Schumpeter's Model of Socialism: Its Past and Future

John Willoughby

Introduction

Joseph Schumpeter's *Capitalism, Socialism, and Democracy* has remained relevant largely because of its provocative analyses of capitalist evolution, its skeptical treatment of representative democracy, and its critical but positive judgement of Marx's contributions to social thought (Schumpeter 2003). On the other hand, Schumpeter's actual discussion of socialism has attracted much less commentary for three reasons. First, his belief that the coming of socialism was almost inevitable has been refuted by our actual historical experience. Second, his lengthy treatment of the practices of European social democratic parties in the first half of the 20th century was not compelling even at the time the book was published. Third, his actual model of socialism was disconnected from either the Social Democratic or Soviet experiences of the mid-twentieth century.

This paper addresses the last aspect of Schumpeter's analysis of socialism. I argue that, despite its obscure characteristics, Schumpeter addresses an issue important for the consideration of any socialist alternative. How does one establish a system of social property ownership while constructing a reasonably efficient system of production and allocation? Not only is the question important, but the system which he proposed to solve this problem has now reappeared in the early 21st century as a new model for a participatory socialist future. Finally, one of the few economists to analyze Schumpeter's socialist vision was Friedrich von Hayek. He focused on the inherent inefficiency embedded in Schumpeter's model because of its failure to understand how economic information is generated and used in a market economy. This critique, in my view, still resonates today, and any new model of socialism must confront it.

I organize my argument in four sections before concluding. First, I outline the origins of Schumpeter's model and highlight the important work of one of the most creative economists of the mid-twentieth century, Oskar Lange. Second, I present Schumpeter's modification of Lange's indicative pricing model and note that Schumpeter ignores or marginalizes Lange's more egalitarian arguments while arguing forcefully for the viability of this system. In the third substantive section, I examine the 21st century rejuvenation of the Langean/Schumpeterian vision of socialism proposed by Michael Albert and Robin Hahnel. The final section returns to Hayek's critique of Schumpeter's proposal and considers the viability of non-market socialist alternatives in the 21st century.

Part I: The Origins of Schumpeter's Model of Socialism

Schumpeter developed his argument to respond to a forceful early criticism of socialism developed by Ludwig von Mises (Von Mises 1935). He asserted in the early 1920s that socialism is 'impossible' because without institutions of capitalist property ownership and markets, any society with a complex division of labor would collapse. Von Mises made this claim because he believed that without a system which permits the sale of capital goods and enterprises themselves, there would be no coherent way to discover the correct prices which could guide the efficient allocation of resources. As von Mises stated:

> Exchange relations between production goods can only be established on the basis of private ownership of the means of production. When the 'coal syndicate' provides the 'iron syndicate' with coal, no price can be found except when both syndicates are the owners of the means of production employed in their business. *This would not be socialization but workers' capitalism and syndicalism.* (my emphasis). (Von Mises 1935, 112.)

Schumpeter agreed with the last sentence of von Mises statement, that socialism requires the centralized ownership of the means of production, but he forcefully refuted the first claim in *Capitalism, Socialism, and Democracy* by essentially recapitulating the work of Oskar Lange, who in 1936 and 1937 published two influential articles critiquing von Mises in the *Review of Economics Studies* (Lange 1938). These articles, entitled "On the Economic Theory of Socialism drew on ideas developed by the American economist, Fred Taylor, who in 1929 gave an inaugural address as President of the American Economic Association on the viability of socialist management (Taylor 1938).

Lange is an important figure in the development of economic theory. He had clear Marxist sympathies and noted in this relatively early work that the effective establishment of socialism requires a revolutionary rupture which rapidly establishes the state ownership of the means of production (Lange 1938, 124). On the other hand, Lange also rejected Marx's labor theory of value and adopted the framework of neoclassical price theory to explore what he defined as the fundamental economic problem -- choosing between alternatives in an environment of scarcity (Lange 1938, 60).

In the case of socialism, the data on preferences for output can either be given by demand schedules of individuals or by administrative fiat while the relative costs of production depend on the constraints associated with different technologically determined production functions. Lange flatly asserted that the information problem for the capitalist entrepreneur is the same as one facing a socialist manager of an enterprise, and even if there is no market for the various assets which make up the means of production, one can construct a robust 'index of alternatives' which can lead to efficient production decisions (Lange 1938, 61).

