Final Paper (Economics 2300)

Does privatization lead to the hardening of the budget constraint?

by

Vladimír Zlacký*

Abstract

This paper reviews the recent literature and brings data from the Business Environment and Enterprise Performance Survey to bear on the question of whether privatization leads to the hardening of budget constraints in transition economies. The paper concludes that the decade of the transition experience does not suggest that privatization automatically leads to the hardening of firms' budget constraints. Only if complemented with institutional reforms can privatization be expected to eliminate soft budget constraints. The evidence presented in this paper is consistent with the emerging paradigm that ownership matters, but institutions matter just as much.

* Kennedy School of Government, Harvard University. Mailing address: 64 Dane St., Apt. #2, Somerville, MA 02143. Email: zlackyv@ksg.harvard.edu. Wider circulation of this paper is contingent on the approval of World Bank officials, who provided the BEEPS database to the author for work on the umbrella paper for the World Bank's summit in Prague in September 2000.

1. **Introduction**

Countries of the former socialist block embarking on the road of transformation toward the market economy had to cope with, among other problems, the legacy of structural economic distortions and macroeconomic disequilibria. A crucial element of reform programs to tackle inherited economic problems was the hardening of firms' budget constraints (Kornai 1990). If non-viable firms were not forced to exit or restructure, sectoral reallocation, which is so much needed to free resources to be employed in more productive uses, would not follow. If subsidies continued flowing to firms on the same scale as in the past, the fiscal situation would not get consolidated, and macroeconomic imbalances would persist.

Privatizing firms has been seen as one of the main instruments for hardening budget constraints. Early in the transformation, some even argued that privatization would solve the problem of soft budget constraints by itself. This simplistic view stemmed from some analysts' focus on subsidies as the main source of soft budget constraints neglecting other possible sources. With the benefit of hindsight, did privatization really lead to hardening of budget constraints in the transition economies? This is the question this paper attempts to answer.

I will investigate this issue along two tracks. First, I review the relevant theoretical and empirical literature. Second, I will use the Business Environment and Enterprise Performance Survey (BEEPS) to get additional empirical evidence on the existence of soft budget constraints in transition economies and their main sources.

The picture that this paper paints can be summarized in the following way. The recent literature suggests that privatization is a necessary but not sufficient condition for the hardening of firms' budget constraints. For budget constraints to become hard, the proper institutions constraining the sources of soft budget constraints must be put in place. The empirical investigation using BEEPS suggests privatization hardens budget constraints concerning subsidies and bank

financing. The opposite conclusion is reached with regard to trade credit, tax, and wage arrears. However, these results should be read with utmost caution as there are significant ambiguities regarding the interpretation of the data and the usual caveats concerning a small-sample survey apply.

The paper is organized as follows. Section 2 introduces the concept of soft budget constraints. Section 3 describes the relationship between SBC and privatization. Section 4 reviews the literature evaluating the impact of privatization on SBC. Section 5 contains the empirical investigation using BEEPS. Section 6 summarizes and draws policy implications.

2. Soft budget constraints in socialist economies

The soft budget constraint (SBC) concept was introduced into economic theory by János Kornai (1979, 1980, 1986). The budget constraint is the usual postulate of the micro-theory that the agent's total expenditures cannot exceed his total income. The budget constraint softens when an economic agent expects with a significant probability that another agent, most often the State, will make up for any violation of the agent's budget constraint. Importantly, the subjective probability distribution of the bail-out depends on the collective experience of agents in the economy rather than on the individual history of the agent. When the probability of external assistance is high, and this probability gets built into the agents' behavior, the syndrome of soft budget constraints pervades the economic system and leads to economic inefficiencies.

In general, no economic system is completely immune to the SBC problem. This phenomenon was conspicuously present in the socialist economies, where profitability played no role in the entry, expansion, or contraction or in the exit of firms. The economic structure was being determined by the State, and redistribution from profitable to loss-making firms assured the survival of the latter. However, mixed economic systems also know soft budget constraints. Public utilities,

non-profit institutions, local governments or even financial institutions and occasionally other private firms have their budget constraints softened by the State. This is being justified on the basis of security, solidarity, or other non-economic goals, which, in many cases, may well be worth their economic costs.

