

A Future for Socialism

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1. INTRODUCTION

The demise of the Communist system in the Soviet Union and Eastern Europe has caused many to believe that socialism cannot exist, either in the present world or as an ideal. I shall argue that it can; but this requires some revision of standard views of what constitutes socialism, for if one thought socialism were coextensive with the Soviet model, then clearly it would be dead. I shall defend the idea of market socialism. The term comes to us from what has been called the socialist calculation debate of the 1930s, in which the two principal protagonists were Oscar Lange and Friederich Hayek. Lange argued that what economists now call neoclassical price theory showed the possibility of combining central planning and the market, while Hayek retorted that planning would subvert at its heart the mechanism which is the source of capitalism's vitality. Hayek's criticisms of Lange's market socialism, and more recently those of Janos Kornai, are for the most part on the mark. But the experiences of capitalism, as well as of socialism, in the last fifty years suggest ways of reformulating the concept of market socialism in response to the Hayekian critique of its intellectual ancestor. This reformulation is my task.

This article summarizes the main ideas of *A Future for Socialism* (Harvard University Press, 1994; Verso, 1994). The description of the coupon economy in section 6 differs from that in the book, also from that in an earlier article with the same title (in *Egalitarian Perspectives: Essays in Philosophical Economics* [New York: Cambridge University Press, 1994]). The amendments presented here to the coupon proposal are due to suggestions made by participants in the Conference on *A Future for Socialism*, Madison, Wisconsin, May 13-15, 1994; they are acknowledged more specifically in section 6. I have, however, made no attempt to incorporate here the many other good suggestions and criticisms of conference participants to be found in this issue. I am grateful to all of them.

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Economic theory does not yet enable us to write a complete balance sheet of the benefits and costs of the market mechanism. During the 1930s, when Lange and Hayek wrote about market socialism, the Soviet Union was undergoing rapid industrialization. There was, apparently, full employment in that country, while workers and machines were massively idle in the industrialized capitalist world. Hayek therefore wrote from a defensive position, while Lange may well have felt that his proposal was fine-tuning for a socialist system that was, inevitably, the face of the future. Today, the tables are turned. Yet both the pro-socialists of the 1930s and the pro-capitalists of today jump to conclusions too quickly, for we understand fully the effects of markets only in very special circumstances.

Economic theory can explain how, if all economic actors are small relative to the market and cannot affect prices individually, if externalities are absent, and if there is a sufficient number of insurance and financial markets, the equilibrium in a market economy will engender an allocation of resources that is Pareto efficient—that is, efficient in the sense that no other allocation of resources exists which could render everyone simultaneously better off. But this kind of static efficiency may be relatively unimportant compared to the dynamic efficiency with which markets are often credited—that they produce innovations in technology and commodities more effectively than would any other economic mechanism. Although we seem to have much evidence of market dynamism, we have no fully adequate economic theory of it. Nor do we have a controlled experiment which would permit a skeptical scientist confidently to assert that markets are superior to planning in this dynamic sense. The real-life experiments are severely polluted, from a scientific viewpoint: the most dynamic economies of the last thirty years (Japan and the East Asian tigers) used markets with a good dose of planning, and the Communist economies not only had planning and the absence of markets but also political dictatorship, a background condition that an experimental designer would like to be able to alter.

The social scientist must, therefore, be more agnostic about the effects of the market than are elementary economics textbooks and the popular press. Indeed, contemporary economic theory has come to see markets as operating within the essential context of nonmarket institutions. These are, notably, firms, contract law, the interlinking institutions between economic institutions and other actors such as between the firm and its stockholders, and the state. Large capitalist firms are centrally planned organizations (in which internal transactions are not mediated by a price system), usually run by managers hired to represent the interests of shareholders. This they do imperfectly, as their own interests do not typically coincide with the interests of shareholders. Contract law is an essential supplement to the market: long-term contracts are, indeed, instruments which render it costly for parties to them to return to the market during the life of the contract. Furthermore, in different capitalist economies, different kinds of nonmarket institutions have evolved—here, we do have somewhat of a real-life experiment

which can help in evaluating alternative economic mechanisms. Germany and Japan, for example, have very different institutions through which owners of firms monitor their managements from those in the United States and Great Britain.

The market, in a word, does not perform its good deeds unaided; it is supported by a myriad cast of institutional characters which have evolved painstakingly over time, and in a variety of ways, in various market economies. My central argument is that these institutional solutions to the design problems of capitalism also suggest how the design problems of socialism may be solved in a market setting.

To see why this may be so, I will first quickly, and necessarily inadequately, summarize the theory of income distribution of Hayek, more generally, of the Austrian school of economics. The distribution of income in a market economy according to this view is, in the long run, determined by the relative scarcity of various factors of production, principally human talents, including entrepreneurial talent. Property rights should, in the long run, be viewed as themselves derivative of talent. Firms are indeed just the means through which entrepreneurs capitalize their talent; in turn, it is profits from firms which enable their owners to purchase real estate and other natural resources so that, in the long run, natural resources, too, are owned by talented people or their descendants. Furthermore, any attempt to interfere with the operation of markets—that is, with the institution that maximizes the freedom to compete in the economic sphere—will only reduce overall welfare, as it will inevitably result in conditions which inhibit entrepreneurs from bringing their talents fully into play.

Were this “naturalistic” view correct, egalitarians would have little remedy for inequality other than education serving to develop the talents of as many as possible, and perhaps inheritance taxes. What I believe the institutional view of capitalism that I have outlined three paragraphs earlier shows, however, is that the advanced capitalist economy is in large part the product of large, complex institutions, whose operation depends on the combined efforts of many “ordinary” people—ordinary in the sense that their talents are not of the rare variety that the Hayekian view envisions but result from training and education. The wealth of society is not due primarily to rugged and rare individuals, as it were, but is reproducible, according to blueprints which are quite well understood. The market is necessary to implement competition and to economize on information, but not so much to cultivate the inspiration of rare geniuses.

A particular way in which the modern view of capitalism suggests a future for socialism is in its understanding of the firm as a nexus of principal-agent relationships. It is not correct to characterize modern capitalist firms as instruments by which entrepreneurs capitalize their talents. The profits of firms are distributed to many owners, who have no direct control over decisions which affect profitability and who are in large part not responsible for firms’ successes or failures. Firms are run by hired agents of their owners; this suggests that hired agents could as well run firms in a socialist economy, one in which profits would

be distributed even more diffusely than they are in the large capitalist corporation. Indeed, the mechanisms that have evolved (or been designed) under capitalism that enable owners to control management can be transported to a socialist framework.

In contrast to the “thin” Hayekian and neoclassical views, which see markets as a minimal structure organizing competition among talented individuals, the modern “thick” view sees markets as operating within the context of complex, manmade institutions, through which all individual contributions become pasteurized and refined. These two views of the market are, I suggest, substantially different, and the latter view, unlike the former, is amenable to the coexistence of markets and socialism. Income distribution, in particular, is more malleable under the thick view; the door is opened to reducing inequality substantially, short of massive education, as the reallocation of profits will, if properly done, have little or no deleterious effect on economic efficiency.

In what follows, I will try to flesh out these vague claims.

