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FOR CENTRAL AND SOUTH-EASTERN EUROPE

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ECONOMIC AND BUSINESS REVIEW

for Central and South-Eastern Europe

The Review seeks to embrace the disciplines of economics, organisation and business with a particular emphasis on the conditions and prospects of Central and South-Eastern European countries. Unlike other journals operating within individual disciplines, the Review focuses on the geographical area of Central and South-Eastern Europe by applying the methodology of all three disciplines - economics, business and organisation. By adopting this multi-disciplinary approach, we wish to attract writers from all parts of the world whose research and policy interests involves this geographical area. Both theoretical and empirical contributions from these areas, especially those with lessons for the economic policies of these countries, are most welcome. Today's Economic and Business Review is the successor to the Economic Review (1950-1990) and the Slovenian Economic Review (1991-1999), which were published mainly in the Slovenian language by the Union of Economists of Slovenia and the Faculty of Economics in Ljubljana. As there is a growing need for researchers studying the Central and South-Eastern European countries, and also to mark the Review's 50th anniversary, the publishers decided to change the old name and broaden its scope so as to reflect its new role. The Review is published four times a year.

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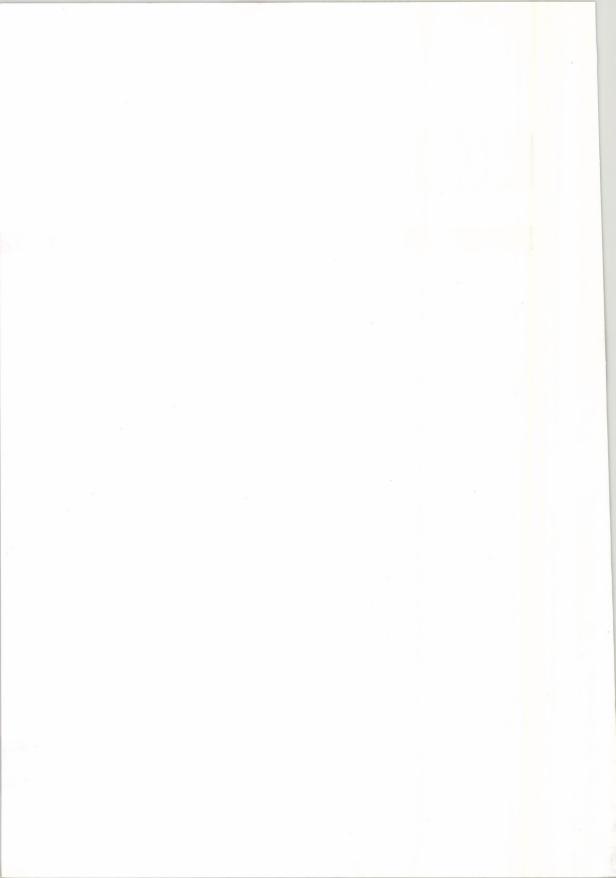
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LEGAL OBLIGATION, NON-COMPLIANCE AND SOFT BUDGET CONSTRAINT

JÁNOS KORNAI**

Abstract: If persistently loss-making firms which ought to go out of business according to the internal rules of the market are regularly bailed out, their budget constraint becomes soft. Behind the phenomenon of soft budget constraint lies a dilemma of dynamic commitment and credibility. In its declarations the state commits itself to not saving the loss-making firms, but under certain conditions it is unable to keep its promise. The article emphasizes that although the phenomenon of the soft budget constraint appears most sharply in the socialist and post-socialist economies, it is quite widespread in some spheres of mature capitalist economies as well. The soft budget constraint leads to adverse selection, dulls price and cost responsiveness, causes coordination disturbances, involves harmful monetary and fiscal effects, and causes demand to run away. The study surveys the wide and varied theoretical and empirical literature on the soft budget constraint, the political, social and economic reasons behind it, and concludes by drawing up some economic policy implications. Hardening of the budget constraint is of particular importance during the post-socialist transition, when it is one of the yardsticks for measuring the progress of the reform process.

Keywords: Loss-making firms; Bailout; Commitment; Fiscal discipline, Post-socialist economies

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1. INTRODUCTION

One requirement for smooth operation of a market economy is financial discipline. This means enforcing four simple rules: (i) Let buyers abide by their sales agreements and pay for their purchases. (ii) Let debtors observe their credit agreements and pay their debts.

