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Risktaking, Capital Markets, and Market Socialism

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January 1991

Key words: agency problem, competitive socialism, soft budget constraint

Abstract

This paper provides a scheme for resolving the major principal-agent problem of market socialism where competition among large firms is combined with public ownership.

JEL Classification: 050,110,610

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Risktaking, Capital Markets, and Market Socialism*

by Pranab Bardhan University of California at Berkeley

From the post-mortem reports of the collapse of the command economy in Eastern Europe and elsewhere it is clear that over the years one major economic failure has been in the area of initiating and sustaining technological innovations. State socialism, despite its dramatic initial success in creating a basic capital goods base in early stages of industrialization and in its spectacular feats of mass literacy and public health campaigns in poor countries like China, Vietnam or Cuba, seems largely incapable of coping with the technological demands of the increasing sophistication in product quality and diversity and the needs of quick flexibility in decision-making and risktaking in a whole range of economic activities spanning the technological spectrum from agriculture to semiconductors. Right now we are living through a technological revolution in information and telecommunications and many socialist countries are so far behind in this that they are afraid of missing the boat altogether. Bureaucratic socialism is now widely suspected to be a 'fetter' on the development of the forces of production and the current turmoil arises partly out of the tension of readjusting the relations of production.

There is no doubt that a more decentralised market-based allocation of resources and greater competition can correct much of the wastage and dynamic inefficiency of the bureaucratic command system and introduce more agility and flexibility in economic decisions. But the big question is how effective the stimulus of competition and markets can be without large-scale private ownership. Some of the horror stories one hears about inefficient public firms (or cases of parastatals in developing countries

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which have become white elephants draining the public treasury) may have to do more with their being public monopolies than with the fact of their public ownership per se. Examples of efficient public firms in a competitive environment are many around the world. There now exists a substantial amount of empirical work (for a survey see Borcherding et al), failing to find evidence of significant efficiency differentials between public and private firms <u>after adjusting for market structure.</u> Some of the East European countries in their headlong rush toward capitalism are in practice ruling out reasoned assessments of alternative property systems (often identifying the virtues of the market mechanism with those of capitalist ownership, on the rebound from the old Stalinist dogma which used to identify socialism with a bureaucratic command system). I think it is important to explore, even at the abstract level, if competitive socialism can be made economically viable, capable of handling the complex issues of risktaking and innovations in particular, where state socialism has failed so miserably. The old Lange-Hayek literature on market socialism, concentrating on price calculations, has not paid enough attention to these issues. How does one, for example, mimic the equity capital market under socialism? Can one devise alternative public institutions to give public-sector managers more discretion in entrepreneurial decision-making and at the same time safeguard against managerial slack?

Before we discuss these questions, let me note that the standard response in some East European countries to any new proposal of socialist reform is now twofold: (a) 'we are tired of experiments, we have tried this or some variant of it before and it does not work, so let us opt in favor of the only time-tested system that works, however imperfect it may be, i.e. capitalism;' (b) 'there may be merits in this proposal but it is too late, the march toward capitalism is now unstoppable.' Without indulging in the easy flippancy that often characterises outsiders' advice or suggestions for reforms, it is possible to point to some inadequacies in those two responses. On (a), as any detailed study of the Hungarian or Yugoslav reforms over the last two decades will show (for a brief account see, for example, Brus and Laski), whatever has been tried has been at best piecemeal; market socialist reforms in some integrated well-thoughtout pattern have never been tried, and certainly not with any measure of political democracy or full market competition. Capitalism in some fashion 'works,' but not in an institutional

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There are important externalities in the generation of technology, in information processing, learning and acquisition of technological capability. In capitalist countries these externalities are internalised in large non-market organizations of corporate bureaucracy, some of which are even larger than the whole economy of some East European countries. With the separation between ownership and management in corporate capitalism 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, but it may be difficult for the shareholders, the ultimate risk-bearers, to sort out if the manager's poor performance is or is not due to factors beyond his (her) control. This principal-agent problem is, of course, analogous to the agency problem under socialism between the macro planners and the managers of a public firm.

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Finance theorists concerned with the agency problem in corporate capitalism (for example, Alchian and Demsetz, Jensen and Meckling, Fama) 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 depoliticized institution-building, but not necessarily a considerable 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. The stock market also helps in keeping the cost of capital low by spreading financial risk over the diversified portfolios of millions of investors and by facilitating the exchange of risk in a liquid market.

