

# SUBSCRIBE NOW AND RECEIVE *CRISIS AND LEVIATHAN*\* FREE!



"*The Independent Review* does not accept pronouncements of government officials nor the conventional wisdom at face value."

—**JOHN R. MACARTHUR**, Publisher, *Harper's*

"*The Independent Review* is excellent."

—**GARY BECKER**, Noble Laureate in Economic Sciences

Subscribe to [\*The Independent Review\*](#) and receive a free book of your choice\* such as the 25th Anniversary Edition of *Crisis and Leviathan: Critical Episodes in the Growth of American Government*, by Founding Editor Robert Higgs. This quarterly journal, guided by co-editors Christopher J. Coyne, and Michael C. Munger, and Robert M. Whaples offers leading-edge insights on today's most critical issues in economics, healthcare, education, law, history, political science, philosophy, and sociology.

Thought-provoking and educational, [\*The Independent Review\*](#) is blazing the way toward informed debate!

Student? Educator? Journalist? Business or civic leader? Engaged citizen? This journal is for YOU!



\*Order today for more **FREE** book options

**SUBSCRIBE**

Perfect for students or anyone on the go! *The Independent Review* is available on mobile devices or tablets: iOS devices, Amazon Kindle Fire, or Android through Magzter.



---

# Has John Roemer Resurrected Market Socialism?



MICHAEL WOHLGEMUTH

**J**ohn E. Roemer, a leading socialist economist, has recently proclaimed a “Future for Socialism” (Roemer 1994). His book is advertised as being “measured, highly accessible, and most of all compelling.” I have come to the opposite conclusions. Roemer’s most provocative assertion is his claim to have found “ways of reformulating the concept of market socialism in response to the Hayekian critique” (2). In his attempt to convince central planners as well as communitarians in the socialist camp of the virtues of the market, Roemer indeed goes a long way in accepting the objections that Friedrich A. Hayek and others put forward during the calculation debate of the 1930s. It is helpful to recall the debate on socialist economics from the early warnings of Ludwig von Mises and Hayek to the later analyses of Yugoslav and Hungarian market socialism by Svetozar Pejovich or János Kornai. These critiques form the background of what Roemer calls the “fifth generation” of market-socialist proposals, which he claims lack the defects of those associated with former generations.

Whether this assertion can be substantiated is the central question of this article. First, we must reconstruct Roemer’s model of market socialism. Because Roemer leaves important elements of this system unexplained or unconnected, my account can only mirror his eclecticism, but I shall try to avoid unfriendly misreadings. Next I shall describe Roemer’s own normative scheme of reference, finding his concept of “equal opportunities” highly

---

Michael Wohlgemuth is a research assistant at the Max-Planck-Institute for Research into Economic Systems, Jena, Germany.

ambiguous. Furthermore, whatever the interpretation of equal opportunities, it is hardly reconcilable with the effects that Roemer's proposals for institutional reform must be expected to have. I analyze these effects in the following sections. They all involve substantial obstructions of market competition in different dimensions and can be summarized as evidence of a fundamental conclusion: spontaneous market competition and egalitarian market socialism are as incompatible as Hayek and other critics always believed them to be.

### Four Generations of Socialist Miscarriages: The Debates in Retrospect

According to Roemer (1994, chap. 4), the market-socialism debate has now entered its fifth stage. My recapitulation of the preceding four generations of market-socialist ideas and refutations serves a twofold purpose: (1) to show that the debate was a catalyst in the development of Austrian ideas of the market process; and (2) to show the defects of former market-socialist ideas that Roemer now claims to have avoided.

#### The Calculation Debate

The theoretical deliberations on the economics of socialism began with “the belief that socialism will dispense entirely with calculation in terms of value and will replace it with some sort of calculation in natura based on some units of energy or some other physical magnitude” (Hayek [1940] 1994, 235). This view, traditionally held by European Marxists such as Friedrich Engels or Karl Kautsky, was first challenged by Mises ([1920] 1994). Mises provoked socialist economists to enter the debate with his “impossibility theorem,” usually summarized as follows: there is no basis for rational calculations of value if there are no market prices; and there are no market prices without the voluntary exchange of private property rights. Hence, if socialists want to allocate of resources “rationally”—sacrificing a less-valued opportunity in favor of a more highly valued one in view of consumers’ preferences and producers’ capabilities—they cannot at the same time dispense with production goods as objects of market exchange. Only full-fledged capital markets reveal monetary values of production goods and thus provide information and incentives necessary for a rational use of the means of production. One decisive qualification Mises probably considered unnecessary to dwell on at length. Its due consideration by his critics, however, would have avoided many misunderstandings:

The static state can dispense with economic calculation. For here the same events in economic life are ever recurring.... But...our economic data are ever changing, so that the static nature of eco-

conomic activity is only a theoretical assumption corresponding to no real state of affairs.... Thus, in the socialist commonwealth every economic change becomes an undertaking whose success can be neither appraised in advance nor later retrospectively determined. There is only groping in the dark. (Mises [1920] 1994, 16)

In addition, appreciating the knowledge problem arising from “the uncertainty of future conditions, which is an inevitable concomitant of the dynamic nature of economic life” (17), Mises clearly foresaw the incentive problems of expropriated socialist actors. Not only the signaling function of market prices but also their controlling and motivating qualities depend on free markets for the exchange of private property. Mises understood that “the exclusion of free initiative and individual responsibility...constitutes the most serious menace to the socialist economic organization” (20).

Perceiving Mises’s twofold argument in this way instead of just picking his bluntly stated conclusions—“Where there is no free market, there is no pricing mechanism, without a pricing mechanism, there is no economic calculation” (17)—one is compelled to conclude that the replies of socialist economists badly missed the point. They hardly ever considered the incentive problems of planners and producers. Their “possibility theorems” rested on static economic theories in which all circumstances relevant for economic calculation are assumed to be constant and “given.” Hence they referred to a utopian state for which even Mises denied a serious calculation problem. Contrary to the declarations of critics and reviewers throughout the subsequent generations, we must conclude that Mises’s criticism was not actually refuted. Still, the discussion led to the “realization by socialists that prices must be used for economic calculation under socialism” (Roemer 1994, 28), as expressed by Oscar Lange in his glibing praise: “Socialists have certainly reason to be grateful to Professor Mises, the great advocatus diaboli of their cause. For it was his powerful challenge that forced socialists to recognize the importance of an adequate system of economic accounting to guide the allocation of resources in a socialist economy” (Lange [1936] 1994b, 252).