If present on a large scale, as in socialist economies, the SBC phenomenon has grave economic consequences. As Kornai (1986) argues, SBC blunts firms' responsiveness to relative prices, which is crucial for economic efficiency. Second, with SBC present, weak performance of firms is tolerated, and hence, the attention of managers is directed toward lobbying for subsidies and other means of softening budget constraints rather than toward improving the firm's efficiency. Ailing firms will survive by tying resources that could be used more efficiently elsewhere. In other words, the economy does not benefit from the Schumpeterian "creative destruction". Third, if firms expect their budget constraints to be relaxed, their expansion drive will not be limited, and shortages in various markets will emerge.

In socialist economies, a firm used to have usual horizontal relationships with its suppliers and customers and a very special vertical relationship with the State. If it made losses, the State softened its budget constraints via various channels. Kornai (1992) mentions soft subsidies, soft taxation, soft credit, and soft administrative prices as possible ways of softening budget constraints. Softness here does not mean low (in case of taxes and interest rates) or high (subsidies and output prices), but rather that the instrument will be dynamically adjusted contingent on the firm's performance so that it is assured that the firm stays in business. However, whatever the channel, the State and its paternalistic preferences were behind the SBC phenomenon.

Given the pervasiveness of SBC in socialist economies, hardening of budget constraints became one of the priorities once countries of the former Soviet block engaged in economic

reforms. As Roland (2000)[1] notes, the continued existence of SBC would a) prevent unprofitable enterprises from restructuring as the threat of bankruptcy would not press them, b) be an obstacle to sectoral reallocation as newly formed enterprises would not be able to hire workers away from the subsidized state-owned enterprises (SOEs), c) jeopardize macroeconomic stability as government expenditures would get out of control.

In light of the recent surge of academic and policy writings on the importance of trust and social capital for economic development, we also need to point out another possible negative consequence of the SBC syndrome[2]. If non-payment of dues in the economy – one of the possible ways of softening budget constraints by firms in transition economies (TEs) - becomes chronic and ubiquitous, it may get encoded in the "culture," thus seriously eroding trust among economic actors. The lack of trust then has negative consequences for economic development, and it might take very long for agents to start trusting each other again[3].

3. Privatization as a suggested cure

Early literature on transition focused on government subsidies as the main source of SBC.[4]. Since privatization makes subsidization of firms costly for politicians – this is well exposited in Shleifer and Vishny's (1994) model – it was assumed that cutting subsidies was sufficient to establish hard budget constraints. This has led reformers to think of hardening budget constraints as a simple policy choice. Privatize and keep fiscal and monetary policy tight, and hard budget constraints will follow.

---

[1] See chapter 9

[2] On the importance of trust for business activity and economic growth, see Fukuyama (1995) and Zak and Knack (1998). On the trust in transition see Raiser (1999).

[3] Data from the World Values Survey show an alarming decline in trust in transition economies since the transition began. Data are available from the author.

[4] Roland (2000), p.214, points at this shortcoming of the early literature " …in an important part of the literature, soft budget constraints are identified with subsidies. For example, Aghion, Blanchard, and Burgess (1994, p 1331) discuss 'subsidies, a plausible characterization of a soft budget constraint.' Boycko, Shleifer, and Vishny (1995, p. 314) write of 'subsidies from the Treasury to firms, also known as soft budget constraints.' Seen in that perspective, hardening of budget constraints is then nothing else but a decision to cut subsidies."

This simplistic view has been proved wrong both in theory and, more importantly, in practice. On a theoretical front, Dewatripont and Maskin (1995) re-cast the idea of SBC into a more general framework. While Kornai stressed paternalistic motives of the State for the repeated bailout of firms under socialism, these authors analyze SBC as a more general dynamic commitment problem of the funding source (not necessarily only the State) not to provide further financing for economically sub-optimal projects. The inability of the center to make this commitment leads the agents to take inefficient action as they expect a bailout if things go wrong. The solution to the problem of SBC is to create institutions that enable funding sources to make credible commitments. This model implies that hardening budget constraints does not simply entail cutting subsidies but rather a proper institutional design.

