Keynesian economics; it is only a matter of time before he is nominated for the Nobel Prize in Economic Science.

Whither Socialism? is based on his Wicksell Lectures presented at the Stockholm School of Economics in 1990. It provides a convenient and well-written summary of the central themes of the new information economics, and for that reason alone should attract the few uninitiated economists who have so far hesitated reading the new literature.

The book's provocative title, however, should also attract a broad readership, especially those interested in the big questions of comparative political economy and the burning problems of socialist transformation. At a time when we have witnessed the collapse of socialist regimes across Eastern Europe, Stiglitz confidently suggests that socialism might be resurrected by first formulating a more appropriate understanding of both socialism and capitalism. Thus, he jumps right into the midst of the great debate concerning the future of capitalism and the possibility of any real socialist alternatives.

Stiglitz argues in Chapter 2 that market socialism failed in Eastern Europe because it was based on a faulty model, that of Oskar Lange and Abba P. Lerner. And the reason why the Lange-Lerner model was faulty is that it was founded on a notion of general economic equilibrium that (at least implicitly at the time of the socialist calculation debate) required Arrow-Debreu notions of a complete set of perfectly competitive markets—not only spot markets but futures markets as well. If Arrow-Debreu really describes the capitalist system, Stiglitz argues, it would also provide an empirically feasible case for market socialism, if not outright central planning. But, writes Stiglitz (p. 24):

Casual observation would suggest that market socialist economies are not identical to capitalist economies, not even remotely so. The model of market socialism underlying that theorem is seriously flawed.

But our contention is that it is equally important to observe the model of the market economy—underlying not only that theorem but also the fundamental theorems of welfare economics—is seriously flawed. With a bad model of the market economy and a bad model of the socialist economy, no wonder that any semblance of the equivalence of the two could, at most, be a matter of chance.

Stiglitz then examines the standard model's welfare claims, reacquainting us in Chapter 3 with the now well-known Greenwald-Stiglitz theorems that demonstrate that a world with imperfect information (leading to incomplete markets, moral hazard problems, and so on) vitiates the First Fundamental Theorem of Welfare Economics: the purely free market can *never* reach a constrained Pareto optimum under such conditions, but government intervention can *potentially* create Pareto improvements in the economy. In Chapter 4 he calls into question the Second Fundamental Theorem, which otherwise establishes a general case for decentralization of the economy, by raising further questions about the

prevalence of nonconvexities and externalities (including in some cases what are otherwise considered mere pecuniary externalities).

Stiglitz further explores those criticisms by discussing how, contra Arrow-Debreu, decentralized plans are often coordinated by more than prices in actual capitalist economies (Chapter 6), that the presence of rents, significant sunk costs, strategic barriers to entry, and so forth all call into question the Arrow-Debreu concept of competition (Chapter 7), and finally, in Chapter 8, that the Arrow-Debreu concept of a complete set of markets (including forward markets for each commodity) leaves out the entire question of innovation. In Chapter 11, "The Socialist Experiment: What Went Wrong?," Stiglitz argues that the theoretical limitations of the Arrow-Debreu model (and, thus Lange-Lerner) go a long way toward explaining why the market-socialist experiences in Eastern Europe failed.

Theoretically, Stiglitz's negative assessment of the mainstream general equilibrium model is formidable, and it does indeed amount to a (non-Austrian) rejection of the celebrated Lange-Lerner "solution." But Stiglitz is empirically weak. His interpretation of market socialism in Eastern Europe, such as Hungary, is colored, if not blinded, by the Lange-Lerner spectacles: he seems to believe that those experiences were an application or "adaptation" of the Lange-Lerner model. Perhaps it is convenient for an economist, especially with high opportunity costs of his time, to interpret the complex historical record in this light, but misplaced concreteness surely carries a scholarly cost.

Given Stiglitz's negative critique, it comes as no surprise that the standard Arrow-Debreu model has little if anything to say about current socialist transformation, because it is not a model that can deal with dynamic transition problems. Stiglitz, accordingly, offers his own tentative policy advice in Chapter 15, based on the new information economics established by the Greenwald-Stiglitz theorems. But, despite Stiglitz's hope of establishing a new "paradigm" in economic theory, his own application of the new information economics to transition issues is purely mainstream: state economic policy should minimize barriers to entry, establish general and credible rules of the game (which includes hard budget constraints and meaningful profit-loss measures), keep a check on inflation, change the incentive-structures of management (perhaps before encouraging full-blown privatization) and, finally, take the opportunity to create a more equal distribution of wealth from the start, a sort of "people's capitalism." Outside of a couple of Austrian and renegade neoclassicals who call for anarcho-capitalistic shock therapy in Eastern Europe, most neoclassical economists nurtured on Arrow-Debreu theorems generally would agree with Stiglitz's recommendations. Moreover, Stiglitz's theoretical differences with the mainstream do not make much of a policy difference for East European transition economies. What, then, are we to make of his book?