2. WHAT SOCIALISTS WANT

I believe socialists want (1) equality of opportunity for self-realization and welfare, (2) equality of opportunity for political influence, and (3) equality of social status. By self-realization, I mean the development and application of one’s talents in a direction that gives meaning to one’s life. This is a specifically Marxian conception of human flourishing¹ and is to be distinguished, for instance, from John Rawls’s notion of fulfillment of a plan of life, for a plan of life might consist in enjoying one’s family and friends or eating fine meals or counting blades of grass,² whereas these activities do not count as self-realization, the latter being a process of self-transformation that requires struggle in a way that eating a fine meal does not. One does, however, derive welfare from enjoying one’s family and eating fine meals, and so I do attribute value to these activities in the socialist’s reckoning, for (1) requires equality of opportunity for self-realization and welfare.³

That equality of *opportunity* for self-realization and welfare is the goal, rather than equality of self-realization and welfare, requires comment. Were equality of welfare the goal rather than equality of opportunity for welfare, then society would be mandated to provide huge resource endowments to those who adopt terribly expensive and unrealistic goals. Suppose that I, a poor athlete, come to believe that my life has been worthless unless I reach the top of Mount Everest on foot. This may require a large amount of money to hire sufficient sherpas and other support services to make that journey possible. Equality of opportunity for welfare, on the other hand, puts some responsibility on me for choosing welfare-inducing goals that are reasonable. It is certainly tricky to decide what allocation of resources will give all people an equal opportunity for welfare or self-realization,

but I hope the principle is clear from this example. What distinguishes socialists or leftists from conservatives is, in large part, the view of how deeply one must go in order to equalize opportunities. Conservatives believe not very deeply: if there is no discrimination in hiring and everyone has access to education through a public school system or vouchers, then the conservative standard of equality of opportunity is met. Socialists believe that those guarantees only touch the surface. Equality of opportunity requires special compensation or subsidy for children who have grown up in homes without access to privilege. Most generally, equality of opportunity requires that people be compensated for handicaps they suffer induced by factors over which they have no control.⁴

Suppose that we have clarified what each of (1), (2), and (3) mean—and I will not here attempt to offer any explication of (2) and (3). The statements of (1), (2), and (3) are still inaccurate. For instance, what socialists really want is not equality of opportunity for self-realization but equality of such at a high level. So (1) should be restated as: socialists want an organization of society which equalizes the opportunity for self-realization at a level that is no lower than any other organization of society could achieve as an equal level. Or, in other words, (1) says we should maximize, over all possible organizations of society, the level of opportunity for self-realization which can be achieved as an equal level for all. Desideratum (2) calls on us to choose that organization of society which maximizes the degree of equality for opportunity for political influence, and a similar statement holds for (3). It is, however, impossible to maximize three objectives at once. That is, the kind of social organization that maximizes the equal level of opportunity for self-realization may well induce highly unequal levels of political influence.⁵

There are two responses to this problem. The first says: there is a form of society in which all three objectives are equalized simultaneously, when “the free development of each becomes the condition for the free development of all,” or some such thing. I think this is an unsubstantiated and utopian claim. The second response says that one must admit the possibility of trade-offs among the three objectives. This, in fact, is what most of us do. For instance, a lively debate has taken place in the socialist movement on the question, Which is primary, democracy or equality? Or, rephrased, is equality of opportunity for political influence more important than equality of opportunity for self-realization and welfare? Socialists have different answers to this question. For example, Western socialists assign more importance to equality of opportunity for political influence than did most Soviet socialists. Some socialists did not support the Sandinistas because of the lack of press freedom and democracy in Nicaragua.

I will not offer here any particular preference order over the three equalisanda. For the rest of this article, I shall be concerned only with investigating the possibility of equalizing income without any unacceptable loss in efficiency. Indeed, I believe raising the income of the poor is the most important single step to improving their opportunities for self-realization and welfare.

3. PUBLIC OWNERSHIP

I think that socialists have made a fetish of public ownership: public ownership has been viewed as the *sine qua non* of socialism, which is based on a false inference. What socialists want are the three equalities I just enumerated; they should be open-minded about what kinds of property relation in productive assets would bring about those equalities. There is an infinite gradation of possible property rights between full, unregulated private ownership of firms (which exists almost nowhere) and complete control of a firm by a government organ. The link between state ownership, one end of this spectrum, and the three equalities is tenuous, and I think one does much better to drop the concept from the socialist constitution. Socialists should advocate those property relations in productive assets that will bring about a society that ranks highest according to their preferences over the three equalities. One cannot honestly say, at this point in history, that one knows what those property rights must be.

I view the choice of property rights over firms and other resources to be an entirely instrumental matter. The history of socialism on the question is, very crudely, as follows. Private property, characteristic of capitalism, was abolished and replaced, under the Bolsheviks, by state property. For complex reasons (including bureaucratic ossification and class interest), this form remained dominant for seventy years. The labor-managed-firm property form remained peripheral in the socialist movement. The widest variety of property forms became visible in modern capitalism, not socialism: nonprofit firms, limited liability corporations, partnerships, sole proprietorships, public firms, social democratic property,⁶ labor-managed firms, and other forms of social-republican property.⁷ The property forms which will best further the socialist goals may involve direct popular control or state control of the means of production in only a distant way.

By market socialism, I shall mean any of a variety of economic arrangements in which most goods, including labor, are distributed through the price system and the profits of firms, perhaps managed by workers or not, are distributed quite equally among the population. By what mechanism profits can be so distributed, without unacceptable costs in efficiency, is the central question.

From a somewhat more abstract viewpoint, the choice of property relations in firms and land should be optimized over two desiderata: their effect on the distribution of income and on efficiency. With respect to efficiency, we can be more specific: property relations should engender competition and innovation and should shelter firms from certain kinds of inefficient government interference. Private ownership of firms *sometimes* accomplishes these objectives. It engenders competition when ownership is not too highly concentrated in an industry, and it prevents inefficient political interference when constitutional provisions that prevent such interference are enforced. Private ownership gives certain persons the incentive to demand constitutional enforcement of these property rights—hence of government noninterference. But it is worthwhile noting that, even in

the United States, private ownership of firms is not a foolproof institution in respect of preventing government interference. In 1950, President Truman seized the big steel firms in order to force them to increase production of armaments for the Korean War. This action was, in the end, overturned by the courts. I mention this example to encourage us to think more generally about a property relation as an instrument with certain properties. The experience of the twentieth century may suggest that only two alternatives exist with regard to firms, state ownership and private ownership. But, in principle, there might well exist other institutions than private ownership of firms which would engender competition and prevent inefficient government interference about as well as private ownership does while having better distributional properties. Surely the failure of the property relation, at the other end of the spectrum from private ownership, to perform these tasks well should not settle the question.

4. WHY THE CENTRALLY PLANNED ECONOMIES FAILED

The failure of the Soviet-type economies was due to the conjunction of three of their characteristics: (1) the allocation of most goods by an administrative apparatus under which producers were not forced to compete with each other, (2) direct control of firms by political units, and (3) noncompetitive, nondemocratic politics. Noting this, however, does not explain the failures, for we must uncover the mechanism through which these characteristics induced economic failure. In some of my own recent work, I wrote that principal-agent problems were the source of failure of the Soviet-type economies.⁸ I now believe that the true story is more complex. In this section, I shall first outline the argument of Soviet-type failures based on principal-agent problems, then offer some critical remarks on it, and finally modify the argument.

The contour of the argument is that the three characteristics I just listed conspired to prevent the solution of principal-agent problems which, in capitalist democracies, are solved successfully. Communist societies faced three principal-agent problems: (i) the manager-worker relationship in the factory or the collective farm, (ii) the planner-manager relationship, and (iii) the public-planner relationship. Managers must try to get workers to carry out their production plans, planners must try to get managers to carry out the planning bureau's plan, and the planners, in a socialist regime, are supposed to be agents doing the best they can for their collective principal, the public.

The initial utopian view of the Bolsheviks, and later of the Maoists in China, was that economic incentives were unnecessary to solve these principal-agent problems and that a socialist society would instead rely on the transformation of persons into what used to be called "socialist man." In Mao's lingo, all should learn to "serve the people" and not to take those actions which maximize personal security or comfort. If this transformation had occurred, the agency problems would have been mitigated greatly. In the event, most people could not motivate

themselves, for a lifetime, by serving only the public good; people responded to their immediate situations much as they do in capitalist societies, by trying to look after their material interests a good proportion of the time.

To be more specific, the *manager-worker agency problem* festered for two reasons: workers had little motivation to work hard if it was virtually impossible to fire them, and there was little incentive to earn more because so few goods were available to buy. Much of the consumption bundle, including housing, was provided directly by the firm and not through the market. Second, the *manager-planner relationship* became one where the planners, or politicians, depended on the firms in their regions for income, and so, rather than carrying out plans proposed by the planning bureau, firm managers entered into bargaining relationships with politicians. An instance of this relationship was the “soft budget constraint”: political authorities extended loans and tax exemptions to firms that, from the viewpoint of economic efficiency, should not have been extended. This was done in part because, not officially recognizing the existence of unemployment, the system had no mechanism for retraining and rehiring laid-off workers. The path of least resistance for government and planning bureaucrats often consisted in continuing to finance a firm that should have been allowed to die. The third agency problem, between the planners and the public, was supposed to be solved, in theory, by the vanguard role of the Communist Party: “from the masses to the masses” was Mao’s theory of the party as agent of the people. But Mao was wrong; political competition is required to empower the public, and this was thoroughly squashed by Communist parties throughout the world holding state power.

