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### Publication Date

1991-07-01

Peer reviewed

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Working Paper No. 91-175

**Market Socialism: A Case for Rejuvenation**

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July 1991

Key words: investment planning, competitive socialism, soft budget constraint

Abstract

In this paper we first discuss a market-mediated mechanism of investment planning which performs better than capitalism in terms of investment coordination, more egalitarian distribution, lower unemployment and production of public "bads". We then look at the inevitable question of the soft budget constraint, both as an agency problem and as a political problem. We propose a bank-centric system of insider monitoring which provides a partial solution to those twin problems.

JEL Classification: O50, I10, J610



# Market Socialism: A Case for Rejuvenation

by

Pranab Bardhan and John E. Roemer

## 1. Introduction

It is unfortunate that the momentous events in socialist countries since 1989 have persuaded many among us that socialism as a political, economic and intellectual movement is to be now dismissed as bankrupt and practically moribund. The "socialist" economic experiment that has clearly failed was characterized by three features: (1) public or state ownership of the means of production, (2) non-competitive, non-democratic politics, and (3) command/administrative allocation of resources and commodities. The false inference that is often being drawn from this is that, since the conjunction of (1), (2), and (3) have implied economic failure, therefore all of (1) through (3) must be negated to achieve a successful economic system. What we outline below is a feasible economic mechanism of "competitive socialism" in which (2) and (3) are, indeed, negated -- there would be competitive politics and competitive allocation of most commodities and resources -- but in a major part of the economy public ownership of the principal means of production would be maintained.<sup>1</sup> Put slightly differently, our claim is that competitive

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<sup>1</sup>In China and Vietnam a curious attempt is being made to partially relax (1) and (3), while holding on to (2). Apart from its inherent undesirability from the democratic-socialist point of view, we also doubt the long-run

markets are necessary to achieve an efficient and vigorous economy, but that pervasive private ownership is not necessary for the successful operation of competition and markets. Contrary to popular impression this claim has not yet been disproved by history or economic theory. It is the failure of both the political "right" and the "left" to disambiguate the concepts of private ownership and the competitive market that has led to the premature obituaries of socialism.

For what follows, it is essential to clarify several ambiguities in the way terms are used in the on-going discussion. First, there is a distinction between central planning and administrative/central allocation: the government engages in central planning when it decides to direct the economy to achieve socially mandated ends, while administrative allocation is a particular way of implementing a plan. What has been demonstrated in the socialist countries is the failure of a system of generalized administrative allocation, not that of central planning. Second, we distinguish between public ownership and state control of firms. We define public ownership to mean that the distribution of the profits of firms is decided by the political democratic process -- yet the control of firms might well be in the hands of agents who do not directly represent the state. What the Eastern European experiment has shown is that a system of pervasive state control of firms, plus the absence of markets, does

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viability of this strategy.

not work. Public ownership may still be compatible with dynamic efficiency.

Public ownership, so defined, is not sufficient for socialism, which requires two things: that profits be distributed more or less equally, and that central planning be used to solve market failures. Competitive democratic socialism is, thus, a system in which (i) the population, by democratic means, decides to distribute profits of firms in a more or less equal manner across the population, (ii) price and non-price mechanisms of competitive markets are used as extensively as possible in the allocation of resources and (iii) the state intervenes in various ways to mitigate market failures, particularly in the coordination of investment decisions and in meeting complex social objectives (like ensuring a certain quality of social life).

Of course, one standard response in some East European countries to proposals of market socialism is that some variants of it have been tried (for example, in Hungary since 1968) and they don't work. Kornai (1990) states it flatly: "the time has come to look this fact in the face and abandon the principle of market socialism.... It is time to let go of this vain hope once and for all". Yet when one studies the Hungarian socialist reform process over the last two decades in some detail, say in the account of Brus and Laski (1989) or that of Kornai himself, it is clear that whatever has been tried has been at best piecemeal; market socialist reforms in some integrated pattern, with

institutional restructuring to take account of the various incentive and agency problems, have never been tried, and certainly not with any measure of political democracy or full market competition. Quite often the crucial decisions on the entry and exit of firms and the selection, promotion and dismissal of managers have effectively remained in the hands of the all-powerful party nomenklatura. Sachs (1991), on the basis of his recent experience in Poland, has claimed that market socialism involving "liberalization without privatization" is particularly pernicious, because it gives the managers and workers of a public firm autonomy without responsibility, and this often leads to their joint cannibalization of the firm's assets. But this only means that the key incentive and agency problems in the management of a public firm have to be addressed, and it is the claim of our paper that privatization is not the only or even the better way of handling those problems.

The rest of the paper is arranged as follows. In section 2 we discuss a mechanism of investment planning in a market socialist economy. Next we show how unemployment (section 3) and public "bads" (section 4) are likely to be lower under a market socialist economy than in a capitalist one. In section 5, we look at the question of the "soft budget constraint" as an agency problem under market socialism. In section 6 we propose a bank-centric system of insider monitoring as a viable solution to the agency problem. In

section 7 we discuss the essential problem of political accountability and the difficulty of credible pre-commitment involved in the issue of the soft budget constraint and suggest ways of minimizing this problem in our proposed system. In the final section 8 we address some of the other standard objections to a proposal for market socialism.