The mechanism Lange proposed to obtain the appropriate information for efficient decision making assumes that a socialist economy will permit freedom of choice in consumption and freedom of choice of occupation. This requires a 'genuine market' for consumer goods and for labor services (Lange 1938, 73). Because no one receives property income from the ownership of productive resources of corporations, Lange argued that consumers receive income from two sources – the selling of labor services and the receipt of a lump sum dividend which constitutes "the individual's share in the income derived from the capital and natural resources owned by society." Lange 1938, 74). This institutional framework means that prices for consumer goods and labor costs will be generated in a way that is similar to the capitalist world. With respect to input prices for production, the Central Planning Board sets prices for these inputs and then commands the managers of the socialist enterprises to account for the use or resources so that the extra revenue generated by the selling of additional output is greater or equal to the extra cost of using the inputs.

If there is an imbalance in the proposed supply and demand of inputs, then indicative prices will be adjusted. Lange argued moreover that this trial-and-error procedure would work much better in a socialist economy than it would in a competitive economy because:

> the Central Planning Board has a much wider knowledge of what is going on in the whole economic system than any private entrepreneur can ever have, and consequently, may be able to reach the right equilibrium prices by a much shorter series of successive trials than a competitive market actually does (Lange 1938, 89).

Lange further claimed that this socialist system leads to a more efficient outcome than actually existing capitalism because there will be no monopoly pricing since all enterprise managers follow the same rule.

Lange's proposal is sometimes interpreted as market socialism, but this is incorrect. There is a market for consumer goods outputs and for labor services, and the input prices set by the tatonnement planners are derived from these markets, but Lange conceded von Mises' argument that social ownership of the means of production requires a non-market system for assets and inputs that contribute to production. One can imagine a system in which the major productive assets both are centrally owned and can be bought and sold by socialist managers striving to maximize profits for their enterprises. However, Lange never considered this alternative, which bears some resemblance to the Yugoslav experiments of the 1960s and 1970s. As we shall see, one can also shift the Langean system in the opposite direction and deploy non-market derived indicative prices for all goods and services produced in the economy.

Lange's two articles represent a triple critique – of Stalin's central planning system, of the monopoly capitalist order of the early 20th century, and of von Mises' argument that socialist economic management of an economy with a complex division of labor is impossible. Lange made the following comment about the material balances approach of the Soviet Union.

> The consistency of those decisions with the plan can be, instead, measured by fixing quotas of output and comparing them with the actual achievement (as is done in the Soviet Union). But there is no way of measuring the efficiency in carrying out the plan without a system of accounting prices which satisfies the objective equilibrium condition, for the rule to produce at the minimum average cost has no significance with regard to the aims of the plan unless prices represent the relative scarcity of the factors of production (Lange 1938, 94-5).

Lange's critique of the Soviet model is not just technocratic. He also endorses Abba Lerner's argument that freedom of consumer choice is necessary to fulfill "the ideals of the socialist movement." Indeed, Lange argues that, "The suppression of consumer choice would scarcely be tolerated by any civilized people (Lange 1938, 95)." Lange's views of the Soviet Union and the governance of both Lenin and Stalin are complex, but it would take us too far afield to explore this issue in any detail here. Nevertheless, it is clear that he and other economists of his era sympathetic to the construction of a socialist alternative were searching for a model compatible with individual choice, equality, economic efficiency, and democratic governance.

Part II: Schumpeter's Modification of the Langean System

It is not surprising that Schumpeter was attracted to Lange's proposal for socialism. He was a champion of Walrasian theory, and here was the most talented Marxist-influenced economist of his era basically embracing the general equilibrium method of economic coordination. He and Lange discussed these ideas at Harvard in the mid-1930s, and there is little doubt that these interactions affected the type of socialism which Schumpeter proposed in *Capitalism, Socialism, and Democracy*.

It is also not a shock that Schumpeter looked for a technocratic solution for the socialist regulation of the economy. According to him, the construction of socialism would be an elitist project. Workers might support the overcoming of the anarchic and unequal capitalist order, but Schumpeter felt that they did not have the ability to participate effectively in enterprise decision-making (Brosio 1994). Schumpeter in his discussion of socialism acknowledged that it might produce a more equal society, but his focus was not on the goals of socialism but on the form of economic regulation. Despite his worker sympathies, Lange's description of how socialism would work – which is clearer than Schumpeter's explanation of the marginal cost pricing model – does not consider the role of workers in managing the economy. Their voice in the economy is, like in the capitalist world, mainly mediated through the consumer goods market. Lange's insistence that social ownership of the means of production requires the state of ownership of wealth producing assets unites him uneasily with von Mises and Schumpeter.

