Acta Oeconomica, Vol. 52 (2) pp. 221–235 (2002)

STATE-OWNED ENTERPRISES, SOFT BUDGET CONSTRAINTS AND THE OWNER–REGULATOR SYNDROME

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(Received: 14 December 2000; revision received: 11 January 2002; accepted: 15 February 2002)

We look at the soft budget constraint literature in the context of the state-led restructuring of state-owned enterprises (SOE) in which institutions are both regulators charged with constraining SOE restructuring outcomes and part owners of the SOEs concerned. Such institutional agents constitute a set of what we term "owner–regulators (OR)". These economic agents may have political problems as regulators – as suggested by the Chicago School approach to economic regulation. They can also have ownership problems – here defined by literature on the theory of the firm and on vertical structure. In this light the incentives associated with the imposition of hard budget constraints may be by themselves insufficient to radically change owner–regulator behaviour. If the implementation of such constraints does not take into account the factors highlighted by this paper, hard budget constraints are likely to be either counterproductive or irrelevant.

Keywords: state enterprise restructuring, transition economies, corporate governance, regulatory policy

JEL classification index: H11, L59, P21, P26, P31

1. INTRODUCTION: LINKING SOFT BUDGET CONSTRAINTS TO STATE-LED SOE RESTRUCTURING

This paper is a preliminary attempt to link two transitional economic phenomena often associated with the state-owned enterprise (SOE): restructuring, defined in this context as the transformation of the individual firm including changes of corporate governance, organisation, management, inputs, outputs and sales (Bornstein, 2000, p. 1); the "soft budget constraint" (SBC), often referred to as the "soft budget syndrome"; and the phenomenon of state-led restructuring where one or more state institutions attempt to influence restructuring outcomes through

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continued (or constrained transferred) ownership in the SOE concerned, what we term the "owner–regulator (OR) syndrome."

The SBC is a relatively well-known phenomenon. In a recent article Kornai, the inventor of the "soft budget constraint" (Kornai, 1979; 1980; 1986), characterised the SBC syndrome as an economic theory of exit, a theory of the demise of organisations (Kornai, 1998, p. 11, pp. 16–17).

Yet at the same time, the research agenda has been very much one of investigating the syndrome with a view to limiting its pernicious effects:

> The degree of softness or hardness of the budget constraint, the methods and techniques used to try to harden or soften it, and the effects that these have on decision-makers producer's [sic] are crucial aspects of the SBC syndrome. Many research tasks lie ahead before these relationships will be fully clarified (Kornai, 1998, p. 17).

In this context we shall investigate the impact of a transition from soft to hard budget constraints within restructuring state-owned enterprises, where a leading restructuring role is assigned one or more state institutions who simultaneously own shares in the SOE concerned and have a politically sanctioned regulatory mandate, the owner–regulators of this paper.

This dual role of certain state agencies in SOE restructuring has historical roots. Compared to the somewhat amorphous pre-1988 definition of being "the property of the state", SOE ownership rights have since been more carefully defined and distributed in the form of shares or other property rights among various public and private bodies, the latter as a prelude to privatisation. Lavigne (1995) has characterised this development as "a complex ownership structure involving banks, investment funds, other enterprises, state asset management agencies, and local governments, with a network of cross-ownership. The actual managers are the former ones in many cases, due to the difficulties of finding thousands of able managers willing to do the job" (p. 178). Frequently, an explicit or implicit motive behind the establishment of these cross ownership patterns is that they will allow a form of government-led restructuring, in which one or more governmentally owned institutions simultaneously own the restructuring SOE, and, in their competence as regulatory institutions, attempt to influence restructuring outcomes. Variations of this strategy are numerous, so are countries employing state owner–regulatory strategies, ranging from countries such as Hungary and Poland on the one hand to China on the other.