On the empirical side, various authors found that subsidies are not the main source of SBC in TEs. Kornai (1999) provides a review of the recent literature. World Bank (2001) contains a study of the financial performance of a large sample of Romanian enterprises in 1995-8. The report shows that Romanian chronic loss-making firms financed their losses mainly by increasing unpaid tax bills and bank credit. Government subsidies and trade credit seem to be only minor sources of softening of budget constraints. This finding is partially in line with Shaffer (1998), who argues that trade credit in TEs is no larger than in Western countries, that tax arrears constitute a significant source of SBC, but, unlike the World Bank's study on Romania, that importance of banks as a source of SBC in TEs has been exaggerated.

Generalization of the SBC phenomenon, as done by Dewatripont and Maskin (1995), is important for understanding it in the context of transition, when its roots changed and were not necessarily stemming only from the state's paternalistic preferences. Rather, a more complex approach—accounting for institutional inadequacies and state capture by firms—is appropriate for understanding SBC in TEs. We follow the literature and focus on five possible sources of SBC and the expected impact of privatization on them.

a) Subsidies. This is the traditional source of SBC, which was supposed to be eliminated by privatization. When the company is private, it is much more costly for politicians to persuade it to take actions that are in line with politicians' objectives but might contradict profit maximization. Furthermore, with political regimes in TEs becoming democratic, public finance comes under public scrutiny, making it harder for politicians to use public money for their narrow goals. We expect privatization to lead to the elimination (reducing the importance of) of this source of SBC.

b) Bank financing. There are at least two reasons why this source of SBC should be important in TEs. First, the privatization of banking sectors in TEs has been gradual (and is still not completed in many places), making it possible for politicians who appoint bank managers to bail out firms if that fits their political goals. Using directed lending rather than outright subsidies has the advantage of disguising the transfers from public yes. Second, as Dewatripont and Maskin's (1995) model suggests, even if banks are private, the problem of SBS arises if the institutional environment does not enable the bank to make a credible commitment not to refinance ailing firms. Given the two above-mentioned possible reasons for the continuation of SBC via bank financing, it is not obvious at all that the privatization of *firms* should automatically shut down this source of SBC.

c) Tax arrears. If the tax authorities are weak in enforcing the collection of their tax claims, firms in financial dire straits will try to delay their payments to tax authorities. If the claims or penalties are periodically written down, either on the assumption that the full repayment would ruin the company and deprive the authority of future revenues or simply because tax authorities get bribed, the problem of SBC emerges. Given that the law enforcement in TEs is often weak and/or the state bureaucracy captured, the tax arrears can be a significant source of SBC. Again, there is no reason to expect that, without complementary institutional reforms, privatization will automatically lead to the hardening of budget constraints.

d) Arrears to suppliers. Another way of financing losses is for the companies to delay their payments to their suppliers. However, if companies operate in an economy dominated by private firms, this financing channel should be limited. No rational private firm will continue bailing out its unviable customers. The picture changes if a substantial part of the economy is in the State's hands or if the State tolerates that few of its large companies operating in the economy dominated by private firms, such as utilities, continue to refinance private firms. From this, it follows that the privatization of firms should diminish, but, unless complete, not eliminate, the possibility of an incentive for the State to relax budget constraints of firms via trade credit. We should thus expect some relationship between the privatization of firms and the hardening of budget constraints in the economy, but as long as state-owned firms exist, this source of SBC will not be completely eliminated.

e) Wage arrears. This can only be a source of temporary softening of budget constraints. One can hardly expect workers to continue writing down their claims on their employers and remain interested in working for them. Here, the link with privatization is not obvious. On a slightly speculative note, one could perhaps expect that employees should be able to tolerate non-payment of wages by the SOEs more than by private firms since they get more job security in exchange. If this argument is correct, then privatization should lead to lower wage arrears

4. Review of the literature on the impact of privatization on SBC

Most of the literature to date has focused on investigating the impact of privatization on the performance of firms rather than specifically on eliminating their soft budget constraints. A strong performance of firms suggests that hard budget constraints are being applied, for under SBC the firms would have little incentive to restructure and thus increase their efficiency (EBRD, 1997), but the two concepts are not identical (and do not imply each other).

