New Market Socialism: A Case for Rejuvenation or Inspired Alchemy?

DIMITRIS MILONAKIS [*]

I. INTRODUCTION

1. Socialism as a concept has its roots in the eighteenth century Enlightenment's ideals of equality and co—operation, whereas the term itself was coined during the 1820's. Throughout most of its history and certainly throughout the nineteenth and early twentieth century, from Karl Marx and Frederic Engels to the Fabians, the concept has been held to be synonymous with corporate planning in the context of common ownership of the means of production. As such, the essence of the concept has traditionally been based on a critique of capitalism as an exploitative class system and has correspondingly been hostile to both markets and private ownership (Hodgson, 1999b, ch.2).
2. Market socialism as a concept has a shorter history: its origins can be traced back to the calculation debate of the 1920's and 1930's. However, the basic idea associated with it—to marry socialism with markets—is contemporaneous with the invention of the term 'socialism'. Thus from Pierre Proudhon's free association of small independent producers —what Marx called 'petty bourgeois socialism' —to John Stuart Mill's sympathy with decentralised co—operative socialism, the idea has been to combine the efficiency of markets with the egalitarian goals of socialism. Having said this, it is also true that the idea of combining socialism with the market would be considered a contradiction in terms by most nineteenth century socialists (ibid). [1]
3. It was not until the 'calculation debate' of the 1920's and 30's that the concept of market socialism itself was used and the idea of the marriage of socialism with markets re—emerged. Although the 'calculation debate' started as a reaction by the Austrians (see Mises, 1920) to central planning, the debate itself was actually conducted between socialists of neoclassical persuasion (Lange, Dickinson, Taylor, Lerner) and representatives of the Austrian school (Mises, Hayek, Robbins) with Marxian interventions by Dobb. The result was the crystallisation of the idea of a marriage between markets and socialism in the form of a formal model proposed by Lange which has since become the standard point of reference. It was widely thought at the time that the midway house (midway between

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[1] For a potted history of the concept of socialism together with a critical review of recent debates see Hodgson 1999b, ch. 2; for a potted history of the concept of market socialism see Blackburn, 1991; for more general histories of socialism see Landauer, 1959; Mackenzie, 1966; Thompson, 1988; Itoh, 1995. The literature on market socialism is by now enormous. No attempt will be made in this article to offer a comprehensive review of this literature. Rather only selective references will be made to this literature where necessary. Vaughn, 1980, Murrell, 1983 and Lavoie, 1985 offer comprehensive reviews of the 'calculation debate' from the Austrian perspective; for more general critical reviews of the whole debate on market socialism see Adaman and Devine, 1996, 1997.

central planning and capitalist free markets) presented by Lange's 'competitive model' had won the argument (see for example Bergson, 1948).[2]

4. This was a reflection of the ideological climate of the period which was characterised by 'the intellectual dominance of socialism' (Mises, 1981, p. 465). The widely held view at the time was that the socialist system was a more advanced economic system than capitalism, reflecting the fact that, at that time, the Soviet economy was witnessing exceptionally high rates of growth at a time when the West was plunged into the vagaries of the Great Depression of the 30's. Even then, however, the ideological climate on the left was such that the idea remained in a subordinate position among socialists. The fact that nothing approximating Lange's model had ever been tried in practice pays testimony to this. At that time the term 'socialism' was still being used in the traditional sense to imply central planning and state ownership of the means of production.

5. 'Socialism', in this traditional sense, although much debated, has been on the retreat since 1945. The relative success of welfare state mixed economies of the West during the so—called golden age of capitalism in the 50's and 60's coupled with the problems increasingly facing the centrally planned economies, contributed to a discrete change in the ideological climate. This change was reflected in the reform movement in the centrally planned economies. The main thrust of these reform proposals —what came to be known as 'central planning with a regulated market' —was the introduction of the (limited) use of markets in the context of state ownership

6. and central planning. It was in the 1980's and 1990's, however, with the rise to dominance of the free market ideology of the New Right, together with the demise of the centrally planned economies that the ideological climate changed decisively.

7. Following the revival of the Austrian school in the 1980's, it has increasingly been argued that the 'calculation debate' had been wrongly interpreted as having been conducted between socialists and non—socialists arguing within the same paradigm. Rather, the revisionists suggest, what was involved was a clash between two different epistemological and methodological paradigms. Seen in this light, the conclusion drawn by most is that the Austrian challenge had not been met effectively and that they had won the earlier argument (Vaughn, 1980; Murrell, 1983; Lavoie, 1985; Adaman and Devine 1997; Ioannides, 2000).

8. At the same time, the demise of socialism in Eastern Europe is thought by many socialists to have invalidated Marx's vision of socialism interpreted as the abolition of private property combined with conscious central planning. This is more than evident in recent discussions of alternative models of socialism where Marx is hardly mentioned.[3] In such a climate many socialists have resorted to reliance on the market once again,

[2] It has to be said at this point that the real answer to Mises came not from Lange but from Lenin, when he introduced his New Economic Policy (NEP) in Russia. Mises' was above all a critique of what subsequently came to be known as War Communism. When he introduced NEP at the beginning of 1921, Lenin answered Mises in practice through the partial introduction of the market mechanism. It is in the real experience of NEP in Russia as well as of the 'central planning with a regulated market' reforms in Eastern Europe and of China at the present time, that we can see the achievements – and limitations – of (real) market socialism. Indeed, as we shall see in more detail below, one of the main drawbacks of the proposals discussed in this article is the fact that they do not discuss real market socialism as such, preferring instead to deal with the properties of abstract models of market socialism.

[3] There are, of course, exceptions to this rule, which, however, simply reinforce the rule. See inter alia Laibman, 1992; McNally, 1993; Gray, 1995; Itoh, 1995; Ollman, 1998; Lawler, 1998. Although Lawler does refer extensively to Marx, he does so in order to defend market socialism.

favouring either proposals involving some sort of mixed economy as in the case of Nove and Brus & Laski, or a reformulation of the concept of market socialism, as in the models proposed by Bardhan and Roemer and others. At the same time radical political economy is being abandoned by these writers in favour of neo—classicism. Naturally, the way the issue of socialism is being treated has also been changing radically, away from the traditional issues of exploitation, class, power, conflict and social transformation to concepts such as (juridical) property relations and equitable distribution of income. In reformulating the concept of market socialism, recent developments within mainstream economics in the form of the 'new information economics' and the incentive compatibility and the principal/agent literature, have played an important part, both in the recent critiques of the early models, as well as, in the conceptualisation of the new models.
9. Based on these developments, Lange's model is seen as limited from the modern perspective, its main deficiency being identified with its neglect of the twin 10. issues of incentives and monitoring. But these late models will also be critically shown to be equally limited by their own context. The aim of this article is exactly to examine the relative merits and drawbacks of the new generation of models of market socialism. This will be done, firstly, by putting these modern versions of market socialism into the perspective of the history of economic thought. Thus, after a brief sketch and a critique of Lange's proposal, the main elements of the Austrian and the new information critiques of this model are critically assessed. This leads in the fourth section to the presentation of the basic elements of the new generation models. Then, in the last two sections, the new generation models are subject to close scrutiny. This is done, firstly, by making the necessary comparisons and drawing the necessary contrasts between modern and earlier versions of the model (mostly the Lange model) to see what is new that they have to offer and whether they really represent a sharp break with the past. Secondly, the internal consistency and coherence of these models is scrutinized in terms of their own proclaimed goals. Finally, based on this scrutiny, a more thorough methodological critique of these models is provided.