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(iii) Let taxpayers pay their taxes. (iv) Let firms cover costs out of revenues. In a consolidated market economy, there is a legal obligation to comply with the first three rules. Compliance with the fourth is imposed by the nature of an economy based on private property. Persistent losses lead sooner or later to ruin and an exit from commercial life. Non-compliance with the rules of financial discipline occurs in all real economies. The syndrome known as soft budget constraint (SBC) is a special case of such non-compliance. (This article uses the abbreviations BC for budget constraint and SBC for soft budget constraint.)

2. CLARIFYING THE CONCEPTS

The concept of SBC, coined by the author (Kornai, 1979; 1980 and 1986), was borrowed from microeconomic theory of the household. Take the functioning of a firm, disregarding for a moment the possibility of credit. In a static model, the firm's total spending, like the household's in the standard microeconomic model, cannot exceed the BC-the stock of money at its disposal. Let us call this a pure case, where the BC on the firm is truly effective or hard. In a real economy, processes occur over time, and there is credit. An inter-temporal BC can be called hard if the firm's spending stream, including debt servicing, does not persistently exceed its income stream, including the credit it raises. Consider a situation where the requirement of a hard BC, and thereby rule (iv) of financial discipline, fails to apply. The firm's spending stream exceeds its income stream over a protracted period; it makes steady losses. This means it cannot fulfil various financial obligations, which flouts rules (i), (ii) and (iii) of financial discipline. For instance, it may fail to pay for ordered, delivered goods, pay wages for hours worked, pay instalments and interest on loans, pay taxes, or commit several such omissions. Each omission implies a forced loan. Those to whom payments are due are forced to give the firm credit, against their will. Then two things may happen. The internal regularities of the market dictate that a persistently loss-making firm ceases to exist. The losses are borne by the firm's owners and forced creditors, in proportions depending on the circumstances of the liquidation, for instance the terms of the law. However, there is another possibility. The firm may be bailed out. Some forced creditor may resign himself and waive the debt, or tolerate late repayment. This constitutes collaboration between the offender breaching financial discipline and the injured party. Alternatively, an institution (such as the state) may give active assistance (for instance a budget subsidy). The bailout, allowing the firm to survive its persistent losses and insolvency, softens the BC.

A few more comments are needed for clarification. There is no sense in referring to an SBC on a single firm and its operation over a single period. If a loss-making firm was bailed out once, that does not justify saying its BC was soft. The BC is rightly called soft only when whole groups of firms are rescued frequently, bailouts occur time and again over a long period, in a foreseeable fashion, and the collective experience of these rescues becomes imprinted in management expectations. The SBC syndrome is not a

'financial' phenomenon, but a *behavioural regularity* of firms, an attribute of expectations, a specific social relation between the firm and the rescuer. Ultimately, there lies behind the SBC syndrome a dynamic dilemma of commitment and credibility, which will be dealt with in more detail later. The state (or other rescuing institution) would like to induce the firm to cover its expenditure with its income. So it makes statements committing itself not to bail the firm out. However, it fails to abide by these under certain conditions. The more frequently this happens, the less credible the commitment becomes. BC stringency is not a dichotomous variable. Between the extremes of perfect hardness and perfect softness lies a continuum. The degree of hardness or softness expresses the certainty of the firm's expectations, the subjective probability that a breach of financial discipline will be tolerated and a bailout ensue.

To understand the SBC syndrome more closely, let us look at the instruments available for softening the constraint, remaining with the firm and cases where the state or a state institution applies them. The most obvious instrument, most often mentioned by writers, is a budget subsidy covering a firm's losses. A second, equivalent instrument, but less conspicuous than this, is a tax concession. There are several variants. Rather than setting a uniform rate of taxation, the state may tailor it to each sector or industry's profitability. Alternatively, there may be a uniform rate, with room for exceptions. Or the state may tolerate firms breaching rule (iii) by not paying taxes on time. The last does not mean a situation where the firm taxed finds a legal loophole or commits an undetected act of illegal tax evasion. The situation within the scope of SBC is one where the tax authorities knowingly overlook a breach of the law, as the firm's tacit accomplice, lest it collapse under the weight of taxation. A third category of instruments ties in with credit. Let us confine the discussion for now to cases where the bank is state-owned and controlled by the government's financial apparatus. The BC softens if the state bank fails to apply strict, prudential criteria to its lending, and allows credit applications even if it knows debtors will be unable to meet their obligations. This is a kind of lifeline the state often throws to a troubled firm. The softness may continue when instalments, interest and repayment of the loan fall due. This breach of rule (ii) of financial discipline, where noncompliance with the credit agreement is tolerated, eases the firm's payment problems temporarily. The instruments applied within the credit system are far less conspicuous than fiscal instruments, and survive more stubbornly, even in an environment resistant to softening of the BC. The fourth and final category of instruments can be applied where prices are regulated by an administrative authority. The difference between a soft and a hard administrative price can be sensed intuitively. One adapts passively to prevailing costs, according to a mechanical 'cost-plus' formula. This largely sanctions the actual costs, even if they result from inefficient management. The latter calls for effort by the firm, which can only make a profit at the administratively fixed price by producing economically and efficiently. It is easier to set a harder price, of course, if there is some available basis for doing so, such as the cost level of more efficient firms in the country, or the foreign price of a tradable good. The risk of softening is greater if the producer has a national monopoly, or the product or service is not tradable.