The empirical literature on the impact of privatization on the enterprise performance is vast and is reviewed in Havrylyshyn and McGettigan (1999) and Roland (2000). At the cost of some simplification, one can capture the essence of these studies by summarizing:

a) Some early studies, naturally using data over only a short time span, found no difference in performance between SOEs and privatized firms or even that state ownership is superior to privatization to insiders and to mass privatization in some countries over some time periods.

b) Later studies tend to find that concentrated outside ownership following privatization dominates insiders' ownership, ownership by dispersed individuals, and state ownership in terms of enterprise performance.

c) The most robust finding of this literature is that *de novo* firms – firms formed after the transition began – show better performance than any privatized firms or SOEs.

d) Firms owned by foreign investors show stronger performance than firms owned by domestic investors.[5]

Literature explicitly investigating the impact of privatization on SBC is much scarcer. Early studies by World Bank's researchers Pohl, Anderson, Claessens and Djankov (1997) and Claessens and Peters (1997) show that large private sector is associated with harder budget constraints in TEs.

EBRD (1999) presents some evidence on the relationship between state governance, state capture – the ability of firms to influence government decisions - and large-scale privatization. Countries are split into two groups: "high capture" and "low capture" countries. The study found that privatization's effect on governance quality is positive only in low capture countries. If we

[5] Analyzing balance sheets and income statements of 100 largest firms, Barto and Zlacký (1998) also reach this conclusion (for Slovakia)

associate poor quality of state governance with higher incidence of SBC, then the results of the study can be read as evidence that privatization need not lead to hardening of budget constraints.

Roland (2000) argues that mass privatization, as, for example, carried out in the Czech Republic, may have led to the persistence of SBC as powerful lobby groups created by mass privatization lobbied the State not to create pre-conditions for hard budget constraints. Also, Kornai (1999), contrasting the experience of Hungary and Poland with that of the Czech Republic, argues that privatization is not a sufficient condition for the hardening of budget constraints. Mass giveaway privatization in the Czech Republic led to the creation of powerful investment funds, owned by banks that were still state-owned or had close ties to politicians, as controlling investors in firms, thus preserving the old link between firms and the State.

Finally, using macro data to proxy economic performance, Sachs et al. (2000) investigate which factors contribute to the gains from privatization in TEs. One of the central findings of the paper is that real gains from privatizations come from complementing reforms aimed at hardening budget constraints with change-of-title reforms. While Sachs et al. (2000) do not perform a direct test of whether privatization leads to hard budget constraints, if there were a perfect correspondence between privatization and (a lack of) SBC, the empirical proxy of the latter would have no explanatory power in the authors' regression tests. The authors endorse the newly emerging paradigm - "ownership matters, but institutions matter just as much".

In conclusion, the literature suggests that privatized firms perform better than SOEs, but not unconditionally. Voucher privatization or privatization to insiders does not necessarily lead to performance improvement. More to the main question investigated by this paper, the little evidence that there is on the relationship between privatization and SBC suggests that there is no clear causal relationship between privatization and the hardening of budget constraints. Whether privatization hardens budget constraints likely depends on the privatization method chosen, the ownership structures that ensue, and the existence of a proper institutional framework (such as corporate

governance mechanisms, strong regulatory bodies)[6]. As Roland (2000) argues, there is a lot of empirical work yet to be done to understand the relationships (and specific channels) between privatization and hardening of budget constraints. The next section attempts to make one, though very modest, step towards redressing this lack of evidence.

5. A simple empirical test using the BEEP survey

As already mentioned, the early literature and reform programs in TEs focused on government subsidies as the principal source of SBC. Further advances in theory (i.e., Dewatripont and Maskin, 1995), empirical studies, as well as anecdotal evidence from the TEs, shifted the attention of analysts to other possible sources of SBC. The merits of five potential sources – government subsidies, bank financing, trade credit, tax, and wage arrears – are investigated using the Business Environment and Enterprise Performance Survey (BEEPS)[7].

5.1 Government subsidies

Table 1 presents data on a traditional source of SBC, government subsidies. We sliced the sample along two dimensions – ownership and geographical location. The first cut generates three types of firms – formerly state-owned, which were privatized, state-owned, and *de novo*. The second cut puts firms into four clusters: Central Europe, Baltics, Southeastern Europe, and CIS[8].