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sometimes organize a loan consortium for the firm), and these loans are convertible into equities under some pre-specified conditions.⁴

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 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 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. Horiuchi notes that the main bank is motivated to arrange the rescue operation since it wants to retain its reputation or credibility as a delegated monitor and since otherwise it may lose the intangible asset it has accumulated specific to its relationship with the affiliated firm. As Berglof 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) 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 inolved 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

As Horiuchi suggests, in the Japanese system the primary role of the main bank may be that of what Diamond calls 'delegated monitoring': through its commitment to the affiliate firm the main bank communicates to other investors and lenders about the firm's credibility.

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 knowledgable 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 internalised 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. Although the main bank will be largely state-owned, the need for frequent bailing out by the state should be avoided.

We have noted before that the stock market-centric financial system has the merits of providing elaborate risk diversification and liquidity. Both are considerably less under this bank-centric system. But liquidity is less of a pressing need in the case of institutional investors (particularly because their cash needs are usually somewhat more predictable than in the case of individual investors). As for risk diversification also large institutional investors are likely to have a larger risk-bearing capacity. Besides, in underdeveloped financial systems the opportunity costs of foregone diversification are relatively low, since in a shallow market the investor has fewer opportunities to diversify. In any case, risk diversification through diffuse stock ownership in the stock market-centric system is bought at the expense of diluting the interest of any individual investor in monitoring any particular firm. This trade-off between risk diversification and managerial agency problem is a central organizational weakness of the large capitalist firm. Even the financial discipline of corporate takeover is usually a delayed and wasteful process. Jensen notes that in the US the fact that takeovers and leveraged-buyout premiums average 50% above market price illustrates

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Finance theorists concerned with the agency problem in corporate capitalism (for example, Alchian and Demsetz, Jensen and Meckling, Fama) 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 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. The stock market also helps in keeping the cost of capital low by spreading financial risk over the diversified portfolios of millions of investors and by facilitating the exchange of risk in a liquid market.

But we often 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, while insulating a member firm from hostile takeovers by outsiders, has served the crucial functions of mutual accountability and risk-sharing. Socialist countries can usefully adopt a similar practice of mutual stock-holding among public-sector companies, with a state investment bank financing and underwriting risks for the group and providing collective monitoring services. In much of the rest of this paper I shall discuss the advantages and disadvantages of such a bank-centric financial system under market socialism.

I am primarily concerned here with the large-scale industrial, trade and related service sectors. I think a predominantly socialist country should tolerate some amont of small-scale owner-entrepreneur-based private sector (particularly in agriculture, crafts, trade and distribution and in services). I am also all for small entrepreneurs getting rich 'gloriously' (as Deng's famous maxim in China would characterize it) on the basis of innovations that sometimes start even in a private garage (where the legendary birth of the Apple computer reportedly took place). The socialist firm comes into the picture only when the owner-entrepreneur firm goes public and the shareholder-manager agency problem becomes serious. Individuals are not allowed in my scheme to hold shares in large companies, except indirectly through pension funds or directly in the form of shares in the company in which the individual is an employee as part of an incentive wage payment.³ The major part of the shares of a firm will be owned by the main public investment bank (and its subsidiaries) and the other firms in the corporate group around that bank. Some shares will be owned by companies the group, other financial institutions, pension funds, local outside governments, etc. The firm will also borrow from the main bank (which may

In this paper we are not considering in detail the case of workers directly owning shares in the firm where they work, primarily because this form of market socialism is less egalitarian than the one in which the social dividend is distributed among workers in all public firms more evenly. There is a large literature on worker-owned or labor-managed firms. Many critics of such firms have pointed to some adverse incentive and agency problems. Jensen and Meckling, in particular, 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 have suggested, the floating of freely convertible but non-voting shares for non-employees to raise outside equity. If in the spirit of the rest of this paper we now assume that these non-voting shares will be largely owned by the main bank, affiliate firms and a few other institutional investors, we 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 built-in tendency toward excessive wage payments or capital consumption in labor-managed firms.

sometimes organize a loan consortium for the firm), and these loans are convertible into equities under some pre-specified conditions.⁴

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 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 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. Horiuchi notes that the main bank is motivated to arrange the rescue operation since it wants to retain its reputation or credibility as a delegated monitor and since otherwise it may lose the intangible asset it has accumulated specific to its relationship with the affiliated firm. As Berglof 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) 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 inolved 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

As Horiuchi suggests, in the Japanese system the primary role of the main bank may be that of what Diamond calls 'delegated monitoring': through its commitment to the affiliate firm the main bank communicates to other investors and lenders about the firm's credibility.