## 2. The Lange Mechanism of Investment Planning

It has been recognized quite early in the development economics literature (see, for example, Scitovsky (1954)) that there is a serious market failure problem in coordinating investment decisions over time, particularly when futures markets and risk markets are absent or highly incomplete. Of course, the information problems are quite acute for the state as well, but in a situation of intertemporal interdependence of investors the state as an outside arbiter in strategic negotiations among individual agents has at least the advantage of coercive power of enforcement, cutting through a possible bargaining impasse. Given this rationale of investment planning, the question we consider in this section is: how can the central planning bureau direct the economy to achieve planned investment targets in a market economy? We shall assume here that firms always maximize profits, postponing the obvious monitoring and incentive problems under public ownership for later sections.

Ortuño, Roemer, and Silvestre (1991) study investment planning in a



general equilibrium model of market socialism, where investment in some sectors is subsidized in order to induce an equilibrium in which a pre-determined sectoral composition of investment is achieved. The question, more particularly, concerns the relative efficacy of intervening in the economy by use of price instruments (in this case, sectoral interest rate subsidies) in lieu of administrative quantity controls. This is a multi-sector model, in which production takes place in both periods; but investment takes place in the first period, which affects production in the second period. Citizens are paid wages in each period, and receive as well, in each period, a social dividend (Oscar Lange's (1938) term) consisting of a prescribed share, perhaps equal per capita, of total firm profits. Citizens may save in the first period, and firms must borrow in the first period to finance investment, as all profits are distributed to citizens at the end of the first period. Without government intervention, a Walrasian equilibrium exists, in which the interest rate equates savings and investment, and a particular vector of sectoral investments, call it  $\bar{I} = (\bar{I}_1, \dots, \bar{I}_n)$ , obtains.

Suppose, however, the central planning bureau would like to implement a different vector of sectoral investments, say  $I^* = (I_1^*, \dots, I_n^*)$ . Assume for simplicity that there is only one investment good. Consider the following three mechanisms for implementing  $I^*$  in a market economy. In the first, which the

authors call the command-market mechanism, the planners simply issue commands to each firm to purchase given amounts of the investment good, where the total amount of investment in sector  $i$  adds up to  $I_i^*$ . Except for these commands, all markets operate -- that is, prices adjust to equate supply and demand in every market. Citizens maximize utility given their budgets, and firms maximize profits subject to the constraint that each must invest a given amount. An equilibrium may or may not exist; if one does, it may entail negative profits for some firms who are forced to invest more than they would like to. In such a case, a citizen's right to a share of profits from the firm becomes a duty to pay a share of the loss. There will be a set of sectoral investment vectors, call it  $I^{CM}$ , that can be implemented as equilibria of the command-market mechanism -- subject to the strong caveat that firms actually carry out the commands issued by the center.

In the second mechanism, called the direct-investment mechanism, the government taxes profits of firms, before they are distributed to citizens, and itself purchases the investment good, which is then distributed gratis to firms in given amounts. Otherwise, markets operate freely. In particular, firms are free to purchase more of the investment good if they so wish, but they may not sell or transfer to other firms any of the investment gift they receive from the center. Relative to a given pattern of investment gifts from the center,

there may (or may not) exist a "direct-investment equilibrium," a set of prices at which all agents maximize subject to their constraints, and in which all markets clear. (The government purchases the investment good at the market price.) Call the set of investment vectors that can be achieved as equilibrium allocations of the direct investment mechanism  $I^{DI}$ .

The third mechanism is called the Lange mechanism, as Oscar Lange (1938) originally proposed using the interest rate to influence the rate of investment in a market socialist economy. In the Lange mechanism, the center announces sectoral discounts (and perhaps surcharges) on the market interest rate at which firms in the various sectors may borrow from the state bank, which pays out interest to savers at the market rate. Subject to this vector of discounts, firms maximize profits and citizens maximize utility. The government must also tax the income of citizens to finance the deficit of the state bank, which collects interest payments in the second period from firms at one set of rates and pays out interest to savers at the market rate. A Lange equilibrium is a set of prices and an allocation at which all markets clear. For a given vector of announced interest rate discounts, one may or may not exist. Call the set of sectoral investment vectors that can be achieved as equilibrium allocations of the Lange mechanism  $I^L$ .

Ortuño, Roemer, and Silvestre show that  $I^L$  includes  $I^{DI}$ , and is equal

to  $I^{CM}$ . That is, the mechanism that uses price intervention is at least as powerful as the two mechanisms that involve direct quantity intervention. Each of the three mechanisms requires that the government have some information about preferences and technologies, but the Lange mechanism is arguably much more parsimonious in this regard than the other two. The command-market mechanism and the direct-investment mechanism both require that the center issue commands (or make deliveries) to every firm, while the Lange mechanism leaves the firm's investment strategy up to the firm. Interest rate discounts can be adjusted as the government watches what is happening in the economy, while comparable flexibility is much more costly in the other two mechanisms, where the government must commit itself once and for all.