There has been a debate about the concept of SBC in economic literature. Several authors have suggested alterations, or tried to sub-divide the syndrome (see, for instance, Gomulka, 1986). However, a broad range of theoretical, empirical and economic-policy writing adopts the conceptual framework just outlined. This is the sense in which the concept is used in the rest of this article.

3. THE SBC FRAMEWORK: A VERTICAL RELATION

Market transactions produce a horizontal linkage between two partners of equal rank, buyer and seller. There is no superiority or subordination. The information flows horizontally, as does the product or service provided and the payment made for it. The SBC syndrome can occur when a vertical relation of superiority and subordination replaces or imposes itself on the horizontal relation. This clearly occurs under the socialist system. (Here the socialist system denotes the actual, historical formation that existed for decades in many countries, including the Soviet Union and several countries in Eastern Europe. It is synonymous with what is often known elsewhere as the 'communist system' or 'Soviet-type economy'.) In this case the state stands 'above' the enterprise, as its owner and the main co-ordinator running the command economy. The official doctrine of the socialist system endorses rule (iv) of financial discipline: a firm must cover costs from income. However, the principle does not actually apply because relations between the state and state-owned enterprises are permeated by the SBC syndrome. This has been the area of main concern in literature dealing with the SBC. However, researchers recognised from the outset that it is much more widespread, and appears under other systems, if only sporadically. Let me list some other relations that display SBC phenomena and are not system-specific (having developed under either the capitalist or the socialist system). In each case the relation is vertical, and I have signified which party is 'above' and which 'below'. The superior party tolerates the non-performance or initiates the rescue. The subordinate party breaks the rules and benefits from the rescue:

- Above: the state. Below: production firms (for instance, in declining industries), either state-owned or privately owned.
- Above: the state. Below: investment projects implemented with a state subsidy.
- Above: the state. Below: banks, either state-owned or privately owned.
- Above: the state. Below: off-budget, non-profit institutions (for instance, the social insurance system).
- Above: central government. Below: local government. (See Qian and Roland, 1996.)
- Above: a bank with a credit monopoly. Below: debtors.

The concept of an SBC can be broadened further. Phenomena related to it in many respects occur, for instance, in relations between the centre of a large conglomerate and its member-companies. Another example is the handling of a debt crisis affecting several countries. There the international financial community is above (the international financial institutions, major banks, and perhaps governments of creditor countries),

while the countries requiring a bailout are below. The remarks that follow are largely confined to the spheres in which the conceptual and analytical apparatus originally developed: to relations between the state and subordinate organisations, primarily firms.