II. EARLY MARKET SOCIALISM: THE LANGE MODEL

10. Lange's basic aim was to construct a model that could imitate the efficiency properties of capitalism defined as allocative efficiency, while eliminating the extreme income inequalities and macrostability problems associated with private property (Lange, 1936, pp.105—6). At the same time, his model would provide a solution to the problem of calculation which, according to Mises who first raised the issue in his article which set off the 'calculation debate', is caused by the absence of private property under socialism and the consequent absence of a market for capital goods to determine their prices (Mises, 1920).[4] The methodological basis on which this could be done is the same as the analysis of capitalism. According to Lange (1936, pp.107—8), there is a 'formal analogy' between the problems facing any sort of exchange economy (in all such cases this is a problem of allocation of scarce —resources to alternative uses). Provided that socialism is defined as

[4] For discussions of Lange's model and of the 'calculation debate' more generally see Lavoie, 1985; Brus and Laski, 1989; Kowalik, 1987; Kirzner, 1988.

some sort of —market economy, the economic theory of equilibrium is better equipped to analyse the workings of the socialist economy as well. On this methodological foundation, his basic aim could be achieved by simply substituting public (state) ownership for private ownership, and by harnessing the market through the elimination of capital markets, but allowing for real markets to operate in the consumer goods and labour market sectors. In the absence of real capital markets, the Central Planning Board (CPB) through a Walrasian trial and error procedure undertakes the function of determining the price of capital goods. The CPB announces prices which all market participants take as given. Given these prices, firm managers are instructed to follow two rules: they have to choose, first, the combination of the factors of production that minimises the average cost and, second, the level of output at which the marginal cost is equal to the price of the product. In the case of consumers, the guiding principle of their market behaviour still remains that of utility maximization.[5] Last, the volume of investment (rate of accumulation) in Lange's model is determined 'corporately' by the CPB.[6]

11. Lange's model was very much a product of the preoccupation of the economic theory of his time and of the then prevailing ideological climate. Although Lange's model appeared at approximately the same time as Keynes' 'General Theory', at the micro level, despite Chamberlin's and Robinson's work on imperfect competition, neoclassical microeconomic theory mostly in its Marshallian partial equilibrium form, was still going relatively unchallenged. The ideological climate on the left during this period, dominated by the relative hegemony of the idea of central planning and state ownership, also left its imprint on Lange's actual model, in the sense that he retained state ownership, that he did not allow for real markets to function in the capital goods —sector and that decisions concerning the rate of investment still remained in the hands —of central authority.

12. Lange's achievement was to show that if the neoclassical equilibrium theory is an accurate description of the working of the competitive capitalist system, then the same theoretical apparatus can be employed to analyse the working of market socialism. The specific institutional set up did not really mater (Lange, 1936, 61—2). In fact, Lange reads in neoclassical theory exactly what it implies: that the presence of the auctioneer is more important than the existence of either real markets or private property, and that neither markets nor private property are necessary for an efficient allocation of resources (Hodgson, 1999b, pp. 34—5). As Lavoie (1985, p. 122) puts it, 'if the equilibrating process of real world capitalism is explained by recourse to a Walrasian auctioneer, (there is no reason) why a planning bureau could not similarly function as a coordinating agent'.

13. Not only that, but his system can actually achieve better results partly because the place of a theoretical construct — the fictitious auctioneer — is taken by an institution with real,

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[5] The prices thus arrived at by this iterative process are not real market prices but accounting (shadow) prices. In this way, what Lange manages to show is that some form of decentralised planning is possible without the overcentralisation tendencies inherent in the soviet model of central planning and without the concentration of knowledge required by this system (see Lavoie, 1985, pp.126—8).

[6] How this investment is then allocated to various industries is not entirely clear. It seems that this decision is left to the managers of these industries to decide following the second rule referred to above (price equals marginal cost). What the CPB finally does is to adjust the rate of interest so that the demand for investment is set equal to its supply as determined by the CPB (see also Dobb, 1939, pp.42—3).demand for investment is set equal to its supply as determined by the CPB (see also Dobb, 1939, pp.42—3).

actual existence, the CPB (Lange, 1936, pp. 89—90).[7] This is not surprising since, contrary to the widespread view, the Walrasian system is, in fact, a *centralised* system where the auctioneer is supposed 'to gather, process and communicate huge amounts of information' (Hodgson, 1999a, p. 41 and references therein).[8] At the same time, general equilibrium is an 'as if' theory. It treats the functioning of the market 'as if' it is guided by a fictitious auctioneer.[9] This is the result of what Arrow (1959, p. 43) has called a 'logical gap' in the theory: in the perfectly competitive world there is no real agent to make a decision on price. [10] In this sense, the CPB, by filling a logical vacuum in the theory, helps to enhance its welfare properties.

14. Further, as Dobb (1939, p. 50—1) has said, Lange's model of market socialism is 'an ingenious proposal for reproducing in a socialist society the 'ideal capitalism' of economist's imagination'. This is an early incidence of what has been dubbed 'new economic virtualism' (Carrier and Miller, 1998). More importantly, what Lange's exercise has done, despite the author's intentions, is to expose the weaknesses of neoclassical theory as a framework for analysing either markets or capitalism. This line of argument is also the point of departure of the Austrian critique of market socialism to which we now turn.

III. MARKET SOCIALISM AND THE QUESTION OF KNOWLEDGE: THE AUSTRIAN CHALLENGE

15. If neoclassical socialists, as they later came to be known (Vaughn, 1980), were the main proponents of socialism in the calculation debate, the Austrians were their main adversary arguing for the virtues of the free market system based on private property.[11] Hayek, faced with Lange's ingenious exposition of the feasibility of a (partially decentralised) planning

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[7] Lange gives two further reasons why his model would produce better welfare results: first, because through the more equitable distribution of income achieved the equilibrium reached is welfare enhancing (Lange, 1936, pp.98—103); second, and more dubious,the adjustment time needed to reach equilibrium through the actions of the CPB is much shorter, because of its wider knowledge relative to any private entrepreneur (ibid, p. 89).

[8] For the opposite view where Walrasian theory is treated as emphasising the decentralisation/ information role of prices see Makowski and Ostroy, 1993.

[9] It should be noted here that the fictitious auctioneer is based on the practice of the Paris Bourse. Lange's procedure simply amounts to applying to the whole economy the price setting procedure used on the Paris Bourse. In evaluating the Lange model, one has to consider, inter alia, whether the same price setting procedure is, first, efficient in all markets and, second, a correct description what is going on in other markets (see Biais et al, 1999). (I owe this point to an anonymous referee.)

[10] In Arrow's (1959, pp. 41—3, quoted in Makowski and Ostroy, 1993, p. 72) words, 'there exists a logical gap in the usual formulations of the theory of the perfectly competitive economy, namely, that there is no place for a rational decision with respect to prices as there is with respect to quantities. The standard development of the theory of behaviour under competitive conditions has made both sides of any market take the prices as given by some outside agency…Each individual participant in the economy is supposed to take prices as given and determine his choices as to purchases as sales accordingly: there is no one left over whose job it is to make a decision on price.'

[11] Despite differences of emphasis or even substantive differences between the two main representatives of this school in this debate (Mises and Hayek), one thing is sure; this debate contributed a great deal towards the clarification and further elaboration of their ideas. This is especially true with regard to some of the most central ideas of the Austrian school such as the subjective and dispersed nature of knowledge and the conception of the market process and competition as a discovery process (see Hayek, 1937, 1940, 1945, 1946, 1978; see also Kirzner, 1988; 1992, ch. 6; for a concise account of the development of Hayek's ideas see Caldwell, 1988). The Austrian critique presented here is not necessarily based on their immediate reaction during the debate, although most of their ideas were already present in this early stage, but on their overall critique as it first emerged during the debate itself and was then further consolidated in their subsequent writings as well as in the writings of their modern epigones during the revival of the debate in recent years.

system, was forced to accept its logical possibility given its theoretical neoclassical premises and, initially, simply to question its practical possibility (Hayek, 1940, pp. 187—8). In addition to this, however, Hayek also started questioning the very premises on which this theoretical possibility was established: neoclassical theory itself with some of its most basic assumptions such as the concept of stationary equilibrium, of competition as passive price taking behaviour and the assumption of perfect knowledge.

16. In his endeavour, the question of tacit knowledge was to assume central importance. So what does this concept involve? As he puts it, ‘the knowledge of the circumstances of which we must make use never exists in a concentrated or integrated form but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess’ (1945, p. 77). This knowledge of ‘the particular circumstances of time and place’ that only the ‘man on the spot’ can possess and deploy, is of central importance in any economic system.

17. Given the subjective and dispersed nature of knowledge and its derivative nontransferable character, its concentration in a single mind is unthinkable. Hence efficient central planning becomes impossible. Further, this knowledge can only be acquired through a competitive process which, rather than reflecting a passive price taking and quantity adjusting behaviour on the part of the producers as neoclassical theory assumes, is defined as a rivalrous process through which knowledge is being both generated and diffused to all economic actors. Here competition is portrayed as a ‘discovery process’ (Hayek, 1978): the vehicle through which knowledge is dispersed to all market participants. In this process the role of entrepreneurship is indispensable. In a world where the data are constantly changing, the function of entrepreneurship is to seize profit opportunities before anybody else, a sort of perpetual condition of arbitrage.

