, Cheryl Gray and Andrzej Rapaczynski (London: Central European University Press).

Earle, John and Saul Estrin, 1997, "After Voucher Privatization: The Structure of Corporate Ownership in Russian Manufacturing Industry," CEPR Discussion Paper No. 1736, (London: Center for Economic Policy Research).

Earle, John, Saul Estrin and Larisa Leshchenko, 1996, "Ownership Structures, Patterns of Control, and Enterprise Behavior in Russia," in *Enterprise Restructuring and Economic Policy in Russia*, ed. by Simon Commander, Qimiao Fan and Mark E. Schaffer (Washington: The World Bank).

EBRD, 1997, *Transition Report 1997 - Enterprise Performance and Growth*, (London: European Bank for Reconstruction and Development).

EBRD, 1998, Transition Report 1998 (draft version), (London: European Bank for Reconstruction and Development).

Ellerman, David, 1998, "Voucher Privatization with Investment Funds: An Institutional Analysis," World Bank Policy Research Working Paper No. 1924, (Washington: World Bank).

Estrin, Saul and Robert Stone, 1997, "A Taxonomy of Mass Privatization," in *Between State and Market–Mass Privatization in Transition Economies*, ed. by Ira W. Lieberman, Stilpon S. Nestor and Raj M. Desai (Washington: The World Bank).

Fischer, Stanley, 1996, "Why are Central Banks Pursuing Long-Run Price Stability?,"in *Achieving Price Stability*, Papers and Proceedings of a Symposium Sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August.

Fischer, Stanley, Ratna Sahay and Carlos Végh, 1996, "Stabilization and Growth in Transition Economies: The Early Experience," *Journal of Economic Perspectives*, Vol. 10, pp. 45-66.

Fischer, Stanley, Ratna Sahay and Carlos Végh, 1998, "From Transition to Market: Evidence and Growth Prospects," IMF Working Paper WP/98/52 (Washington: International Monetary Fund).

Frydman, Roman, Cheryl Gray and Andrej Rapaczynski, 1996, *Corporate Governance in Central Europe and Russia, Vols. 1 and 2*, (Budapest: Central European University Press).

Frydman, Roman, Cheryl W. Gray, Marek Hessel and Andrej Rapaczynski, 1997, *Private Ownership and Corporate Performance - Some Lessons from Transition Economies*, World Bank Policy Research Working Paper No. 1830 (Washington: The World Bank).

Frydman, Roman, Edmund Phelps, Andrej Rapaczynski and Andrei Shleifer, 1993, "Needed Mechanisms of Corporate Governance and Finance in the Economic Reform of Eastern Europe," *Economics of Transition*, Vol. 1, pp. 171-207.

Gaddy, Clifford and Barry Ickes, 1998, "Beyond a Bailout: Time to Face Reality About Russia's Virtual Economy," mimeo., The Brookings Institute.

Ganiev, Bahodir, 1997, "Promoting Market-Oriented Enterprise Adjustment in Transition Economies – Cross-Country Analysis," mimeo., International Monetary Fund.

Gray, Cheryl, 1996, "In Search of Owners: Privatization and Corporate Governance in Transition Economies, *The World Bank Research Observer*, Vol. 11, pp. 179-197.

Im, Soo, Robert Jalali and Jamal Saghir, 1993, *Privatization in the Republics of the Former Soviet Union: Framework and Initial Results*, PSD Group, Legal Department PSD and Privatization Group and CFS Joint Staff Discussion Paper (Washington: The World Bank).

IMF, 1998, "Growth Experiences in Transition Economies," mimeo., International Monetary Fund.

Ježek, Tomáš, 1997, "The Czechoslovak Experience with Privatization," *Journal of International Affairs*, Vol. 50, pp. 477-488.

Johnson, Simon and Gary Loveman, 1995, *Starting Over in Eastern Europe - Entrepreneurship and Economic Renewal*, (Cambridge, Mass.: Harvard Business School Press).

Johnson, Simon, Daniel Kaufmann and Andrei Shleifer, 1997, "Politics and Entrepreneurship in Transition Economies," Working Paper Series, No. 57, The William Davidson Institute, University of Michigan.

Konings, Jozef, 1997, "Competition and Firm Performance in Transition Economies: Evidence From Firm Level Surveys in Slovenia, Hungary and Romania," CEPR Discussion Paper Series No. 1770 (London: Centre for Economic Policy Research).

Kornai, János, 1994, "Transformational Recession: The Main Causes," *Journal of Comparative Economics*, Vol. 19, pp. 39-63.

Lewandowski, Janusz, 1997, "The Political Context of Mass Privatization in Poland," in *Between State and Market–Mass Privatization in Transition Economies*, ed. by Ira W. Lieberman, Stilpon S. Nestor and Raj M. Desai (Washington: The World Bank).

Lieberman, Ira, 1997, "Introduction: Mass Privatization in Comparative Perspective," in *Between State and Market– Mass Privatization in Transition Economies*, ed. by Ira W. Lieberman, Stilpon S. Nestor and Raj M. Desai (Washington: The World Bank).