For the purposes of this paper, ORs have the following defining characteristics:

The lack of what Stigler (1971) has termed "the market for regulation" is the first characteristic associated with the OR syndrome. Stigler's "market" describes a situation in which the regulators simultaneously supply regulation as a "good"

which is demanded by the regulated industry, and through provision of this good perform an indirect political support function to various agents jockeying for political power. (Here the regulated industry rewards the politicians who in turn control the regulators so that the supply of regulation conforms to the regulated industry's interests). Owner regulators substitute an internal bureaucratic process for the more open "market" here with consequences for the transparency of the transformation process and for the imposition of hard budget constraints.

Secondly, there is a subordination of the owners corporate governance role, here strictly interpreted as owner maximisation of an economic residual, to the more specific institutional interests of the state body involved. This phenomenon may have differing outcomes. Of particular interest can be vertically structured relationships (Tirole, 1988). In these the state body is often simultaneously a monopoly provider of one or more factor or non-factor inputs, and is often tempted to maximise its return on such inputs, capturing what might be defined as "input rents" – essentially monopoly rents – in a variation of the double marginalisation puzzle.

Further definition of what is meant by the OR syndrome is the focus of the next section. Then in sequence we first discuss how the OR distorts what might be termed a market in regulation and thereafter present a simple model illustrating the problems arising from vertically structured relationships, characteristic of many (although not all) ORs. Both these phenomena are seen to complicate the introduction of hard budget constraints, separately and in conjunction with one another.

2. DEFINING THE STATE OWNER–REGULATOR SYNDROME

Our approach leads to two key insights as to the problems of implementing hard budget constraints on state-led SOE restructuring: the lack of a market in regulation, and the presence of vertically structured relationships. Prior to discussing these insights, however, it is necessary to define our concepts more precisely.

By "regulation" we mean those "governmental actions to control the price, sales, and production decisions of firms in an avowed attempt to prevent decision-making that would take inadequate account of the public interest (Breyer and MacAvoy, 1992, p. 128)." While Breyer and MacAvoy apply this term to its American context, we feel it applies to state roles in the context of state-led SOE restructuring. These certainly undertake "actions to control the price, sales and production decisions of firms to prevent decision-making that would take inadequate account of the public interest," although they can do so more directly through ownership control over manager decisions. As such, an owner-regulator

can influence decision-making alone, or can do so in conjunction (or competition) with other regulatory institutions. (For an exposition of the problems posed by multiple regulatory agents see Martimort, 1996; Tirole, 1994).

The table below summarises the fundamental differences between the use of a regulatory agency to implement SOE reform and the use of state ownership. A casual glance at the table reveals that there are indeed significant differences behind the two institutional contexts. Let us in accordance with Alchian and Demsetz (1972), assume that the SOE to be restructured is a set of contracts. A regulatory agency's relationship with the firms under its purview is essentially contractual, involving an arms-length principal–agent relationship (Martimort, 1996; Laffont and Tirole, 1993; and Tirole, 1994). The regulatory agency is not a party to many of the contracts which comprise the SOE. This contrasts with the status of the government as owner. As owners elsewhere, the government is privy to all contracts comprising the firm under restructuring, and, by definition, exercises residual control rights over those contractual rights comprising the firm (Grossman and Hart, 1986). This confers immense advantages. Government as owner can directly affect issues of corporate governance, organisation, management, purchase of inputs, and sales of output.

Restructuring perspectives: agency vs. owner regulation

	Agency perspective	*Owner–regulator perspective*
Contract	arm's length contract; principal–agent relationship	party to all contracts in firm; contractual plus residual rights
Regulatory form	market in regulation; regulatory agent provides indirect political support (Stigler)	SOE government owner owner provides direct political support
Inputs to production	not an input provider	frequent in vertically structured relationships

On the other hand, the absence of a principal–agent arms length contractual relationship is not without potential disadvantages. The precise form of corporate governance or organisation for the restructured firm may be more a function of governmental preference than of a transparent outcome of a political "market process". Managers of enterprise restructuring may come from within governmental ministries, attracted by high pay but without actual corporate management experience. The purchase of inputs can be dictated by government and not

by the market. Most importantly, the definition of how hard budget constraints are to be accommodated within restructuring the firm become an issue for the very same government as owner which is applying these budgetary constraints as regulator.