4. THE SYNDROME'S EFFECTS

4.1 Weakening of market instincts, adverse selection

One prominent aspect of standard microeconomic theory is the recognition that firms strive to maximise profits. The theory of the SBC adds a further dimension. A firm's behaviour is also influenced by how intensely it strives to act efficiently: feebly or strongly. The market mechanism and market competition perform a process of natural selection. If the BC is hard, profitability becomes a matter of life and death. If the BC is soft, so that the firm's survival is assured, its pursuit of profits growth will be feebler, because it needs to strive less hard to survive. The theory of the SBC complements the literature that arose in the wake of Schumpeter's theory of business enterprise. Schumpeter (in 1911 [1968] and 1942 [1976]) drew attention to the process of creative destruction. The literature deals extensively with the creative side of the process, with freedom of enterprise and competitive entry, with the forms and conditions of competition, and with innovation. Schumpeter's entrepreneur introduces new products, technologies and methods of organisation, and wins new markets. The theory of the SBC focuses on the destructive side. Softening the BC impedes the destruction that market selection should be carrying out. Acting symmetrically with the phenomena emphasised by Schumpeter, the SBC sustains the old products, and old technologies, forms of organisation and markets, in cases where they should have been replaced by new ones. This conservation continues to tie down resources that market selection would free for new, more efficient purposes. Indeed the way the SBC syndrome supported obsolete firms was among the main reasons for the socialist system's low efficiency. The SBC syndrome does not simply weaken the ex ante selection produced by exit. It also creates adverse selection ex post, making an entrepreneur entering the market less concerned about risks and more willing to proceed even if costs are unfavourably high, because the firm can expect to be bailed out if there is trouble. The effect of the SBC resembles what is known in the economic theory of insurance as 'moral hazard'. Indeed with an SBC in force, the state (superior organisation) more or less assumes the role of an insurer, compensating for losses. That dulls the debtor's sense of responsibility, saps his eagerness to prevent losses, or if the losses have already been made, to minimise them.

All these developments strongly affect the mentality and behaviour of managers. It may be more important to have good connections with those who decide on budget subsidies, tax concessions, soft credits, and administrative prices that allow costs to run away, than to strive for more favourable procurement and marketing, or more efficient production. Here analysis of the SBC intersects with the theory of rent seeking. The latter sets out to explain how the entrepreneur wants to optimise his or her relations with the political sphere and the bureaucracy. This includes the case where an already profitable enterprise succeeds in gaining a rent. The SBC theory examines the relation between firm and state (and other, analogous vertical relations) from a specific angle, directing attention to losses, insolvency, exit, the problems of demise and survival of the organisation.

4.2 Weakening responsiveness to prices and costs

The customary demand functions describe the buyer's varying reactions to relative prices of different products. The tightness of the BC adds another dimension to the examination of price responsiveness. If the firm is sure it will be compensated for its losses and its survival not be jeopardised by insolvency, it becomes less responsive to prices and costs. It feels it is less important to react to cost and price changes by altering its technology or product mix.

4.3 Co-ordination problems, damaging monetary and fiscal effects

If the SBC syndrome is confined to a narrow field of the economy, it may not have cumulative, spillover effects. It is a different matter if it prevails over most of the economy, as it typically did under the socialist system. This can also be felt strongly at certain stages of the post-socialist transition. Predominance of the SBC syndrome can lead to inordinate expansion of the credit supply, for instance through forced lending. One obvious example is the phenomenon of 'chains of debt' that cause serious problems in several post-socialist countries. This places serious strains on the whole banking system and the state budget, and puts on pressure for excessive monetary expansion and for fiscal deficit. If the government reacts by using its usual softening instrumentssuccessively bailing out those in worst trouble-it can prevent serious co-ordination problems in the short term. At the same time it spells out a message that it does not matter if a firm cannot pay its debts, because it will be rescued, and the long-term disciplinary effects of that are very damaging. Bailing out the large banks that suffer a financial crisis is especially problematic. If they are not rescued, there could be catastrophic knock-on effects. On the other hand, the repeated state assistance they have received in most postsocialist countries sends out harmful signals to the financial sector. It reduces the severity with which the bank treats credit transactions that represent a bad risk (see Begg and Portes, 1993).

4.4 Runaway demand

If buyers feel they can spend more than their BC allows without running a serious risk, their demand ceases to be constrained by present and future income. So the SBC syndrome causes runaway demand. There is no way of establishing accurately what