In the whole sample, less than 14% of privatized companies reported receiving government subsidies, while more than twice as many SOEs reported being subsidized. Only slightly more than

---

[6] On the importance of strong financial market regulators in TEs, see Glaesser, Johnson, and Shleifer (2001). Pistor, Raiser, Gelfer (2000), and Pistor (1999) stress the importance of strong law enforcement for financial development.

[7] The survey is a joint product of EBRD and World Bank. The two institutions commissioned AC Nielsen, an international market research company, to conduct face-to-face interviews with firm managers in 26 transition countries in 1999. In each country between 125 and 150 firms were interviewed with the exception of three large countries; in Poland 205, in Russia 550, and in Ukraine 250 firms were surveyed.

[8] The clusters are defined as follows. *Central Europe*: Czech Republic, Hungary, Poland, Slovakia, and Slovenia, *Baltics*: Estonia, Latvia, Lithuania, *Southeastern Europe*: Albania, Bosnia, Bulgaria, Croatia, FYR Macedonia, Rep. Serbska, and Romania, and *CIS*: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Ukraine, Uzbekistan.

4% of *de novo* firms receive subsidies. All three categories of firms reported being less subsidized than they were three years ago. While the basic pattern of SOEs receiving more subsidies than privatized firms holds in all regions, the share of subsidized firms differs markedly.

Table 1.

Does your enterprise receive subsidies from local or national government ? Did your enterprise receive subsidies 3 years ago ?		
TEs	% reporting Yes	% reporting Yes 3 yrs ago
Privatized	13.77	17.31
SOE	28.04	29.42
De Novo	4.33	5.31
CENTRAL EUROPE		
Privatized	16.58	21.55
SOE	43.81	45.63
De Novo	6.31	9.52
BALTICS		
Privatized	20.22	26.19
SOE	22.12	21.05
De Novo	2.80	4.48
SOUTHEASTERN EUROPE		
Privatized	8.19	9.38
SOE	23.56	25.90
De Novo	3.54	3.42
CIS		
Privatized	13.54	16.89
SOE	26.06	27.31
De Novo	4.04	4.3

Source: BEEPS

An inspection of the table suggests two other interesting facts. First, the highest share of SOEs reporting government subsidies is in Central Europe. Second, the highest share of privatized firms reporting subsidies is in the Baltics, followed by Central Europe. This may seem counterintuitive in light of aggregate figures for government subsidies in TEs, which show the extent of budgetary subsidies to be twice as high in some CIS countries (such as Russia and Ukraine) than in other TEs (EBRD, 1999). One possible explanation for the first finding is that, with privatization almost completed in Central Europe, a few remaining SOEs are utilities and other public goods-providing companies (where some subsidization might be economically justified), and

thus, the total value of subsidies is relatively small even though a large share of these companies is subsidized. A possible explanation for the second fact (which might also be relevant to the first finding) is that in Central Europe and the Baltics, the governments provide relatively small subsidies (such as for the creation of new jobs or R&D) to a relatively large number of companies. On the other hand, it may well be that in CIS government subsidies are a result firms' lobbying and a relatively small number of large powerful firms captures a large bulk of subsidies. This explanation squares well with the findings of EBRD (1999) and Hellman et al. (2000) that the problem of state capture is more acute in CIS than in Central European or Baltic countries.

It seems fair to conclude that, possible geographical puzzles notwithstanding, the evidence presented above suggests that privatization reduces the amount of subsidies available to firms. However, before concluding that this is equivalent to the hardening of budget constraints as far as government subsidies are concerned, one caveat is in place. EBRD survey and our tabulated data do not directly tackle the issue of whether subsidies are being dynamically adjusted contingent on firms' performance, which is what we associate with SBC, but only shows how prevalent the subsidies are. While there is a link between the two phenomena, they are not equivalent.

5.2 Bank financing

As already mentioned, it has been suggested by several analysts, such as Berglof and Roland (1997,1998), that bank financing is an important source of softening of budget constraints. In order to investigate the merits of this argument, we tabulated companies' answers to the question of how important is the influence of creditors with respect to reducing production costs. If we associate a higher stringency of creditors with harder budget constraints being applied, we can measure how important this source of SBC is TEs.