What are the analogous principal-agent problems in a capitalist economy, and how are they addressed? The worker-manager problem remains essentially the same; it is solved by using both the carrot and the stick. Arguably, the carrot works better. For instance, job ladders within the firm, with wages increasing as one moves up the ladder, are constructed to give workers an incentive to build a career in the firm. This is a type of “efficiency wage,” in which a firm pays a worker more than the worker is willing to accept—or, to be somewhat imprecise, more than the market requires—to bind her to the job. Much of modern industrial relations is concerned with ways of solving the manager-worker agency problem. In addition, workers depend almost entirely on their wage income to purchase goods, unlike in the Soviet economies.

Under capitalism, the analog of the planner-manager agency problem is the stockholder-manager agency problem. Managers are supposed to undertake policies which are in the best interest of the stockholders—that is, which maximize profits or the value of the firm. It is often not in the best personal interest of the manager to do so: he may not want to liquidate an unprofitable branch of the firm; he may be reluctant to distribute profits as dividends to shareholders, preferring to keep them to finance projects internally and thus to avoid the scrutiny on which

a bank would insist before approving a loan; or he may purchase corporate jets for executive travel and make other lavish expenditures that are not in the stockholders' interest. Different capitalist economies have undertaken quite different strategies to solve this agency problem. It is believed by many finance economists that the stock market and the takeover process are the institutions that force managers to operate firms in the interests of shareholders. If profits decline because of bad management, the stock price of the firm falls and the firm becomes an attractive target for a takeover. This, it is argued, is the main disciplinary device that induces managers to act in the interests of shareholders.

Japan and Germany, however, have quite different ways of creating efficient management. The stock market has been relatively unimportant in Japanese corporate finance. Firms are largely financed by bank loans, and stockholders have little say in corporate decisions. Japanese firms are organized into groups called *keiretsu*, each of which is associated with a main bank that is responsible for organizing loan consortia for the firms in its group. The bank is in large part responsible for monitoring the firm's management. The bank even protects its firms from takeovers. A bank has an interest in running a tight ship so that its *keiretsu* is an attractive one for new firms to join, for if it disciplines unprofitable firms it can easily arrange loan consortia for its *keiretsu*'s members. In Germany, there is also bank-centric monitoring, and takeovers are virtually nonexistent.

What is the analog of the public-planner agency problem under capitalism? It must be the *public-stockholder agency problem*, except neither capitalist property relations nor culture require the stockholder to be an agent of the public. At this point, the theory of capitalism invokes Adam Smith: stockholders, that is to say firm owners, are directed to undertake those actions which are in the public interest as if by an invisible hand. But the invisible hand works well only under a stringent set of conditions. In practice, modern capitalist societies have developed other institutions where the invisible hand fails: antitrust law, regulation of various kinds, indicative planning, taxation and public expenditures, and so on.

The argument, then, seeks to establish that a combination of markets and political democracy solves capitalism's three principal-agent problems better than dictatorship and administrative allocation solve the three analogous problems in Soviet-type economies.

The skepticism I now have about the validity of this argument concerns the growth in Soviet economies in the postwar period until 1970. Indeed, earlier Western criticisms of these political economies were of a markedly different nature from their attacks of the 1980s. In the earlier period, Western critics argued that, *despite* its economic success, Communism was bad for human welfare because of the lack of political freedom.

If, indeed, it is true that for about twenty years in the postwar period, and certainly during the 1930s in the Soviet Union, economic growth was respectable in the Communist economies, then we cannot simply invoke principal-agent

problems as an explanation of the failure of those economies in the 1980s. At least, the principal-agent argument is not sufficiently fine-grained, for some characteristic of these economies that changed between 1960 and 1985 must be brought into play. I conjecture that one important change concerned the dependence of the improvement in economic welfare on technological change. In the postwar period, economic welfare could improve rapidly without technological innovation since these economies were in large part devastated by the war and rebuilding them increased economic welfare substantially, even without technological innovation. By the 1980s, or perhaps earlier, growth in economic welfare depended much more on the ability of an economy to innovate. At this, the Soviet-type economies failed dismally, and it is misleading to characterize this failure as due to principal-agent problems except in the tautological sense that the public was not being well served by its agents, the planners and managers, if the latter were not succeeding in introducing technological change.

To state the issue somewhat differently, it is false to say that sufficient technological change did not occur because some agent was not carrying out some principal's orders. No one gave such orders. The correct statement is that, without the competition that is provided by markets—both domestic and international—no business enterprise is forced to innovate and, without such forcing, innovation, at least at the rate that market economies engender, does not occur. Perhaps even the “forcing” view puts too much emphasis on the incentive issue. It might just have been extremely difficult to innovate in the Soviet-type economies because, for instance, information about commodities on the technological frontier was very hard to come by, because the best engineers and scientists were recruited by the defense sector, and because the *Weltanschauung* of the system belittled the kind of consumer gratification that is catered to by capitalist enterprise. This contrasts with the principal-agent explanation, which emphasizes the view that managers and workers didn't work hard because of a failure of incentive due to the economic mechanism.

The question becomes, then, whether an economic mechanism can be designed under which technological innovation will take place but in which a characteristically capitalistic distribution of income does not come about. More specifically, can competition between business enterprises, leading to innovation, be induced without a regime of private property in firms? For, at this point, we have no observations of innovation as a generic multisectoral phenomenon in an economy except when it is induced by competition.

5. PUBLIC BADS AND THE DISTRIBUTION OF PROFITS

One might object that a market socialism whose focus is the equal distribution of profits will not amount to much, for profits account for only 15 to 30 percent of national income, and they may account under market socialism for less than that because some revenue that takes the form of corporate profits in a capitalist

system would there take the form of interest payments to banks and their depositors. I believe, however, that the partial equalization of income that takes place in these systems is only part of the story.

Classical arguments against capitalism note not only its bad distributional properties but its generation of what in modern economic parlance are called public bads. Public bads are often created by free-rider problems: it may be in the interest of each individual to perform a certain action, treating the behavior of others as given, but the collective result is a situation that is worse for everyone than if all had abstained from the action.

There is a class of public bads having the property of being inputs into or joint products of production. Pollution is the prototypical example: it is a joint product of many production processes and has a negative effect on people's welfare. The essential property of public bads in this class is that their presence increases the profits of firms and indeed the wages of workers. Other examples are: wars which increase profits, for example, by lowering the price of imported inputs used by firms; noxious advertising, for instance, by cigarette companies; investment in firms doing business in South Africa under apartheid; and fast assembly line speeds or, more generally, the lack of enforcement of labor legislation and of legislation applying to occupational safety and health. All these practices increase profits, and often wages as well, yet also directly reduce the welfare of the population.

It has also been argued that a highly unequal distribution of wealth is itself a public bad, as it creates a kind of society that decreases the welfare of all—most obviously, through the crime that it generates and, less proximately, through the lack of community that it engenders.

The level of public bads in a democratic political economy is an outcome of the political process, where different actors attempt to implement their economic interests. In a capitalist economy, there is a small class of wealthy individuals who receive large amounts of income as their share of firms' profits, and it is generally in their interest to have high levels of the profit-increasing public bads. The positive effect from the public bad on the income of members of this class more than compensates them for the direct negative welfare effect.⁹ Individuals who stand to gain from them actively fight, through political activity, for high levels of these profit-inducing public bads. The virtue of the market-socialist proposals is that there would exist no small, powerful class of individuals deriving large incomes from profits, hence no class would have such an interest in fighting for large levels of public bads.

I do not make the blanket statement that if no class exists which derives large incomes from corporate profits, then low levels of public bads will be forthcoming. One must examine carefully the general equilibrium effects of a market-socialist mechanism that precludes the formation of such a class. I have done some preliminary work on this, which I summarize in section 6.