Similarly, the OR as a form of regulation is not unproblematic. ORs are tightly connected to the political system and are capable of promoting political interests both directly and indirectly as their role as regulators. As Stigler (1971) points out, regulation as often as not is a response to a demand for regulation from the regulated industry itself. An OR distortion of this feedback loop can be problematic as we shall see in the next section.

Finally, ORs may not concerned with the maximisation of an economic residual alone. For example as input providers (and regulators) they may be more concerned with achieving a maximum return on their factor and non-factor inputs, a rent accruing from a vertical monopoly position as owners and as input providers.[1] We define these rents here "as any direct or indirect monopoly return to a factor or service input provided by an OR above the efficient cost of its provision". This begs the question of the various manners in which input rents in fact occur, who benefits from them and whether these are appropriated or not by the ORs providing them.[2] Examples of this "vertical relationship structure" are numerous. In China, municipal owners, ministries, and other concerned ORs have become such a plague in this regard that they are universally referred to as the "mother-in-law problem." Elsewhere in Central and Eastern Europe various stakeholders have also attempted to extract input rents with consequent losses in efficiency, but here the problem is less significant.

[1] ORs are often monopoly owners of resources which are inputs to the SOE. This phenomenon is particularly widespread in China, where ownership of inputs can run to several ORs providing land, capital, plant, raw materials, semi-manufactures, and labour (see Davis and Worm, 2000) but this is often the case in several Central and Eastern European countries as well.

[2] That there are multiple ways in which input rents occur is both obvious and subtle. An OR providing a service and charging the SOE a rate above cost for it, either directly (bill for services rendered), or indirectly is clearly appropriating an input rent as we have defined it. Yet we also include other forms of input rent. That the inefficient provision of a work force is not generally seen as input rent is clear, but according to our definition, an input rent is indeed present, but is dissipated among the work force and appears on the corporate books as a cost. Furthermore in that the workforce may be represented by an OR (state or quango-like trade union) owing shares in the SOE, we regard the input rent as appropriated by the OR concerned. A similar problem occurs when the land on which enterprise premises are located is owned by a municipality who has been awarded SOE shares and is an OR. The municipality may exercise title to the land and charge for its usage; on the other hand, it may not. In both cases, given that the factor is provided in an inefficient manner, and there is a positive difference between its efficient use and its less efficient alternative, there is an input rent involved, and this rent either falls to the municipality or is dissipated among the other owners.

It is important in this context to underline that the existence of these phenomena is predicated on the assumption that a government owner does in fact exercise its ownership rights in the context of the restructuring process. This may not always be the case, even where the mode of restructuring can be characterised as "state-led" as is the case in this paper.[3]

3. THE HARD BUDGET CONSTRAINT AND THE OWNER–REGULATOR SYNDROME

How does the existence of one or more OR-led restructuring of the SOE interact with the imposition of hard budget constraints? Here we consider OR incentives first as regulators of SOEs and, secondly, as owners of the restructuring SOE. Here OR provision of inputs to the SOE and the consequent problem of vertically structured relationships gain vital importance. We then place these interrelationships in a general context where ORs may or may not own the inputs at issue.

3.1. The regulatory market and the feasibility of hard budget constraints

Given the discussion of owner–regulator incentives with regard to the imposition of hard budget constraints, we have yet to address the most crucial question: who determines the "rules of the game"? There is a transparency element in Stigler's (1971) model of a "market in regulation". Here, as it may be recalled, the demand of the regulated for regulation is implemented indirectly through the electoral process. In return for industry's support, elected politicians constrain regulators so that the latter match the supply of regulation with industry demand. While imperfect, such markets render the processes by which regulation is demanded and supplied transparent. (See Peltzman, 1989, for a listing of such studies.) There are three distinct sets of agents. Relationships among them are arms-length. Accountability is feasible, although it remains a function of political will.