Table 2.

Is the influence of creditors on reducing costs important ? (1 = not at all, 2= slightly, 3=fairly, 4=very important)		
TEs	It is important (2,3,4)	Mean answer
Privatized	58.07	2.02
SOE	47.45	1.81
De Novo	45.29	1.79
CENTRAL EUROPE		
Privatized	58.24	1.95
SOE	48.45	1.80
De Novo	41.71	1.76
BALTICS		
Privatized	46.43	1.79
SOE	45.76	1.78
De Novo	50.45	1.87
SOUTHEASTERN EUROPE		
Privatized	50.00	1.91
SOE	51.97	1.91
De Novo	39.58	1.71
CIS		
Privatized	61.91	2.1
SOE	46.74	1.80
De Novo	46.67	1.79

Source: BEEPS

Data in Table 2 show that, in the whole sample, a share of privatized firms considering the influence of creditors on reducing costs to be important is higher than that of SOEs (which in turn is higher than that of *de novo* firms). This pattern holds true in all regions except for Southeastern Europe. A seemingly counter-intuitive finding that *de novo* firms feel less pressure from creditors to cut costs – if we identify that pressure with a hardness of budget constraints - than privatized firms or SOEs might be related to a possibly different financing of these firms (greater importance of equity finance). Yet another explanation, which in its implications casts doubts on our way of measuring the hardness of budget constraints by creditors, is that managers feel the bonding role of debt financing when the company performance deteriorates. If this is the true interpretation of the data, then the fact that a share of privatized firms reporting pressure from creditors is higher than that of SOEs might rather suggest that SOEs are performing better. The better performance suggests but does not imply hard budget constraints. This ambiguity illustrates well the limitations and

shortcomings of the BEEP survey and, more generally, of most empirical research carried out to date to reliably measure the hardness of budget constraints in TEs.

5.3 Suppliers, tax authorities, and workers

Data presented in Table 3 (in Appendix) are based on answers of corporate executives to the question of how substantial is the amount of overdue (by more than 90 days) payments of their companies to utilities, suppliers, government and local tax authorities, and their workers' body. The first column shows the share of firms that had some overdue bills to the above-mentioned entities; the second column shows the mean answer according to survey coding. Regarding the latter, the higher number indicates a higher degree of payment compliance.

An inspection of the table leads to the following findings. First, for the whole sample, the share of firms with overdue bills is the highest in the category of privatized firms. This essentially holds for their liabilities to all five entities and, with a notable exception of Southeastern Europe, in all regions[9]. Second, without exception, in all regions, and to all entities, de novo firms draw the least on overdue bills. Third, although it is not central to our goal of identifying the impact of privatization on SBC, it is worth noting that Baltic countries have the lowest share of firms in all categories reporting unpaid bills, while, as expected, CIS countries have the highest. The only qualification to the latter part of the above statement is the case of Southeastern Europe, which is partially due to the fact that it breaks the otherwise robust (across regions and stakeholders' groups) pattern that we identified – that a higher share of privatized firms than a share of SOEs reports overdue bills. Finally, it is also interesting to note that firms in all categories and regions report that they tend to have overdue bills most frequently with respect to suppliers.

To the extent that reported numbers are true measures of the softness-hardness of budget constraints, they suggest that privatization does not lead to hardening of budget constraints as far as

[9] The only other exception is overdue bills to workers in Central Europe

three sources of SBC are concerned: trade credit, tax arrears, and wage arrears. The reported survey data also suggest that tax arrears, which the literature often finds as the main source of SBC, are not more important than trade credit, rather the other way around.

However, before we jump to strong conclusions, we should consider at least two caveats. First, our survey data show a snapshot of the extensiveness of the use of involuntary credit. However, they have nothing to say about the evolution of the credit over time, which is what we are interested in. In other words, even if the stock of involuntary credit was high, as long as it did not grow over time, we would not have a problem with SBC. Second, we are working with survey data, which capture only a very small fraction of the total enterprise universe in each country, and there is ample room for sampling errors. Nevertheless, imperfect as our data and constructed measures are, our results indicate no simple causality arrow running from privatization to hard budget constraints.