degrees of softness in the BC will generate what amounts of additional demand. Due to the softening process, demand tends to depart from the buyer's ability to pay, as the expression 'runaway' implies. The effect of SBC on demand has been confirmed theoretically by Goldfeld and Quandt (1988, 1990 and 1993) and Kornai and Weibull (1983). Goldfeld and Ouandt call this reaction the 'Kornai effect'. There was debate about whether the effect plays a significant part in explaining the chronic shortage characteristic of the socialist system. I still find the original hypothesis convincing. Although the syndrome was certainly not a *sufficient* condition for a chronic shortage economy to develop, even under a system where the SBC syndrome prevailed in most of the economy, it was, along with other factors, among the necessary conditions for this (see Kornai, 1992, Chapters 11 and 12; Oian, 1994, and Kornai, 1995). The effect is most striking on investment decisions. It is noticeable also in a traditional market economy that actual costs far outstrip the original budget for a project if it is completed wholly or partly with state funds. That applies to many military installations. Two classic examples of such overruns involving Britain and France were the Concorde supersonic airliner and the Channel Tunnel. In all such cases, those initiating and implementing the project calculate that the state will not abandon the project once it has started. The phenomenon applied to almost every investment carried out under the socialist system. The SBC suffices to explain a typical feature of the economic system: investment hunger. The heads of every enterprise and state institution want to invest, because they can do so without risk of financial failure. (See Kornai, 1980; and Huang, 1996.) The investment hunger constantly reproduced under the socialist economic system is among the main components of the runaway of aggregate demand. The connection between the SBC syndrome and demand has important theoretical implications. Standard equilibrium theory tacitly assumes the BC on every decision-maker is hard. The assumption that Say's Principle applies is equivalent to assuming that the BC exists and is hard. According to Clower, the BC is not an accounting identity, but a rational postulate about behaviour, for 'no transactor consciously plans to purchase units of any commodity without at the same time planning to finance the purchase either from profit receipts, or from the sale of units of some other commodity ...' (See Clower 1965; and Clower and Leijonhufvud 1975 and 1981.) Where the SBC syndrome applies, this postulate is breached on a mass scale on a micro level, and consciously so, as Clower puts it. To remain with the example of investment, the investor, though aware that the planned income stream will never cover the planned expenditure stream, embarks on the project nonetheless. This starts a process of inordinate additional demand that the additionalsupply process cannot oppose at prevailing prices.

MEASUREMENT

Like other complex social and economic phenomena, the hardness or softness of the BC cannot be measured directly, only indirectly. One possible way of quantifying it is to observe the extent to which the various softening instruments are applied and the

frequency with which this occurs. For instance, how large are the budget subsidies and how are they distributed? How differentiated are the tax rates? To what extent do unpaid taxes accumulate? What is the composition of the banks' stock of outstanding credit, in terms of servicing and repayments? What is the proportion of non-performing loans? What is the distribution of profitable and loss-making firms among the debtors to banks, or in more general terms, what relationship pertains between the extending of credit and business profitability? According to the conservative principle of banking, the best borrower would be one who could continue to operate without credit. It is possible to observe whether the principle applies. There are numerous examples of this method of measurement found in literature on the subject (see for instance Kornai and Matits, 1990; Raiser, 1995 and Perkins and Raiser, 1995). Another way of measuring is to try to examine the primary effects of the SBC. In line with the account given earlier, one can describe as secondary or ultimate effects occurrences such as declining efficiency, weakening responses to prices and costs, disturbances of co-ordination, and runaway demand. The question then remains what other factors contributed to these ultimate effects, besides the SBC syndrome. On the other hand, there is a fairly direct relation between SBC and the following three primary effects:

- A. The strength of the correlation between the profitability of a firm and its survival. The complementary issue to this is the closeness of the correlation between the exit and the losses of a firm, and the frequency of the various types of bailout actions.
- B. One form the SBC syndrome takes is bureaucratic redistribution of business profits. Most of the profits of enterprises operating fairly profitably are siphoned off through various channels and transferred to those that are less profitable or make losses. This levelling of profits dulls the profit motive. The scale of the redistribution can be gauged numerically (see Kornai and Matits; 1990; Schaffer, 1990).
- C. Under a hard BC, a persistently profitable enterprise has a greater chance of self-financing its investment and of receiving long-term investment credit. It is a sign of softening if there is a loose correlation between the profitability of a firm and its development, expansion and investment activity. This can also be measured numerically (see Kornai and Matits, 1990; Perkins and Raiser, 1995).

There is a danger of comprehensive, manifold measurement being eschewed in favour of observing one or two randomly chosen indices, such as reduction of budget subsidies. This can lead to false conclusions. The post-socialist transition has slashed fiscal subsidies to the business sphere in many countries. Nonetheless, there are no grounds for complacency. The hardening of the BC has been much less radical. Into the foreground have come softening techniques such as extending soft loans, or tolerating firms' non-fulfilment of loan-servicing and taxpaying obligations. It is essential to track the course of the SBC syndrome through a collection of indices.

6. THE EXPLANATORY FACTORS

Since it is the state, in most cases, that softens the constraint, it may initially seem baffling to know why it should do something that harms the state interest. Several explanations have been advanced (for a review of the theories, see Dewatripont, Maskin and Roland, 1996; and Maskin, 1996.) One criterion for grouping the theories is by whether they attribute this behaviour in an *endogenous* fashion to the internal interests of a softening institution 'above', or whether an *exogenous* explanation applies, for in the second group of explanations, a strong, even a key part is played by the relation of the actor performing the softening with the surrounding political and social environment and the external economic factors.

