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With my compliments,
John

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The Place of the Soft Budget Constraint Syndrome in Economic Theory¹

János Kornai

*Littauer Center, Harvard University, Cambridge, Massachusetts 02138,
and Collegium Budapest, Budapest, Hungary*

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Kornai, János—The Place of the Soft Budget Constraint Syndrome in Economic Theory

The concept of the budget constraint, previously applied mainly to household decisions, was extended to enterprises and other organizations initially by Kornai for socialist economies. The more general phenomenon usually includes rent seeking, although not all rent-seeking behavior is associated with a soft budget constraint (SBC). Rather, SBC analysis is a theory of exit, or more precisely, of the demise of organizations. Moreover, the syndrome cannot be treated as a special case of the theory of regulation because not all price regulation softens the budget constraint. The SBC can emerge in nonregulated spheres, especially when financial interactions take place in vertical relationships between superiors and subordinates rather than in horizontal market conditions. *J. Comp. Econom.*, March 1998, 26(1), pp. 11–17. Littauer Center, Harvard University, Cambridge, Massachusetts 02138, and Collegium Budapest, Budapest, Hungary. © 1998 Academic Press

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1. INTRODUCTION

The concept of the soft budget constraint (SBC), as introduced by this author in the context of socialist economies (Kornai, 1979, 1980), refers to

¹ This note is based on the author's comments at a session on the soft budget constraint at the 1996 AEA meetings in New Orleans. The author served as a discussant on the paper by Professor Thomas Rawski (1997). While the ideas of the note were inspired by the dialog and controversy with Professor Rawski, the present version is self-contained and can be followed by a reader who is not familiar with the Rawski paper. I express my gratitude to John Bonin and Chong-En Bai for editorial help in compiling this note and to Brian McNeal for the translation of the first draft.

the phenomenon that socialist firms are bailed out persistently by state agencies when revenues do not cover costs. Since its introduction, the concept has been applied to other spheres of economic activities bringing into question the boundaries of SBC theory (Rawski, 1997). Two aspects deserve thorough consideration. First, how does the SBC syndrome relate to other areas of economic theory? It is a deficiency of my own work that I have not given a satisfactory answer to this question. I will attempt to remedy partially this omission by characterizing the essential ideas of the SBC so as to clarify its differences from other theories, e.g., rent-seeking and theories of regulation. Second, is the SBC syndrome a problem specific to socialist and postsocialist economies or does it exist in other economic systems? I want to stress, as I have done several times in my works, that no one ever doubted that the SBC can be found in a capitalist economy.² However, I maintain that the phenomenon is far more common and far more damaging in a socialist or postsocialist economy than in a consolidated market economy. The SBC is not equally compatible with private or with public ownership; state ownership provides the government with much stronger inducements to soften the budget constraint.

I discuss five specific issues relating to these two questions. First, I consider the budget constraint in economic theory and then I demonstrate the importance of vertical relationships to the SBC. I discuss in detail *ex ante* and *ex post* government intervention and the differences between rent seeking and the SBC as a theory of exit. Finally, I distinguish the SBC syndrome from economic theories of regulation and general state intervention.

2. THE BUDGET CONSTRAINT IN ECONOMIC THEORY

When I first presented my ideas on the SBC to my colleagues, they asked me in astonishment why I was talking about a budget constraint for enterprises. They advised me to read again the basic theoretical works of Walras, Arrow, and Debreu from which I would see that only households or individuals are subject to a budget constraint. As a behavioral hypothesis, enterprises maximize profits subject to technology constraints. Nonetheless, I think that introducing the enterprise budget constraint was a useful theoretical innovation. No behavioral maximand or objective function can replace the explicit attention paid to the financial constraints under which decision makers make choices. Understanding their behavior depends upon knowing under what circumstances these constraints are effective or ineffective.

This observation does not apply only to firms operating in a socialist economy but it is equally pertinent to firms in any monetized economy and,

² See, for instance, Kornai (1986), which devotes a separate chapter to this issue.

for that matter, to all organizations with monetary income and expenditure. I have the impression that the full implications of this idea have not yet been appreciated in theoretical models of enterprise behavior.

3. VERTICAL RELATIONSHIPS

The relationship between the SBC syndrome and the economic system depends on whether the relationship between organizations and agents is vertical or horizontal. Consider whether or not horizontal market transactions can involve a SBC. For example, when a steel factory gives in to the pressure from a car factory to lower its price, is this a form of the SBC? I think the answer is no. This behavior has nothing to do with what I, and several other writers, call the SBC.