This recognition led to a second stage of socialist economics “characterized by the view that it would be possible to calculate the prices at which general equilibrium would be reached in a socialist economy by solving a complicated system of simultaneous equations—and so socialism need only await the invention of powerful computers” (Roemer 1994, 28).<sup>1</sup> The

---

1. See for example, Taylor (1929) or Dickinson (1933). Computopia fallacies remained fashionable in later works of Lange ([1965] 1994a). Even Kenneth Arrow (1974) once adhered to this nirvana: “Indeed, with the development of mathematical programming and high-speed computers, the centralized alternative no longer seems preposterous. After all, it would appear that one could mimic the workings of a decentralized system by an appropriately chosen

equations of general equilibrium as depicted by Leon Walras, Vilfredo Pareto, and Enrico Barone were presented as proof of the possibility of rational socialist calculation. To prove that abstract equations have an equally abstract solution in terms of equilibrium values that ought to guide central planning agencies was not, however, to prove that they could in practice be of any use in the absence of a market for the exchange of property rights. The debate remained as open as ever. Hayek ([1935] 1948b, 153ff.) stressed the inadequacy of the metaphor of the Walrasian auctioneer as a description of market processes and as a prescription for planning purposes. Later he summarized his view as follows:

The problem is thus in no way solved if we can show that all the facts, if they were known to a single mind (as we hypothetically assume them to be given to the observing economist), would uniquely determine the solution; instead we must show how a solution is produced by the interactions of people each of whom possesses only partial knowledge. To assume all the knowledge to be given to us as the explaining economists is to assume the problem away and to disregard everything that is important and significant in the real world. (Hayek 1945, 530)

Hayek's insistence on recognizing the practical problems of centralizing the knowledge necessary to mimic the workings of competitive capitalism induced Lange to open the third stage of the debate by making some "practical" proposals. Only then did the term market socialism attain some institutional context as a result of "the realization...that actual markets would indeed be required to find the socialist equilibrium—and this because the central planning bureau could not possibly have the information necessary to make the calculation" (Roemer 1994, 28f.). Prices for consumer goods would be set in actual markets; even wages would be determined by decentralized bargaining in real labor markets. "But there is no market for capital goods and productive resources outside of labour" (Lange [1936] 1994b, 260). Here the Central Planning Board (CPB) would replace market transactions, conducting a procedure of trial and error analogous to the *tâtonnement* of the Walrasian auctioneer (259ff.).

It would start by decreeing randomly chosen prices for the collectively owned producer goods. All managers ("assumed to be public officials" [260]) are instructed to set output so that price equals marginal cost, taking the prices of inputs and of their products as given; hence firms are mandated to act as if they were suppliers under perfect competition. The CPB now checks whether any shortages or surpluses of factors and goods exist and corrects its errors by new trials, altering prices until it finds the market-

---

centralized algorithm" (5).

clearing ones. Thus, Lange argues:

The Central Planning Board performs the functions of the market. It establishes the rules for combining factors of production and choosing the scale of output of a plant, for determining the output of an industry, for the allocation of resources, and for the parametric use of prices in accounting. Finally, it fixes the prices so as to balance the quantity supplied and demanded of each commodity. It follows that a substitution of planning for the functions of the market is quite possible and workable. ([1936] 1994b, 263)

Hayek [1940] 1994 challenged this conclusion,<sup>2</sup> contrasting the practicality and performance of Lange's system of centralized information and decreed prices with a market system "where the required changes are brought about by the spontaneous action of the persons immediately concerned" (240). All his objections pertain to fundamental shortcomings of the neoclassical paradigm or to an "excessive preoccupation with problems of the pure theory of stationary equilibrium" (240).

First, because of "the daily changing conditions in different places and different industries" (240), Lange's bureaucratic *tâtonnement* will not converge. At each phase of the cumbersome procedure, the specific circumstances to which rational calculation ought to adapt will already have changed again. While decentralized market procedures elicit rapid and differentiated adjustments, centralized trial and error can react only with delays and undue generalizations.

Second, undue generalizations must occur because of the heterogeneous character of production goods. Economically, each machine of a different age or in different combinations has its individual value. The CPB can hardly even know of their overall existence; even less can it fix particular values in terms of the shadow prices of each of the different production goods. Furthermore, the *tâtonnement* procedure is inapplicable to

---

2. It should be noted that Mises did not leave the debate at the first stage (Roemer does not mention Mises's contribution at all!). Even though his reactions to market socialism were not as prominent as Hayek's prompt and detailed rebuttal of Lange, they were equally substantive. Mises ([1949] 1966, chap. 26) now stressed the lack of capital markets, which alone can generate reliable asset prices and interest rates as the basis of factor evaluations in changing environments. The relevant aspect of human action is speculation and investment. Mises argued that "one cannot play speculation and investment. The speculators and investors expose their own wealth, their own destiny. This fact makes them responsible to the consumers" (709). In the Austrian camp, a fierce debate has recently occurred about whether Mises or Hayek gave the "right" and "final" answer to socialist planning (see the last three years of the *Review of Austrian Economics*). This is not the place to contribute to the internal Austrian debate; I agree with Kirzner (1996) that the view of two conflicting Austrian paradigms is based on grave exaggerations and misunderstandings sometimes even leading to lamentable "verbal terrorism" (148). It may be more rewarding to return to the debate with socialist proposals that should not remain unnoticed.

nonstandardized commodities, which form a great part of the socialized production goods (e.g., machinery, buildings, and ships produced only on special contract). For such goods, the CPB has no market-clearing prices to decree in advance; hence it would have to take “all the functions of the entrepreneur on itself” (241).

Third, the managers, even if loyal and capable, cannot be expected to find the lowest-cost production methods. Because the CPB is confined to establishing uniform prices for goods of economically different value, “the managers of production will have no inducement, and even no real possibility, to make use of special opportunities, special bargains, and all the little advantages offered by their special local conditions” (244). This nonresponsiveness also reflects their obligation to treat prices as “given.” As pure quantity adjusters with price competition outlawed, managers have no reason to “incur extra costs to remedy a sudden scarcity, since a local or temporary scarcity could not affect prices until the official machinery has acted” (244). In an evolutionary and complex environment, forced marginal-cost calculations based on artificially sticky and uniform prices must lead to a misallocation of resources.

Fourth, for the same reason, there is no room for entry and innovation. Decreed prices destroy

the opportunity for anybody who knows a cheaper method to come in at his own risk and attract customers by underbidding the other producers.... Since the man with the new idea will have no possibility of establishing himself by undercutting, the new idea cannot be proved by experiment until he has convinced [the CPB] that his way of producing the thing is cheaper. (247)

Indeed, just as innovation cannot be depicted in Walrasian equilibrium formulas, it cannot be managed in Lange’s price-fixing procedures. Because the new good or technique has no established market, the CPB has no price to fix in advance. For the same reason, technical knowledge is usually assumed to be “given” in the neoclassical model of the market. To assume every producer’s know-how to be equally available to the CPB, however, turns an assumption of a static environment into a pretense of knowledge.<sup>3</sup>

As Hayek switched from considering problems of theoretical possibility to considering those of practical workability concerning market socialism, he