18. What makes this profit motive operative, however, is the private ownership of the means of production. As Lavoie (1985, p. 183) puts it, ‘competition necessarily requires private ownership in the means of production in order to serve its function as a discovery process’. This is so, because only private owners have the incentive to act in an entrepreneurial way. In the absence of private property, financial responsibility for one’s actions is lost. Hence in the absence of the incentive to act entrepreneurially, the competitive process is frustrated.[12] So for both Mises and Hayek it is either markets or socialism. There can be no midway house between central planning and capitalist free markets that can successfully reproduce the entrepreneurial discovery function of the capitalist market process.

19. A final point concerns the critique of the neoclassical concept of equilibrium. In the Austrian conception of the market system the basic role of the price mechanism is no longer the equilibrating function but the communication/ coordination of knowledge function (Hayek, 1945, p. 86). It is through the price system that the knowledge that has been generated during the competitive process is being dispersed to all market participants.

[12] This position of the Austrian school is a forerunner of the ‘property rights’ approach in economics, which stresses the importance of clearly defined property rights in providing incentives to the agents to work out efficient economic arrangements (Coase, 1960; Stiglitz, 1995, p. 11; see also below). It is also a forerunner of Kornai’s ‘soft budget constraint’ referring to the tendency of the government to intervene through subsidies, soft taxes and other means in order to keep loss—making enterprises in business. Once again, in these conditions, financial responsibility is transferred from the firm to the government thus removing the firm’s incentive to be competitive (see Kornai, 1986a).

So the price system rather than being an allocative mechanism, represents a knowledge mobilization system, whose main function is the utilization and dissemination of (subjectively held) knowledge. In the Austrian problematic, the concept of equilibrium is replaced by the concept of market process which, according to them, captures the uncertainty, time and change aspects of real market functioning which are left completely untouched by the Walrasian framework (Mises, 1949, p. 354; O'Driscoll and Rizzo, 1985, p. 85; Ioannides, 1992, ch.6).

20. Some have argued (see Adaman and Devine, 1997) that on the basis of this critique the Austrians have built a different epistemological and methodological framework for analysing the market system. However, their substantive differences notwithstanding, it still remains true that both approaches share similar methodological starting points: methodological individualism and subjectivism albeit with very different contents. On this basis, it is difficult to establish a truly dynamic theory of the market system, which 'can only be based on an objective view of the forces that set the economy in motion' and such a view of the market necessarily undermines the subjective nature of Austrian theory (Ioannides, 1992, p. 85; see also last section).

IV. THE QUESTION OF INCENTIVES: MARKET SOCIALISM AND 'NEW INFORMATION ECONOMICS'

21. According to Makowski and Ostroy (1993, pp. 81—2) any economic mechanism design must meet at least two basic requirements: first, the information/ communication requirement and, second, the incentives requirement. The question of incentives was first raised by Lange himself only to be dismissed by him as belonging to the field of sociology (Lange, 1936, p. 109). The Austrians, on the other hand, focused almost exclusively on the former although, as we have seen, they did touch on the question of incentives mostly by stressing the importance of private ownership in motivating people to act entrepreneurially (Hayek 1935b, pp. 175—6).

22. Only in the last three decades through the emergence of 'new information economics' associated with the 'incentive compatibility' and 'principal/agent' literature on the theory of the firm, has the question of incentives surfaced as an issue of any importance within mainstream economics.[13] Following the re—emergence of the market socialist debate in the 80's and 90's, and on the basis of these new developments in neoclassical economics, a renewed assault on the original market socialist model has been launched (Stiglitz, 1995; Makowski and Ostroy, 1993) and new models of market socialism have been proposed (Bardhan and Roemer, 1992; Bardhan and Roemer, (ed.), 1993; Roemer, 1994). In this section the basic elements of this critique are presented, whereas the investigation of the main ingredients of the new models is the subject of the next section.

23. As we have seen, the emphasis of the Austrian critique of market socialism focuses on the role of competition and the concept of knowledge, as well as on the necessity of private property. The latter later became the exclusive focus of attention of the 'property rights' school (Coase, 1960). For this school the clear assignment of property rights and the

[13] The phrase 'incentive compatibility' was coined by Hurwicz (1972) who was also one of the pioneers of mechanism design theory (see Makowski and Ostroy, 1993).

consequent incentives this gives to the owners to reap the full benefits of their efforts are the secret that lies behind the success of market economies. The absence, on the other hand, of such well—defined property rights under socialism (and market socialism), and the consequent absence of the appropriate incentives represents their Achilles' heel, which necessarily cripples the efficiency properties of the system. A critique of this position is the point of departure of the engagement of the new information—theoretic approach with market socialism. According to Stiglitz (1995, pp. 11—3), the clear assignment of property rights does not necessarily lead to efficient outcomes as the existence of public goods and externalities illustrates. At the same time, the absence of well—defined property rights need not lead to efficiency problems. So, what lies 'at the core of the success of market economies' is not so much the issue of private property rights but some other central features of the market system such as markets themselves and inter—firm competition (ibid, p. 13).

—If property rights are not the problem with market socialism, what is?

24. Again, for Stiglitz, the problem lies with the underlying framework: the Walrasian general equilibrium model. As he puts it, 'if the neoclassical model of the economy were correct, market socialism would have been correct' (Stiglitz, 1995, p. 10). It follows that 'the very criticisms of market socialism are themselves, to a large extent, criticisms of the neoclassical paradigm' and vice versa (ibid). It just so happens that two of the basic presuppositions of the perfectly competitive model are again found wanting: the information efficiency assumption and the existence of a full set of markets postulate. Emphasis is once again laid on the information properties of the model. Thus, the presence of asymmetric information and the related costs of acquiring it, lead to market imperfections (in the form of imperfect competition and other inefficiencies). The same implication follows from the absence of a full set of markets. In the absence of futures and risk markets, for example, capital markets are necessarily inefficient. In both cases the market outcome will not be (constrained) Pareto efficient with the implication that interventions by the government may be welfare enhancing (ibid, p. 29). Hence follows the justification for increased government intervention in the economy.

25. Related to the question of asymmetric and costly information are the twin problems of incentives and monitoring. This question, which is left completely untouched by the competitive Walrasian model, lies at the heart of the critique of early market socialist models from the prism of incentive compatibility theory.[14] The basic issue addressed by this literature is the question of 'how to design (and implement) monitoring and reward structures that 'align' incentives' in the presence of asymmetric information (ibid, p. 68). At the same time, a political problem 'largely involving the problem of credible precommitment on the part of the state' to non—intervention in the competitive process or else the separation of 'the political from economic criteria in decision making' is added to the information and agency problem (Bardhan and Roemer, 1993, p. 11).

[14] As Makowski and Ostroy (1993, p.74) put it, 'efficiency prices are given exogenously by a 'Walrasian auctioneer' or some 'central planning board'. There may be a communication process between the center and the agents 'on the spot' required to discover the market clearing prices; but it is assumed that agents will cooperate with the price—setting agency and not try to willfully distort the latter's collected information…. In the modern jargon, the incentive/revelation issues are ignored'.

26. Both Stiglitz (1995) and Roemer (1993) identify the problem of incentives as the key reason for the failure of socialism in Eastern Europe and a fundamental flaw of early market socialist models.[15] However, they consider false the implication that many draw from this, that all that is needed for the restoration of incentives is the restoration of private property. For one thing, the problem of incentives and monitoring is not confined to socialist models. Large corporations under corporate capitalism also suffer from serious incentive problems. This is related to the well— known issue of what Berle and Means (1932) have called the separation of ownership from control.[16]

27. The question of incentives, however, is not confined to the management level. In relation to non—private (publicly) owned enterprises the question has been raised as to whether those who run publicly owned firms have the incentive to implement incentive structures and be concerned with efficiency. Stiglitz dismisses this argument on the grounds that in a competitive environment, efficiency is a prerequisite for survival. Once again what matters is not so much ownership but competition. What is important, in this respect, is the commitment problem facing the government. In other words, the problem of 'commit(ting) itself to competition, to hardening budget constraints, not to subjecting the enterprise to political pressure, and not to subjecting it to civil service requirements' (Bardhan, 1993; Putterman, 1993; Stiglitz, 1995, ch.6).