A clear distinction must be preserved between vertical relationships and horizontal market transactions. The relationship between the steel company, as seller, and the car factory, as buyer, is a horizontal market one. They are of equal rank so that there is no superiority or subordination. Of course they may bargain with one another. The buyer may pressure the seller, and vice versa. Such a situation is recognized fully and treated adequately by standard economic theory. However, a different situation arises if there is a degree of dependency, i.e., a relationship of superiority and subordination, between two organizations. In the case of a state-owned enterprise, this vertical relationship occurs because the owner, i.e., the state, is superior to the subordinate agent, i.e., the manager. In other cases, the superiority derives from the state's legal dominance over its citizens (i.e., it can prohibit and command them using laws and regulations as instruments) in addition to its ability to reward or penalize citizens by providing or withholding uncompensated transfer payments on nonmarket criteria.

Other vertical relationships exist in which the superior party is not the state but some other institution. For example, firms may be at the mercy of a monopoly bank that is their only source of credit³ or of a bureaucratic planner who controls their life and death. A vertical relationship exists between central and local governments (Qian, 1994) and between the International Monetary Fund and the governments applying for support. Future research could probe whether or not the SBC syndrome arises in all vertical relationships in which the superior organization provides monetary support to the subordinate one.

My work on the SBC phenomenon focuses on the vertical relationship between the government and the enterprise. This special attention is understandable because of the significance of the problem in economic systems.

³ This relationship is introduced in a pioneering study by Dewatripont and Maskin (1995) that formalizes the SBC syndrome.

Nonetheless, it is an arbitrary constriction as the phenomenon applies to a much broader sphere of economic interactions.

4. *EX ANTE* AND *EX POST* STATE INTERVENTION

The SBC is often considered to take different forms in socialist and capitalist economies in that the state rescues individual enterprises *ex post* in the former, whereas it enables whole industries to survive through *ex ante* intervention in the latter. I do not find this distinction convincing since *ex ante* and *ex post* interventions can be observed in both socialist and capitalist systems and also at the level of the individual enterprise or for whole branches of industry. Of course, whether or not there is a temporal distinction of the SBC syndrome between systems is an empirical question not a theoretical one. My assertion needs to be confirmed or denied by observations. To identify regularities in rescue operations under both systems is a fertile ground for future empirical research.

The empirical work to date on the SBC contains abundant data on the socialist economy. Permanent turnover-tax concessions and subsidies for whole branches of industry that are specified in advance in legal regulations are well-documented. Moreover, individual cases of *ex post* rescues are commonly found.⁴ Furthermore, the subsidies and tax concessions used in a capitalist economy are not exclusively of the legally enshrined *ex ante*, permanent type applied to whole branches of industry. As an illustration, consider the successive individual life belts thrown to banks in financial difficulties, not as *ex ante* interventions, but as occasional *ex post* measures. However, even though these constitute individual bail-out packages, banks can count on such *ex post* support to some extent so that their *ex ante* behavior is affected by the probability of a state bail-out.

Hence, I feel that an *ex ante/ex post* dichotomy is too rigid in this context. I have always emphasized in my writings that the *expectation* of the decision-maker as to whether the firm will receive help in time of trouble or not is an essential component of the SBC syndrome. A single instance of occasional assistance to an enterprise will not produce the SBC phenomenon. The expectation will develop only if such bail-outs recur with a certain frequency so that managers learn to depend on them. Continual *ex post* rescues, both of the

⁴ Numerous Hungarian examples appear in the book I wrote jointly with Ágnes Matits published in Hungarian (Kornai and Matits, 1987). The Hungarian jargon of the time described these taxes and subsidies as "normative" but they are basically what Rawski (1997) denotes *ex ante* industrial interventions. The data in the book distinguish the effects of these more permanent types of intervention from *ad hoc*, individually awarded subsidies and income levies. Some of the more important tables from the book appear in the English-language publication by Kornai and Matits (1990). Some data for Poland can be found in Schaffer (1989).

firm concerned and of other firms in a similar situation, elicit the expectation of a SBC even before any trouble has arisen *ex ante*. Therefore, we should not describe state rescue as a binary, "bail-out/no bail-out" variable. It is far more meaningful to consider the subjective likelihood of support as a continuous variable that expresses the strength of the decision maker's beliefs about the likelihood that state bail-out will occur (Kornai and Weibull, 1983). As recent work demonstrates, the economic rationale for a state rescue program can be either *ex post* efficiency or *ex ante* efficiency (Dewatripont and Maskin, 1995; Bai and Wang, this volume).

5. RENT-SEEKING AND THE THEORY OF EXIT

To consider the relationship between the theory of the SBC and other economic theories, it is useful to ask whether efforts to soften the budget constraint are equivalent to rent-seeking. To put it bluntly, has my introduction of the SBC concept not simply put old wine into a new bottle? I do not think this is the case. Although it is certainly true that an agent attempting to obtain a state subsidy for a troubled firm is seeking a rent, the converse statement is not true. Not all rent seekers are trying to rescue beleaguered firms. Rather, they may be trying to increase even more the profits of an already successful business. Nor is rent seeking a more general, comprehensive concept of which softening the budget constraint is a subcategory.