---

3. This point was made earlier by Hayek ([1935] 1948b, 155). Here, he also anticipated some of Polanyi’s (1967) ideas on the tacit dimension of subjective knowledge: “much of the knowledge that is actually utilized is by no means ‘in existence’ in this ready-made form. Most of it consists in a technique of thought which enables an individual engineer to find new solutions rapidly as soon as he is confronted with new constellations of circumstances” (155). There is no justification “to assume that the concentration of knowledge at the central authority would also include a capacity to discover any improvement of this sort” (155).

discovered theoretical inadequacies of the neoclassical paradigm concerning core questions of economics. The ensuing reactions of the scientific community can be interpreted as exemplary vindications of Kuhnian themes: the neoclassical camp failed to perceive the focus and rigor of the critique and remained confident that Lange's claims had not been seriously damaged.<sup>4</sup> The Austrians, in turn, gradually realized that they had reformulated the economic problem in a fundamental way.<sup>5</sup> A growing awareness of paradigmatic incompatibilities led them to develop their own research program based on such notions as "competition as a discovery procedure" (Hayek [1968] 1978a), "competition and entrepreneurship" (Kirzner 1973), and "the market as an economic process" (Lachmann 1986).<sup>6</sup>

### Modern Variants of Market Socialism

Roemer (1994, 32) assigns the fourth stage to the first real-life attempts to establish forms of market socialism in Yugoslavia (1950), Hungary (1968), China (1978), and Poland (1980s). In all cases, Soviet-type central planning was partly replaced by other systems of reluctantly decentralized decision-making. These experiments yielded the first empirical evidence on the performance of market socialism, thus allowing the debate to turn from the practical relevance of theories to theoretical explanations of reality.<sup>7</sup> The first stages of the debate on market socialism fostered the formulation of Austrian theories of the market process, but empirical examination, especially of the Yugoslav and Hungarian experiments, contributed to the development of property-rights theories and comparative institutional analysis.

Furubotn and Pejovich (1972, 1973) analyzed Yugoslav worker-managed firms and compared them to capitalist corporations. They emphasized the interconnectedness of property rights, transaction costs, incentives, and economic behavior. In terms of property rights, the Yugoslav system can be described as follows: (1) the workers' collective has the right to produce, buy, or sell most capital goods; and (2) it owns the residual net profits, which it allocates between the wage fund and retained earnings for reinvestment; but (3) "the employees can neither sell the rights specified above nor

---

4. The view that the socialists had "won" the debate can be found in most retrospectives at least until the 1980s. See the critical survey of Lavoie (1985, 10ff).

5. See also Kirzner (1988), Vaughn (1994, chap. 3), or Keizer (1994).

6. For an overview, see Streit (1993) or Vaughn (1994). Meanwhile, in his famous *Road to Serfdom*, Hayek (1944) added a political warning of creeping totalitarianism, stressing his early prediction that partial attempts to plan "will necessitate further and further measures of control until all economic activity is brought under one central authority" ([1935] 1994, 134).

7. The blueprints of Lange, Lerner, or Taylor were hardly influential in designing the reforms. A theory of the labor-managed firm did not exist at the time it was tried out in Yugoslavia. It was delivered later, by such individuals as Ward (1958) and Vanek (1970).

continue to enjoy them when they leave the employ of the firm” (Pejovich [1976] 1979, 152).

The incentives in this arrangement give rise to certain behavioral patterns of self-interested actors: neglect of reinvestments in favor of consumption via the wage fund, massive debt-financed expenditures instead of self-financed investments, and a particular reluctance to hire new workers who would share the wage fund. The economic results of such incentive schemes can be observed and explained: “inflation, unemployment, the liquidity crisis, low level of self-financed investment and the virtually complete dependence of business firms on the banks—can be traced to the incentive patterns generated by the prevailing property relations and the absence of capital markets” (161).

Similarly, the Hungarian experiment, which relied on a combination of limited central planning and limited market coordination (both restricted in favor of increased indirect regulation and bargaining), permitted a fruitful analysis of the effects of rules on individual behavior and social outcomes. The property rights of both the regulating bureaucracy and the managers in highly monopolized industries were insufficiently specified and distinguished. Decisions on prices, taxes, subsidies, credits and investment projects arose mostly from bargaining as Hungary’s “third way” around the discipline of both the market and direct central planning. János Kornai (e.g., 1992) made the most influential theoretical assessment. His analysis, which also helps to explain failures of corporatistic rent-seeking in capitalist welfare states, centers on the political economy of the “soft budget constraint” (Kornai 1986): semi-independent firms and political agencies both escape individual responsibility for inefficiencies, losses, and mistakes as competition in capital and goods markets is corporatistically administered and politically cushioned.

According to Roemer (1994, 33), the debate on market socialism has now entered its fifth stage. Market socialists of the fifth generation are described as having inherited from their ancestors not much more than a set of egalitarian ends; in terms of means, they claim to have cut the umbilical cord from earlier socialists such as Lange, with Hayek and Kornai being the foremost obstetricians:

Not only have the proponents of market socialism retracted Lange’s insistence that industrial prices be set by the planners instead of the market, but they have also dispensed with public ownership (in the sense of exclusive state control) of firms.... Kornai’s and Hayek’s point has been accepted, that as long as the government cannot credibly commit itself to noninterference in the competitive process, managers will not be profit-maximizers and economic inefficiency will result. (Roemer 1994, 34f.)

Today we find various models, most of them relying on “real” markets and competition within a wide spectrum of different combinations of management-, labor- or state-run firms. They are owned or financed by shareholders with differently restricted rights to dispose of their assets, by more or less state-owned banks and other firms, by the workers themselves, or by the state.<sup>8</sup> They all share a commitment to egalitarian values, but differ in their specific contents and policy implications.<sup>9</sup> The youngest generation of market socialists is large and fragmented; the family ties are too loose to justify discussion of the whole family as one. Therefore, I have selected one proponent for a more substantiated presentation and critique. I chose the work of Roemer (1994) because this author claims that his model is particularly immune against failures of former market socialist models.

### Roemer’s Market Socialism: Compromising on Market Competition and Equal Opportunities

It is extremely difficult to extract a consistent line of reasoning from Roemer’s mixture of anticapitalist and promarket rhetoric as well as his vindications and accusations of real-life socialism. It is equally difficult to identify a coherent and comprehensive specification of his own system of market socialism. However, the reader gets at least some clear statements about what Roemer’s market socialism is not: “direct control of firms by the state is not necessary for socialist goals” (4); and labor-managed firms are also rejected as inefficient substitutes for markets (122f.). In both instances, Roemer attributes the failures mainly to inappropriate incentives to work efficiently, to make use of decentralized knowledge, and to seek innovation—the characteristic effects of the “soft budget constraint,” unsolved principal-agent problems, and insufficient competition. In Roemer’s model, therefore, neither central planners nor workers’ committees are supposed to “own” firms in the sense of deciding how to produce, invest, and share the surplus.

One is impelled to ask: Socialism, where is thy sting? Where are the systemic differences between this form and capitalist systems? Once more, the clearest answer is a negative one: “Under market socialism, the poor are precluded from liquidating their shares” (73).