5.4 Does shareholding structure matter?

Both theoretical models and empirical studies suggest that the way privatization is carried out and the shareholding structure crystallizes might have an important bearing on whether privatized companies end up with hard budget constraints[10]. In order to investigate this issue, we carved out privatized firms from the whole sample and sliced this sub-sample according to the companies' current shareholding structure. This cut generates four categories of privatized firms: those where the largest stake is owned by dispersed individuals, strategic investor, financial investor (bank or investment fund), and insiders (managers or workers).

[10] For a review see Roland (2000) Ch.10,12

Table 4

Does your enterprise receive subsidies from local or national government ? Did your enterprise receive subsidies 3 years ago ?		
	% reporting Yes	% reporting Yes 3 yrs ago
Dispersed Individuals	11.05	12.50
Strategic Investor	12.89	17.47
Financial Investor	16.67	15.79
Insiders	13.07	19.40

Source: BEEPS

An inspection of Table 4 suggests that privatized companies with a financial investor are most often reported as receiving subsidies. This can be for two reasons. First, in many TEs, banks are still owned by the State, and politicians might have an incentive to soften firms' budget constraints for political reasons. Second, investment funds in several countries (most notably in the Czech Republic, where they play the most important role due to the mass privatization) are either owned by banks or are so influential that they successfully lobby government agencies to bail out firms in their portfolios.

Table 5

Is the influence of creditors on reducing costs important ? (1 = not at all, 2= slightly, 3=fairly, 4=very important)		
	It is important (2,3,4)	Mean answer
Dispersed Individuals	54.52	1.96
Strategic Investor	60.34	2.02
Financial Investor	65.85	2.12
Insiders	62.50	2.12

Source: BEEPS

Data in Table 5 suggests that firms owned by a financial investor report most frequently that they feel pressure from the creditors to cut costs. To the extent that our measure of the hardness of budget constraints is the right one, this finding flies in the face of the popular notion that privatized firms owned by banks have their budget constraints softened by continuing financing.

Finally, the only clear finding that emerges from Table 6 (in Appendix) is that firms with strategic investor report overdue bills (to all five entities) least frequently of the four categories of privatized firms. Which category of firms is most delinquent depends on the type of involuntary

credit. Regarding government and local taxes, the source of SBC the empirical literature finds most important among the five, firms with dispersed ownership and insiders dominated firms report overdue bills most frequently. The latter result is in line with Li (1998), who shows analytically that privatization of insiders leads to the softening of budget constraints.

In conclusion, a tentative picture that emerges from this investigation of the importance of the shareholding structure of privatized firms for SBC suggests that firms with financial or strategic investors face harder budget constraints than firms in which the shareholding structure is dominated by insiders or dispersed individuals. However, one should keep in mind the limitations of this survey to answer questions this investigation asks and not to buy too much into this conclusion unless other studies find it robust.

6. **Conclusions and implications**

The recent literature suggests that privatization is a necessary but not sufficient condition for the hardening of firms' budget constraints. For budget constraints to become hard, the proper institutions constraining the sources of soft budget constraints must be put in place. The empirical investigation using BEEPS suggests that privatization hardens budget constraints concerning subsidies and bank financing. The opposite conclusion is reached with respect to trade credit, tax, and wage arrears. Firms with financial or strategic investors seem to face harder budget constraints than firms in which insiders or dispersed individuals dominate shareholding structures. In line with most literature, by a large margin, SBCs are least pervasive among *de novo* firms. However, the results of this paper’s empirical investigation should be read with utmost caution as there are significant ambiguities regarding the interpretation of the data and the usual caveats concerning a small-sample survey apply.

Nevertheless, the review of the literature and the empirical investigation using BEEPS seem to justify the following conclusion. The decade of the transition experience does not suggest that privatization automatically leads to the hardening of the budget constraint. There are multiple channels of soft budget constraints, which privatization alone does not tackle equally well. While it is effective in reducing the pervasiveness of government subsidies, only if complemented with institutional reforms aimed at strengthening corporate governance mechanisms, law and contract enforcement, and regulatory framework can privatization be expected to shut other channels of soft budget constraints.