The literature on the SBC has contributed a *specific point of view* to our existing theoretical knowledge by focusing attention on exit not on the desire of economic actors to line their pockets with state support. The SBC perspective does not require that economic agents are profit maximizers. Rather, it is sufficient to assume that the decision maker is intent on survival and avoiding organizational death. Hence, the same conceptual framework can be applied to actors with differing objectives, e.g., local-government organizations and nonprofit institutions.

To place the SBC in the context of economic theory, it is worth recalling Schumpeter's development theory that focuses on the entrepreneur and creative destruction in the economic marketplace. Economic theory deals at length with the creation side by stressing freedom or restriction of entry, innovation, and the competitive challenge to existing producers. The concept of the SBC focuses on the destruction side. Will an organization live forever? If it is to die, will it die a natural death or will it be sustained artificially for some period of time by state support through the SBC? Alternatively, will an organization be killed off by the state's use of an administrative instrument, e.g., liquidation? Familiar models link the evolutionary market process to natural selection. The SBC syndrome builds friction into the selection process or, in the extreme, stops it altogether.

6. REGULATION, STATE INTERVENTION, AND THE SOFTNESS OF THE BUDGET CONSTRAINT

A second issue in placing the SBC syndrome within economic theory is whether or not the SBC is already subsumed by the theory of regulation or by the general analysis of state intervention due to market failures. Could it be that the SBC is simply a *linguistic* coinage, not a theoretical innovation, and, thus, as above, old wine in a new bottle? Again I reject this interpretation. State intervention, in general, and price regulation, in particular, are justified by many objectives. The extensive body of theoretical and empirical writing on this subject is well-known. The state may wish to intervene even if an enterprise is profitable so that survival is not a problem. For example, bureaucratic intervention may be intended to protect the environment from the enterprise's activity or to make the enterprise reduce industrial accidents. The theory of the SBC focuses on a special type of intervention designed to ensure the survival of an enterprise, or a whole industry, that would otherwise succumb to the processes of market selection and cease to exist.

A similar point can be made about price regulation. In a market economy, the state may resort to administrative price setting for a variety of reasons. For example, the government may want to prevent the abuse of a natural monopoly or to protect the interests of consumers or housing tenants. In such cases, the producer (landlord) wants to set a higher price (rental) while the regulator wishes to prevent price from rising above some ceiling for efficiency reasons. On the contrary, as an instrument of the SBC syndrome, price regulation is used to adjust the price of a commodity to cover the costs of the high-cost, inefficient producer. In this context, price regulation endorses inefficiency by tolerating the survival of high-cost production. Examples of state intervention involving a SBC include the financial subsidies given to inefficient agricultural producers in many countries and the state concessions awarded to firms in declining industries to prevent unemployment. Again the SBC literature focuses on a specific viewpoint and offers a new theoretical and empirical research agenda.

One further aspect of price regulation is worth considering. If price should be regulated for some policy objective, *what* administrative price will achieve the desired goal? Of course, this question does not apply solely to regulated prices in a market economy. It is even more pertinent to a socialist economy in which the vast majority of the prices are regulated and set bureaucratically. Many critics of the socialist economy considered the main problem to be its inability to get the prices right so that the economy could operate efficiently. The notion of the SBC contributed a new perspective to this issue by drawing attention to the one-sidedness of this question. The other side is whether the decision maker in a socialist economy pays attention to price at all. Economists accustomed to thinking about the market economy take it as self-evident

that all decision makers are price responsive. However, such a presumption is far from self-evident for the socialist economy in which the price and cost responsiveness of decision makers is quite weak. In this context, such responsiveness is a function of the perceived hardness or softness of the budget constraint.

The softness of the budget constraint makes the price and cost responsiveness of a socialist state-owned enterprise much weaker than that of a private firm in a market economy. This difference is less extreme if the comparison is made to a private firm selling at prices that are controlled by administrative means in a mixed-capitalist system. Such a private firm exhibits symptoms of the SBC because price is adjusted frequently to its cost, a practice that dulls its cost-cutting instinct. However, even though this firm is not exposed to the market's ultimate trial of life or death, its profitability is not a matter of indifference to its shareholders. Profits earned depend not only on the price coaxed out of the regulators but also on the efficiency of the operation and its cost responsiveness. Hence, confining our attention to the extreme cases of softness or hardness of the budget constraint misses important applications. The degree of softness or hardness of the budget constraint, the methods and techniques used to try to harden and soften it, and the effects that these have on the decision maker producer's are crucial components of the SBC syndrome. Many research tasks lie ahead before these relationships are fully clarified.

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