The inference to be drawn from the exercise is not that the planners could actually implement any sectoral investment vector in the set  $I^L$ , but rather that, given the commitment to the general use of markets, price-directed planning is at least as effective and informationally parsimonious as more commandist methods. This is an instance of the distinction drawn in the first section above, unfortunately muddied by the practice of the centrally planned economies, between planning and administrative allocation.

### 3. Unemployment

In the models discussed thus far, there is no unemployment at equilibrium, since all prices, including the wage, are market clearing. But because unions will form, and will be necessary under market socialism, wages might be sticky, just as they are in a unionized capitalist economy. Wages may not adjust to market-clearing levels in the labor market, and unemployment would result. Two arguments may be offered to support the claim that unemployment would be lower in a market socialist economy than in a capitalist economy.

The first is the obvious one: to the extent that recessions are induced by failures of investment, they can be prevented by the mechanism of investment planning.

The second argument addresses the case of wage stickiness in a capitalist economy with trade unions. Suppose that a such an economy is operating near full employment, and then a bad shock occurs -- say, the price of some important input, such as oil, increases. Given the new price for the input, the full employment equilibrium for the economy will now require a fall in the real wage. If unions are strong, workers have a choice: to allow the real wage to fall, or to maintain it at its old level. It will, in general, be in the interest of large groups of workers to maintain the old wage -- if the

probability of their becoming unemployed is sufficiently small. This probability will usually be quite small for many workers, and indeed, for workers who may be powerful in unions (those with seniority, skills, etc.).

Now consider the situation in a market socialist economy, which experiences the same shock. A worker's income consists of three parts: his (her) wage, interest on the savings, and the social dividend, which, let us say, is his (her) per capita share of total profits in the economy. Suppose, for simplicity, that all workers in the economy are identical. Then each worker receives, as total income, exactly his (her) per capita share of the total product of the economy -- for each receives the same wage, interest payments, and the same share of profits. It may be shown that it is always in the interest of such a worker to allow the real wage to fall to its new full-employment level after a shock, roughly because the total product of society will be greater with full-employment than without it, and the worker receives roughly a per capita share of the total product.<sup>2</sup>

Thus, a market socialist economy has a built-in stabilizer which pushes

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<sup>2</sup>It is assumed that unemployed workers continue to receive the social dividend. The adjective "roughly" is necessary, because there is some discretion in the amount of wage replacement the unemployed would receive.

it in the direction of maintaining full employment in the face of negative shocks. This is mindful of the property of Martin Weitzman's "share economy," although the mechanism is completely different. In the share economy, full employment is maintained because firms always have an interest in hiring unemployed workers, but in the market socialist economy, it is maintained because workers generally do not have an interest in maintaining real wages that are so high as to produce unemployment.

The result generalizes to a model in which there are workers of several different skill levels, and hence wages. Under reasonable assumptions, there is less equilibrium unemployment in an economy in which each worker receives a per capita share of total profits, than in an economy in which the distribution of profits is highly concentrated (Roemer and Silvestre, 1991).

#### 4. Market socialism and public "bads"

Thus far, we have not specifically mentioned externalities (except indirectly in the case of investment interdependence), although socialism, and planning in particular, are often invoked as ways of dealing with externalities and public goods with which a market economy cannot properly deal. We will not rehearse these well-known arguments here, but will propose a way in which the equal distribution of profits to the population may reduce the production of public "bads". More generally, the egalitarian redistribution of

profits may not be simply a way of moving the economy from one Pareto optimal allocation to another, but of moving from a Pareto sub-optimal allocation with a skewed income distribution to a more nearly Pareto optimal one with a less skewed income distribution.

Suppose that there is an economy with a single firm that hires all citizens and that produces the single good that all citizens consume. The firm also produces as a joint product a public bad. Equivalently, the public bad may be viewed as a production input, whose level determines the production possibilities of the firm. Suppose that the equilibrium output of the good is an increasing function of the level of the public bad, as is the profit of the firm. One may think of several examples, the most obvious of which is pollution. Another one is the speed of the assembly line: this is a public bad for workers in the firm, but is positively correlated (at least up to a point) with output and profits. A third example might be noxious advertising for the firm. (Here, the public bad is associated with increasing profits of the firm, but not increasing output.) Assume that citizens have identical preferences, increasing in the good and decreasing in the public bad.

The economy works as follows. Citizens as shareholders of the firm decide upon the level of the public bad, by voting their shares. The price and wage then adjust so that equilibrium attains. With any level of the public bad



that shareholders might choose, there is an equilibrium, in which each citizen spends his (her) budget on the good, and consumes as well the public bad, giving rise to a level of welfare for him (her). The economy is in overall equilibrium at that level of the public bad that maximizes the welfare, so derived, of the median shareholder.