However, in the author's view, this conclusion does not follow that privatization should be postponed until the right institutions are in place. Such generalization goes beyond what this paper attempted to demonstrate. Other considerations, such as those related to the political economy of reforms, might possibly outweigh the negative consequences of fast privatization in an inferior institutional environment.

What follows from the paper's conclusion is that building an effective institutional framework should be a top policy priority in transition economies. Broadly speaking, the paper's message is in line with the emerging paradigm, as suggested by several leading analysts of the region and recently put forth also by Sachs et al. (2000), that ownership matters, but institutions matter just as much.

References:

Barto, M., and V. Zlacký. (1998). "Top 100 Companies Commentary: Credit Financing Reaches its

Limits.", *TREND*, No. 24/98

Berglof, E., and G. Roland. (1997). "Soft Budget Constraints and Credit Crunches in Financial Transition", *European Economic Review*, 41: 807-817

Berglof, E., and G. Roland. (1998). "Soft Budget Constraints and Banking in Transition Economies". *Journal of Comparative Economics,* 26: 18-40

Claessens, and S., R.Peters. (1997). "State Enterprise Performance and Soft Budget Constraints: The Case of Bulgaria", *Economics of Transition*, 5: 305-322

Dewatripont, M., and E. Maskin. (1995). "Credit and Efficiency in centralized and Decentralized Economies", *Review of Economic Studies*, 62: 541-555

European Bank for Reconstruction and Development. (1997). *Transition Report 1997*. London: EBRD

European Bank for Reconstruction and Development. (1999). *Transition Report 1999*. London: EBRD

Fukuyama, F. (1995). *Trust*. New York: Simon & Schuster

Glaesser, E., S. Johnson, and A. Shleifer. (2001). "Coase versus Coasians", *Quarterly Journal of Economics*, forthcoming

Havrylyshin, O., and D. McGettigan. (1999). " Privatization in Transition Countries: A sampling of the Literature", IMF Working Paper

Hellman, J.S., G. Jones, and D. Kaufmann. (2000). " Seize the State, Seize the Day: State Capture, Corruption and Influence in Transition, World Bank Working Paper

Kornai, J. (1979) "Resource-Constrained versus Demand-Constrained Systems". *Econometrica*, 47: 801-819

Kornai, J. (1980). *Economics of Shortage*. Amsterdam: North Holland

Kornai, J. (1986). "Soft Budget Constraint", *Kyklos*, 39 (1), pp. 3-30

Kornai, J. (1990). *The Road to a Free Economy. Shifting from a Socialist Sytem: The Example of*

Hungary. New York: W.W. Norton

Kornai, J. (1992). *The Socialist System: The Political Economy of Communism*. Oxford, UK: Oxford University Press

Kornai, J.(1999). "Hardening the budget Constraint". Discussion Paper No. 59, Collegium Budapest

Li, D. (1998). "Insider Control and the Soft Budget Constraint: A Simple Theory" *Economic Letters* 61: 307-311

Pistor, K. (1999). " Patterns of Legal Change: Shareholder and Creditor Rights in Transition Economies", EBRD Working Paper

Pistor, K., M. Raiser, and S. Gelfer (2000). " Law and Finance in Transition Economies", EBRD Working Paper

Pohl, G., R.Anderson, S. Claessens, and S.Djankov. (1997). "Privatization and Restructuring in Central and Eastern Europe", World Bank Technical Paper 368

Raiser, M. (1999). " Trust in Transition", EBRD Working Paper No. 39

Roland, G. (2000). *Transition and Economics: Politics, Markets, and Firms*. Cambridge: MIT Press

Sachs, J., C.Zinnes, and Y.Eilat. (2000). " The Gains from Privatization in Transition Economies: Is Change of Ownership Enough ? ", CAER Discussion Paper 63

Shaffer, M. (1998). " Do Firms in Transition Economies Have Soft Budget Constraints ? A Reconsideration of Concepts and Evidence." *Journal of Comparative Economics*, 26 (1):80-103

Shleifer, A. and R. Vishny. (1994). "Politicians and Firms", *Quarterly Journal of Economics*, 109: 995-1025

World Bank (2001). " Romania's Road to Recovery", work in progress

Zak, P.J., and S. Knack (1998). "Trust and Growth", IRIS, University of Maryland, mimeo