6.1 Endogenous explanations

The pioneering work is a study by Dewatripont and Maskin (1995), whose model shows how the SBC syndrome can be analysed with the apparatus of game theory. A superior organisation, such as a bank, is deciding whether to finance investment projects. Projects come in two types: 'good' investments, which can be completed in a specified period, and 'bad' investments, whose completion will be delayed and cost more than 'good' projects. Although each project manager knows beforehand the likely completion period, this information is kept from the bank, and some projects accepted are bad. At the end of the initial period, the managers of bad, incomplete projects request refinancing. Since the initial investment is a sunk cost, it may be the case that the bank prefers to refinance a loan, because the marginal benefit of refinancing exceeds the marginal cost. This situation may occur even though the total sum invested in the project will end up being higher than the returns it generates. So the bank is using softening instruments in its own commercial interest, not because of outside factors. However, its behaviour results later in adverse selection. Future project managers count on the bank's willingness to refinance and have no qualms about requesting money for bad projects. The only way the bank can avoid this is by committing itself in advance (and abiding by its commitment) not to give refinancing under any conditions - but in that case it would often have to act against its commercial interest. The study analyses the conditions in which the bank will choose repeated refinancing, along with its damaging side effects, and those in which it will commit itself to refusing refinancing. In particular, it shows that decentralisation of credit can make refinancing more difficult to achieve, which can contribute to hardening budget constraints. The credibility of a commitment by an institution 'above' lies at the centre of many other theoretical investigations (for instance, see Oian and Xu,1991; and Schaffer, 1989.) Bai and Wang (1996) emphasise the information side of the problem. Those personally responsible to their superiors for a previous bad decision are afraid it will shed a bad light on their screening activity to cancel the half-complete project. It will be less conspicuous to continue the project, even at a higher cost.

6.2 Exogenous explanations

The following are those that deserve the closest attention.

- 1. The socialist system headed by the communist party was imbued with the concept and practice of state paternalism. This left its mark on the state's relationship with firms, as well as individuals. The state treated its enterprises like children, patronising them and intervening in every detailed decision. On the other hand it did not abandon them when they were in trouble. In effect, the party apparatus, the economic bureaucracy and the enterprise management group formed an inseparable whole, a uniform, cohesive stratum of leaders. Managers of firms could count on help from their colleagues (see Kornai, 1980). Explanation 1 is system-specific, deriving from the political and sociological nature and official ideology of the socialist system. Explanations 2–4 are not system-specific.
- 2. Governments may make SBC-type interventions for reasons of employment policy. They want to avoid mass insolvency and liquidation among firms, so as to save jobs and reduce the insecurity of employees.
- 3. Governments and parties may apply mainly fiscal instruments of state assistance that soften the BC, in order to gain political support. This lies behind the fiscal support won by farming lobbies, or the assistance to some declining, crisis-ridden industries or regions. This explanation for the SBC syndrome gains support from inferences of public-choice theory.
- 4. The possibility of corruption cannot be excluded. A loss-making firm may bribe a politician or bureaucrat who can influence whether fiscal assistance or other softening instruments are applied.
- 5. The state feels it has no option but to bail out a troubled firm if its demise would cause external damage greater than the cost of rescue. This effect may occur in the real economy. For instance, if a firm is in a monopoly position, elimination of its production may upset other firms as well, and precipitate a serious loss to society (see Newbery, 1991; and Segal, 1993.) On the other hand, it may appear in the monetary economy. Mention was made earlier of the reproduction of insolvency and the grave coordination problems that may arise. The desire to avert serious external damage explains why the state normally saves large banks in financial difficulties, not only in a socialist or post-socialist economy, but in every developed country that operates traditionally as a market economy. A surge of withdrawals by depositors leads to panic, which spreads and can grow into a national catastrophe. As a rule, the state forestalls this with a bailout.

The various endogenous and exogenous explanations often act together on the factors that induce softening, reinforcing each other. Examining the explanatory factors makes clearer something already mentioned when the concepts were clarified: why the SBC syndrome is more widespread, prevalent and resilient under the socialist than under the capitalist system. In the former, all the explanatory factors listed are constantly present in all spheres of the economy. However, most of these factors can also appear in the latter, if more sporadically and over a narrower sphere. SBC

phenomena tend to appear more extensively the greater the intertwining between politics and business, the bigger the state sector, and the wider the bureaucracy's sphere of action. Thus the SBC syndrome is quite common in developing countries, for instance.