6. A MARKET-SOCIALIST ECONOMY WITH A STOCK MARKET

In this section, I briefly outline one model of a market-socialist economy. There are four “corporate” actors among whom financial transactions will take place. The first is the *adult citizenry*. The second is the sector of *public firms* but, as we shall see, these are not owned directly by the state. In a thoroughgoing market-socialist economy, all large firms (roughly equivalent to the corporate sector in an advanced capitalist country) would belong to this sector. The third is a set of *mutual funds*, and the fourth is the *state treasury*.

Every adult citizen would receive from the state treasury an equal endowment of *coupons* that can be used only to purchase shares of mutual funds. *Only* coupons can be used to purchase shares of mutual funds, not money. Only mutual funds can purchase shares of public firms, using coupons. Prices of corporate shares and mutual funds are, hence, denominated in coupons; they will oscillate depending on the supply of and demand for shares. Citizens are free to sell their mutual fund shares for coupons and to reinvest the coupons in other mutual funds. Finally, firms may exchange coupons with the state treasury for investment funds and may purchase coupons from the treasury with money. This is the only point at which coupons exchange for money. These investment funds play the role of equity in the firm.

A share of a firm entitles the owning mutual fund to a share of the firm’s profits, and a share of a mutual fund entitles the owning citizen to a share of the mutual fund’s revenues. When a citizen dies, his mutual fund shares must be sold, and the coupon revenues are returned to the state treasury. The treasury, in turn, issues coupon endowments to citizens reaching the age of majority.

Firms’ investment funds come from two sources: bank loans (or corporate bonds financed by banks) and the state treasury, through coupon exchange. Citizens deposit savings in banks. The supply of and demand for loans determine the interest rate, and the supply of coupons and the demand for state investment funds determine the rate at which coupons exchange for investment funds at the treasury. The treasury’s funds are raised by taxation of the citizenry (or, perhaps some combination of corporate and personal taxes).

Thus the coupon system is meant to endow each adult citizen with a stream of income during his lifetime, his transient property right in the nation’s “public” firms. Only during his lifetime does a citizen have an entitlement to the profits of firms. Because shares can be purchased only with coupons and coupons cannot be sold by citizens for money, rich citizens will not generally own more shares than will poor citizens except insofar as they are better informed about investment opportunities. This effect is mollified by the requirement to purchase mutual funds, not the shares of individual firms. Of course, some citizens will end up holding relatively valuable portfolios of mutual funds, but those cannot be bequeathed to children. Inter vivos gifts of mutual fund shares are prohibited.

Mutual funds are used as (mandatory) intermediaries between citizens and firms for two reasons. The first is paternalistic, to protect citizens from squander-

ing their coupon endowments on poor investments. The second reason is somewhat more subtle. Since a citizen cannot pass down her share holdings to her child, nor can she sell shares for money, were citizens able to purchase (coupon) shares directly from firms, there would be a tendency for some firms to emerge as “cash cows.” These firms would sell off their assets and distribute the proceeds to shareholders as dividends. During this process, the (coupon) value of the firm’s shares would decrease to zero, but by that time the shareholders would have capitalized their share holdings, thus avoiding the 100 percent death tax on coupon holdings. Such cash cows might well constitute an inefficient use of resources. Now, in principle, the same thing could happen with unregulated mutual funds: some funds could specialize in holding portfolios of cash cows. One easy way to prevent this occurrence is to regulate mutual funds by requiring that each have a balanced age distribution of owners. To keep the age distribution balanced would require the mutual firm not to purchase only cash cows.

The existence of both equity and debt finance will allow firms to choose a desired degree of leverage. Were no equity available (but all financing were to be through banks), the interest rate would arguably be higher than it is in a “comparable” capitalist economy since debtors would be subject to more risk. There is also an element of wealth redistribution in the institution of firm equity, as designed. For it may be assumed that the taxes which raise funds for the treasury are progressive, while all citizens become initially equal owners of the capital stock through the coupon system.

In equilibrium, the total number of coupons is equal to the total coupon value of equity in the public sector because no firm will desire to hold coupons (absent transaction costs). Since the total coupon value of stock held by citizens is also equal to the total number of coupons, we have the identity that the total value of stock is equal to aggregate equity of firms in the public sector.

Banks will play a special role in the economy as the primary monitors of firms, as will be described in section 8. Banks will also be public firms in the coupon sector: their shares will be purchasable by mutual funds as well.

As I have indicated, the intention of the coupon mechanism is to distribute the profits of firms quite equally among the adult citizenry. In the next two sections, I study the effect of the coupon system on the welfare of different income strata of the population due to the effect of equalizing the distribution of profits on the level of public bads as well as the claim that the coupon system will induce the kind of competition and innovation characteristic of capitalist firms.¹⁰

7. CONTRASTING WELFARE EFFECTS OF THE COUPON ECONOMY AND AN EGALITARIAN CAPITALIST ECONOMY¹¹

The model I shall describe in this section is not intended to be a complete description of a market-socialist economy. A number of matters are ignored, such as investment planning by the state and the monitoring of firms. The purpose of

the present model is to analyze one question only, the difference in the level of welfare of citizens that would come about as a consequence of different ways of defining property rights in firms when profit-inducing public bads exist.

I shall describe an economic environment on which two possible politico-economic mechanisms shall be alternatively imposed—one capitalist, the other market-socialist (coupon). The problem is to compute the welfare of the population at the equilibrium induced by each mechanism. The environment is described as follows. There is only one good produced, which all people like to consume. There is also a public bad, to be thought of as pollution. One may think of this public bad as an input in each firm's production function even if, in actuality, it is a joint product of the firm's production process, for the level of the public bad that the firm is allowed to "emit" in part determines its production—the higher the permissible level of pollution, the greater the firm's production at a given level of the other input, which is the good itself. Thus firms produce a good using "inputs" of pollution and the good.

There are many citizens, of whom a small percentage are initially rich and a large percentage have initially a middle or low level of wealth. Initially, that is, the rich own a large amount of the good, the middle a smaller amount, and the poor an even smaller amount. All citizens have the same preferences over consumption of the good, at various times, and of the public bad: utility is increasing in consumption of the good and decreasing in consumption of the bad. The bad is public because all citizens must consume the same amount of it, namely, the amount 'emitted' by firms. There may be many firms in the economy. There are also banks, which accept deposits and make loans.

There are three relevant dates at which things happen in the economy: call them 0, 1, and 2. Consumption of the good occurs at dates 0 and 2, and production and consumption of the public bad occur at date 2. Thus a person's utility function has the form $u(x_0, x_2, z)$, where x_0 is consumption of the good at date 0, x_2 is consumption at date 2, and z is consumption of the public bad at date 2. There is uncertainty in the economy, which takes the following form. There are various possible *states of the world* that may occur at date 2. These states are brought about by events that should be thought of as occurring outside the model. What is relevant is that the production function of each firm depends on the state of the world. Thus the state of the world might be the weather, and the weather might affect the production of firms, which in this case are farms. Or investors may be uncertain about the technological change that will have taken place by date 2. At date 0, all citizens are supposed to know the probabilities with which the various states will occur at date 2. At date 0, each citizen owns, as well as some amount of the good which characterizes her as rich or poor, an equal per capita share of every firm in the economy. At date 0, each citizen shall have to make consumption and investment decisions, whose precise nature depends on the economic mechanism that shall be imposed. At date 1, citizens vote to determine the level of pollution

that firms shall be allowed to emit. At date 2, one of the states of the world occurs, following which production takes place, with each firm emitting the amount of pollution that has been determined by vote at date 1. Output of the firms is distributed to citizens, and is consumed by them, according to the investment decisions they have made at date 0.

Let us now impose a capitalist economic mechanism on this economic environment. There is a stock market at date 0. People initially each own equal shares of all firms, but they can now trade these shares, where the price of a share is denominated in units of the good. (The issues of cash cows, and hence mutual funds, are ignored in this section.) Thus, at date 0, a person can purchase a portfolio of stock, using her endowment of stock and her endowment of the good in trade. She also chooses how much of her endowment to consume at date 0 and how much to put in the bank at the going interest rate. (She may, alternatively, borrow from the bank.) She also must contribute to the firm a share of its total investment (which is its input of the good) equal to the share of its stock she has purchased.¹² After elections take place and the amount of the public bad is determined at date 1, and after the state of the world is revealed and production takes place at date 2, the citizen receives a share of output from each firm equal to the share of its stock she has purchased and also receives her principal plus interest from the deposit she made in the bank at date 0 (or, alternatively, she pays principal plus interest on the loan she took). Thus, if, at date 0, citizens can predict the outcome of the vote at date 1, and they face prices for stock of each firm and an interest rate, then they can choose a portfolio and consumption plan that maximizes their expected utility, the expectation being taken over the various states of the world that may occur at date 2. This optimal choice will be the same for every poor person and the same for every rich person, but it will, of course, differ among the types.