Indeed, this condition remains the only continuous feature of Roemer’s

---

8. For an overview, see Roemer (1994, chap. 6). The variety of “fifth-generation” models of market socialism is further increased when one takes references in the essays collected in Roosevelt and Belkin (1995), Bardhan and Roemer (1993), Le Grand and Estrin (1989) or in the approaches of Pierson (1995), Arnold (1994), Miller (1994), Yunker (1992, 1993), Nove (1991), and Brus and Laski (1989).

9. See, for example, Miller (1993), Arneson (1993), or Plant (1989).

system of market socialism: coupons are substituted for transferable shares. This idea, however, appears in three different, even contradictory presentations. Proceeding through the three stages of Roemer's approach, one finds that the significance of the coupon system, but also of market coordination, gives way more and more to traditional forms of socialist state intervention.

### Coupon-Market Socialism: A First Approach

In a first formal presentation of a neoclassical model depicting a "market-socialist politico-economic equilibrium" (chap. 8), the existence of coupons instead of transferable shares is the only institutional assumption that sets the system apart from capitalism: "The coupon economy is equivalent to the capitalist economy except for one missing market: one cannot trade coupons for the good" (73). In Roemer's model of an economy with one good (representing the national product), every adult citizen receives a fixed amount of coupons, which cannot be sold in exchange for money. Coupons, like capitalist stock, are entitlements to firms' profits that can be invested in firms of the individuals' choice, but unlike capitalist stock they cannot be sold or bequeathed. In terms of property rights, coupons lack the attribute of transferability. "All else," Roemer states, "is the same as in the description of the C[apitalist] P[olitical] E[conomic] E[quilibrium]" (67). We must infer that in this model, firms are actually financed by coupon holders and private banks and that speculation on coupon dividends is assumed to create the same incentives for investors to incur information costs and for entrepreneurs to act in the interests of principals and consumers as under capitalism. We must also infer that savings and investments are coordinated through an interest-rate mechanism just as in a capitalist economy and that labor markets also are no different from those in market economies.

Most of these hidden *ceteris paribus* assumptions (in the sense of "all else remains equal to capitalist economies") are either withdrawn by Roemer himself in the following paragraphs or must be doubted by a critical reader right from the beginning. Nevertheless, from this simplistic model, Roemer draws far-reaching conclusions: "public bads" would be drastically reduced in coupon-market socialism, thus increasing "total utility in the population" (71). The logic is as follows: in capitalism, a few "rich" own the firms; in a coupon system, the many "poor" will be the controlling group in most firms, as they own the majority of coupons in society. Thus, the firms will choose their levels of investments in the interests of the poor" (68). Because the "poor" are assumed to amount to a vast majority (95 percent) of the population (73)<sup>10</sup> and everyone's coupon holdings are the same, there is

---

10. This assumption is upheld in the capitalist as well as the market-socialist environment! The labor market is not integrated in Roemer's model. All the egalitarian thrust is on the stock

much less concentration of stock ownership. The latter, in turn, is made responsible for people's views on "the optimal level of the public bad" (65): the larger the fraction an individual asset-holder owns in the stock of firms, the higher the level of public bads he or she would permit, as private profits would be concentrated in a few owners, whereas the concomitant public bads would be widely dispersed. Roemer's concepts of "public bads,"<sup>11</sup> typical interests of "the rich" and of "the poor," and firm management as "a perfect agent of the firm's controlling group" (75) are dubious. To add to the confusion, Roemer assumes that "the level of the public bad is the outcome of the political process"; hence firms (socialist or capitalist) are assumed to treat the level of public bads as "given" (66f.), even though they "produce" them.

### Coupons and the Banking System: A Second Approach

Some of the open questions about crucial elements of Roemer's market socialism are answered in the following paragraphs, which may move away from formal modeling to the consideration of real institutions. These answers, however, partly contradict the *ceteris paribus* assumptions (all else remains equal to ordinary capitalist economies) referred to earlier. Now (chap. 9) we are told that firms can not use the coupon stock market for raising capital (76).<sup>12</sup> Therefore, a banking system has to be introduced. According to Roemer,

firms in the coupon economy would 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. (76)

Roemer gives no further specifications concerning those formal and informal institutions of a Japanese keiretsu that he wants to imitate. We can infer only that "the universe of public firms is partitioned into groups" and that the firms in each group "are associated with a main bank" (49). The ownership

---

market due to Roemer's "skepticism concerning the existence of alternatives to a competitive labor market for allocating labor in an efficient manner" (120).

11. I could find no sound, coherent theoretical reasoning on these matters. The traditional concept of public bads is made virtually unoperative by including all sorts of things anathema to socialists, including unemployment, pollution, imperialistic wars, apartheid, noxious advertising, fast assembly-line speeds, and low taxes on profits.

12. Note that the assertion that under a regime of coupons "the poor will be the controlling group in most firms" (68) becomes totally incredible under the specifications given now. If coupon holders neither give nor withdraw any means relevant for firms, how do they control? Why should firms "choose their levels of investments in the interest of the poor" (68) if the "poor" only take their share of profits but cannot give their share of investment?

of banks is not further discussed; it is only casually assumed “that they are publicly owned in the sense that their profits go in large part directly to the state treasury” (156, n.3). Hence, we find here a different type of public ownership without being given an explanation of why the alleged virtues of the coupon system should not apply to the ownership of banks as well. Indeed, after this introduction of the banking system, it becomes extremely difficult to discern the remaining significance of the coupon system. Because in Roemer’s second representation of market socialism, the coupon market cannot be used to raise capital, its influence on firms’ decisions must be negligible. All it might do to affect resource allocation would be to inform the loan-giving banks about the current bets of coupon holders. Roemer, however, does not seem to give much credit even to this informational role of his own system. Eventually, he is led to “recommend safeguards that enabled banks to monitor firms independently of what the stock market is saying” (82).

### The Banking System and Central Investment Planning: A Third Approach

The relevance of the coupon system having been superseded by that of the banking system, Roemer (in chaps. 11 and 12) introduces the state as a new player. This shift further reduces the role of the coupon market and brings into question the independence of banking system. Now, we learn that the state would be “engaging in investment planning, both by providing incentives for firms to invest in particular sectors or regions and by direct government investment” (90). As we shall see later, interest rates are manipulated in order to encourage particular investments against the signals of the market. More and more, the meaning of market socialism loses its connection to markets and returns to its traditional focus: state intervention.

In addition, Roemer’s arguments lose coherence. The role attributed to central investment planning now supersedes the “provisions that grant the banks considerable independence from state control” (76).<sup>13</sup> Roemer asks the right question: “But why should the bank, which is itself a publicly owned institution, perform its monitoring job well?... 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” (76). The principal answer given, however, is not that firms and independent banks should be primarily responsible for investment decisions (the coupon holder having long since been dispensed with). Now, government agencies

---

13. His proposals once more contradict themselves: there should be “constitutional ...guarantees that bank management be evaluated on economic criteria only,” while at the same time bank management “should be elected by citizens in the bank’s district” (76ff.)!

using political rather than economic criteria make investment decisions! All this adds up to an enormous confusion for the reader, who can never be quite sure just who is really in charge of financing and investment decisions.