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 knowledgable 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 internalised 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. Although the main bank will be largely state-owned, the need for frequent bailing out by the state should be avoided.

We have noted before that the stock market-centric financial system has the merits of providing elaborate risk diversification and liquidity. Both are considerably less under this bank-centric system. But liquidity is less of a pressing need in the case of institutional investors (particularly because their cash needs are usually somewhat more predictable than in the case of individual investors). As for risk diversification also large institutional investors are likely to have a larger risk-bearing capacity. Besides, in underdeveloped financial systems the opportunity costs of foregone diversification are relatively low, since in a shallow market the investor has fewer opportunities to diversify. In any case, risk diversification through diffuse stock ownership in the stock market-centric system is bought at the expense of diluting the interest of any individual investor in monitoring any particular firm. This trade-off between risk diversification and managerial agency problem is a central organizational weakness of the large capitalist firm. Even the financial discipline of corporate takeover is usually a delayed and wasteful process. Jensen notes that in the US the fact that takeovers and leveraged-buyout premiums average 50% above market price illustrates how much value corporate managers can destroy before they face a serious threat of disturbance. He points out that in recent years new organizational forms (the leveraged buyout assolciation is a major example) are evolving in the US 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 diversification and control the balance is shifting in favor of more control by large investors. In the proposed bank-centric financial system for socialist countries also the main bank and the group partners will have a larger stake in and more 'inside' information about a company than the ordinary shareholders in a stock market-centric system, will 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 likely 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 incomplete risk and futures markets and highly imperfect information about the activities of the firm, may be too much concerned about short-run profitability. 5 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 suggests, takeovers are like buying 'used firms' and Akerlof's 'lemons principle' applies here as well.

In any case the efficient operation of the stock market system presumes a more developed capital market than is likely to obtain in the socialist countries for a long time to come. In fact 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 points out, the main bank system originated in the highly imperfect financial markets and economic uncertainties of the immediate post-World War II period in Japan). In an empirical study of the positive relationship between bank involement and corporate profitability for a

In his study of alternative financial systems Berglof notes that a feature that distinguishes the bank-oriented systems from their stock market oriented counterparts is their longer-term shareholdings.

sample of 48 leading West German companies, Cable views this system of industrial financing as one of 'quasi-internal capital markets' with important informational and transaction cost advantages. It may also be pointed out in this context that the bank's simultaneous involvement in both loans and equities of a firm internalises an important externality between debt and share contracts. Under a limited liability system a pure lender, not sharing in the upside gains from the risky project of the borrower but hit by the downside risks, tends to be conservative and primarily interested in reducing the probability of default. When lenders are also important equity-holders, credit-rationing and other onerous terms of lending may be largely avoided, and more risk-taking encouraged.

One problem of depending on the main bank as the major monitor of the firms in a corporate group is the question; who monitors the monitor? This question does not have an easy answer and it ultimately depends largely on reputational cosequences. In the Japanese system, there is some keenness on the part of banks to preserve their reputation as good monitors and the competition among banks in seeking the position of main bank for well-run firms. In our proposed socialist financial system the banks are largely accountable to the state and in this process monitoring reputation will certainly count. Since the number of main banks will be relatively small it may be easier to keep track of the reputational record of bank managers. The problem is to strike the right balance between the need for autonomy from the state (so that the industrial financing and monitoring system is not exposed to the mercies of constant political pressures) and that of effective accountability to the public. Some difficult-to-change constitutional precommitments on the infrequency of state intervention on the short to medium-run operations of the main bank managers will be necessary. would also suggest that although the state is to directly own majority of the shares of a bank, a significant amount of these shares may be declared to

Empirical studies on Japan seem to suggest that main-bank finance to affiliated firms was cheaper than market finance, at least until recently (when deregulation and internationalization of the Japanese financial system started weakening the links between banks and affiliated firms). This has been cited as one of the reasons for the observed lower average cost of capital for Japanese firms compared to their U.S. counterparts until the beginning of the 1980's. See, for example, Hoshi, Kashyap and Sharfstein.

be of the non-voting type and some other major shares should 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. It will also be important to introduce appropriate incentive features linked to their monitoring performance in the payment structures of bank managers.