How does a firm choose its level of investment, the amount of input it shall use in production at date 2? At the equilibrium level of investment for each firm, citizens will purchase its stock in varying amounts. The board of directors of the firm will be comprised of representatives of the three types of shareholder, but with votes that are not necessarily in proportion to their ownership shares. The firm's investment choice must be that which is chosen by the board of directors, under some rule for how the board solves its political problem. For instance, the investment choice might be that which is optimal for the median shareholder on the board.

Finally, we must stipulate how people vote at date 1 on the level of the public bad. Given the investment and consumption choices that people have made at date 0, each has some optimal level for the amount of the public bad. (In this economy with just three types, there is one optimal level of the public bad for the poor, one for the middle, and one for the rich.) Recall that increasing the amount of the public bad increases the output firms can produce at date 2, given their investment choices, and because of this, it increases the consumption of the good of each

citizen at date 2; but, on the other hand, increasing the level of the public bad also decreases utility directly for each citizen. There is, in general, for each citizen type, a level of the public bad which optimizes this trade-off.

A simple theory of voting would stipulate that the outcome of the election will be the level of the public bad preferred by the median voter or, in this case, preferred by the middle-income voters, who will, for the parameters I shall choose, be the median voters. I shall assume, somewhat more realistically, that the political process is sufficiently complex that all three income classes have some impact on the determination of the level of the public bad. As a shortcut to providing a full-fledged theory of this process, I shall simply stipulate that the outcome of the election maximizes some weighted average of the utilities of the poor, the middle, and the rich, and I shall fix the weights used in this average as a characteristic of the political process.¹³

We are now prepared to state the concept of capitalist politico-economic equilibrium (CPEE). A CPEE is a set of stock prices for each firm's stock and an interest rate at date 0, a portfolio and consumption choice for each citizen at date 0, an amount of investment for each firm, and an amount of the public bad, such that: (1) at that level of the public bad, at those prices and interest rate, and given the investment choice of each firm, the consumption and portfolio choice of each citizen at date 0 maximizes her expected utility; (2) given the portfolio choices of each citizen and the level of the public bad, the board chooses a level of investment for the firm by an internal political process that I shall not describe precisely here; (3) the level of the public bad is the outcome of the political process at date 1 (that is, it maximizes the appropriate weighted average of the utilities of the rich, the middle, and the poor), given the portfolio choices of each individual; and (4) total bank deposits made and total bank loans extended are equal at date 0.

Under suitable restrictions on the preferences of agents and the production functions of firms, a CPEE exists, and we can calculate it for specific choices of those functions.

Next, I describe the coupon politico-economic mechanism. It is the same as the capitalist mechanism but for one feature: one cannot purchase stock with the good, but only with coupons. This may be thought of in the following way. Each citizen begins with an endowment of the good, as before, and, say, 1,000 coupons. The prices of the firms' stocks are announced in coupons only. It is illegal to trade coupons for the good; one can purchase stock of a firm only with coupons and can sell it only for coupons. Thus each consumer has two budget constraints, one in terms of the good and one in terms of coupons. The coupon budget constraint states that a person cannot purchase shares valued in excess of 1,000 coupons. The good budget constraint states that total consumption at date 0 plus deposits at date 0 plus amount of the good dedicated to the investment of firms in one's chosen portfolio cannot exceed one's initial endowment of the good.

All else is the same as in the description of the CPEE. We can now define a market-socialist politico-economic equilibrium (MSPEE) as consisting of a set of stock prices for each firm's stock, denominated now in coupons, and an interest rate at date 0, a portfolio and consumption choice for each citizen at date 0, an amount of investment for each firm, and an amount of the public bad, such that conditions (1) through (4), spelled out in the definition of the CPEE, are satisfied. The only difference is that here prices of stock are denominated in coupons, not in units of the good. Under suitable conditions on preferences and production functions, an MSPEE exists and, for specific choices of those functions, it can be calculated.

Thus one can, in principle, calculate the expected utilities of the rich, the middle, and the poor in the equilibria of the two politico-economic mechanisms. I shall report some of those calculations in a moment. But first, let me conjecture, qualitatively, some of the differences that one might expect in politico-economic choices under the two mechanisms. What one should expect to happen in the capitalist mechanism is that the poor, and to a lesser extent the middle, will sell a good deal of their initial endowment of firm shares to the rich, who shall pay for them with the good, which the poor and middle shall consume at date 0. This will concentrate the ownership of stock in the hands of the rich, with two effects: first, they shall comprise the controlling group in most firms, and hence the firms' investment choices will be in their interest, and second, they shall have a greater interest than the poor and middle in a high level of the public bad, as they own such large fractions of the stock of firms. In the coupon economy, however, the rich are precluded from buying controlling shares of all firms—for shares can be purchased only with coupons and all citizens have the same initial endowment of coupons. One should expect, then, that at equilibrium the middle and poor will control most firms, as they own the majority of coupons in society. Thus the firms will choose their levels of investments in the interest of the middle and the poor. Furthermore, the rich will derive only a fairly small fraction of their date 2 consumption from the profits of firms and will not, therefore, desire as high a level of the public bad as they did in the capitalist economy.

All this is conjecture, for the general equilibrium effects can be complicated. The only way to be sure what the welfare effects are in equilibrium is to prove a theorem or to make some calculations. I have no general theorems at this time, but I report the results of some calculations in Table 1.

Table 1 presents results from calculating the market-socialist and capitalist politico-economic equilibria for this economic environment,¹⁴ for values of λ running between 0 and 1, where λ is the weight assigned to the utility of the rich and $(1-\lambda)/2$ is the weight assigned to the utility of the poor and of the middle in the determination of the political outcome, the level of the public bad. Three aspects of the equilibria are reported: the level of the public bad, the utilities of

Table 1
Coupon and Capitalist Equilibria for Various Political Influence Weights

<i>Coupon Equilibria</i>										<i>Capitalist Equilibria</i>									
λ	$(1-\lambda)/2$	I	z	u_p	u_m	u_r	λ	$(1-\lambda)/2$	I	z	u_p	u_m	u_r						
0	0.50	1375	0.568	2.729	3.561	12.853	0	0.50	1384	0.579	2.727	3.558	12.927						
0.04	0.48	1384	0.595	2.729	3.563	12.886	0.04	0.48	1410	0.663	2.725	3.563	13.019						
0.08	0.46	1392	0.623	2.729	3.565	12.916	0.08	0.46	1433	0.748	2.720	3.563	13.100						
0.12	0.44	1401	0.651	2.728	3.566	12.946	0.12	0.44	1454	0.836	2.711	3.560	13.172						
0.16	0.42	1409	0.679	2.727	3.567	12.974	0.16	0.42	1473	0.924	2.699	3.552	13.235						
0.20	0.40	1416	0.707	2.725	3.567	13.001	0.20	0.40	1491	1.014	2.684	3.542	13.291						
0.24	0.38	1424	0.736	2.723	3.567	13.026	0.24	0.38	1508	1.105	2.667	3.530	13.340						
0.28	0.36	1431	0.764	2.721	3.566	13.051	0.28	0.36	1523	1.198	2.648	3.515	13.384						
0.32	0.34	1438	0.793	2.718	3.565	13.075	0.32	0.34	1537	1.291	2.627	3.498	13.424						
0.36	0.32	1445	0.822	2.715	3.564	13.097	0.36	0.32	1551	1.386	2.604	3.479	13.458						
0.40	0.30	1451	0.851	2.712	3.562	13.119	0.40	0.30	1564	1.481	2.580	3.458	13.489						
0.44	0.28	1458	0.880	2.708	3.560	13.140	0.44	0.28	1576	1.578	2.554	3.435	13.516						
0.48	0.26	1464	0.909	2.704	3.558	13.160	0.48	0.26	1587	1.676	2.527	3.412	13.539						
0.52	0.24	1470	0.939	2.699	3.555	13.179	0.52	0.24	1598	1.774	2.498	3.386	13.560						
0.56	0.22	1476	0.968	2.695	3.552	13.198	0.56	0.22	1609	1.873	2.469	3.360	13.577						
0.60	0.20	1482	0.998	2.690	3.548	13.215	0.60	0.20	1619	1.974	2.438	3.332	13.592						

λ = political weight of rich, $(1-\lambda)/2$ = political weight of middle and poor, I = investment, z = public bad, u_j = utility of class j , j = p, m, r.

the two types, and the firm's level of investment. First, note that the poor and middle-income classes are better off in the coupon economy than they are in the capitalist economy, for all values of λ , and that the rich are worse off in the coupon economy. Second, note that the level of the public bad is consistently lower in the coupon economy—so the coupon economy is a green economy. The difference is quite substantial. At $\lambda = .24$, which might not be an unreasonable value, the level of “pollution” is 50 percent higher in the capitalist economy. Third, note that the level of investment is consistently higher in the capitalist economy.