Lieberman, Ira, Stilpon Nestor and Raj Desai (eds.), 1997, *Between State and Market - Mass Privatization in Transition Economies* (Washington: The World Bank).

Lipton, David. and Jeffrey Sachs, 1990, "Privatization in Eastern Europe: The Case of Poland," *Brookings Papers on Economic Activity*, No. 2, pp. 293-341.

Marcinèin, Anton and Sweder van Wijnbergen, 1997, "The Impact of Czech Privatization Methods on Enterprise Performance Incorporating Initial Selection Bias Correction," *The Economics of Transition*, Vol. 5, pp. 289-304.

Megginson, William, Robert Nash and Matthias Van Randenborgh, 1994, "The Financial and Operating Performance of Newly Privatized Firms: An International Analysis," *The Journal of Finance*, Vol. 49, pp. 403-452.

Mertlíck, Pavel, 1997, "Czech Privatization - From Public Ownership to Public Ownership in Five Years?" *Eastern European Economics*, Vol. 35, pp. 64-83.

Murrell, Peter, 1992, "Privatization versus the Fresh Start" in *Uprooting Leninism, Cultivating Liberty*, ed. by Tismaneanu, V. and P. Clawson (Philadelphia: University Press of America).

Murrell, Peter, 1995, "The Transition According to Cambridge Massachusetts," *The Journal of Economic Literature*, Vol. 33, pp. 164-178

Nellis, John, 1998, "Privatization in Transition Economies: An Update," in *Case-by-Case Privatization in the Russian Federation–Lessons from International Experience*, ed. by Harry G. Broadman, World Bank Discussion Paper No. 385 (Washington: The World Bank).

Pinto, Brian and Sweder van Wijnbergen, 1995, "Ownership and Corporate Control in Poland: Why State Firms Defied the Odds," CEPR Discussion Paper No. 1273 (London: Centre for Economic Policy Research).

Pinto, Brian, Marek Belka, and Stefan Krajewski, 1993, "Transforming State Enterprises in Poland: Evidence on Adjustment by Manufacturing Firms," *Brookings Papers on Economic Activity*, No. 1, pp. 213-70.

Pohl, Gerhard, Simeon Djankov and Robert Anderson, 1996, *Restructuring Large Industrial Firms in Central and Eastern Europe–An Empirical Analysis*, World Bank Technical Paper No. 332 (Washington: The World Bank).

Pohl, Gerhard, Robert E. Anderson, Stijn Claessens and Simeon Djankov, 1997, *Privatization and Restructuring in Central and Eastern Europe–Evidence and Policy Options*, World Bank Technical Paper No. 368 (Washington: The World Bank).

Rapaczynski, Andrej, 1996, "The Roles of the State and the Market in Establishing Property Rights," *Journal of Economic Perspectives*, Vol. 10, pp. 87-103.

Richter, Andrea and Mark Schaffer, 1996, "The Performance of De Novo Private Firms in Russian Manufacturing," in *Enterprise Restructuring and Economic Policy in Russia*, ed. by Simon Commander, Qimiao Fan and Mark E. Schaffer (Washington: The World Bank).

Rondinelli, Dennis and Jay Yurkiewicz, 1996, "Privatization and Economic Restructuring in Poland: An Assessment of Transition Policies," *American Journal of Economics and Sociology*, Vol. 55, pp. 145-160.

Sehaffer, Mark, 1998, "Do Firms in Transition Economies Have Soft Budget Constraints? A Reconsideration of Concepts and Evidence," *Journal of Comparative Economics*, Vol. 26, pp. 80-103.

Shleifer, Andrei and Dmitry Vasiliev, 1996, "Management Ownership and the Russian Privatization," in *Corporate Governance in Central Europe and Russia*, ed. by Roman Frydman, Cheryl Gray and Andrzej Rapaczynski (London: Central European University Press).

Shleifer, Andrei and Robert Vishny, 1997, "A Survey of Corporate Governance," *Journal of Finance*, Vol. 52, pp. 737-783.

Smith, Stephen, Beom-Cheol Cin and Milan Vodopivec, 1997, "Privatization Incidence, Ownership Forms, and Firm Performance: Evidence from Slovenia," *Journal of Comparative Economics*, Vol. 25, pp. 158-179.

Uvalic, Milica and Daniel Vaughan-Whitehead, 1997, "Introduction: Creating Employee Capitalism in Central and Eastern Europe," in *Privatization Surprises in Transition Economies: Employee-Ownership in Central and Eastern Europe*, ed. by Milica Uvalic and Daniel Vaughan-Whitehead (Cheltenham, U.K: Edward Elgar).

Vining, Aidan and Anthony Boardman, 1992, "Ownership Versus Competition: Efficiency in Public Enterprise," *Public Choice*, Vol. 73, pp. 205-239.

World Bank, 1996, *From Plan to Market - World Development Report* (Washington: The World Bank).