Replacing two sets of agents, the regulated industry and the regulating bodies, with one, the owner–regulators essentially remove regulation from a "market relationship" and place it in one and the same organisation. More seriously, the regulatory relationship is insufficiently transparent, and more difficult to subject to non-incumbent political control – an important precondition to the enforce-

[3] The authors are grateful to an anonymous referee who has drawn their attention to this assumption.

ment of hard budget constraints. As Sheifer and Vishny (1994) conclude, "Politicians are better off when they have control rights ... Because control gives them better bargaining opportunities (p. 1019)." State institutions as both owners and regulators possess the means for perpetuating soft budget constraints which are difficult of detection due to the internal nature of bargaining between SOE managers and OR politician owners.

This conclusion is supported by a number of empirical studies showing a tendency towards SBCs which are the least politically controversial, but which give ORs room for manoeuvre. Thus, Shaffer (1998) in his study finds that of the channels for SBCs: state subsidies, state bank credit bailouts, price controls, state tolerance of unpaid arrears (wages, inter-enterprise) not due the state, and the state granting of tax arears, it is the allowance of cumulative arrears in taxes due the state which is the preferred mode of SBC. This is not a surprise. The granting of tax arrears to a distressed SOE can be a discretionary decision, one not subject to parliamentary approval (as would be a subsidy bailout). Furthermore, the SOE in arrears is nonetheless contributing positive added value to the economy:

If the tax authority moves to liquidate the firm, the recovery value will be low, value added will be lost, and re-allocating both capital and labour will take time, so meanwhile unemployment will increase. All this is politically even more costly (Shaffer, 1998, p. 100).

The manner in which SOE ORs obtain SBCs varies among transitional economies. In states with weak central authority, ORs have lobbied extensively to obtain tax arrears. In Russia these amounted to 7% of the GDP (although this figure includes privatised firms as well). Elsewhere, the power of the ORs is curtailed by other governmental organs and SBCs are more or less confined to truly distressed SOEs (Shaffer, 1998, pp. 100–101).

Additionally, the extent of the OR syndrome in restructuring SOEs seems to vary by countries and sectors. Given that development of political and bureaucratic institutions is uneven between countries and that such development includes the development of "countervailing powers", one would anticipate a greater degree of the OR syndrome in countries with weak institutions. This generally seems to be the case, if the prevalence of the SBC is an indicator of the OR syndrome (see Shaffer's comparison in Shaffer, 1998, pp. 98–100).

Another, more speculative manner, in which the OR syndrome may affect developments can be seen in the field of FDI. There has been growing reluctance among Western firms to form joint ventures with SOEs, a problem which may have been linked to and to cope with the problem of ORs, their political clout and the effect of input rents on factor productivity. (This is a growing tendency in the Peoples Republic of China, for example. See Davis – Worm, 2000). Elsewhere as well the preferred mode of entry is increasingly through "greenfield"

or "brownfield" investment, particularly in those countries where institutions are relatively weak (Meyer and Estrin, 1999; Meyer, 2000). Could avoidance of JVs with privatising SOEs in these cases be due to a relatively uncontrolled OR syndrome in countries with weak institutions?

3.2. Owner–regulators as owners: hard budget constraints with vertically structured relationships

Here we introduce a model of an SOE considering a restructuring project, either initiated internally or through sale of some SOE shares to a private firm who would undertake restructuring.

We ignore the restructuring project to begin with. Let us assume that one or several ORs supply inputs to the SOE, and as a consequence, they can obtain benefits either as providers of inputs or as shareholders in the company. In a world of no uncertainty, one way of obtaining income may be as good as any other, but not so if uncertainty is introduced into the model. We show that under suitable assumptions, uncertainty may favorise the extraction of input rents, and in such a situation, substituting a hard budget constraint of the firm for a soft one may cause serious disruption.