7. CONCLUSIONS FOR ECONOMIC POLICY

Identifying the damage the SBC syndrome causes leads to a general conclusion: it is worth working to harden the BC on firms and other organisations. While this applies to every economic formation, there is good reason to single out economic policy in the socialist countries, where the SBC syndrome causes the most trouble. Historical experience seems to support the following statement. Partial reforms with cosmetic changes will not suffice to harden the BC. The socialist system has to give way to a capitalist market economy. Most policy programmes and expert recommendations for the post-socialist transition treat hardening the BC as a key issue. The need for a radical change in property relations should be specially emphasised. It helps to harden the BC if the relative weight of the private sector is raised substantially and most enterprises hitherto owned by the state are privatised. There is also a fairly general consensus on the following statement: it is hopeless to expect the BC on firms to harden while state ownership remains dominant (see Boycko, Shleifer and Vishny, 1992 and 1995). On the other hand, Bardhan (1993) expresses confidence about the compatibility of public ownership and a hard BC. The situation changes when private ownership becomes dominant and the state-enterprise sector narrows. It can be observed empirically that it then ceases to be impossible (although it remains far from easy) to give the remaining state-owned enterprises fuller autonomy and harden their BC (see Pinto, Belka and Krajewski, 1993).

These are some other measures that help to eliminate or minimise the SBC syndrome:

- Introduction and consistent enforcement of an accounting law compatible with a market economy. This limits the concealment of losses, as does the spread of the jointstock company form.
- Introduction and consistent enforcement of an up-to-date banking law. This makes it harder to conceal losses or irresponsible lending.
- Reduction of fiscal subsidies, introduction of uniform tax rates, and elimination or strict limitation of tax concessions. 'Fiscalization' of concealed subsidies, so that they appear plainly in the budget, which tends to reduce them.
- Introduction and consistent enforcement of a bankruptcy and liquidation law, and development of the judicial system required.
- Where possible, action against the appearance of monopolies.
- Where possible, price liberalisation, to limit the scope for using administrative prices as a softening instrument.
- Decentralisation, where practicable, of the state organisation, including fiscal decision-making. If possible there should be overlap and multiplication among state bodies, to

create competition among them that helps to overcome the SBC syndrome (see Raiser, 1995; and Qian and Roland, 1996.)

While most experts agree on the desirability of hardening the BC, this can never be accomplished rigidly or dogmatically, at a stroke. In some cases exceptions must be made, for instance if the external damage would be too great compared with the gain from hardening the constraint. Under some conditions, there have to be temporary concessions, to prevent insolvencies and liquidations caused by the hardening having serious knock-on effects that destabilise the economy or political democracy. Attention needs paying to regional differences within the country, and to social and employment problems caused by market selection. Adaptation takes time, so that the option of temporary subsidies should not be utterly rejected in a doctrinaire manner. If such subsidies are given, it is worth announcing beforehand a timetable for phasing them out. This allows preparations to be made for a hard BC regime. There has been debate about when such softening of the BC is permissible and what scale the concessions should assume. Observation of the hardness or softness of the BC and assessment of the change have passed from the realm of theoretical studies into the practical language of economic policy. Reports on the post-socialist transformation frequently take the BC as a yardstick. Activity (or absence of activity) to harden the BC makes a good gauge of the responsibility, foresight and resolve behind government policy.

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REFERENCES

Bai, C. and Y. Wang (1996), Agency in project screening and termination decisions: Why is good money thrown after bad? Mimeo, University of Minnesota.

Bardhan, P. K. (1993), "On tackling the soft budget constraint in market socialism", In *Market Socialism: The Current Debate*, eds. P.K. Bardhan and J.E. Roamer, New York; Oxford; Toronto and Melbourne: Oxford University Press.

Begg, D. and R. Portes (1993), "Enterprise debt and economic transformation: Financial restructuring in Central and Eastern Europe", In *Capital Markets and Financial Intermediation*, eds. C. Mayer and X. Vives, Cambridge: Cambridge University Press.

Boycko, M., A. Shleifer and R. Vishny (1992), *Property rights, soft budget constraints and privatization*, Mimeo, Harvard University.