To summarize, all we know for sure is that Roemer's market socialism has no stock market for trading transferable ownership titles. Coupons represent entitlements to firms' profits but they, at least in later versions of the model, can neither be emitted by firms in order to raise capital nor be bought and sold by citizens in order to accumulate or liquidate assets. Although coupons are first (chap. 8) described as the central property of market socialism, yielding massive welfare gains, it becomes clear later that neither firms' managers nor loan-giving banks should take the coupon market seriously. This revision brings to the fore a banking system that should now do the monitoring and financing of firms (chap. 9) using purely economic criteria. Soon, however, we are confronted with a second revision calling for governmental investment planning (chap. 12), which supersedes the banking system that, in turn, dominates the coupon system.

### What Roemer Wants Socialists to Want

Roemer's model of market socialism ought to be judged by the ends he himself proclaims. His normative frame of reference remains, however, as ambiguous as his institutional proposals. Roemer describes the socialist creed as follows: "I believe socialists want equality of opportunity for: (1) self-realization and welfare, (2) political influence, and (3) social status" (11).

Stressing equality of opportunity rather than social outcomes, the classical liberal might agree with Roemer, while clarifying the concept by emphasizing the need for rules to protect equal rights to pursue individual ends ("self-realization and welfare") in market transactions and to allow competitive market entry of outsiders. Adoption of such rules would be possible if the unequal opportunity of exercising "political influence" in rent-seeking societies were discouraged by a strict rule of law. A constitution of equal rights would restrict preferential treatment of powerful groups, defending equal opportunity in markets against the cementing of a given "social status."

Roemer, of course, defines equal opportunity not in terms of individual rights against interference from the state or from fellow citizens but in terms of social claims on support from the state (i.e., claims on the money of other citizens). Equal access to equal rights is disparagingly said to "only touch the surface of a much larger task. Equality of opportunity requires special compensation or subsidy for those denied access to privilege. Most generally, equality of opportunity requires that people be compensated for handicaps induced by factors over which they have no control" (12).

Roemer neglects the legal and politicoeconomic consequences of his egalitarian precepts, consequences that were at the heart of Hayek's critique of socialism following the calculation debate (beginning with his *Road to Serfdom* [1944], extensively discussed in his *Mirage of Social Justice* [1976] and ending with his *Fatal Conceit* [1988]). Briefly put, the Hayekian objection would be that equality under the law is not associated with Roemer's notion of equality of opportunity; rather, pursuit of the latter must seriously damage the former. The general rule of law cannot serve as a "surface" to legally enforced special compensations on grounds of redistributive justice. It would be increasingly destroyed by privileges granted to powerful interests who call for compensation of market outcomes that are, indeed, induced by factors over which no one has control. If the political system is given unspecified (and hence unrestricted) control over market results, there would be "a future for socialism," even in its totalitarian variants. In the same measure, however, there would be no future for the rule of law and its economic counterpart: dynamic market competition.

To be sure, I do not accuse Roemer of paving the "Road to Serfdom." There can be, and there actually are, at least viable compromises between equal individual liberty under the rule of law and equalized social status under the will of government. However, the compromises of conflicting values should be described as such. Unspecified rights to government compensation for alleged handicaps of special groups cannot be simply brushed under a "surface" of rights against state interference. My argument is not about the superiority of values as such; it is about the opportunity costs of pursuing clouded objectives such as distributive justice in view of their institutional consequences. These arise primarily on a constitutional level, describing the relationship between government and the individual, and critically affect the workings of a competitive order.

### Paternalistically Forced Savings and Equal Nonopportunities

Roemer's socialist state distributes an equal amount of coupons or stock vouchers to every adult citizen. The government's "gift" represents a claim on national wealth,<sup>14</sup> but its disposition is seriously constrained. Individual coupon holders cannot dispose of their assets as freely as capitalist stockholders can. They cannot reduce their coupon holdings in favor of what they believe to be more profitable investments (in foreign stock, bonds, human capital, own business ventures) or more urgent needs (a honeymoon, a

---

14. This may be illustrated by imagining the transition from a capitalist to a coupon system: all former owners, shareholders, and partners must be expropriated or paid off.

house, a car, a conference on market socialism). Socialist “investors” cannot liquidate, transfer, or bequeath their claims in accordance with their individual propensity to consume, risk preference, and time preference. For the sake of “equal opportunities,” in the sense of an equal distribution of dividends, Roemer’s “rich” as well as his (95 percent) “poor” are deprived of the opportunity to pursue their own individual ends by freely disposing of their coupon budget.

For Roemer (73f.), starting with an equal distribution of transferable shares would not do; one has “to prevent the poor from selling prematurely to the rich...this phenomenon could happen...if the poor had poorer information than the rich.” This view not only brings to light a blatant paternalism. It also contradicts the assertion that a coupon economy would make use of the same quality of actors’ knowledge and skill as does a capitalist stock market. What can we expect of a “market” composed of actors who are forced to take part, who are described as having inferior information, and who are not even trusted to make mature decisions?

In Roemer’s coupon economy all have to invest their fixed coupons’ share whether they are informed, interested, and skilled in such affairs or not. Such involuntary “market participation” cannot match the spontaneous division of labor, knowledge, risks, and skills that follows from a voluntary participation of those who have a specific interest and experience in speculating on the future performance of firms. A real stock market “makes possible, whether in the form of ‘take-over bids’ or otherwise, the transfer of the control of material resources from pessimists to optimists, i.e. to those who believe they can make better use of them than others can” (Lachmann [1969] 1977, 162). A coupon lacks these properties. Because exit from and additional entry into the coupon market is outlawed, those with “poor” information or willingness to speculate must stay put along with those who want to bear risks and incur information costs. In this publicly organized “stock-exchange game” the stakes are paid by “the state” and can be neither lowered nor increased by the players. With no chance to win or lose much more than the average from the allocation of given coupons, no one has a great incentive to invest in information and monitoring. Abolishing the opportunity to accumulate and transfer capital also obstructs the accumulation of knowledge and diversification of risk (Alchian [1965] 1977, 140ff.).

From the firms’ perspective, a coupon “market” bears almost no resemblance to a capital market, simply because there is no capital to be raised. No supply-and-demand relationship connects firms and coupon holders. Unlike managers in capitalist systems, Roemer’s managers face no pecuniary external effects if citizens change their portfolio, nor are they confronted with the risk of takeover. Consequently, one is at a loss to understand why “the coupon stock market should provide the same discipline over firm man-

agement as a capitalist stock market” (50). The revisions of the concept that Roemer adds later in his book indicate that he himself envisages the coupon economy as not much more than a coercive transfer mechanism with some gambling properties for the receivers. In considering the “efficiency of firms under market socialism” (chap. 9) we must, as Roemer does, concentrate on the workings of the banking system.