28. Where early market socialist models have got it right, is in their implicit recognition of the absence of futures markets for coordinating investment decisions. This absence can be the cause 'massive coordinating failures', leading to excess capacity in some industries and shortages in others. The way early market socialist models tried solve this problem theoretically, is by allowing the government to play the coordinating role by directly controlling the level of investment (Stiglitz, 1995, p. 9). By doing so, however, they failed to take into account the information problem associated with the allocation of capital.[17]

29. The more serious implications of the new information critique of the working of markets and of the standard neoclassical explanation of it, is that in the presence of imperfect information markets will always be imperfectly competitive. At the same time, the absence of a full set of markets and in particular the absence of futures and risk markets can lead to coordination failures which can in turn cause markets (such as the labour and money markets) not to clear thus leading to unemployment and to credit rationing. Relatedly, in the absence of a well functioning coordination mechanism the market

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[15] Roemer's position on the causes of the collapse has since shifted, emphasising more the lack of competition with the consequent lack of incentive for innovation as the main factor (see Roemer, 1994, ch.5).

[16] In large corporations, the argument goes, the costs of acquiring information have given management considerable autonomy from the shareholders in their decision—making. This creates two related problems: on the one hand, the financial incentive of managers in large corporations is very weak, since managers appropriate only a small fraction of the profits. On the other, the discretion that managers enjoy in their decision—making gives rise to serious monitoring problems. Given the stock market's inefficiencies and the diffusion of the property rights of firms to many small shareholders, the main existing control mechanisms (takeovers via the stock market and shareholder voting) provide, according to Stiglitz, only limited control over management. At the same time he also considers the stock market as highly ineffective as a device for raising capital. In both respects, Stiglitz considers the banking system as offering a much more effective control mechanism as well as an effective fund raising device (see Stiglitz, 1985).

[17] Stiglitz makes the distinction between old market failures (public goods and externalities) and new market failures associated with imperfect and costly information and incomplete markets. Although the former can be relatively easily be identified and corrected with appropriate government action, the latter applies to virtually all markets making them pervasive in the economy. The conclusion is that this pervasiveness reduces not only our confidence in the efficiency of markets but also in the ability of governments to take care of them (Stiglitz, 1995, ch.3).

economy is likely to exhibit dynamic instabilities leading to economic downturns (ibid, ch.2).[18]

30. What is striking, is that all this talk is conducted in terms of the properties of models. The target of Stiglitz's critique is not real market socialism as such, not even Lange's model of market socialism. It is mostly a critique of Lange's underlying framework of analysis: the Walrasian general equilibrium framework. What Stiglitz does, is to take this theoretical system, change two of its basic assumptions (perfect information and the existence of a full set of markets) and then try to identify the consequences of this new set of assumptions for the model. This way, however, the debate becomes totally divorced from reality. At the same time, the method employed (model building) remains the same, as is the general frame of reference – neoclassical theory (Hodgson, 1999b, pp. 36—7).

31. Based on this critique, Stiglitz's own conclusion is that the market socialist project is not viable. Instead he proposes a sort of 'people's capitalism' with significant government role both in providing public goods and taking care of externalities as well as in influencing private investment. At the same time he favours a system of monitoring based on the banking system and not the stock market (the Japanese/German bank—centric system rather than the Anglo/American system based on the stock market) (see also Roemer, 1995). The more general implication, however, of the new information critique, is that for any market socialist model to be credible, it has to tackle these problems explicitly. This indeed has been the prime aim of the new models of market socialism proposed by Bardhan and Roemer and others. It is to these new models that we now turn.

V. MODERN VERSIONS OF MARKET SOCIALISM

32. The aim of modern versions of market socialism has been twofold: to achieve the goals of the original market socialist models (i.e. to combine efficiency with equity) while at the same time avoiding the problems of the original models as identified above, especially those addressed by the new information paradigm. More concretely, Roemer's and Bardhan's attempt has been to take explicitly into account the incentive and monitoring problems left untouched by general equilibrium theory and early market socialist models. The basic question they try to answer is 'whether a version of market socialism can be designed that works about as efficiently as capitalism but with better distributional properties' (Roemer, 1995, pp. 120). Or, more specifically, 'can competition between business enterprises, leading to innovation, be induced without a regime of private property in the means of production?' (Roemer, 1994, p. 45).

33. There are four basic touchstones on which modern market socialist models are built. First, is the belief that the Soviet system failed because of the abrogation of markets and the consequent absence of competition and lack of incentives. Particular emphasis is laid in this respect on the role of competition in promoting innovation as well as in the fact that, in this

[18] This, of course, is hardly a new discovery by Stiglitz and the new information camp. Dobb (1969, pp. 147—9), for example, arguing from a Marxian perspective made a similar point a few decades ago, when he argued that in the absence of future prices and the uncertainties associated with it, the result will be chronic instability with excess capacity emerging in some sectors and bottlenecks in others. So there is not even 'a *prima facie* case for regarding long—term investment under free market conditions as optimal' (ibid, p. 149). For a similar critique of the functioning of markets see Estrin and Winter (1989, pp.105—115).

view, the Soviet experience has completely discredited direct planning as a mechanism for allocating resources (Roemer, 1994, ch.5, p. 125).

34. The second pillar is provided by certain recent developments in capitalist countries (which Roemer calls ‘concessions of capitalism’) which, according to this view, can be used for ‘designing the next step of socialist experiments’. These include, first and foremost, its ability to solve complex agency problems in face of the separation of ownership from control in modern corporations and the concurrent diffusion of profits to many small shareholders.

35. Other developments of interest for the socialist project include the Scandinavian model of social democracy, which has shown that it is possible to have a more equitable distribution of income without important losses in efficiency (ibid, ch. 4). Yet further, there is the success of China’s township and village enterprises (TVE’s) and the Montragon group of cooperatives in the Basque region, which prove that private ownership and the clear delineation of property rights is not a necessary prerequisite for efficiency and growth, as Hayek, Kornai and the property rights school have argued (ibid, ch.15). At the same time, the Japanese *keiretsu* provides a good example of a device (bank monitoring) that can be used to monitor the managers. Other non—market institutions include ‘the firm, contract law, the interlinking institutions between economic and other actors (such as the firm and its stockholders), and the state’ (Roemer, 1994, p. 3). As far as the latter is concerned, the growth in the share of the public sector in most developed countries together with the East Asian growth miracles where the state played a leading role, both help to prove that extensive government involvement in the economy is not necessarily concomitant with inefficient outcomes, as long as it does not interfere in the competitive process.

36. This last point brings us to the third pillar of new generation models, which is that state *ownership* cannot work effectively. Here, Kornai’s and Hayek’s point has been accepted that as long as governments interfere in the competitive process, firms will not be held financially responsible, managers will not be profit maximisers and economic inefficiency will result. This represents what Kornai has termed the ‘soft budget constraint’ (Kornai, 1986a; Bardhan and Roemer, 1993, p. 6).

37. The last touchstone of the modern market socialist endeavour is a theoretical one. It concerns recent developments in new information economics we have already referred to, especially the incentive compatibility literature and the principal/agent theory of the firm.

38. Built on these pillars, the new market socialist proposals, despite their differences, have certain common attributes that also distinguish them from earlier market socialist models. These attributes include, first, the existence of real markets and competition not only for consumer goods and services and labor, but also for capital. In opposition to earlier models, in these proposals *all* prices (including those of capital goods) are set by real functioning markets without any state interference. In addition, late models have completely dispensed with state ownership having replaced it with some form of public ownership where either the workers themselves and/or other institutions (banks, mutual funds, other firms etc.) share the ownership rights.

39. The central theme lying behind these models is that the driving force of the dynamism exhibited by modern economies, i.e. the basic cause of their efficiency, lies not so much in their property relations but in other attributes and institutions of modern economies such as the existence of markets themselves and inter—firm competition (Bardhan and Roemer,

1992, p. 101). They do recognise, however, that, in the absence of private property to impose financial responsibility on firms, there arises a strong incentive problem in relation both to the ownership and the management of these firms. These twin problems of competition and incentives represent the basic questions that modern market socialist models try to address.