We shall work with a very simple and basically well-known model, namely that of monopolies with vertical mutual relationships: the SOE is assumed to be selling a commodity on a market defined by a given demand curve, say

$$p = 1 - q$$

where p is the price charged to the public, and q is the quantity supplied. The firm produces the commodity in a simple constant-returns-to-scale technology. Assuming at first that only a single commodity is needed as input, we may model the situation so that one unit of input transforms to one unit of output, and consequently unit costs are equal to the price p charged by the input supplier, also assumed to be a monopolist. Optimal production is then

$$q(0) = 1 - \frac{p}{2},$$

with the corresponding price

$$p(0) = 1 + \frac{p}{2},$$

and profits are

$$\frac{(1-p)^2}{4}.$$

The SOE buys $q(0)=1–p/2$ units of the input commodity.

Clearly, the input-supplying OR monopolist can charge a price p which maximises profits when the response of the downstream monopolist to the input price p is given by the expression $1–p/2$ as derived above. For simplicity, we assume that the supplier has zero unit cost, so the total amount obtained from the sales may be considered as an input rent. Profit maximisation of both the input supplier and the downstream monopolist leads to the well-known phenomenon of *double marginalisation*: if the input supplier charges the monopoly price, then the downstream retailer will charge an overprice to the final buyer, and the result is a loss of profits to the input provider due to reduced volume of sales as compared with the situation where the input provider would be in full control of the market.

In the case which interests us at present, the input supplier is actually an owner of the downstream monopolist; at first sight, it might be suspected that there would be no need for the more sophisticated arrangements mentioned above. The input supplier can sell the input at marginal cost, realising the maximal profit of the combined firm at the retail level. However, the input supplier is not necessarily the only owner; there might be other owners as well. To make the argument as simple as possible, the other owners do not supply inputs to the SOE.

With several owners of the downstream monopoly, conflicts of interest arise, depending on the rules agreed upon for sharing the profits. Let us assume that there are S shareholders, and that profits earned by the SOE are divided equally among shareholders; then each shareholder gets $1/S$ of total profits, that is

$$\frac{(1-p)^2}{4S}$$

whereas the owner–supplier obtains a total gain of

$$\frac{(1-p)^2}{4S} + p\frac{1-p}{2}$$

(profit share plus input rent) from doing business with the SOE, when the prices charged for inputs are p.

It is seen that if the OR input supplier obtains only a share of the profits of the downstream firm, then its charging higher prices (thus extracting higher input rents), will be better than charging low prices and realising profits at the SOE. This can be simply explained: profits have to be shared with others. Thus, double marginalisation is once again a problem. Theoretically there are two solutions to double marginalisation: either the institution of two-part tariffs or of retail price maintenance.

Whether the one or the other solution is chosen, the basic idea is converting profits from the downstream monopolist to input rents which can be extracted by the OR input supplier. Given SOE restructuring in a transitional context, resort to the solution of a two-part tariff seems implausible. Here the SOE should pay an entrance fee to the input supplier in order to have the right of buying its supplies cheaply. Two problems are encountered here: firstly, the OR supplier must agree to receiving a lump-sum payment in lieu of continuing its previous pricing policy. This may be particularly difficult for the owner may see its input rents as being linked to its regulatory mandate, its *raison d'être*. Secondly the need to provide a lump-sum payment to one of the several owners would probably cause animosity between other shareholders, particularly given their awareness of less costly factor inputs not requiring a lump-sum payment. Given these two problems, the method of retail price maintenance, whereby the output prices are fixed by the input supplying owner–regulator, so that profits may be transferred to the supplier as input rents, is the preferred solution.

With this rule in force, the equilibrium in the market considered is easily determined: Industry profits are maximised at the output level $q^* = 1/2$, to be sold at the price $p = 1/2$, and with total industry profits equal to 1/4. The input supplier sells the input commodity to the SOE at price $p^* = 1/2$ (which is the same as the retail price), profits are 0 in the SOE, everything goes to the input supplier in the form of input rents.