To summarize, the market-socialist mechanism prevents the occurrence of a free-rider problem that afflicts the poor and the middle under capitalism. In the capitalist economy, it is individually optimal for each poor and middle-class individual to sell a lot of her shares of the firm to the rich, which creates a class of rich individuals who control firms and whose income depends on profits. The rich come to control firms and, through their influence on the political process, a high level of the public bad ensues. Under market socialism, the poor and the middle are precluded from liquidating their shares. They therefore remain the dominant shareholders and, as well, the rich turn out to be a force for lowering the level of the public bad. The net effect of these changes is not easy to predict in theory, but we have seen that, at least in one example, the poor and the middle-class end up better off in the market-socialist regime—and that regime is greener, to boot.

A final comment on these results is in order. One advantage of having a coupon stock market in real life would be to prevent the poor from selling their shares prematurely to the rich, something one fears might happen if, let us say, firms in a formerly Communist economy were denationalized by distributing shares to all citizens, after which a fully liberalized stock market were opened. Such premature liquidation of one's stock cannot occur in the coupon economy since liquidation cannot occur. More specifically, this phenomenon could happen in the capitalist politico-economic mechanism if the poor had poorer information than the rich about the probabilities with which the various states of the world occur at date 2. It is important to mention that this does not happen in the model whose equilibria are reported in Table 1: there, all agents are equally knowledgeable and rational. So, in real life, one might expect that the difference between the utility of the poor under the two mechanisms would be even greater than it is in Table 1.

8. THE EFFICIENCY OF FIRMS AND THE RIGHTS OF CAPITAL UNDER MARKET SOCIALISM¹⁵

Earlier, I said that the issue for market socialism was whether a politico-economic mechanism could be created under which firms would behave competitively—in particular, in which they would innovate—and be sheltered from inefficient government interference. As Hayek pointed out,¹⁶ and as Kornai ramified Hayek's point with the theory of the soft budget constraint, when the

state controls firms, firm managers are to a large extent absolved of responsibility with regard to errors in judgment; more generally, inefficient practices will not generally be weeded out as they are in a competitive market environment.¹⁷ The model I've just presented does not address this issue at all. That model's purpose was to examine the general equilibrium welfare effects of the different financing mechanisms, under the assumption that the firm manager is a perfect agent of the firm's controlling group. Indeed, technological innovation was not an issue. The purpose of this section is to argue that there are institutions that would force firms to behave competitively in the coupon economy.

I intend that firms in the coupon economy be organized around a fairly small number of main banks, as in the Japanese *keiretsu*. A main bank would be primarily responsible for putting together loan consortia to finance the operations of the firms in its group; it would, correlatively, be responsible for monitoring these firms. The coupon stock market serves all three functions of a capitalist stock market: the movement in the coupon price of a firm's stock is a *signal* useful to banks and mutual funds which shall monitor the firms; it allows mutual funds to *construct portfolios with varying attributes* (e.g., vis-à-vis risk). It also permits firms to *raise capital* by exchanging coupons for investment funds from the treasury. If the coupon price of a firm's stock falls or, more often, before that happens, the main bank would investigate how well the firm is being managed. It has an incentive to monitor the firms in its group effectively because, by so doing, it keeps its firms profitable and thereby able to pay back their loans. This gives the bank a good reputation, making it easier for it to continue to raise money to finance the operations of firms in its group. It may also be desirable to allow or require banks to purchase shares of firms in their *keiretsu* as an incentive for their monitoring function.

But why should the bank perform its monitoring job well? Who, that is, would monitor the monitors? The principal question is whether the banks would operate with sufficient independence of the state, making decisions about firms using economic and not political criteria. Bardhan and I, who have written about this, do not believe that we have a definitive solution to the problem, although we view the following features of the economy as ones which would induce banks to do their job properly.¹⁸ First, in the present proposal, banks would not be owned by the government but by mutual funds and, finally, citizens. Bank managers would be hired on a managerial labor market, by a board of directors. Second, the reputational concerns of the main banks' managers should act as an antidote to susceptibility to political pressure. In Japan, even though banks have been closely regulated by the Ministry of Finance, managers exhibit keenness to preserve their reputation as good monitors, and banks compete in seeking the position of main bank for well-run firms. The managerial labor market will not forget if a bank manager forgives bad loans or nonperforming firms too often. Third, incentive features would be a part of the salary structure of bank management. Fourth, the

doors of international product competition must be kept open, which would act as a check on laxity of the institutional monitors. Fifth, as Raj Sah and Martin Weitzman have suggested, there should be well-publicized precommitments by banks, before large investment projects begin, that promise liquidation should their performance at prespecified dates not exceed prespecified levels.¹⁹ The public nature of these precommitments would preclude the soft budget constraint problems that Eric Maskin and Mathias Dewatripont have studied,²⁰ in which it is in the interest of public banks to renegotiate loans on poorly performing projects. Sixth, banks may perhaps own shares in the firms they monitor. To the extent that bankers' salaries are linked to the banks' profitability, this would further induce them to monitor firms well.

Many, including Colin Mayer and his coauthors in Europe and Michael Porter in the United States,²¹ have argued that a system in which banks monitor firms is preferable to the takeover process as the mechanism guaranteeing firm performance in capitalist economies;²² there seems ample reason to believe that a similar mechanism can be adapted to a market-socialist economy.

If banks monitor firms aggressively, if firms must depend on banks and the accumulation of coupons for finance, and if the doors to international trade are open, firms will innovate. Under capitalism, innovations are designed in the R&D departments of large firms and also enter the economy through the formation of new, small firms. In the coupon economy, I envisage that many small private firms would form; those that grow would eventually be bought by large firms in the "public" sector, as happens under capitalism. Or the government might purchase the firm and auction it in the public sector. Perhaps joining the public sector would be a prerequisite to receiving loans from the main banks or loans at preferential interest rates. I am undecided whether all firms that reach a given size should be nationalized in one of these ways or whether private large firms should continue to coexist with firms in the coupon sector for the sake of competition and, perhaps, of incentive.

I must emphasize that I envisage the coupon proposal as a desirable model of market socialism only when the economy can support sophisticated financial institutions and regulation. (For economies at low levels of development, the Bardhan *keiretsu* model is, I believe, superior.²³) Without a monitoring organ like the U.S. Securities and Exchange Commission, it would be difficult to control black-market transactions in which wealthy citizens purchased coupons from poor citizens with cash. Recall that one wishes to prevent such transactions in order to preserve the good effects on the level of the public bads consequent on having a somewhat egalitarian distribution of profit income. With a national accounting system in which all coupon and stock transactions are registered, this would be possible. Contracts in which one citizen agreed effectively to transfer ownership of her coupon portfolio (or its stream of income) to another would not be enforceable in courts. It would, however, probably still be possible to arrange

enforceable contracts of this type through the use of a financial intermediary in another country. This kind of behavior would have to be regulated.