### Cartelizing the Economy: The Banking System

Whereas the coupon system is characterized by an excessively high dispersion of involuntary “market” participation (for the sake of equalized profit distribution), the other basic functions of a capital market (financing and monitoring) are assigned to a banking system with excessive concentration. Roemer’s reliance on “a fairly small number of main banks” (76) entails a concentration of capital supply and monitoring capacity that exceeds by far that of any capitalist stock market and is exceeded only by the workings of a CPB. In capitalist systems that rely on a combination of financing via asset markets and competing private banks, we can expect the number and competitiveness of sources for risky investment funds to be higher. The same is true for the sources of independent information acquisition. In Roemer’s market socialism, capital can be raised only via bargaining with the one main bank in charge of a given group of firms. Under this regime, competition on capital markets and on product markets is likely to give way to a producers’ cartel organized around its leading bank. If firms form a group financed by one and the same bank, the bank has the incentive not only to monitor but also to coordinate the operations of the firms in its group. It would be ill advised to have the investments of one of its clients threatened by competitive attacks from others. This incentive to collude holds against competition from the members within the group as well as from newcomers and foreigners. These often criticized tendencies of the Japanese keiretsu (e.g., Lawrence 1991) become systematic features of Roemer’s market socialism.

### Obstructing Competition I: New Firms

How does “the man with the new idea” enter the socialist market? Is there an equal “opportunity for anybody who knows a cheaper method to come at his own risk and attract customers by underbidding the other producers” (Hayek ([1940] 1994, 247)? We must expect that in Roemer’s coupon and banking system, innovative entry to markets confronts problems similar to those arising in Lange’s model of a price-fixing CPB. Any new firm must eventually be integrated into the coupon system and into the keiretsu-like financing group; it cannot rely on the raising of private capital by issuing shares; it cannot at the same time be owned by profit-sharing associates and be integrated into the coupon system. Indeed, why should an entrepreneur

start a risky venture at all if losses fall back on him privately whereas profits are “owned” publicly?

Roemer recognizes that eventually he must allow a private sector in order to “provide almost the same incentives that exist in capitalism for those who form new firms in order to bring innovations to market” (78f.). But the existence of even “almost” equal opportunities and incentives for innovators must be seriously doubted. In his proposal “it is envisaged that many growing firms would eventually be bought by large firms in the ‘public’ sector” (78),<sup>15</sup> If this acquisition does not occur voluntarily, “the government might auction the private firm to firms in the public (coupon) sector” (78). Even if “the proceeds [are] going to the erstwhile owner” (78), however, entrepreneurial pioneers are treated badly: as soon as they become successful and competitive, they are forced out of the market. Is it far fetched to expect that “the man with the new idea,” with entrepreneurial spirit and pride, would try his luck abroad, in real capitalist countries that offer him an equal opportunity to exploit his knowledge without being forced to accept a “golden handshake” from incumbent competitors?

Roemer’s public sector is deliberately designed to frustrate the emergence of private ventures right from the beginning: “Perhaps joining the public sector would be a prerequisite to receiving loans from the main banks or loans at preferential interest rates. There would be a statute requiring nationalization of private firms that reach a given size” (78).

Obviously, “the man with the new idea will have no possibility of establishing himself by undercutting” (Hayek [1940] 1994, 247). Whereas in Lange’s system “every calculation by an outsider who believes that he can do better will have to be examined and approved by the authority” (247), in Roemer’s system every request for loans by an outsider has to be addressed to banking consortia that either discourage or absorb new competitors who threaten the insiders (e.g., in their ability to repay loans). We must conclude that Roemer’s praise of market competition is muted as soon as it encounters the hard necessities of his market socialism. There is a protective belt around the socialist market cartel; there cannot be equal opportunity for new ventures and incumbent firms.

## Obstructing Competition II: International Capital Flows

Referring to international capital flows, Roemer asks: “Would domestic firms

---

15. Roemer adds: “as happens under capitalism.” We are puzzled to find that the alleged empirical tendencies toward “monopoly capitalism” (Sweezy 1966) that used to be at the heart of Marxist critiques of the market now serve as a normative recipe for market socialism. Is this considered “shortening the labor pains of a coming communism”? We don’t believe this is what Roemer intends; but we conclude that competition is not perceived as a procedure of eminent importance.

attempt to set up foreign subsidiaries to escape high wages at home?” (82). Of course they would like to invest abroad—and for many more reasons than high wages at home. One possible reason would be to escape socialist markets designed by Roemer to frustrate successful private profit-seekers. In addition, firms prevented from taking full advantage of the international division of labor, capital, and knowledge could hardly succeed in modern global markets. Such impediments, however, do characterize Roemer’s market socialism: “This is an important sense in which the firms of the market-socialist economy would remain socially controlled: they would not necessarily have the right freely to export capital” (82).<sup>16</sup> Roemer welcomes some foreign investment in domestic firms at least within the boundaries “circumscribed by law.” Foreign private capital, however, cannot be integrated into the coupon system, as it would bring in real money. Hence, “the possibility arises that citizens might use foreign firms as their agents to invest their capital in domestic firms. This would have to be outlawed” (82). Thus, the government interferes with international capital flows in a way that discriminates against individuals kept within their market-socialist system. There must be a protective belt around the market-socialist economy; there cannot be equal opportunity for domestic and foreign market participants.

### Obstructing Competition III: Investment Planning

The case against equal opportunities (and risks) for market participants to enter and exit the market according to general rules of the game is further strengthened by Roemer in his digressions on state intervention and investment planning (chaps. 11, 12). Here one can most directly observe a “pretense of knowledge” (Hayek [1975] 1978b) flowing from an attitude with deep roots in mainstream economics. According to Roemer, “the essential element that causes investment to be often inefficient in market economies [is] the fact that it takes time in an uncertain world” (91).

I shall not consider here the interesting methodological question of how to characterize states of (in)efficiency while at the same time taking into account that investment takes place in an ever-changing, complex, and inherently uncertain world.<sup>17</sup> Instead, I ask: How are nonmarket arrangements

---

16. See also (113): “With public bank directors popularly elected and legal provisions limiting the freedom of firms to export capital, the ‘structural power of capital’ over society as a whole would be broken. Those who control capital would not be able to hold society hostage by threatening to take the means of production (and the jobs that go with it) overseas.” The opportunity costs (and the jobs that go with it) that arise if firms cannot seek the best uses of resources outside a reservationlike market socialism are totally ignored.

17 This problem has often been raised by Hayek (see, e.g., [1968] 1978): “If we do not know the facts we hope to discover by the means of competition, we can never ascertain how effective it has been in discovering those facts that might be discovered” (180).

supposed to cope better with an uncertain world? Roemer presents two mechanisms aimed at socializing entrepreneurial risks through government intervention.