It must be added that the preceding analysis remains valid also in the case where there are several OR input suppliers who are also shareholders; profits should again be extracted in the form of input rents to the suppliers. With several supplier monopolists the retail price must of course be set by mutual agreement among the OR suppliers so that industry profits become maximal.

Let us now consider a restructuring project and the imposition of hard budget constraints. We additionally assume market uncertainty with respect to final demand, a common characteristic in transition economies.

First, what happens in this market if final demand is subject to uncertainty? If the demand curve may shift symmetrically up and down from the previous position, now considered as the average, then industry profits vary around the average. However, with the special institutional arrangement prevailing in the industry, whereby all profits are transferred to the input supplier, a demand below average, which will happen with probability 0.5, will result in negative profits in the SOE.

What are the implications for restructuring under hard budget constraints here? The consequences of negative profits and hard budget constraints could mean that the SOE ceases its business, and any private partners acquiring state shares

as a prelude to restructuring obviously will take this prospect into consideration. Thus, an SOE will have smaller probability of survival, and consequently smaller probability of being ever restructured, if the budget regime becomes hard and forces bankruptcy in situations of negative earnings.

On the other hand, with a soft budget constraint, whereby the SOE is allowed to survive even situations of negative balances, any restructuring project must be acceptable not only for the OR input supplier but also for the remaining shareholders. Thus we see that the mutual relationship between ORs who are also engaged in input provision, forces conditions on the SOE which makes it very vulnerable to general market conditions and which with rational agents may actually prevent economically sound restructuring projects from ever coming into existence.

3.3. Owner–regulators as regulators: restructuring and hard budget constraints with and without vertically structured relationships

Key to OR roles as regulators is how they perceive their regulatory mandate (and whether this is distinguished from OR institutional "self interest". We can distinguish three regulatory roles: one where the OR perceives little if any difference between its institutional interests (and inputs) and those of society; another where an OR perceives its regulatory role in terms of regulating the SOE factor inputs of other parties; and a regulatory role in which the OR perceives its role as eliminating societal welfare distortions external to the SOE. For each of these regulatory roles, the imposition of hard budget constraints could have less than optimal consequences.

In the first case, where owner–regulators do not distinguish between their institutional self-interest (and SOE factor and non factor inputs) and their perceived regulatory mandate, the consequences for restructuring under hard budget constraints are identical to those predicted by our model of vertically structured relationships. This situation is complicated by the presence of several ORs, each with its own perceived regulatory interest. Given overlapping regulatory interests, there can be a jointness to input rents. For example, the inefficient use of manpower, a form of input rent in this context, can be appropriated by worker owners of the SOE. This input rent could be jointly shared with a municipal OR. The degree that over-manning occurs reduces the outlays which the municipality would otherwise incur through unemployment compensation and other welfare programmes, so the municipality capturing this rent as well. In such cases, it would be unusual if the two owners did not vote together in the board of directors.

The application of our model to OR regulation of the SOE factor inputs of other parties is somewhat less clear. Here are two situations. One in which ORs perceive their regulatory role in terms of maintaining the capture of input rents by other agents. (This is most typically the case when redundancy plans are advanced by other private owners with a view of reducing over-manning and improving firm efficiency have been overruled by ORs, here acting on behalf of employee organisations). In such situations, the logic behind our vertically structured relations model clearly applies, as does its conclusion to introducing hard budget constraints under a restructuring project. The second situation occurs when ORs attempt to switch either the suppliers of factor inputs or to alter the terms by which these factors are sold to the SOE. If such change leads to cost savings and additional profitability, the OR regulatory role can be said to have a beneficial effect, one which could harmonise with the institution of hard budget constraints.