9. SOCIALISM AND DEMOCRACY

Almost all Western socialists today are democrats; some, such as Samuel Bowles and Herbert Gintis,²⁴ are interested in socialism in large part only insofar as it is instrumental for bringing about democracy. I have defined what socialists want as including equal opportunity for political influence, and I shall here be conventional in assuming that democracy is a precondition for such equality although this assumption is by no means obviously true. It may be more accurate to say that serious disagreements exist with respect to what form of democracy can deliver the desired equality.²⁵

The insistence on democracy has important implications for the socialism of the future, which will involve a change in the language we use to describe it. In a democracy, socialism will be represented by one or several political parties competing for power with other political parties, some of which will be "bourgeois." It may be the case, sometimes, that a regime could be described as socialist for many years despite the occasional victories of bourgeois parties. We can say that the Scandinavian countries have remained social-democratic despite such occasional victories.

But the situation of the Sandinistas may be another pattern. A socialist party comes to power. For various reasons—its own errors, pressure from U.S. imperialism—it loses the elections some years later, to be replaced by a bourgeois party or coalition that undoes a number of its accomplishments. Then, perhaps some years later, the socialists again win the elections. In this case, we must transform our language from "countries being socialist" to "socialist parties being in power." Perhaps the Sandinistas would not have made some of the errors they did had they thought of themselves as being a socialist party in power rather than thinking of Nicaragua as a socialist country.

Nevertheless, a regime of market socialism might well be characterized by its constitution, which would limit the permissible degree of accumulation of private property in productive assets and perhaps explicitly describe other kinds of property that are (constitutionally) protected. One justification for a supermajoritarian requirement to reverse such provisions is that property relations will not engender long-term planning and, in particular, investment, if they are thought to be easily reversible; another is that large social costs would be sustained in any change in property relations.

I think it is incontrovertible that a key reform necessary to achieve the three desiderata of socialists is massively improved education for the children of the poor and working class. Only through education can the difference in opportunities faced by them and the children of the well off be eradicated; only when skills become less unequally distributed, because of education, will wage differentials

narrow significantly. To devote the required amount of resources to this kind of education will require a massive change in outlook of the citizenry of every large, heterogeneous country. Majorities will have to overcome their racism but, more than that, they will have to be won to the position, as John Donne (Devotion 17, 1623) wrote, that “No man is an island entire of itself. Every man is a piece of the continent, a part of the main.” Thus the implementation of a thoroughgoing socialism in a democracy will take a long time if it must await such a feeling of community among people.

But I think that a number of the ills of capitalism would probably be cured more quickly, without the prerequisite of this feeling of community, because of the changed economic interests people would have under market-socialist property relations. I have outlined how the level of various public bads in a democratic society is the outcome of a political struggle in which different classes fight for their interests. If interests change, then so, in general, will the equilibrium level of public bads. Let me take as an example the Persian Gulf war of 1991. A case can be made that that war was fought to keep the price of oil low and that the main interests that wanted the price of oil kept low were firms using oil as an input. Of course, consumers want a low price of oil, too; the question is, Who was willing to go to war in January 1991 to keep the price of oil low, and who would have been content to apply a boycott for another year? As late as December 15, 1990, surveys taken in the United States showed that the great majority of people were opposed to starting a war. One can take this as evidence that they were willing to trade off the possibility of a somewhat higher price for oil and a somewhat higher rate of unemployment for not going to war. Yet President Bush decided to go to war, and he probably had support from “important people” in doing so. These important people were ones who derive huge amounts of wealth from profits of firms; for them, the fall in profits that would ensue from higher oil prices made the alternative of war a preferable one. Now suppose, in a market-socialist economy, no one received more than roughly a per capita share of total profits. A rise in the price of oil would, of course, hurt profits and wages but, arguably, no class of “important people” would have such an overwhelming interest in keeping oil prices low. Almost everyone might prefer to take the chance of higher oil prices to avoid having to fight a war.

If many of the ills of capitalism are public bads of this kind—bads that increase profits—then, even if the preference orderings of individuals do not change, a change in the distribution of profit income would change the level of public bads that is engendered by a democratic process. We have seen this effect in the simulations of section 7. I think that, to some extent, racism and sexism are public bads of this kind. An old Marxist argument maintains that divisions among the working class—created, for example, by racism and sexism—strengthen the bosses in the struggle against labor. To the extent that this is the case, capitalism may develop mechanisms to foment racism and sexism, for example, by the

treatment of minorities and women in the capitalist media. Were profits equally distributed in the population, the public-bad argument of section 5 implies that such capitalist-inspired fomenting of divisions in the working class would be reduced. I do not ignore the fact that people themselves have racist and sexist ideas, and so one cannot expect changes overnight with respect to these practices. But the change in property relations would dissolve one powerful class interest in the maintenance of discrimination.

A fundamental left-wing criticism of capitalist democracy has been that, as long as capital is in the hands of a small wealthy class, politics must conform to the needs of that class. Under the coupon system I have outlined, the “structural power of capital” over society would be broken.

It would be comforting to argue that, once a mechanism for redistributing profits or for transforming firms into labor-managed ones had been put in place, then a feeling of such community would develop that the well-to-do would be willing to sacrifice income in order to fund the kind of educational system necessary to raise massively the opportunities of the many. I do not think this is a realistic expectation. I do think, however, that preferences change and that, if the income distribution becomes more egalitarian due to market-socialist property relations and if the levels of public bads do fall, then preferences will also change in an egalitarian direction. My point is that institutions can be changed more rapidly than can preferences.

Nevertheless, I remain agnostic on the question of the birth of the so-called socialist person and prefer to put my faith in the design of institutions that will engender good results with ordinary people. With such agnosticism, are there nevertheless grounds for believing that market socialism would eventually increase the support for large increases in publicly supported education? Perhaps; again, I will invoke the public-bad argument. To a degree, education of the working class is a profit-increasing public good and, to this degree, it is rational for capitalists to support its financing. It is almost certainly the case that publicly supported education in the United States is at present below this degree and, indeed, significant sections of the capitalist class support increased educational funding: U.S. workers would be more productive and could more easily acquire profit-enhancing skills if they could read detailed instruction manuals, as Japanese workers can.²⁶ What may well be the case, however, is that the optimal degree of working-class education for capitalists is less than the socially optimal degree—after a point, that is, increased public education may have a net negative effect on profits (when the profit taxes needed to finance the marginal educational increment for the working class are more than the profits the increment induces) while it continues to have a large positive marginal effect as a non-profit-inducing public good via its effect on social culture (in which I include everything from improved television programming to public civility). It is this additional educational increment which, according to the public-bad argument made in section 5, a society in

which profits are equally distributed is more likely to support through its political process.²⁷

I have not thus far addressed in this essay what is the largest injustice in the world, the massive inequality between nations, conveniently described as North-South inequality. Furthermore, in the next fifty years, it may well be this inequality which becomes the focus of politics as the South industrializes and demands large transfers from the North to enable it to do so without destroying the global commons. I have no doubt that such transfers are required by justice, for where one is born is a morally arbitrary personal feature, and equality of opportunity mandates compensation to those born into societies with low standards of living. The question is whether a market-socialist society would be more prone to support such transfers than would a capitalist one.

The practices of the Scandinavian countries suggest that perhaps the answer is yes; foreign aid is a larger fraction of national income in Norway and Sweden than it is in any other country, and this appears to be due to the socialist-person effect.²⁸ The social-democratic parties in Scandinavia have advocated relatively large development aid on grounds of solidarity. Furthermore, many people in industrialized countries advocated divestment of corporate stock in South Africa: here is a case where people were willing to sacrifice a small amount of income (in the form of slightly higher wages, profits, and pensions that were possible with South African investment) for the sake of the freedom of people in a distant land. It is therefore not absurd to suggest that the low welfare of people in the South is a (profit-inducing) public bad as far as many people in the North are concerned and, as such, foreign aid might well increase with a redistribution of profits.