Yet as long as the umbilical cord between the main banks and the state remains, the problem identified by Kornai as the soft budget constraint does not entirely disappear; of course, in the relationship between the marketsocialist firm and the state treasury there is, in my proposed system, a hard layer formed by the equity-holding banks and technologically related firms, and the intermediary screening by these involved parties as well as domestic international competition 7 may harden the budget constraint considerably. Even on the close relationship between the state and the main banks, one may cite exemplary cases from France, Germany and Japan. (In France seven of the ten largest banks are government-controlled. In West Germany Westdeutsche Landesbank with public ownership has been one of the three largest commercial banks. In Japan the banks, particularly those involved in long-term lending to industry, have been closely regulated by the state). Much clearly depends on the evolution of business norms and legal institutions consistent with strict enforcement of financial obligations, but a private property regime is neither necessary nor sufficient for this evolutionary process. In any case the political pressure on the state to bail out failing large banks is formidable even under capitalism (as current events in the U.S. amply testify).

There is a growing theoretical literature in industrial economics on how competition can spur managerial efficiency in corporate capitalism by changing the information structure (in favor of the principal in a principal-agent relationship between shareholders and managers). To the extent softness of the budget constraint under socialism is due to information problems in an agency relationship between the state and the manager of a public firm, competition (domestic and international) may ease some of those problems when comparative performance of different firms is in full public view. In any case the requisite hardness of the budget constraint refers to some kind of responsible ownership, which is not necessarily ensured by the diffuse ownership patterns of corporate capitalism.

Another 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 my proposed system I am 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 possibilites 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 therefore very important to keep the doors of international competition open. There will obviously be many 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 precommitments credible some binding international trade agreements may be tried. In South Korea and Taiwan the state has often energetically used the carrot of easy loans and other benefits and the stick of international competition to prod the firms on to the technological frontier. The use of international market signals can provide important guidelines in the main banks' monitoring process and raise cost and quality consciousness all around.

Another problem of the proposed system relates to valuation of a firm's shares and the signal it gives to mobility of investible resources.

Since the majority of the shares are to be held by a small group of institutional investors, those outside the group will have little information to go by in terms of public evaluation of those shares. This may hamper resource mobilization and reallocation. Here I am receptive to Nuti's idea of introducing a 'challengable self-assessment' principle of mandatory asset value declaration by each firm: in case of a challenge a firm has to either release (sell) or revalue its assets. A tax (at a higher rate than the tax on operating profit) will be charged on capital gains due to such selfrevaluation: similarly, the profit rate-linked bonus for managers and workers has, of course, to be calculated at a lower rate for these capital gains on account of revaluation. In my proposed system, unlike in Nuti's, there will be restrictions on eligible outsider institutions who can bid for a firm's assets, and also it is through and with the approval of the main bank that such asset value declarations (and any consequent buying or selling) will be made. The main bank acts as a broker and, as in the case of the corporate bond market in the U.S., trading is broker-organized rather than stock exchange-organized. If other banks can buy up firms that are undervalued by a main bank, it will also act as a check on the alertness or the arbitrary power of the latter's managers.

In this paper we are primarily concerned with the capital market and not with the labor process, but we may briefly point out that another lesson the Japanese experience suggests is that flexibility in response to changing technical and market conditions (i.e. the nature of adaptation to risks) may sometimes be more dependent on the nature of work organization than on the form of property ownership per se. It is clear from Aoki's account of the Japanese firm that their work organization (including rather fluid job demaracation rules, regular worker rotation, nurturing of worker skills in a relatively wide range of jobs and team-oriented learning) is conducive to encouraging multi-functionality of workers inducing more flexibility on the shop-floor. This is in contrast to the vertical, hierarchical and narrowly compartmentalized work organization in the US firms. There is also a similar contrast in the innovation process. The Japanese firm is oriented more toward the development of knowledge within the firm, through in-house production experience, than the utilization of specialized knowledge imported from the extramural world of science. This, according to Aoki, may partly explain why innovation in Japan is less likely to be commercialized by small independent firms founded by the scientist-cum-entrepreneur and financed by venture capital (as is now well-known in the case of micro-electronics and biotechnology in California's Silicon Valley), or through the acquisition of a small entrepreneurial firm by a large firm, but instead in the form of product diversification by an established, often giant, firm. There is no inherent property rights-related reason why a large socialist firm cannot experiment with such flexible work organization or in-house learning and innovation process, if the product market is kept competitive, incentive wage payments and long-term employment relations are encouraged and there is some bank-centric monitoring and underwriting of risks. Socialism may have to look as much to the East for new economic ideas as it does to the West for its democratic ideas.