To be fair, Schumpeter is less concerned with the actual form of property relations than he is with ways in which control over production and distribution is exercised. His definition of socialism emphasizes the centralization of authority over the economy rather than the social ownership of the means of production.

> By socialist society we shall designate an institutional pattern in which the control over means of production and production is vested with a central authority … (Schumpeter 2003, 150)

Since economic regulation of this sort is likely to be implemented by a group of specialized, highly educated workers, this allows Schumpeter to emphasize the hierarchical nature of the socialist project and subtly mock those who link socialism with egalitarianism. For Schumpeter, the political form of socialism are inherently indeterminate, just as capitalism is:

> It [socialism] may be aristocratic or proletarian; it may be a theocracy and hierarchic or atheist or indifferent to religion … (Schumpeter 2003, 153).

Beyond this difference in the political orientation of Schumpeter, he also distanced himself analytically in one other key respect. He rejected Lange's argument that the socialist economic model he described would be superior to an existing capitalist system. Here, Schumpeter left the world of the Walrasian theory of which he was a champion and noted forcefully that the general equilibrium model does not effectively describe how capitalism actually works. Schumpeter agreed that socialism might eliminate "the idle rich" and permit some static efficiency gains by suppressing misleading advertising and suppressing the business cycle, but he argued that it will not encourage the dynamic evolution of technologies – the disruption of creative destruction – associated with capitalism he lovingly analyzed.

Part III: An Egalitarian Langean Model of Participatory Socialism

More than five decades after Lange's and Schumpeter's indicative pricing socialism, Robin Hahnel and Michael Albert began to argue for a system of non-market coordination that required the participation of workers as both producers and consumers (Albert and Hahnel 1991). Hahnel eventually labeled this model 'participatory socialism' (Hahnel 2021). This system is designed to allow community and enterprise councils to develop production and consumption plans while being guided by indicative prices so that their choices are constrained by the need to stay with budget constraints (for consumers) and the need to produce positive value added (for producers). A group of planners or coordinators who reside in the 'Iteration Facilitation Board' collect this information and discover imbalances between supply and demand and then announce a new set of prices, which in turn requires workers and consumers to submit a new set of consumption and production proposals. Given modern information processing technologies, Hahnel anticipated that this iterative process would not be onerous. Indeed, he suggests that this would be a time for most of the population to enjoy vacations.

The abolition of an unregulated market altogether is anticipated by Schumpeter's modification of Lange's original proposal. While Lange argued that a market for labor services and consumer goods were essential for the functioning of socialism, Schumpeter described an alternative possibility in which planners just determined by fiat what goods should be accessible to consumers. In this scenario, there would be no market adjustment if there were excess demand of output. Presumably, the socialist planners would also develop rationing schemes to ensure the predictable allocation of scarce goods.

Hahnel's proposal is committed to principles of neoclassical efficiency. Quantity supplied should equal quantity demanded in each sector of the economy, and workers and consumers should be free to attempt to work where they wish to acquire the goods they want. This proposal is similar to one proposed by Dan Saros, and in a review of his book several years ago, I labeled this an Amazon socialist model (Saros 2014; Willoughby 2018). Consumers choose from a wide variety of goods posted online and put in their orders, and presumably many of the use values are delivered to the household's doorstep. One can imagine a number of environmentally sustainable socialist drone enterprises emerging to facilitate the distribution of goods to their socialist customers.

Part IV: The Specter of von Mises and The Hayekian Response to Indicative Pricing Socialism: The Role of Information in Socialist Models

Oskar Lange developed his model of socialism to refute the Austrian critique that socialism was impossible. Schumpeter endorsed this perspective even though he presented himself as a disinterested observer of social evolution rather than a full-blooded advocate of a particular economic system. Such an approach rhetorically added force to his argument.

It was not difficult to refute von Mises' initial critique of socialism because of its extreme formulation. Hayek does not state a system of centralized control of economic life cannot exist. Rather, he asked skeptically whether a centralized authority can carry out the task of allocating goods and services "with a reasonable degree of accuracy, with a degree of success equalizing or approaching the results of competitive capitalism …" (Hayek 1935A, 17). This statement mirrors Lange's and Schumpeter's problematic: Can socialism be an efficient system? Lange and Schumpeter answer in the affirmative; Hayek in the negative.

There are aspects of Hayek's critique which seem deranged. He claimed, for example, that any planning intervention by the government "will necessitate further and further measures of control until all economic activity is brought under the control of the state." This statement anticipates the arguments developed by Hayek in *The Road to Serfdom* (Hayek 2007) but given the experience of state-led investment projects by the United States government to support its military-industrial complex or by France in its energy sector, it is clearly incorrect. Hayek lived long enough to know this, but he always seemed to suggest that either we have unregulated capitalism or the apocalypse.