10. CONCLUSION

Democracy is the best political mechanism that we know of for rendering the state an agent of the people. It is not foolproof, and there are many alternative versions of democracy, in respect of the relationships between branches of government, the ways in which representatives are chosen, and the role of a constitution. Democracy and the use of markets, both of which I advocate, limit the feasible extent of income redistribution. In particular, since labor markets are necessary, there will be wage differentials, and perhaps efficiency requires about the degree of wage differentiation we see in capitalist economies, at least for a large interval of the wage distribution. Because citizens must choose tax systems, and because people tend to believe they deserve what they earn on the labor market, the degree of redistribution of wage income is necessarily limited. There is another element that determines the degree of democratically accessible redistribution through taxes on labor income: the capacity for empathy with other citizens. We have seen the highest degree of redistribution in the Nordic countries. It is not a coincidence, in my view, that these countries are small and are linguistically, ethnically, racially, and religiously homogeneous. I doubt that large

heterogeneous societies will, in our lifetimes, vote to redistribute income as much through the tax system as have the Nordic societies. I would argue likewise in regard to redistribution through inheritance taxes: such redistribution is sharply limited in democratic, heterogeneous societies. From a philosophical viewpoint, I advocate a great deal of redistribution through taxation, but I think it would be utopian to base a blueprint for socialism on that category of instrument.

I believe, however, that there is a substantial degree of freedom in income distribution (in democratic market economies) due to the property relation a society can choose for ownership of its firms. Hayekians assert that a society is, indeed, not free to choose that relation either, on peril of rapid degeneration of its technological vitality. I believe that that assertion is false. It is, ironically, proved to be so by the relative success of large capitalist corporate enterprise, for the Hayekian arguments which deduce the inefficiency of public ownership should apply not only to state-owned firms but to firms like General Motors, with 700,000 employees, approximately one-third of whom are in some managerial capacity. The agency problems between owners and operators in these firms are severe, yet capitalism has devised several quite different ways of solving them (principally represented by the American, German, and Japanese versions). There are, I believe, property relations for firms that can harness these techniques and would implement a substantially more equal distribution of firm revenue among the population than does capitalism.

When Zhou Enlai was asked to comment on the consequences of the French revolution, he replied, "It's too soon to tell." I have argued that the prudent social scientist should likewise remain agnostic about what appears to be capitalism's trouncing defeat of socialism in the late twentieth century.

NOTES

1. For a discussion of self-realization in Marx, see J. Elster, *Making Sense of Marx* (New York: Cambridge University Press, 1985), 82-92. For a more general discussion, see "Self-Realization in Work and Politics: The Marxist Conception of the Good Life," *Social Philosophy & Policy* 3 (1986): 97-126.

2. See John Rawls, *A Theory of Justice* (Cambridge, MA: Harvard University Press, 1971), 426.

3. C. B. MacPherson defines democracy as equal self-realization among citizens (*Democratic Theory* [Oxford: Clarendon, 1973], 4).

4. For an elaboration of the idea of equality of opportunity for welfare, see the following: Richard Arneson, "Equality and Equal Opportunity for Welfare," *Philosophical Studies* 56 (1989): 77-93; John Roemer, "A Pragmatic Theory of Responsibility for the Egalitarian Planner," *Philosophy and Public Affairs* 22 (1993): 146-66.

5. I ignore a fine point here, the distinction between equality and "maximin." With respect to opportunity for self-realization and welfare, I advocate choosing those social institutions which maximize the opportunity for their achievement for those who will have the minimum such opportunity. It is not obvious, however, whether one should advocate "maximin" opportunity for political influence, or equalize political influence at a maximum level, because political influence should probably be defined largely, though not entirely,

in relative terms. Social status is a good similar to political influence in this respect: if everyone has equal social status, is it meaningful to speak about the level of that status?

6. By which I mean private property subject to taxation and regulation of various kinds.

7. For a definition and discussion of social-republican property, see William Simon, "Social-Republican Property," *UCLA Law Review* (1991): 1335-413.

8. See John Roemer, "Can There Be Socialism after Communism?" *Politics & Society* 20 (1992): 261-76.

9. This is so even if the rich cannot escape exposure to the public bad, as indeed they often can.

10. Several elements of the coupon economy as described here have been amended from my original presentation of it in *A Future for Socialism* (Cambridge, MA: Harvard University Press, 1994) due to suggestions made by participants at the Madison conference. I am grateful to William Simon for suggesting that coupons be exchangeable by firms for investment funds, and to Louis Putterman for suggesting the age-profile regulation of mutual funds as a way of precluding the cash cow phenomenon.

11. This section is based on John Roemer, "Limited Privatization in the Presence of Public Bads," in *Property Relations, Incentives, and Welfare*, edited by J. E. Roemer (New York: Macmillan, in press).

12. In this section, citizens supply investment funds directly to firms. The issues of leverage and different forms of firm financing are not modeled here.

13. I have proposed and studied elsewhere models in which the rich can influence the outcome of elections in which they are in a small minority, through campaign spending and electoral propaganda. See John Roemer, "The Strategic Role of Party Ideology When Voters Are Uncertain about How the Economy Works," *American Political Science Review* 88 (1994): 327-35.

14. All individuals have the same utility function whose arguments are consumption of the good at dates 0 and 2 and consumption of the public bad at date 2. The utility function exhibits decreasing absolute risk aversion in consumption. There is one firm; its production function differs in each of an infinite number of possible states of the world. There are three income classes, characterized by their initial endowment of the good (poor, middle, and rich). There are two financial assets: the stock of the firm and a bond. The model is precisely described in J. Roemer, *Limited Privatization*.

15. This section is based in part on P. Bardhan and J. Roemer, "Market Socialism: A Case for Rejuvenation," *Journal of Economic Perspectives* 6 (1992): 101-116.

16. Friederich A. Hayek, "The Nature and History of the Problem," in *Collectivist Economic Planning*, edited by F. A. Hayek (London: Routledge, 1935); "Socialist Calculation: The Competitive 'Solution,'" *Economica* 7 (1940): 125-49.

17. Janos Kornai, *The Socialist System: The Political Economy of Communism* (Princeton, NJ: Princeton University Press, 1992); "Market Socialism Revisited," in *Market Socialism: The Current Debate*, edited by Pranab Bardhan and John Roemer (New York: Oxford University Press, 1993).

18. Bardhan and Roemer, *Market Socialism: A Case for Rejuvenation*.

19. Raj Sah and Martin Weitzman, "A Proposal for Using Incentive Pre-Commitments in Public Enterprise Funding," *World Development* (1991), 19: 595-603.

20. Eric Maskin and Mathias Dewatripont, "Centralization of Credit and Long-Term Investment," in *Market Socialism*.

21. Michael Porter, *Capital Choices: Changing the Way America Invests in Industry* (Washington, DC: Council on Competitiveness, 1992).

22. See J. Corbett and Colin Mayer, "Financial Reform in Eastern Europe: Progress with the Wrong Model," *Oxford Review of Economic Policy* 7 (1991): 55-75. See also Franks and C. Mayer, "Corporate Ownership and Corporate Control: A Study of France, Germany, and the UK," *Economic Policy* (1990), 189-231.

23. P. Bardhan, "On Tackling the Soft Budget Constraint in Market Socialism," in *Market Socialism*.

24. Samuel Bowles and Herbert Gintis, *Democracy and Capitalism* (New York: Basic Books, 1986).

25. For definitions of democracy, see P. Schmitter and T. L. Karl, "What Democracy Is . . . and Is Not," *Journal of Democracy* 2 (1991): 75-88. For general skepticism concerning the feasibility of democracy, see W. H. Riker, *Liberalism against Populism* (Prospect Heights, IL: Waveland, 1988 [1st ed. 1982]).

26. M. Hashimoto reports that in Japan, the Honda training program for workers involves their studying manuals. When Honda set up its U.S. plant, it discovered that workers were unable to learn by reading manuals. See Hashimoto, "Employment-Based Training in Japanese Firms in Japan and in the United States: Experiences of Automobile Manufacturers" (working paper, Department of Economics, Ohio State University, 1992).

27. To put the argument in the language of section 5, we would say that, after a point, the *lack* of public education is a profit-increasing public bad.

28. The four countries that contribute the greatest fraction of their GNP to official development assistance are Norway, Sweden, the Netherlands, and Denmark. Each of these contributes at least 0.94 percent of its GNP. Among the 18 countries constituting the Development Assistance Committee of the Organization for Economic Cooperation and Development (OECD), the United States ranks last, contributing only 0.15 percent of its GNP. See Organization for Economic Cooperation and Development, *Development Cooperation Efforts and Policies of Members of the Development Assistance Committee* (Paris: OECD, 1990).