40. So what are the basic coordinates of these models? With respect to their property rights they can be divided into two groups: the labour—managed and the managerial models of market socialism (Roemer, 1994, ch.6). In the former category, which includes firms that are either worker—owned or labour—managed and in which the workers themselves elect a manager to run the company, belong the models proposed by Estrin (1989), Schweickart (1992, 1998), Weisskopf (1993, 1994), Fleurbaey (1993) and others. In the latter category the property rights are assigned either to various institutions such as banks, mutual funds, other firms etc. or to shareholders under a specially designed coupon capital market. In what follows we concentrate exclusively on the managerial model of market socialism and especially on the proposals by Bardhan and Roemer (see Bardhan 1993; Roemer, 1993; 1994; 1995; Bardhan and Roemer, 1992; 1993). In both proposals firms are profit maximising institutions run by a manager who is appointed by a board of directors who, in turn, are elected by the institutions or individuals who own the company. Where the two models depart is in their assignment of the firm's property rights.

41. Bardhan's bank—centric model is built after the Japanese *keiretsu* system. Firms are divided into financial groups formed around a main bank, which is owned by the state and other banks and financial institutions. They are joint stock companies with their shares owned by their own workers, by other firms in the same financial group and by the main bank and other institutional investors. The firm itself owns shares in other companies of the group and the dividends received are distributed to its workers.

42. In Roemer's model, on the other hand, property rights are assigned to citizens through a voucher scheme that gives them the right to a claim in profits. Citizens can either be distributed an equal number of vouchers and then use them to buy shares or alternatively they can buy shares in mutual funds which, in turn, purchase shares of firms. People can only trade shares with shares or buy and sell shares at coupon prices. But they cannot sell shares for cash. Thus a coupon stock market is created were the movement of coupon prices gives signals to agents as it does in the capitalist stock market.

43. The chief question that these models try to address is how to give proper incentives to managers. Firms are assumed to be profit maximising institutions run by selfish managers. In the absence, however, of private ownership and given the wide dispersal of profits in these models, the question is how are firm managers going to be monitored? In Bardhan's (1993, p. 145) words, '(h)ow to motivate the managers of public firms to maximise profits, to get them involved in rivalrous entrepreneurial processes, and to separate political from economic criteria in decision making concerning those firms — these are the central issues any model of feasible market socialism has to address'.

44. The solution to this problem is sought in the different systems of control and monitoring developed under corporate capitalism in order to tackle similar agency problems in face of the separation of ownership from control. These include, first, family or tightly held control (this is applicable only to small firms), second, the threat of takeovers via the stock market (the Anglo—American system) and, third, the control of managers by

large organisations such as banks and pension funds (the German and Japanese system) (Roemer, 1995, p. 123).

45. In view of Stiglitz's critique of the efficiency of the capitalist stock market as a monitoring mechanism in the absence of a full set of markets, and of the belief that in the absence of private property it is difficult to reproduce the capital market, the two writers try to find alternative ways for monitoring the managers. Bardhan, as we have seen, favours a bank—centric system where banks act both as the chief fund raising device and as well as the main control and monitoring mechanism. Here the agency problem is solved through the main bank and the other group members having a greater stake in, as well as information about, the company than ordinary shareholders. In addition, being the main source of capital for the firms of the group, it has an incentive to monitor them effectively to make sure that they are able to pay back their loans but also in order to retain its reputation of credibility among other main banks (Bardhan, 1993).

46. In Roemer's model, on the other hand, the coupon stock market is supposed to serve the same functions as the money stock market under capitalism (giving signals to agents and disciplining the managers through the take—over threat) except one: the fund raising function. The latter is again performed by the banking system. Given the inefficiency of stock markets as a monitoring mechanism, Roemer combines his coupon system with Bardhan's bank—centric *keiretsu* model, where the main source of equity is again the main bank, which also serves as an additional monitoring device. So, in Roemer's model, the agency problem is solved both through the (coupon) stock market and through the banking system. Such a scheme has, according to Roemer, several virtues. First, it prevents the concentration of ownership in the hands of a small class of citizens. Second, it provides the same signals as the capitalist stock market does. Third, 'it involves probably the smallest change from actually existing capitalism, and therefore it perhaps has the largest probability of running as efficiently as capitalism does'. Last, the layer formed between the firms and the state by intermediate equity—holding institutions and the main bank, 'acts as a buffer against direct political accountability' (Roemer, 1993, pp. 110—2; 1994, pp. 50—1).[19]

47. As far as investment is concerned, the presence of positive and negative externalities associated with some forms of investment and of public goods, as well as the absence of futures markets, make state intervention in the economy and some form of planning necessary. As Roemer (1994, p. 21) puts it, 'the political control of the investment process *is* important because market failures of a conventional kind make it preferable'. As far as this planning process is concerned, Roemer with his collaborators, drawing on the experience of France and of the Ministry of Trade and Industry in Japan and using a Walrasian general equilibrium model, favour chiefly some form of indicative planning using interest rate discounts and surcharges as its principle instrument (Roemer and Silvestre, 1993; Roemer, 1993, pp. 94—5; 1994, ch.12). In addition, state intervention is required in order to create public goods, to compensate for incomplete markets, to take advantage of positive externalities from investment, to take welfare—state measures especially with respect to unemployment which will continue to exist and also to take measure for a further redistribution of income (Roemer, 1994, ch.11).

[19] Here the problem of main bank independence from direct state control also becomes crucial.

48. It should be noted that, as in Lange's and Stiglitz's case, the new generation market socialist project is once again conducted in terms of models. It simply represents an attempt to revisit market socialism in light of incentive compatibility theory. And even when reference is made to real institutions, this is done in an arbitrary and ad hoc way and through the prism of what they want to prove. In what might be called a 'stamp collecting approach', protagonists of new market socialism engage in a process of randomly and arbitrarily picking up capitalist institutions which can presumably be used to 'design the next step of socialist experiments', while dispensing with the institutions they consider counter to this aim. These institutions, however, rather than being seen as the result of deeply rooted historical processes, are treated superficially as simple empirical facts which can be replicated at will. A proper reading of Japanese economic history, for example, suggests a much broader 51. scope than that provided by incentive compatibility within and between *keiretsu*.[20]

49. This is, in fact, a general attribute of an approach that reduces rich historical and analytical issues to either trivial properties of models or empirical ad hocery. On the other hand, it is quite ironic that two of the examples Roemer picks up, Scandinavian social democracy and the East Asian growth miracles, have both collapsed in recent years and can therefore no longer be invoked so readily as prototypes on the basis of53. which the new socialist project can be erected (see also Gray, 1995).[21] Further, the contention concerning the separation of ownership from control in modern enterprises has been heavily contested from many quarters on both theoretical and empirical grounds (Brus and Laski, 1989, p. 133).

50. Even if one overlooks the problematic nature of the approach, the question still remains whether these models, seen in their own terms and through the prism of their own proclaimed goals, have managed to meet the challenge presented by the critiques of the earlier models, and to overcome the problems and the contradictions associated with these earlier models. It is to these questions that we now turn.

[20] The Japanese *keiretsu* system has been selected as the prototype on the basis of which the monitoring devices of the models under investigation have been designed. However, the way their adherents have treated this institution is not only superficial but also erroneous. They overestimate the monitoring function of banks in promoting innovation by neglecting other institutional factors such as the life—long employment system, the wage/ promotion system and the formation of trade unions at the company level, which have all helped to enhance workers' loyalty. These factors together with the team system at the work place, the promotion of multi—skills through learning by doing and the formation of an intra firm labor market have all contributed to the enhancement of the workers' incentive to work (Itoh, 1995, pp.127—8). At the same time, the extensive use of the system of sub—contracting by the *keiretsu* gives large firms the power to lower costs by exerting continuous pressure on smaller firms. Last, the role of state commitment in producing the Japanese miracle should also be explicitely acknowledged. On the other hand, Bardhan and Roemer tend to idealise the system by neglecting all its negative features such as the 'notoriously long working hours', the 'syndrome of chronic fatigue', the 'sharpest discrepancy between rising productivity and stagnant wages', 'the endless corruption scandals' etc. (ibid, pp.127—8, pp.137—9). All this does not mean that one cannot draw useful conclusions from this experience, only that it has to be treated in its proper social and historical context and be analysed through all its historical and socio—economic parameters.

[21] Not everybody agrees with the contention that Scandinavian social democracy has collapsed. For some people it has simply successfully adapted to new circumstances. Whatever the way one chooses to see the matter, however, it still remains true that Scandinavian social democracy in its traditional form no longer exists.