Despite these Manichean sensibilities – oddly reminiscent of many Marxist theorists – Hayek's focus on the complexity of information problems remains salient. He questioned the validity of the Walrasian model both empirically and theoretically and thus cast doubt on Schumpeter's advocacy of it. Can designers of a new socialist order replace or modify the market-generated price system with indicative prices or 'indicators of importance' which can effectively guide resource allocation? This is the key question facing proponents of the Lange, Schumpeter, or Hahnel model.

Hayek's negative answer to this question rests on the following arguments. First, he stated that while it might be theoretically possible to adjust prices to achieve equilibrium in a virtual economy described by equations, the amount of information required to actually perform this task would be overwhelming. Part of the reason he makes this claim is his view that the ways in which economists and statisticians aggregate economic processes to describe the fundamentals of price formation obscure the essential particularity of many economic interactions. With respect to the price of a machine tool, for example, Hayek argued that:

> …. It will be necessary to treat every machine tool, or building not just as one of a class of physically similar objects, but as an individual whose usefulness is determined by it particular state of wear and tear, its location and so on. The same applies to every batch of commodities which is situated at a different spot or which different in any other respect from other batches (Hayek 1935B, 209)

The implication of this analysis is that only face-to-face interactions between buyer and seller can establish the price for many key commodities.

Hayek's criticism of the Langean model and Schumpeter's endorsement of it most probably led to his further work on problems of information. In 1945, he argued convincingly that practical economic knowledge is decentralized and cannot be known by any economic planner or statistical agency (Hayek 1945). He deployed this insight to critique Ca*pitalism, Socialism, and Democracy* directly.

> [Schumpeter] is preeminent among those economists who approach economic phenomena in the light of a certain branch of positivism. To him these phenomena ---- appear as objectively given quantities of commodities impinging directly upon each other, almost it would seem without any intervention of human minds ….
>
> Only to a mind to which all these facts were simultaneously known would the answer necessarily follow from the facts given to it. The practical problem, however, arises precisely because these facts are never given to a single mind, and because, in consequence, it is necessary that in the solution of the problem [of allocation] knowledge should be used that is dispersed among many people (Hayek 1945, 530).

Conclusion

There are aspects of Hayek's critique which betray a misunderstanding of the indicative pricing model. The above quote states that the planner or coordinator must have full knowledge of the technological choices facing each enterprise. This claim is not correct. The central authorities change prices to balance quantity supplied and quantity demanded. That is their only task. Such as effort does not require intimate detail of each firm's potential technological capabilities. On the other hand, Hayek's emphasis on the inherently decentralized nature of price formation should give pause to those who advocate the centralized regulation of prices.

One result of Schumpeter's discussion in *Capitalism, Socialism, and Democracy* is the further consolidation of a twentieth century model of socialism which explicitly rules out a property rights system of decentralized social ownership. Schumpeter dismissively labels alternatives to capitalism which explicitly embrace workers' self-management or the formation of worker's cooperatives as impractical 'guild socialism'. Von Mises, Lange, Hayek, and Hahnel agree. Socialism, in their mind, requires some form of central regulation. While Schumpeter's indicative pricing model is disconnected from the actual practices of Social Democracy and the Soviet System that Schumpeter could observe, it does share with them a statist orientation. The prices or indicators of importance which guide resource allocation must come from a central authority.

Since the writing of *Capitalism, Socialism, and Democracy* and especially since the collapse or withering away of the Soviet system of economic regulation, there has been renewed interest in market socialism or heterogenous systems of control which subordinate or align market-based systems of resource allocation to democratic economic planning. In Lange's original discussion of socialism, he advocated a heterogeneous system of family-run farms, privately-owned small enterprises, and state-owned property. There is no reason why this framework could not be expanded to include other forms of social ownership and a further circumscribing of state-regulated price formation. Similarly, Robin Hahnel's most recent discussion of democratic economic planning models is compatible with market or non-market systems of resource allocation.

The most important contribution of Schumpeter's analysis is his presentation of a model of socialism that did not simply replicate actual historical practices. By reintroducing the 1930s indicating pricing model to a no-doubt bemused general reading public, he kept alive the Langean alternative just as Soviet systems of economic control began to spread. Because of this inadvertent timing, Schumpeter signaled that socialism could take many different forms. This is a useful starting point for the reconstitution of the socialist project in the 21st century.

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