We wish to compare the equilibrium level of the public bad for two possible distributions of firm profits, one inegalitarian, and the other egalitarian. Roemer (1991) shows that, under plausible assumptions on the technology, profit function, and preferences, the equilibrium level of the public bad is higher when the distribution of profits is inegalitarian, and that, if preferences are quasi-linear, the equilibrium allocation is less Pareto efficient in the inegalitarian case. The intuition is roughly as follows. Under the assumptions, the level of the public bad preferred by a voter is increasing in his (her) share of firm profits. Consider someone who receives a large share of firm profits. A small increase in the level of the public bad produces an increase in profits and a large increase in his (her) income, which swamps the negative utility effect of the increase in the public bad. For a small shareholder, a small increase in the level of the public bad produces a small increase in his (her) wage and profit income; the small shareholder's small increase in income may not compensate for the negative utility increment due to the increase in the public bad.

As the distribution of profits changes from inegalitarian to egalitarian, the share of the median shareholder decreases, and so the equilibrium level of the public bad therefore decreases. Indeed, in actual capitalist economies, the policies of the firm are not those that are ideal for the median shareholder, but rather for shareholders who are quite above the median -- at least, this is the case when the boards of directors makes decisions and is composed of large shareholders. This only exacerbates the divergence between the level of the public bad in the inegalitarian and egalitarian cases.

The argument given is a special case of a more general one, which states that in a capitalist economy, the parochial interests of the rich may have much more weight in economic affairs than would be the case were each person to have one vote. This also extends to political affairs.

##### 5. The Soft Budget Constraint as an Agency Problem

There are some basic problems assumed away in the Langean model of section 2. Like the standard textbook model of a capitalist market economy it concentrates on the primacy of the role of prices in resource allocation. In a world of imperfect information, non-price mechanisms (like contracts and reputations) often play a more important role, and models of market socialism like the models of market economies they mimic have to take serious account of them. Let us refer the reader to Stiglitz (1990) for a

discussion of these issues in the context of market socialism.

We have also to address the key question of any model of market socialism, how to motivate the managers of public firms to maximize profits. Under private ownership the entrepreneur has a stake in the firm; he (she) gains or loses money depending on the performance of the firm. The salaried manager of a public firm has usually much less at stake, and therefore may not have the full drive or incentive to pursue the Langean rules of the game. In particular, the latter operates under the built-in expectation of what Kornai calls "the soft budget constraint". Various political considerations interfere with the harsh exit mechanism of the market and the state remains as the ultimate rescuer of losing concerns. Political accountability prevails over financial accountability. Kornai (1986) spells out the mechanisms of softening the budget constraint in terms of (a) soft subsidies - open-ended and negotiable, (b) soft taxation, i.e. easily arranged tax-reliefs, (c) soft credit - easy renegotiation of debt, often forced upon suppliers and other creditor firms, and (d) soft administered prices, often involving cost-plus pricing.

There are at least two conceptually separable elements in the essential soft budget constraint problem: one is an information or agency problem, the other is a political problem (largely involving the problem of credible pre-commitment on the part of the state). Let us take the agency problem first.

The state, as the principal, even when it has the "political will" to demand efficiency of management, may not have the full information to sort out if the agent-manager's bad performance is due to factors beyond the latter's control or not. This agency problem is clearly absent in owner-managed firms under private ownership. But if one goes beyond 19th-century owner-entrepreneurial capitalism and looks to sectors outside the small-scale sector of trade, crafts, services and agriculture, large-scale enterprises under corporate capitalism also face qualitatively similar agency problems in management.<sup>3</sup> With the separation between ownership and management in such a capitalist firm, the manager may not maximize the share value of the firm and may instead feather his (her) own nest or simply take wasteful or foolhardy decisions, and the large body of shareholders, the principal in this case, may have a difficult monitoring problem at hand: the individual investor has neither the ability nor the full incentive to monitor. Just as a socialist firm, as it is owned by everybody, is really owned by nobody, in the sense that nobody takes responsibility, similarly, when shares of a capitalist firm are owned by

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<sup>3</sup>As a matter of fact Lange (1938) insisted that "public officials must be compared with corporation officials under capitalism and not with private small-scale entrepreneurs". With respect to small-scale industry and farming Lange was of the opinion that "private property of the means of production and private enterprise may well continue to have a useful social function by being more efficient than a socialized industry might be".

thousands or even millions of investors, one may have difficulty in ensuring the proper line of responsibility. Only a small part of the agency costs under corporate capitalism can be gauged from the astronomical salary raises the CEO's in American and British companies regularly give themselves -- this is clearly a case of the soft budget syndrome, in respect of the shareholders' money rather than the taxpayers'.

Finance theorists concerned with the agency problem in corporate capitalism -- for example, Alchian and Demsetz (1972), Jensen and Meckling (1976), Fama (1980) -- claim that the primary disciplining of managers comes through (a) the capital market and (b) the managerial labor market (both within and outside the firm). In principle it is possible to reproduce (b) under market socialism, if managerial reputation and future wages crucially depend on the performance of the currently managed firm (although it requires time and considerable depoliticized institution-building, but not necessarily a capitalist property system, to nurture a corporate culture of competitive bidding in the market for professional managers). But reproducing (a) without private ownership is much more difficult. Socialism essentially lacks an institution like the stock market which is supposed to provide a mechanism of continuous assessment of managerial performance. The threat of corporate takeover is supposed to keep the managers honest and the firm efficient, and thus to resolve the conflict of interest between those who bear risk and those

who manage risk.