VI. NEW MARKET SOCIALISM: A CRITIQUE FROM WITHIN

51. Seen in their own terms, the new generation models suffer from one fundamental contradiction: on the one hand, they want to allow real markets and competition in their models to function freely. On the other hand, however, they use the neoclassical model, which incorporates a highly problematic notion of markets and competition, as their underlying framework. What they do not realise, is that by doing so they cancel the very aim for constructing these new generation models which is to imitate the dynamic efficiency properties of the market economies but with better distributional features. For one thing it does not allow the architects of the new models to go beyond the original Lange model in this respect. As such their proposals are vulnerable to most of the criticisms that have been leveled against the original model.
52. Take the example of the concept of competition so much relied upon in order to reproduce the efficiency properties of the market system. Roemer treats prices as parametric thus adopting the neoclassical notion of competition as passive price taking behaviour. This notion, however, has, as we have seen, come under heavy fire from all quarters, for its total inability to capture the true nature and essence of the competitive process. Yet it is reproduced in models that supposedly want to capture exactly the aspects of competition left out by the neoclassical definition, especially its dynamic nature.
53. Yet further, there is the role of entrepreneurship, a factor so much emphasized by the Austrian school but left completely untouched by market socialist proposals. In all market socialist models that adopt the static general equilibrium framework, individuals are treated as optimizing agents who behave according to certain rules, either explicitly, as in Lange's case, or by implication through accepting the Walrasian framework as in the case of Roemer. Entrepeneurs are simply treated as behaving 'like robots, minimising costs and maximising profits with the data given' (Brus and Laski, 1989, p. 57). This way, however, the true function of entrepreneurship, which is to capture the opportunities in a world of uncertainty before anybody else does, is completely lost.
54. The same is true for the way neoclassical theory treats the question of efficiency. This is defined as static allocative efficiency using the criterion of Pareto optimality and refers to the efficient allocation of scarce resources to alternative uses, assuming the technology is exogenously given. Such a criterion of efficiency, however, is highly inadequate for the purposes of constructing market socialist models of the new generation type for two reasons. It is inadequate as a guide to achieving socialist objectives because, as Roemer (1994, p. 145; 1995, p. 113) himself rightly argues, Pareto optimality might be a good criterion from a purely economic point of view, but it suffers from social myopia: it takes no account of issues of distribution and justice. It treats these issues as separate from the question of efficiency. Such a presumption, however, in addition to being counter—factual, is hardly of any use for constructing models whose explicit aim is to combine efficiency with a redistribution of income.
55. Pareto efficiency is also inadequate as a concept for capturing the dynamism of markets, the attribute of capitalism new generation models mostly want to replicate. What is much more relevant for meeting this objective is not static allocative efficiency, but dynamic innovative efficiency which, however, is not captured by the neoclassical framework. Such a conception of efficiency captures the dynamic aspects of market

competition in a more satisfactory way as it is directly related to the issue of productivity and technological innovation – the process of 'creative destruction'. This latter issue of innovation is also left untouched by the standard neoclassical model, which assumes technology to be exogenously given. Not only that, but the neoclassical model is also 'fundamentally *inconsistent* with incorporating technological change' (Stiglitz, 1995, p. 140).

56. However, even if one accepts Pareto optimality as the main criterion of efficiency, the presence of asymmetric information and the absence of a full set of markets, as Stiglitz has argued, make market failures pervasive in the economy and this causes all markets to be *necessarily* inefficient. Given that the market socialist models solve none of these problems, the same criticism also applies to these models.

57. Stiglitz's is a critique not only of the Walrasian framework of analysing markets but also of the actual functioning of markets themselves. This in opposition to the Austrian side, which, despite being a more thorough critique of the neoclassical framework, considers the markets to be the natural and most effective way to organise the economy.[22]

58. Summarising, new generation models, despite their attempted reconciliation of the absence of private ownership with the presence of some form of capital markets and their explicit treatment of the question of incentives and monitoring, fail in two of their principal objectives. They fail to go beyond the original Lange model as far as their underlying framework is concerned and, second, they fail to meet effectively the challenge presented by the Austrian and the new information critiques of early market socialism, save for the question of incentives and monitoring.

59. Another problem associated with new generation models is, as we have seen, that although they allow real markets and competition to function freely, they refuse to take into account their full consequences. In particular, they concentrate almost exclusively on questions of microefficiency, failing to treat in any theoretically consistent manner the macrostability problems associated with the operation of free markets. The combination, however, of what Dobb has called 'atomised decision making' with the absence of futures and risk markets to coordinate investment decisions, creates an environment of uncertainty, which can lead to 'massive coordination failures'. In the absence of a well functioning coordination mechanism, the existence of excess capacity in some sectors is combined with bottlenecks in other sectors leading to chronic instability and economic fluctuations (Dobb, 1969, p. 148). Yet these problems of instability, coordination and long term growth, hardly

[22] Roemer (1995, pp. 121, 113, 117) himself fully accepts the validity of these criticisms, but he then simply bypasses them by failing to treat them in any theoretically consistent manner. In fact, his response to these problems is pragmatic. Given the existence of these problems, he argues, architects of market socialist models must answer two questions: first, 'granted that real market economies are not perfectly described by the Walrasian model, is the approximation...good enough to permit one to use the lessons of the model to design a version of market socialism?'. Second, 'granted that real market economies (including market socialist ones D.M.) are characterised by an incomplete set of markets, asymmetric information, and incomplete contracts' giving rise to equilibria which are not Pareto—efficient, 'can one create an economy that is *about as efficient as capitalism*, yet has qualitatively better distributional properties?' (Roemer, 1995, pp.120—1). Roemer's answer to the first question is that in the absence of any alternative that takes into account the Stiglitzian criticisms, there is no substitute to using the Walrasian model, despite its deficiencies, for constructing market socialist models. Much like Newtonian physics in the absence of the Einsteinian model. So the conclusion that is easily drawn is that Roemer's (and Bardhan's) models of market socialism do not even attempt to meet either the Austrian or the Stiglitzian criticisms (with the exception, of course, of the issue of incentives) although they fully, in the case of Stiglitz, and, partly, in the case Austrians, accept their validity.

feature at all in new generation models. The result will most certainly be huge market inefficiencies in the form of non—clearance of markets and the wastage of resources this brings about. Chief example is the presence of chronic unemployment, which Roemer (1994, p. 90) himself admits will continue to exist in new generation models.[23]

60. Another example of market inefficiency resulting from individualistic investment decisions and the absence of future prices, is the existence of non—optimal rates of investment. Lange did somehow take care of this problem by allowing the rate of investment to be determined 'corporately', thus helping to reduce the problem of uncertainty and the instability associated with it and to alleviate the problem of unemployment, always, of course, remaining within the strict boundaries of his model. Roemer, on the other hand, despite allowing for some form of indirect (indicative) planning through the use of interest rate discounts and surcharges, lets the rate of investment in his model to be determined, in principle, by the individual investment decisions of firms.[24] Thus all the problems associated with individual investment decisions – uncertainty, instability, non—clearance of markets etc. —are also reproduced in his model. More generally, in contrast to Lange for whom the macrostability problems were a major concern, in Bardhan and Roemer's proposals these problems do not feature at all. In this sense it could be said that new generation models have regressed relative to early ones.

61. Competition, a factor so much relied upon to reproduce the efficiency of free markets, is not, of course, free of vices. For one thing, the competitive process creates winners and losers thus continually generating inequalities. This way, however, the very aim for constructing these models, the achievement of a more equitable distribution of income, is cancelled. As such the model is self—defeating as far as the only socialist objective it has been designed to achieve is concerned. In addition, rivalrous competition as the motor of the socialist economy can hardly be aligned to socialist objectives. This is even more so since, as Roemer (1994, p. 117) himself puts it, 'competition in the economic sphere engenders interpersonal competition as a more generalised phenomenon in society'. As such, it creates alienation and promotes the erosion of solidarity and the sense of collectivity (ibid; Adaman and Devine, 1997).[25]

62. In sum, Bardhan and Roemer's proposals seem to offer an uneasy compromise between, on the one hand, accepting the neo—liberal position as far as the virtues of free, unobstructed competition, the need for economic actors to be held financially responsible for their actions and their treatment of these economic agents as 'unabashedly self interested and selfish people' and, on the other, promoting some socialist objectives via the abolition of private property. However, although it is by no means certain that in the

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[23] Roemer (1995, p. 127) resorts to traditional Keynesian type of government intervention in order to take care of this problem.