The first proposal (chap. 11) is that the government should promise (ex ante) to subsidize (ex post) those investments that fail because of “bad shocks for which the firm is clearly not responsible, such as a recession of the economy” (92). This procedure should increase the propensity to invest, regardless of the individual “firms’ pessimistic estimates concerning the future” (93). Such promises are usually not provided by private insurance agencies, because “significant ‘moral hazard,’ the possibility that the insured will take fewer precautions against a bad because he is insured, may be involved” (92). The same, of course, is true for the kind of contingent public subsidizing advocated by Roemer. The government, however, is trusted to be able to distinguish clearly between a firm’s bad management and its “bad luck.” Like Lange’s CPB, Roemer’s central investment-subsidizing bureau would have to imitate entrepreneurial calculi “on much the same scale as if it were actually running the enterprise” (Hayek [1940] 1994, 251).<sup>18</sup> By its very assignment, however, the bureau must honor political judgments about where resources should go, and hence it must encourage investments at times and in areas that private agents would avoid. Subsidizing investments contrary to individuals’ independent “estimates concerning the future” is a very costly procedure. It opens the gates for all aspects of rent seeking, using taxpayers’ money to encourage firms to act in opposition to market signals. Although entrepreneurs’ risks are alleviated, they become concentrated on the political level, where we expect to find highly unequal opportunities to soften one’s budget constraint. Kornai’s warnings do not seem to have impressed Roemer deeply.

Similar deficiencies beset Roemer’s second proposal for investment planning (chap. 12). To make things worse, it takes the form of a relapse into fallacies of third-generation market socialism. Once again we are presented a “Lange equilibrium” as the market-socialist counterpart of a capitalist “Walrasian equilibrium.” Both rely on assumptions of perfect information and foresight of maximizing individuals and a static state of perfect competition (97f., 100f.). Neither therefore accommodates the fact that investment takes time in an uncertain world.<sup>19</sup> Nevertheless, far-reaching

---

18. The controlling problems resemble those of Lange’s CPB also in the following aspects: “From the point of view of the manager it will be much more important that he should always be able to prove that in the light of the knowledge which he possessed the decision actually taken was the right one than that he should prove to be right in the end. If this will not lead to the worst forms of bureaucracy, I do not know what will” (Hayek [1940] 1994, 248).

19. Roemer argues: “Just as one assumes that the market finds the Walrasian equilibrium in a capitalist economy, so we assume that the market will find, after the Government’s announcement, this Lange equilibrium in the market-socialist economy. One assumption is as robust as

conclusions are drawn. Roemer distinguishes the Lange equilibrium from the capitalist one by a more equal distribution of profits (attained through the coupon market) and a centrally “proposed level and pattern of investment for the economy” (99f.). The desired regional or sectoral patterns of investment are to result from “a democratic process that elects a party that is empowered to implement its economic program” (99). The instruments of investment planning are “discounts and surcharges on the market interest rate” (100). As all investments are financed by loans, interest-rate manipulations are a powerful instrument for guiding investments. Prices for loans are now varied according to political considerations, regardless of the amount of voluntary savings in the economy.

The whole process of structural change—the innovation-spurring entry of firms into old and new markets as well as the exit of firms that no longer meet the market test—is now subject to political guidance. Loans are granted according to political considerations (picking the winners, protecting the losers), deliberately ignoring the market signals of competitive markets. At the same time, interest rates no longer serve as meaningful signals of the opportunity costs of consumers (time preferences and risk preferences) but rather as indicators of the political opportunities for rent seeking. Once more, “competition as a discovery procedure” (Hayek [1968] 1978a) is replaced by intervention as a discriminatory procedure. Therefore, one cannot believe that “Kornai’s and Hayek’s point has been accepted, that as long as the government cannot credibly commit itself to noninterference in the competitive process, managers will not be profit-maximizers and economic inefficiency will result” (34).<sup>20</sup> There is an interventionist core in the market-socialist economy; there cannot be equal opportunity for organized and unorganized market participants.

## Conclusion

What is to be gained from continuing an intellectual debate on socialist economics that has now grown older than most socialist economies? Considering Roemer’s lines of reasoning, one is inclined to say: “very little.” However, taking up the intellectual challenge of market socialists remains of

---

the other” (102f.). However, comparing one nirvana with another is of no help either for identifying real-life problems of investments under genuine uncertainty or for comparing the properties of real-life institutions for coping with such problems.

20. Hayek’s point against central (investment) planning is probably more adequately stated along the following lines: “If we can agree that the economic problem of society is mainly one of rapid adaptation to changes in the particular circumstances of time and place, it would seem to follow that the ultimate decisions must be left to the people who are familiar with these circumstances, who know directly of the relevant changes and of the resources immediately available to them” (Hayek 1945, 524). See also Streit (1995) for a Hayekian critique of modern industrial policy.

considerable value for the adequate analysis of capitalist systems for at least one reason: the meanings and, perhaps, the virtues of certain capitalist institutions might well be clarified. Mises ([1949] 1966, 703) made a similar assessment of the old calculation debate, arguing that “such examination offers a good opportunity to bring into relief fundamental features both of the market economy and of the imaginary construction of a nonmarket society.” Indeed, we best appreciate what we have when we imagine it lost. Ultimately, Roemer’s book is very helpful in substantiating an old Austrian view:

that it is hardly an exaggeration to say that without a Stock Exchange there can be no market economy. What really distinguishes the latter from a socialist economy is not the size of the “private sector of the economy,” but the ability of the individual freely to buy and sell shares in the material resources of production. Their inability to exercise their ingenuity in this respect is perhaps the most important disability suffered by the citizens of socialist societies. (Lachmann [1969] 1977, 161).

## References

- Alchian, Armen A. [1965] 1977. *Some Economics of Property Rights*. In *Economic Forces at Work: Selected Works by Armen A. Alchian*. Indianapolis: Liberty Press.
- Arneson, Richard J. 1993. *Market Socialism and Egalitarian Ethics*. In *Market Socialism: The Current Debate*, edited by P. K. Bardhan and J. E. Roemer. New York and Oxford: Oxford University Press.
- Arnold, Scott N. 1994. *The Philosophy and Economics of Market Socialism: A Critical Study*. New York and Oxford: Oxford University Press.
- Arrow, Kenneth J. 1974. *Limited Knowledge and Economic Analysis*. *American Economic Review* 64 (1): 1–10.
- Bardhan, Pranab K., and John E. Roemer, eds. 1993. *Market Socialism: The Current Debate*. New York and Oxford: Oxford University Press.
- Brus, W., and K. Laski. 1989. *From Marx to Market: Socialism in Search of an Economic System*. Oxford: Oxford University Press.
- Dickinson, H. D. 1933. *Price Formation in a Socialist Community*. *Economic Journal* 43: 237–50.
- Furubotn, Eirik, and Svetozar Pejovich. 1972. *Property Rights and Economic Theory*. *Journal of Economic Literature* 10:1137–62.
- . 1973. *Property Rights, Economic Decentralization, and the Evolution of the Yugoslav Firm, 1965–1972*. *Journal of Law and Economics* 16: 275–302.
- Hayek, Friedrich A. 1944. *The Road to Serfdom*. Chicago: University of Chicago Press.