But the financial discipline of corporate takeover is usually a delayed and wasteful process. Jensen (1989) notes that in the U.S. the fact that takeovers and leveraged-buyout premiums average 50 percent above market price illustrates how much value corporate managers can destroy before they face a serious threat of disturbance. Even in the takeover process there is a basic asymmetry of information: managers are more informed about the real reasons of a firm not performing well than outside buyers. As Stiglitz (1985) suggests, takeovers are like buying "used firms" and Akerlof's "lemons principle" applies here as well.

We also should not forget that the threat of corporate raids, a peculiarly Anglo-American game, has not been necessary for strong performance in some countries in continental Europe (like France or Germany), and particularly in Japan. The predominant practice in postwar Japan (at least until the middle 1970's) of mutual stock-holding of private companies within the keiretsu, a corporate financial grouping, often with a "main bank" as the nucleus, provides an important alternative model of monitoring by involved parties. We have drawn upon some of the features of the Japanese system in our proposed alternative financial system of monitoring

under market socialism in the next section.<sup>4</sup> Even in the U.S., as Jensen (1989) points out, in recent years new organizational forms (the leveraged buyout association is a major example) are evolving, in which the key organizational principle is the active involvement by investors who hold large equity or debt positions in the long-term strategic direction of the companies they invest in. In other words, in the trade-off between risk diversification (facilitated by the diffuse stock ownership system) and control (which is diluted by that system), the balance is shifting in favor of more control by large investors.

#### 6. A Proposed System of Insider Monitoring

In the proposed scheme, as elaborated in Bardhan (1991), the state will

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<sup>4</sup>As M. Aoki has pointed out to us, in Japan there are two, overlapping but conceptually distinguishable, types of keiretsu: one is a financial corporate grouping across industries, bound by mutual stock-holding and a main bank as the nucleus; the other is a hierarchical grouping of firms connected by inter-industrial input-output relations, with a major manufacturing firm at its apex. Although in our proposed system we emphasize the former, there are one or two institutional features that we have borrowed also from the latter system.

not directly own a public firm. It will be a joint stock company<sup>5</sup> with the major part of the shares owned by other public firms in a financial group and the main investment bank and its subsidiaries. Some shares will be owned by companies outside the group, other financial institutions, pension funds, local governments, etc. The firm will also borrow from the main bank (which may sometimes organize a loan consortium for the firm) and those loans are convertible into equities under some pre-specified conditions<sup>6</sup> As Horiuchi (1989) suggests for the Japanese system, the primary role of the main bank may be that of what Diamond (1984) has called "delegated monitoring": through its commitment to the affiliate firm the main bank communicates to other investors and lenders about the firm's credibility.

The shares of a firm can be sold to the main bank. At the first signs of significant attempts at unloading by other firms the shares of a particular firm and usually much earlier, the main bank will take measures to prod and

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<sup>5</sup>In this system a small entrepreneur, running a private firm, can get rich "gloriously" (to use Deng's famous maxim in China). The issue of socialist takeover arises only after the owner-entrepreneur firm goes public and the shareholder-manager agency problem becomes serious.

<sup>6</sup>When lenders are also important equity-holders, credit-rationing and other onerous terms of lending may be largely avoided, and more risk-taking encouraged.



discipline the management, renegotiate the debt contract if necessary, orchestrate financial rescue strategies, help the firm with interest moratorium and emergency loans, and arrange for technological assistance from affiliated firms and for temporary selling of the firm's stocks in the latter to make up for its operating losses. With the bank's substantial share holdings it will even have the power to temporarily take over the management of the ailing firm if necessary. (In cases where bankruptcy cannot be prevented, the assets of the firm will be disposed of by the bank among a number of other enterprises). Aoki (1988) gives the example in Japan of Sumitomo Bank taking over the management of the distressed Toyo Kogyo Company, the maker of Mazda cars, in the mid-1970's, until it was salvaged and nursed back to health. The main bank is motivated to arrange the rescue operation (a disproportionate share of the cost of which is borne by the main bank) since it wants to retain its reputation or credibility as a delegated monitor (in a system of reciprocal delegated monitoring with a small number of other main banks who do it for their affiliate firms) and since otherwise it may lose the intangible asset it has accumulated specific to its relationship with the affiliate firm. In the Japanese case long-term workers have also an incentive to work harder in order to avoid liquidation of the firm (which involves a significant loss of firm-specific benefits and seniority). As Berglof (1989) has found in his comparative study of alternative financial systems, creditor reorganization of problem firms is relatively common in bank-oriented financial systems. Such

reorganization is more informal and less costly than involvement by outsiders (like courts or corporate raiders), and is also in line with the incomplete contracting approach to capital structure in the literature (see, for example, Aghion and Bolton (1988)) where the parties agree ex ante to let the banks act as reorganization specialists. Even in the United States venture capital often plays a similar role, in getting involved in active management of a company in times of trouble.