[24] When Roemer (1994, p. 21) calls for the 'political control of the investment process', he presumably has this indirect form of planning in mind. He calls this 'the Lange mechanism' (Roemer and Sylvester, 1993: Roemer, 1994, ch. 12). Thus, he misleadingly interprets Lange as simply advocating some form of indirect planning through the use of the interest rate. It is, however, quite clear, that Lange advocated the determination of the rate of accumulation directly by the Central Planning Board (Lange, 1936, pp. 84—5). In fact, contra Roemer, he explicitly rejected leaving such an important decision in the hands of individuals, since, as he puts it, 'this is scarcely compatible with the organisation of a socialist society' (ibid, p. 85). See also note 6.

[25] Roemer's response to the problems associated with the existence of competition is once again pragmatic: since 'we know of no mechanism that can produce an innovative economy except inter—firm competition,…it follows that we must restrict our investigation to models based upon such competition' (ibid, p. 121).

absence of private property the efficient properties of the market can be replicated, it is beyond any reasonble doudt that all the vices of free markets (generation of inequalities, chronic unemployment and the wastage of resources, dynamic instabilities, non—optimal rates of investment etc) will continue to exist. As such, modern market socialist models represent typical examples of the use of radical means (abolition of private property) for the accomplishment of moderate and uncertain ends.

VII. TOWARDS A MORE RADICAL CRITIQUE

63. According to Roemer (1994, p. 51) 'the principal advantage of (his) model is that it involves probably the smallest change from actually existing capitalism, and therefore it perhaps has the largest probability of running as efficiently as capitalism does'. The question, however, is, in the presence of the profit maximisation motive, the full operation of free markets and competition, the absence of state ownership and state interference in the competitive struggle, what is it that makes these models socialist?[26] Could it be the case that, as Bardhan and Roemer (1993, p. 8) put it, with modern market socialism 'socialists have made all the concessions… (only)… to be followed by the universal recognition…that only a system of conventional private property yields a satisfactory combination of dynamic efficiency, equity and freedom'?

64. Before we embark on this investigation, let us first clear away a misconception, with regard to the relationship between the Austrian and the new information critiques. According to Roemer (1995, p. 114), 'Stiglitz's criticism of the Walrasian world—view is Hayekian'. Indeed, at first sight, it looks as though these two critiques of early market socialism models share some common ground. In particular, both critiques question the validity of the perfect information/ perfect knowledge assumption underlying the neoclassical premises of early (but also most modern) market socialism models. On closer inspection, however, it proves otherwise. Stiglitz shares with neoclassical economics the notion of information as objective knowledge. Given this, he questions the *assumption* of perfect information on the grounds that it does not reflect the actual working of a modern economy which is necessarily governed by asymmetric information. The chief reason for the existence of asymmetric (imperfect) information is that it can be transferred (obtained) only at a cost. In other words, for Stiglitz, 'imperfect information refers to the known—to—be—available information which is costly to produce' (Kirzner, 1997, pp. 64—5).

65. Hayek, on the other hand, did not simply question the *assumption* of perfect knowledge in neoclassical theory. The target of his criticism was the very *concept* of knowledge itself. In his conception, as we have seen, knowledge does not refer to objectively given data that can be acquired and transferred to anybody, but to the subjectively—held 'dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess' (Hayek, 1945, p. 77). In other words, there is a conceptual difference between Stiglitz's notion of asymmetric information as objective knowledge obtained at a cost and Hayek's concept of tacit knowledge, which is subject to discovery through the competitive

[26] Roemer's answer to this question draws attention to the non—private ownership rights in firms, to the more equal distribution of profits and, last, to the existence of some form of planning in these models in order to justify their socialist nature. None of these attributes of his model, however, with the exception of the first one, represents peculiarly socialist institutions. Both the latter could be achieved within a capitalist framework.

process (see Kirzner, 1997, pp. 64—5; Caldwell, 1997; Ioannides, 1992, ch. 3; Adaman and Devine, 1997, p. 63, note 30).[27]

66. What both writers —Hayek and Stiglitz —fail to recognise is one very important parameter of knowledge: its social dimension. On the one hand, knowledge may not necessarily be individual in character, as Hayek has argued. Often, for example it is held by groups of workers rather than individual entrepreneurs (Wainwright, 1994). However, even when it is individualistically held, it still has an equally important social dimension: it is *socially constructed*. This is true in two senses: first, the interpretation/ conceptualisation of the information received by the human mind necessarily involves value judgements (in the form of assumptions, theories etc.) that are socially constructed. As Hodgson (1988, p. 7) puts it, '(w)hilst it can be accepted that information and knowledge have important subjective and individual features, the concepts and theories that are used in their acquisition are not, and cannot be, purely subjective, as if they resulted from an isolated individual'.[28]

67. At the same time, as Marx has persuasively shown, the market process is a deeply social process involving chiefly the relationship between people. In this sense then, the information/knowledge generated in this process, which is the focus of attention of the Austrians, is also necessarily social in character. As Wainwright (1994, p. 58) has argued, recognition of this fact would have serious consequences for Hayek's view of the market process as a spontaneous order. The same is true for his total rejection of the possibility of an efficient economic system not based on private property and market competition. If knowledge is socially constructed, then, contra Hayek, this could provide the basis for collective action. Further, it becomes theoretically possible to devise an economic system based on different principles and institutions to create a mechanism of information generation and dispersal as efficient as the market mechanism (see Wainwright, 1994, pp. xii, 57—61, 106—8 passim; Sciabarra, 1995, pp. 109—116).

68. In addition to the social dimension of knowledge, which is not treated by either neoclassical or Austrian economics, there is the question of the information that the market actually conceals (McNally, 1993, p. 199). This concerns information about the *social effects* of market transactions, which the market mechanism is totally incapable of providing. This necessarily leads to social inefficiencies.

69. The absence of the social dimension in the treatment of information and knowledge is complemented in Roemer's case by a reductionist definition of the concept of socialism. As

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[27] Roemer is not alone in regarding Stiglitz's critique as Hayekian. Stiglitz himself seems to share this view. Whenever he refers to Hayek's work, his assumption seems to be that Hayek shared with him the notion of knowledge as objectified data, while also having a similar concern to him with imperfect information (see Stiglitz, 1994, pp.9—10, 24—6, 43—4; Kirzner, 1997, pp.64—5). Roemer (1994, ch. 4), on the other hand, seems to take into account only Hayek's immediate reaction in the debate (see Hayek 1935; 1940) and not his more general attack as consolidated in his other writings (e.g. Hayek 1937, 1945, 1947) where he advances his major contribution on the subjective nature of knowledge and of competition as a discovery process.

[28] Hodgson (1988, p. 6; 1999b, p. 46) makes a useful distinction between *sense data, information* and *knowledge*. He defines *sense data* as consisting of 'the vast jumble of aural, visual and other signals that reach the brain'. *Information,* on the other hand, is data to which some meaning has been attributed. For this, 'it is necessary to impose a conceptual framework on the jumble of neurological stimuli, involving implicit or explicit assumptions or theories which cannot themselves be derived from sense data alone'. Last, *knowledge* is the product of information use, while *tacit knowledge,* in the Hayekian sense, is knowledge 'which cannot be readily codified in the form of information that can be passed on to others'.

we have seen, the basic question that new generation market socialists try to answer is 'whether a version of market socialism can be designed that works about as efficiently as capitalism but with better distributional properties' (Roemer, 1995, p. 120). Such a delineation of the central objectives of socialism is derivative upon the idea that 'socialism is best thought as a kind of egalitarianism' giving emphasis on a more equitable distribution of income rather than 'the implementation of any particular property relation' (ibid, pp.124—5). The change in the latter is thus viewed in a purely instrumental fashion, as a tool for bringing about a more equitable distribution of income and is not associated with any notion of socialism as a social system of production (Gray, 1995, p. 147). Further, no explicit reference is made to any other specifically socialist institutions that would help in materialising any other socialist objectives.

70. The philosophical underpinnings of such a position are provided by the egalitarian theories of justice in political philosophy as inspired by Rawlsiam moral philosophy. This tradition is mostly associated with egalitarian liberalism rather than socialism, giving emphasis, as Roemer does, mostly to issues of distribution rather than social property relations (Roemer, 1994, ch. 3).[29] This position of Roemer derives directly from his earlier writings on analytical Marxism where property relations are treated in a purely juridical and superficial fashion as simply involving the distribution of ownership rights rather than as incorporating specific social relations (Roemer, 1982; 1988, pp.131—5; 1995, p. 15).