Boycko, M, A. Shleifer and R. Vishny (1995), Privatizing Russia, Cambridge, Mass.: MIT Press.

Clower, R. (1965), "The Keynesian counter-revolution: A theoretical appraisal", In *The Theory of Interest Rates*, eds. F.H. Hahn and F.P.R. Brechling, London: Macmillan.

Clower, R. and A. Leijonhufvud (1975), "The coordination of economic activities: A Keynesian perspective", *American Economic Review* 65 (2), 182–8.

Clower, R. and A. Leijonhufvud (1981), Say's principle: What it means and doesn't mean, Reprinted in A. Leijonhufvud, Information and Coordination, Oxford: Oxford University Press.

Dewatripont, M. and E. Maskin (1995), "Credit and efficiency in centralized and decentralized economies", *Review of Economic Studies* 62, 541–56.

Dewatripont, M., E. Maskin and G. Roland (1996), Soft budget constraints and transition, Manuscript.

Dewatripont, M. and J. Tirole (1996), "Biased principals as a discipline device", *Japan and the World Economy* 8, 195–206.

Goldfeld, S.M. and R.E. Quandt. (1988), "Budget constraints, bailouts and the firm under central planning", *Journal of Comparative Economics* 12, 502–20.

Goldfeld, S.M. and R.E. Quandt (1990), "Output targets, the soft budget constraint and the firm under central planning", *Journal of Economic Behavior and Organization* 14, 205–22.

Goldfeld, S.M. and R.E. Quandt (1993), "Uncertainty, bailouts, and the Kornai effect", *Economics Letters* 41, 113–9.

Gomulka, S. (1986), "Kornai's soft budget constraint and the shortage phenomenon: A criticism and restatement", In *Growth, Innovation and Reform in Eastern Europe*, Economics of Technological Change series, Madison, Wisc.: University of Wisconsin Press.

Huang, Y. (1996), Inflation and Investment Controls in China. The Political Economy of Central—Local Relations during the Reform Era. Cambridge: Cambridge University Press.

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), "The soft budget constraint", Kyklos 39, 3–30.

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

Kornai, J. and Á. Matits (1990), "The bureaucratic redistribution of firms' profits", In *Vision and Reality, Market and State: New Studies on the Socialist Economy and Society*, J. Kornai, Budapest: Corvina, Hemel Hempstead: Harvester-Wheatsheaf and New York: Routledge.

Kornai, J. and J.W. Weibull (1983), "Paternalism, buyers' and sellers' market", *Mathematical Social Sciences* 7, 153–69.

Maskin, E.S. (1996), "Theories of the soft budget-constraint", *Japan and the World Economy* 8, 125–33.

Newberry, D.M. (1991), Sequencing the transition, Discussion Paper 575, Centre for Economic Policy Research, London.

Perkins, F. and M. Raiser (1995), *State enterprise reform and macroeconomic stability in transition economies*, Economics Division Working Papers 95/1, Research School of Pacific and Asian Studies, ANU.

Pinto, B., M. Belka and S. Krajewski (1993), *Transforming state enterprises in Poland: microeconomic evidence on adjustment*, Working Paper 1101, *Transition and Macroadjustment*, Washington DC: The World Bank.

Qian, Y. (1994), "A theory of shortage in socialist economies based on the soft budget-constraint", *The American Economic Review* 84, 145–56.

Qian, Y. and G. Roland (1996), Federalism and the soft budget constraint, Manuscript.

Qian, Y. and C. Xu (1991), Innovation and financial constraints in centralized and decentralized economies, Mimeo, London School of Economics.

Raiser, M. (1995), Decentralization, autonomy and efficiency: Inconsistent reforms and enterprise performance in China, Kiel Working Paper 689, Institut für Weltwirtschaft an der Universität Kiel.

Schaffer, M. E. (1989), "The credible-commitment problem in the center-enterprise relationship", *Journal of Comparative Economics* 13, 359–82.

Schaffer, M. E. (1990), "State-owned enterprises in Poland: taxation, subsidization, and competition policies", *Eastern Europe* 43, 183–201.

Schumpeter, J. A. (1911), *The Theory of Economic Development. An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle, Cambridge, Mass.*: Harvard University Press; 1968.

Schumpeter, J. A. (1942), Capitalism, Socialism and Democracy, New York: Harper and Row; 1976.

Segal, I. (1993), Monopoly and soft budget-constraint, Manuscript.