The maximum size of a corporate group should not be very large and would depend on the monitoring ability and technical and financial expertise of the main bank. On the other hand, it should not be too small, at least for the sake of risk diversification. It will be desirable for members of a corporate group to be technologically somewhat inter-related, either at the vertical upstream-downstream level or at the horizontal contracting level. This is for three reasons: (a) technological inter-relatedness makes it easier to be somewhat knowledgeable about one another's production and market conditions, so that sharing of information, closer monitoring and early detection of trouble become feasible; (b) there may be spill-overs in the results of R and D, so that the usual externalities in the generation and diffusion of technology can be internalized within the mutual stock-holding corporate group; and (c) it becomes easier for the main bank to specialize in some relatively narrow and well-defined technological area for the purpose of

monitoring and scrutinizing its loans and equity involvements in the associated companies. On the other hand, if the technologically interrelated firms are prone to have covariate risks, the main bank needs to have a sufficiently diversified portfolio of loans and equities in firms outside the corporate group to reduce the danger of bank failure.

The proposed bank-centric financial system thus solves in a major way the planner-manager principal-agent problem and does it in a potentially better way than the stock market-centric system. The main bank and the group partners have a larger stake in and more "inside" information about a company than the ordinary shareholders in a stock market-centric system, are likely to be capable of detecting and acting on early signs of trouble (at least the collective action problem is somewhat less acute in what is basically a mode of internal conflict resolution), and are prone to take a longer view in the matter of risk-taking and innovations (i.e. they will be more tolerant of temporary low returns). Under the stock market system even fully rational investors, in a situation of highly imperfect information about the activities of the firm, may be too much concerned about short-run profitability. This is partly confirmed by Berglof (1989) who notes that a feature that distinguishes the bank-oriented systems from their stock market oriented counterparts is the longer-term shareholdings in the former.

### 7. The Soft Budget Constraint as a Political Problem

But the major problem of depending on the main bank as the primary monitor of the public firms in a corporate group is the inevitable question: who monitors the monitor? If the main bank depends substantially on the state for finance, the political aspect of the soft budget constraint again looms large, and the politics of soft budget expose, so to speak, the soft underbelly of socialist economics.

Whenever the beneficiaries from a state policy of leniency in underwriting losses, in refinancing or in providing relief or subsidies are concentrated and highly visible while the costs of such a policy are diffuse, there is inevitable political pressure on the state to follow such a policy, whether in a capitalist or in a socialist country. But such pressure is clearly more irresistible in the latter than in the former. In capitalist countries, while large bail-outs by the state are not uncommon, the prevailing hegemonic ideology makes lay-offs and bankruptcies politically more tolerable. All systems make costly mistakes from time to time; under socialist monitoring (including under our proposed system) what are called Type 2 errors (viz., bad projects are allowed to continue too long) are likely to be more common than Type 1 errors (viz., projects abandoned too soon) that seem to characterize the harsh, if occasionally myopic, exit mechanisms of capitalist market economies. Different societies have different degrees of tolerance for these

two types of error. Societies that value stability and security more than mobility and change seem to have a larger degree of tolerance for Type 2 errors.

While it is difficult to get away completely from the politics of the soft budget constraint, there are some reasons to believe that they may be less virulent under our proposed insider monitoring system with proper safeguards. Let us spell out these reasons:

(a) In our system between the state treasury and the public firm, which is an independent joint stock company, there is a hard layer formed by equity-holding technologically interdependent affiliate firms and the main bank which orchestrates the reciprocal monitoring. This layer provides some financial discipline on public firms and acts as a buffer against directly political accountability.

(b) The reputational concerns of the main bank managers may act as an antidote to easy susceptibility to political pressures. In Japan even though the banks have been closely regulated by the Ministry of Finance, there is some keenness on the part of the bank managers to preserve their reputation as good monitors, and there is competition among banks in seeking the position of main bank for well-run firms. In our proposed system it may not be

difficult to keep track of the reputational record of bank managers, since the number of main banks will be relatively small. The managerial labor market may not "forget" if a bank manager "forgives" bad loans or non-performing firms on his (her) watch too often.

(c) It is obviously important to introduce incentive features in the payment structures of main bank managers linked to their monitoring performance of the firms. While the social loss from a bad project may be many times the resulting loss to the bank manager's linked income, it may be a significant enough fraction of his (her) income to make negligence rather costly.

(d) It is absolutely important to keep the doors of international competition open, as a check on the institutional monitors' laxity. The use of international market signals can also provide valuable guidelines and comparative reference points in the main banks' monitoring process and raise cost and quality consciousness all around. There are obviously some genuine cases for infant-industry protection, but to prevent the much too common degeneration of infant industries into inefficient geriatric protection lobbies, there should be a clearly specified fixed duration announced for such protection, after which the firm has to sink or swim in international competition. To make such pre-commitments credible some binding international trade agreements may be tried.