71. In new market socialist proposals, as we have seen, both capitalism and socialism are treated as models rather than as social systems of production. What Bardhan and Roemer do is to build two alternative models, one for capitalism and one for socialism and then, by comparing them, pronounce judgements as to which has better efficiency and distributional properties. All this is done on the basis of the same underlying framework by simply changing some of the assumptions. In this respect, Bardhan and Roemer's proposals are once again built on the same methodological ground as Lange. In fact, what is striking, is that most of the debate on market socialism (with the exception of Hayek and Dobb) has been conducted in these terms. From Lange's model, to Stiglitz's critique to Bardhan and Roemer's proposals, the chief concern has been the construction of models, which are treated as ideal, ahistorical constructs with universal validity. In this way all historical and social context is lost and the theoretical reproduction of reality is simply treated as an exercise in model building.

72. The only difference in Bardhan's and Roemer's proposals, is that their model is constructed by taking into account the conclusions drawn from the incentive compatibility literature. As they put it, 'the recognition of the problem of incentive compatibility injected a new element into the theory of the market with important corollary insights concerning the utopian nature of Lange's proposals' (Bardhan and Roemer, 1993, p. 7). Despite, however, their protestations to the contrary, the fact of the matter remains that their proposals represent no more than a simple extension of Lange's to take into account incentive problems. They do this simply by changing some of the assumptions of the model. Everything else —methodologically and substantively —remains the same.

[29] See John Rawls' *A Theory of Justice*. Other exponents of this tradition include Ronald Dworkin, Thomas Nagel, and G.A. Cohen (see Roemer, 1994, ch. 3; Gray, 1995).

73. On a methodological level, new market socialists share with Lange, but also with Hayek, the methodological individualism and subjectivism inherent in both neoclassical and Austrian economics. Methodological individualism, in turn, is necessarily associated with reductionism since it attempts to explain the whole through its analytical reduction to its presumed microfoundations and component parts (Hodgson, 1999a, p. 61). This way, however, the whole, rather than constituting an object of study on its own right, becomes a mere aggregation of its component parts.

74. This individualist methodology is complemented by the total divorce of the economic from the social: both are understood in terms of the actions of individuals. In other words, structures are explained in terms of individual motivation (Howard and King, 1992, pp. 344—51). Moreover, in treating individuals simply as 'unabashedly self interested and selfish people', all historical and social context is lost and human behaviour is treated in a universalistic, ahistorical and asocial fashion. As Gray (1995, p. 149) puts it, 'human subjects who figure in the model of a market socialist economy…are not bearers of specific histories, members of any particular culture or community; they are the ciphers of standard economic theory and of Rawlsian moral philosophy'. All structural and collective factors affecting social behaviour are totally absent. If, however, one is to get from individual choices to historical processes, the intermediation of structural factors is indispensible (Wood, 1989, p. 87). Economic processes are objective social processes where structural factors assume central importance. In addition, the fact that the behaviour of individuals is shaped by social institutions has to be explicitly taken into account. This way the individual action is located within its historical and social context and individual motivation becomes a function of structures and collective interests. As Heilbroner and Milberg (1995, p. 8) put it, 'the recognition of the inextricably social roots of all social behaviour leads to the view that macrofoundations must precede microbehaviour, not the other way around…'. In other words, structure takes precedence over agency at the level of the individual and the social is incorporated into the analysis as a point of departure rather than emerge as a consequence of the actions of individuals. This does not mean that individual behaviour is totally *determined* by these collectivities. Only that individual action is necessarily *filtered through* and *conditioned by* these structural and social factors and institutions.[30]

75. A direct corollary of the absence of structural and social factors from Roemer's analysis is the total neglect of the issue of social transformation. In fact, it is not at all clear that advocates of this system realise the huge social transformation that the change in the form of ownership they envisage, entails. And even if they do, they nowhere make explicit the social and political forces that would bring this huge transformation in the economic structure about. This is a direct result of the absence of the concepts of power and conflict in these models. In fact, there are hardly any hints as to how such a transition would come about, while there are neither any links identified between capitalism and socialism that

[30] Take the example of competition. Rather than representing price taking behaviour on the part of rational individuals, it represents the rivalrous and antagonistic process which, rather being the result of some universal chracteristic of human nature (optimising behaviour for neoclassical theory, entrepreneurship for the Austrians), represents the historically specific result of the imperatives of the capitalist market. As Wood (1989, p. 87) puts it, competition is a result of 'the whole historically constituted social structure which has made individuals in capitalist society dependent on the market for the conditions of their self realisation, and hence subject to the imperatives of competition and accumulation'. Capitalists *must* accumulate if they want to reproduce themselves as capitalists (Roberts, 1986, pp. 176—7).

would supply the material conditions for such a transition. In this respect, there is a logical gap in most market socialist models. Without such a link, however, these models are transformed into abstract mental constructs without any historical or practical relevance.[31] This, in turn, is the result of the static and reductionist nature of these models, which make them incapable of incorporating social change and transformation.

VIII. BY WAY OF CONCLUSION

76. Roemer's project, and the modern market socialist project in general, can be considered as part of a wider process currently under way in economic science, described as 'economic imperialism' (see inter alia, Hirshleifer, 1985; Hodgson, 1994; Fine, 1997, 1999, 2000 and references therein).**[32]** This takes the form of analysing and explaining issues that have traditionally been thought as lying outside the scope of mainstream economics, using the tools of neoclassical economics. This process of colonisation has evolved in two principal directions. One is the attempt to analyse social phenomena and institutions (family, crime, addiction etc.) in terms of the optimising individual. Gary Becker has played a leading role in what has been described as the 'as if market' approach, where social phenomena are treated as if they were perfectly competitive markets (see for example Becker, 1993, 1996; Fine, 2000).
77. The second direction concerns the process of internal colonisation of areas of economics previously considered as the privileged fields of non—mainstream traditions in economics such as development economics, segmented labour market theory etc. This is done on the basis of the new microfoundations literature based on imperfect and asymmetric information, Stiglitz being the main representative, following Akerlof. Lange's model, as we have seen, can be considered as one of the first attempts at such a colonisation. Until the appearance of his model the economic theory of socialism was the preferential ground of Marxism (and, in fact, continued to be until quite recently).**[33]**
78. Roemer himself has been a long time practitioner in this project. What is remarkable in his case, is the fact that the target of his original attempt in this direction was not the colonisation of another field of study or some other social science but another school of thought: Marxism. The procedure, however, has been the same: the use of neoclassical tools (game theory) and method (methodological individualism, model building) to reconstruct Marx's concepts redefine the Marxian project.
79. The affinities of Bardhan and Roemer's latest efforts concerning market socialism with the second direction in the colonisation process are unmistakable. Socialism here is treated as a mere extension of the general equilibrium model to take into account incentive

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[31] Roemer (1994, pp. 126—7) himself seems to realise this when he says that the most probable test terrain for his proposals are the former socialist countries where 'the opportunity costs of adopting market socialism are least'. Presenting, however, the 'adoption' of market socialism as simply a matter of choice between alternatives without the identification of the social forces that would bring it about, simply reinforces our claim that these models represent no more than abstract mental constructs without any practical or historical relevance
[32] Fine (1997, 2000) has gone as far as to describe this process as 'the new revolution in economics', drawing a parallel with the marginalist revolution as far as its significance is concerned, although, of course, the trend has been reversed: from narrowing its scope of application in the marginalist revolution to broadening it during this new revolution.
[33] Note that the term 'economic imperialism' was coined at about the same time as Lange's proposal (Swedberg, 1900, p. 14, as referred to in Fine, 2000, p.2).

compatibility plus a change in the property rights. In this reductionist model building approach, socialism is treated on a par with capitalism through a marginal extension of principle (incentive compatibility) to take into account some of the consequences of informational imperfections and asymmetries. No reference whatsoever is made to any specifically socialist institutions. Thus, although modern advocates of market socialism have succeeded in reintroducing the question of incentives and motivation, an issue of crucial importance for any discussion of alternative economic systems, back on the socialist agenda, in most other respects, their actual models seem to be more a sort of ‘inspired alchemy’ as Bardhan and Roemer (1993, p. 16) themselves in a self—critical comment indicate, than a ‘case for rejuvenation’ as the title of their article suggests (Bardhan and Roemer, 1992).

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