Regulation with a view to eliminating those societal welfare distortions imposed on society by the activities of an OR's SOE is difficult for the OR, as such regulation is generally aimed at reducing or eliminating negative externalities, in the implementation of which ORs in their role as owners could have difficulties. Two possibilities arise: Such regulation could reduce SOE cash flows. In this case, the SOE (and any restructuring plan) becomes more vulnerable to hard budget constraints, and possibly harder to sell to a privatising agent. Alternatively, such regulation could involve the use of subsidies by which owner interests could well conflict with regulatory rigour in determining the size of any such subsidy, and provide SOE owners with an opportunity of "clothing" a soft budget constraint "wolf" as a regulatory subsidy "lamb."

4. CONCLUSION: STATE-LED RESTRUCTURING, THE OR SYNDROME AND SOFT BUDGET CONSTRAINTS

It is, perhaps, not an oversimplification to argue that state-led restructuring and the eradication of the "soft budget syndrome" are both central to the restructuring debate in transitional economies. In this context we shall briefly summarise our findings and then examine them in relation to the larger issues of state-led restructuring efforts.

With regard to state-led restructuring, we have attempted through use of the theory of economic regulation to identify a problem which – in our opinion – deserves more attention, the nature of state ownership in the period of transition. Too often, analysis begins and ends with "state ownership" as a monolithic, all-inclusive concept. Yet ownership by state entities, particularly in a period of more

closely defined property rights, and the distribution of ownership to a variety of entities, both within and without the state, in fact means that the state ownership is in reality now ownership by many different state-owned or state-controlled institutions and firms, each with its own set of interests which they can potentially, *ceterus paribus*, seek to promote. To capture how these interests affect these owners and their role in the transition process, we have introduced the concept of the state owner–regulator (OR) and looked at OR incentives through the lenses of the Chicago-school theory of regulation and those of Tirole's theory of vertical structures. We then raised the question as to whether these incentives are compatible with the imposition of hard budget constraints.

The answers to this question are sobering. It is difficult to find any theoretical form of OR-led restructuring effort with incentives directly compatible with the imposition of hard budget constraints. (This, of course, does not rule out the possibility that the state owners will not exercise their ownership rights; but even in such cases, the possibility always remains that at some point in time state owners may opt to do otherwise).

This is particularly true of cases in which there is a complex ownership structure of vertical interests between a state OR and the SOE for which the OR is responsible. This is illustrated by a simple model in which the OR provides one or more factor inputs to the SOE. Here, even given the assumption of economically rational ORs, we arrive at the conclusion that a hard budget constraint is not only difficult to implement, given the inevitability of double marginalisation, but the imposition of it leads to an inability to efficiently restructure an SOE. Variations of this argument apply to other situations as well.

Even in those instances where vertical ownership structures do not appear, the question arises as to whether hard budget constraints are a relevant restructuring tool insofar as OR incentives are concerned. Our interpretation of the Chicago school of regulation links the self-interest of the SOEs concerned to the ORs and to the political process. In the state-led transition context the regulatory authorities and various sets of state owners are all too often the one and the same. Conferring both ownership rights and powers and a regulatory mandate on the same agent, we suggest, could well be an inefficient (and perhaps dangerous) solution to the problems of restructuring. The owners are to regulate themselves, maximise their returns, and do both within a regulatory mandate which all too often define themselves through their influence over the political process. The imposition of hard budget constraints in this context is unlikely to promote efficient restructuring. Rather they become one issue among many in recurrent negotiations in which the ORs hold the winning hand. Given that regulators in our approach serve a political support function and that politicians rely on this function for legitimacy

(or re-election), it is clear that the granting or withholding of "bailouts" by politicians depends on OR support which they in many cases cannot afford to lose. "Capture" of the politicians by the ORs in this case could just as easily yield a very distorted result, particularly in cases where some SOEs are exempted from the consequences of over-stepping hard budget constraints and others are not.

ACKNOWLEDGEMENT

The authors would like to thank colleagues at the Center for East European Studies, Copenhagen Business School, and two anonymous referees for their helpful comments and suggestions.

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