(e) It is often claimed that under the soft budget constraint the state remains as the risk-absorber of last resort, and so there is little incentive on the part of managers to avoid very risky projects. Yet in actual cases of public sector management one often finds too few, rather than too many, risks taken by the managers. This is largely because of too much accountability to the politicians: the managers are constantly wary of taking bold decisions that might be seen by their nosy political bosses as rocking the boat of the pre-existing patronage distribution system. Even in our proposed system it may be difficult for the state to credibly pre-commit not to intervene too often with the main bank managers' decisions. So some difficult-to-change constitutional guarantees on the infrequency of state intervention on the short to medium-run operations of the bank managers may be necessary.

(f) There should also be, as Sah and Weitzman (1989) have suggested, well-publicized liquidation pre-commitments for public sector projects before they are launched, if their cumulative performance at pre-specified dates in the future is not above certain threshold level. The rescue strategies by the main bank of a corporate group that we have indicated above will be subject, by prior legislative enactment, to this kind of liquidation pre-commitment. Of course, the major constituency opposed to liquidation or scaling down unprofitable enterprises is the workforce. Sah and Weitzman have pointed out the advantages of profit-sharing payment schemes in this context. If pre-

commitment to profit-sharing is part of a public sector project right from the beginning and if workers must sign on to this provision when they take a job, then in chronically unprofitable concerns the attraction of clinging on to the job is obviously much less and to that extent the resistance of the workforce may be weaker.

(g) Although in our system the state is to directly own a majority of the shares of a main bank, some significant fraction of the shares is to be owned by pension funds, insurance companies and other banks, to allow for some diversification of interest and professional control in the main bank's operations.

## 8 Other Problems with the Proposed System

One major problem in our proposed bank-centric corporate groups is the possibility of collusion and industrial concentration facilitated by interlocking shareholding and exchange of inside information. It is therefore very important to preserve the discipline of product market competition (along with some anti-trust regulations) in this system. In the formation of these corporate groups it is necessary to keep major competitors in separate groups around different main banks. In our proposed system we are not ruling out cases of a firm leaving one corporate group and joining another (although in the Japanese case the relationship between a main bank and its customers is



usually quite stable), but new entry applications to a group should be subject to strict scrutiny against collusion possibilities by an independent anti-trust authority.

There are some situations, particularly when the market size is small, where economies of scale considerations may make it difficult to have many competing firms in the same industry. In these situations a corporate group with mutual stock-holding among companies linked in input-output interdependence might be helpful in providing some mutual accountability. For example, a steel firm having a stake in a coal company belonging to the same group may, through its own levers of control and those of the main bank, pull up the latter if it indulges in monopoly-induced sloth and high costs. Of course, partial vertical integration through mutual stock-holding may increase market power and make new entry difficult. It is here that international competition can provide a crucial safeguard. There are lessons to learn here from the cases of South Korea and Taiwan where the state has often energetically used the carrot of easy loans and other benefits and the stick of international competition to prod the firms (many of them in the public sector) on to the technological frontier.<sup>7</sup>

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<sup>7</sup>The East Asian cases where the dominant state has worked closely with the market and has used world market signals to keep domestic firms on their toes provide important counterexamples to Kornai's (1990) conviction that

A natural question to ask against any proposal of market socialism like ours is, as Martin Weitzman posed to one of us: why bother with these complicated institutional arrangements to mimic capitalism, when you can have the real thing? East European economists sometimes put it in a slightly different form: we are tired of experiments, let us not waste any more time and go for the only time-tested system that works, however imperfect it may be, i.e. capitalism. First of all, we are not sure if the alternative of the "real thing", viz. Western-style capitalism is available to some of the East European countries, or China, or Vietnam, however much some people there may be hankering after it. The institutions of Western capitalism and their legal, political and economic infrastructure evolved over a long time. Some of them are not easily replicable. In fact the bank-centric organization for conflict resolution and the decentralized insider monitoring of interrelated firms that we have suggested are ways of mitigating a historical handicap in capital market institutions. It is important to remember that it was the underdevelopment of capital markets in Germany in the late 19th century that gave rise to their present system of heavy involvement of the banks in the financing and management of industrial companies. Even in the case of Japan, as Horiuchi (1989) points out, the main bank system originated in the

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"the systemic tendency of self-reproduction of the bureaucracy" will snuff out reform attempts at market coordination, a conviction that feeds his pessimism for "third ways" like market socialism.

highly imperfect financial markets and economic uncertainties of the immediate post-World War II period in Japan.