- . 1945. The Use of Knowledge in Society. *American Economic Review* 35: 519–30.
- . [1935] 1948a. Socialist Calculation I: The Nature and History of the Problem. In: *Individualism and Economic Order*. Chicago: University of Chicago Press.
- . [1935] 1948b. Socialist Calculation II: The State of the Debate. In: *Individualism and Economic Order*. Chicago: University of Chicago Press.
- . 1976. *Law, Legislation and Liberty, Vol. 2: The Mirage of Social Justice*. Chicago and London: University of Chicago Press.
- . [1968] 1978a. Competition as a Discovery Procedure. In *New Studies in Philosophy, Politics, Economics and the History of Ideas*. London: Routledge & Kegan Paul.
- . [1975] 1978b. The Pretense of Knowledge. In *New Studies in Philosophy, Politics, Economics and the History of Ideas*. London: Routledge & Kegan Paul.
- . 1988. *The Fatal Conceit: The Errors of Socialism*. London: Routledge.
- . [1940] 1994. Socialist Calculation III: The Competitive “Solution.” In *Classics in Austrian Economics: A Sampling in the History of a Tradition, Vol. 3: The Age of Mises and Hayek*, edited by I. M. Kirzner. London: William Pickering.
- Keizer, Willem. 1994. Hayek’s Critique of Socialism. In *Hayek, Co-Ordination and Evolution: His Legacy in Philosophy, Politics, Economics and the History of Ideas*, edited by J. Birner and R. van Zijp. London: Routledge.
- Kirzner, Israel M. 1973. *Competition and Entrepreneurship*. Chicago: University of Chicago Press.
- . 1988. The Economic Calculation Debate: Lessons for Austrians. *The Review of Austrian Economics* 2:1–18.
- . 1996. Reflections on the Misesian Legacy in Economics. *The Review of Austrian Economics* 9:140–55.
- Kornai, János. 1986. The Soft Budget Constraint. *Kyklos* 39 (1):3–30.
- . 1992. *The Socialist System: The Political Economy of Communism*. Oxford: Clarendon.
- Lachmann, Ludwig M. [1969] 1977. Methodological Individualism and the Market Economy. In his *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy*. Kansas City, Kans.: Sheed Andrews and McNeel.
- . 1986. *The Market as an Economic Process*. Oxford: Basil Blackwell.
- Lange, Oskar. [1965] 1994a. The Computer and the Market. Reprinted in *Economic Theory and Market Socialism: Selected Essays of Oskar Lange*, edited by T. Kowalik. Aldershot: Edward Elgar.
- . [1936] 1994b. On the Economic Theory of Socialism, Part I and II. Reprinted in *Economic Theory and Market Socialism: Selected Essays of Oskar Lange*, edited by T. Kowalik. Aldershot: Edward Elgar.
- Lavoie, Don. 1985. *Rivalry and Central Planning: The Socialist Calculation Debate*

- Reconsidered. Cambridge: Cambridge University Press.
- Lawrence, Robert Z. 1991. Efficient or Exclusionist? The Import Behavior of Japanese Corporate Groups. *Brookings Papers on Economic Activity*, 311–30.
- Le Grand, Julian, and Saul Estrin, eds. 1989. *Market Socialism*. Oxford: Clarendon.
- Miller, David. 1993. Equality and Market Socialism. In *Market Socialism: The Current Debate*, edited by P. K. Bardhan and J. E. Roemer. New York and Oxford: Oxford University Press.
- . 1994. *Market, State, and Community: Theoretical Foundations of Market Socialism*. Oxford: Clarendon Press.
- Mises, Ludwig von. 1944. *Bureaucracy*. New Haven: Yale University Press.
- . [1949] 1966. *Human Action: A Treatise on Economics*, 3d rev. ed. Chicago: Regnery.
- . [1920] 1994. Economic Calculation in the Socialist Commonwealth. In *Classics in Austrian Economics: A Sampling in the History of a Tradition, Vol. 3: The Age of Mises and Hayek*, edited by I. M. Kirzner. London: William Pickering.
- Nove, Alec. 1991. *The Economics of Feasible Socialism Revisited*. 2d ed. London: Harper Collins.
- Pejovich, Svetozar. [1976] 1979. The Capitalist Corporation and the Socialist Firm: A Study of Comparative Efficiency. In *Economics & Social Institutions: Insights from the Conferences on Analysis & Ideology*, edited by K. Brunner. Boston: Nijhoff.
- Pierson, Christopher. 1995. *Socialism after Communism: The New Market Socialism*. University Park, Pa.: Pennsylvania State University Press.
- Plant, Raymond. 1989. Socialism, Markets, and End States. In *Market Socialism*, edited by J. Le Grand and S. Estrin. Oxford: Clarendon.
- Polanyi, Michael. 1967. *The Tacit Dimension*. New York: Doubleday.
- Roemer, John E. 1994. *A Future for Socialism*. Cambridge: Harvard University Press.
- Roosevelt, Frank, and David Belkin, eds. 1995. *Why Market Socialism? Voices from "Dissent."* Armonk, N.Y., and London: M.E. Sharpe.
- Streit, Manfred E. 1993. Cognition, Competition, and Catalaxy—In Memory of Friedrich August von Hayek. *Constitutional Political Economy* 4(2): 223–262.
- . 1995. Constitutional Ignorance, Spontaneous Order and Rule-Orientation: Hayekian Paradigms from a Policy Perspective. In *Hayek: Economist and Social Philosopher: A Critical Retrospect*, edited by S. F. Frowen. London: Macmillan.
- Sweezy, Paul M. 1966. *Monopoly Capital*. New York and London: Monthly Review Press.
- Taylor, Fred M. 1929. The Guidance of Production in a Socialist State. *American Economic Review* 19:1–8.
- Vanek, Jaroslav. 1970. *The General Theory of Labor-Managed Economies*. Ithaca, N.Y.: Cornell University.

Vaughn, Karen E. 1994. *Austrian Economics in America: The Migration of a Tradition*. Cambridge: Cambridge University Press.

Ward, Benjamin. 1958. The Firm in Illyria: Market Syndicalism. *American Economic Review* 48:566–89.

Yunker, James A. 1992. *Socialism Revised and Modernized: The Case for Pragmatic Market Socialism*. Westport and London: Greenwood, Praeger.

———. 1993. *Capitalism versus Pragmatic Market Socialism: A General Equilibrium Evaluation*. Boston and Dordrecht: Kluwer.

---

Acknowledgments: I wish to thank Annette Jung, Daniel Kiwit, Wolfgang Kasper, Antje Mangels, Uwe Mummert, Werner Mussler, Axel D. Schulz, Stefan Voigt, Oliver Volckart, and Tobias Winkler for criticisms and suggestions. I am also grateful for the insightful comments of three anonymous referees. I owe particular thanks to Manfred E. Streit, who went through two versions of this essay.

---