This paper is about blueprints and not so much about their implementation. I do not have any illusion about the formidable (and in some cases even insurmountable) problems, political and economic, on the possible transition to any such system of market socialism. constituency, for such a transition may be too weak in the recent popular mobilizations of Central Europe. As Comisso notes in her assessment of the prospects of the different options in this region, the current popular mood is quite hostile to the continued salience of public ownership, to the legitimacy of a technocratic elite managing competitive public firms, even to any reform campaign based on universal-rationalistic values. The atmosphere is supposedly more congenial to the idea of a nationalistic small propertyowning democracy, giving prominence and legitimacy to the craft shops, the freeholders and the hit-and-run merchants of the former 'second economy.' But sooner or later the limits of petty-bourgeois populism will be visible, the question of a rational reorganization of large and complex firms and the exploration of the technological frontier under their auspices and the issue of constructing an elaborate financial system to serve their needs will be imperative. In view of the threats of cannibalization of the public firms by the ex-nomenclatura turned capitalist overnight or of their gobbling up by transnational companies, and as cases of cornering of the fledgling stock markets by sharp speculators (which thin equity markets usually attract) will mount, public disenchantment with private capitalism may grow and today's reflex anti-etatism and attitudes against technocratic management and investment planning may wear off somewhat. In any case the marketsocialist scheme proposed in this paper can quite comfortably coexist with a large number of small entrepreneurial firms or farms.

A natural question to ask against the market-socialist proposal is: why bother with these complicated institutional arrangements to mimic capitalism, when you can have the real thing. First of all, I am not sure if the alternative of the "real thing," viz. Western-style capitalism is available to many of the East European countries, however much some people there may be hankering after it. As we have mentioned before, capital markets and the whole institutional infrastructure behind them require a long time to develop (one just has to look at the history of the last 50 years in this respect in many developing countries). The bank-centric organization for conflict resolution and the decentralized insider monitoring of interrelated firms that we have suggested here are ways of mitigating a historical handicap in financial institutions. The transition to market socialism will also 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 dislocations, organizing joint stock companies and a viable commercial banking system, overhauling the legal system and so on.

At the level of blueprints one may also claim that market socialism is likely to be more egalitarian than capitalist social democracy, and given the pre-existing inequality-aversion among the workers, this could be a major advantage. 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 consumption or social investment. The difference with capitalist social democracy, from the point of view of income distribution, is largely in the size of capitalist consumption, which in some sense is the price workers under capitalism pay for the entrepreneurial and other services of capitalists. Przeworski's rough estimates suggest that capitalist

It is also more egalitarian than the proposal (I believe recently made in Poland) of non-saleable vouchers given to citizens entitling them to shares in public firms, since the income under this proposal can be spent on acquiring over time differential amounts of shares.

consumption as a percent of value added in manufacturing in 1985 varied from about 10 percent in Austria and Norway, to well under 40 percent in the United Kingdom and the United States, to about 60 percent in Brazil and 70 percent in Argentina. To the extent market socialism can save 9 on this large price capitalists often exact for their entrepreneurship, it is important to institutional arrangements for risk-taking are explore if alternative feasible or not, which is the purpose of this paper. On the basis of what we have argued there are reasons to believe that in the context of highly underdeveloped capital markets and a large degree of public aversion to economic inequality and job insecurity, market socialism involving a bankcentric industrial finance system and a more democratic work organization with more flexibility on the shop-floor and long-term employment contracts could have been politically less difficult to establish than capitalism. One only hopes that this 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 and their Western patrons and donors the market mechanism can exist only with capitalist ownership.

What about the bureaucrats' cut from the social dividend under market socialism? Since markets allocate most resources and the state is not involved except in deciding the broad contours of monetary and fiscal policies and of indicative investment planning, 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 my scheme there will be an elaborate monitoring machinery in the public banks which is not there in the stock market-centric financial system. But as we have argued, the latter's agency costs (only a small part of which can be gauged from the astronomical salary raises the CEO's in American companies regularly give themselves) and the wastefulness of the corporate takeover process can be viewed as opportunity costs for the larger banking bureaucracy. If the Japanese bank-centric system has succeeded in keeping the cost of capital lower than in stock market-centric systems of the West, there should be ways of keeping down the bureaucratic costs of a competitive bank-monitored system.

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