Secondly, at the risk of belaboring the obvious, the whole purpose of strenuously working out feasible blueprints of market socialism which can achieve roughly similar production efficiency as capitalism instead of rushing for the "real thing", is our conviction that market socialism is likely to be more egalitarian and more sensitive to some of the social needs (like community health care, environmental protection, limiting the production of public "bads", etc.). Under market socialism the social dividend, i.e. the surplus after payment of wages, interest and taxes in large firms can be redistributed in the form of worker private consumption or social consumption and investment. If some of the entrepreneurial functions of capitalism can be reproduced in the alternative incentive-compatible system of market socialism, then workers can save on the large drain on the social surplus that capitalists exact for their entrepreneurship. (A more egalitarian distribution of profits also leads, as we have seen in section 4, to a smaller production of public "bads"). Of course, there will be departures from egalitarian distribution to the extent there are various incentive payment schemes for managers and workers. But this is a worthwhile price to pay in the inevitable trade-off between incentives and egalitarianism, and socialists can live with that. What about the bureaucrats' cut from the social dividend under market socialism? Since in our scheme

markets allocate most resources and the state is not involved in production except in deciding the broad contours of monetary and fiscal policies, the top-level bureaucrats are not supposed to be any more powerful than they are in the mixed economies like France or the Nordic countries. Of course, in our scheme there will be an elaborate monitoring machinery in the public banks which is not there in the stock market-centric capitalist financial system. But as we have argued in sections 5 and 6, the latter's agency costs and the wastefulness of the corporate takeover process can be viewed as opportunity costs for the Japanese-style larger banking bureaucracy.

There are alternative models of market-socialism, oriented more to the labor market and important issues of worker participation and motivation (as opposed to the emphasis on investment planning, financial systems and managerial motivation in our model of market socialism), which are aimed at other goals of socialism (like shop-floor democracy, less alienating work organization, worker solidarity and autonomy, reduction in the inequality of wage income, less of unemployment as a worker disciplining device and so on). There is a large and important literature on market socialism in the form of worker-owned or labor-managed firms. We do not go into this here, except to note in passing that our proposed insider-monitoring system is also a possible way out for some of the adverse incentive and agency problems many critics of labor-managed firms have pointed out. Jensen and Meckling (1979)

have identified the "horizon problem" (workers will not value cash flow beyond their term of employment, leading to suboptimal choices of investment and maintenance of capital) and the "common property problem" (only projects maximizing profits of the firm per worker will be chosen leading to suboptimal employment and rejection of many worthwhile projects). These problems can be solved if one introduces, as Barzelay and Thomas (1986) have suggested, the floating of freely convertible but non-voting shares for non-employees to raise outside equity. If in the spirit of our proposed financial system we now assume that these non-voting shares will be largely owned by the main bank, affiliate firms and a few other institutional investors, one can provide a solution to a monitoring problem which Barzelay and Thomas have not quite solved for the labor-managed firm: the main bank and outside investors, who have a stake in the firm, will monitor and discipline the firm against the possible built-in tendency toward excessive wage payments or capital consumption in labor-managed firms.

This paper is about blueprints and not so much about their implementation. We do not have any illusion about the formidable problems, political and economic, on the possible transition to our proposed system of market socialism. The transition to our system will certainly require the development of some new institutions, but possibly not many more than, or organizationally more difficult than, those required for the transition to

capitalism. In the immediate future both types of transition will involve some common and difficult problems: for example, in breaking state monopolies, ending large-scale public subsidies, introducing markets and competition along with their inevitable painful readjustments and dislocations, organizing joint stock companies and a viable commercial banking system, overhauling the legal system and so on.<sup>8</sup>

We claim in this paper that introducing competition and markets (along with political democracy) is the salient part of the reform program, not large-scale privatization. Some of the horror stories we always hear about inefficient public firms (or cases of parastatals in developing or socialist countries which have become white elephants draining the public treasury) may have to do more with their being public monopolies than with the fact of

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<sup>8</sup>Very recently the Polish government has proposed a reorganization of the large state firms in the form of joint stock companies, shares of which will be owned by different, professionally managed, mutual-funds in large concentrated blocks. This proposal has some family resemblance to ours in terms of insider monitoring by involved institutional investors. But in the Polish scheme private citizens will be handed out vouchers representing equal shares in the mutual funds. If these vouchers are saleable, then concentration of share ownership, which is a common feature of capitalism, will result over time.

their public ownership per se. Examples of efficient public firms in a competitive environment are many around the world. Empirical evidence of significant efficiency differentials between public and private firms after adjusting for market structure (and regulatory policy) is quite scanty.<sup>9</sup> With appropriate institutional restructuring (like that proposed in this paper) some of the organizational and incentive issues of management under market socialism can be handled not too unsatisfactorily, turning the issue of non-decentralizability of ownership to one of relatively secondary importance from the point of view of efficiency. One only hopes that this kind of point of view will not be dismissed out of hand simply because in the current populist discourse in some of the East European countries the word "socialism" brings bad memories of something imposed on them in its name, or because in the simple-minded ideology of the free marketeers in those countries and their Western patrons and donors the market mechanism can exist only with capitalist ownership.

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<sup>9</sup>As Vickers and Yarrow (1991) note in their survey of the evidence on ownership and efficiency, in competitive industries even in cases where private ownership seems to have the edge, competition rather than ownership per se is the key to efficiency.

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July 31, 1991

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