In terms of a debate about technical economics, free-market economists will find Stiglitz's book both challenging and frustrating. They should be

challenged by Stiglitz's thoroughgoing critique of the perfectly competitive model of capitalism. To the extent that they believe the perfectly competitive model describes, or can describe, actual or future capitalist economies, neoclassical economists invite Stiglitz's criticisms, and they should rise to the challenge by providing both formal and empirical research to the contrary. Austrians, on the other hand, will be irritated if not frustrated by Stiglitz's occasionally questionable interpretations of F.A. Hayek (pp. 24, 273) and especially his tendency to lump Austrian efficiency arguments together with those of their free-market neoclassical brethren (p. 43). Austrians will probably maintain that Stiglitz's argument is "really" against neoclassical general equilibrium modeling and its corresponding welfare claims, but, as I have tried to demonstrate elsewhere (Prychitko 1996), Austrians often import capitalist-efficiency arguments from their neoclassical colleagues, and thus unwittingly invite their own frustration: yesterday Lange, today Stiglitz.

Yet the book hopes to move well beyond the narrow confines of technical economic theory, as its title implies. Stiglitz himself is trying to join the broader dialogue in political economy, and wonders at the end of the book "whether the insights of modern economic theory and the utopian ideals of the nineteenth century can be brought closer together?" (p. 277). But it is precisely here that Stiglitz invites criticism, not so much because he wants to save some socialist ideals (incredibly, however, through a "people's capitalism" [p. 265]), but rather because of his unexamined presuppositions regarding how to do so.

In Chapter 13, "Asking the Right Questions," which anticipates his policy proposals, Stiglitz insists that we should not ask whether or not the state has a role to play in the economy, but rather how large a role, and in what specific tasks (p. 231). For Stiglitz, the problem is posed correctly only when we seek an "appropriate balance between markets and government" (p. 267). Stiglitz offers no historical or comparative-institutional reasons about the nature of the modern state, nor does he bother to cite the classic analysis of Joseph Schumpeter (1918) or the contemporary arguments of Claus Offe (1984) to support his claim. No, Stiglitz formally demonstrates the potential efficiency-enhancing properties of the state based on the Greenwald-Stiglitz theorems, and comfortably believes that solutions to our worldly problems (and, apparently, the flourishing of certain utopian ideals) can become illuminated by formulating a new set of mathematical theorems to replace the old theorems of Arrow-Debreu and Lange-Lerner (pp. 4–6, 231–32).

To his credit, Stiglitz mentions that economics must be recast as something more than a constrained maximization problem, but his own alternative—a mathematical theorem that encompasses more complex, nonlinear vectors—nevertheless remains encrusted in an unexamined formalism essentially the same as that of the neoclassical economists he criticizes. This becomes more troubling if Stiglitz hopes to break beyond mere intellectual puzzling about the world and tries to use his models to

change the world. I suggest that Stiglitz reacquaint himself with Hayek's discussion of scientism (Hayek 1979), delve into Jurgen Habermas's (1974) discussions of the problems linking abstract theory with feasible practice (especially because he hopes to answer the Big Questions with mathematical models), and review Offe's (1985) examination of the logics of state planning in the market complex. As a contribution to the cause of salvaging socialist-utopian ideals, Stiglitz's project has to inform itself with the best of that literature.

Finally, if Stiglitz's main insight is generally correct—that the state cannot be ruled out (or, in his case, that it should be ruled in)—then he cannot continue to ignore the grand constitutional questions: How will the coercive institutions of the state be constrained? What is the relation between the state and civil society? He cannot continue to ignore the crucial questions regarding both the state's power to enforce rights, and the rights of the state-collectivity itself. His book fails to persuade as a project in contemporary political economy because it does not seriously address the broader constitutional concerns that James Buchanan (1975) and other economists have raised.

In sum, Whither Socialism? is a fine, informal presentation of the technical themes in the new information economics, written by the best in the field. It could serve as a supplementary text for courses in industrial organization and strategy and in comparative economic systems, suitable for advanced undergraduates. Despite its great merits, however, I think the book has not come to terms with the fundamental historical, political, and philosophical issues implied by its own provocative title. One might retort, of course, that, as brilliant as Stiglitz is, he is just an economist and cannot be expected to address all the difficult interdisciplinary issues. True, but by casting his discussion in terms of the great socialist transformations of our age, and fostering the hope of constructing a new and feasible socialist model that retains powerful utopian ideals, Stiglitz, I fear, is simply wrapping formal, abstract economics in a cloak of radical political-economic change. It is much more fun to read technical economics in this way, but Whither Socialism? remains quite mainstream in its core and in its vision.

> David L. Prychitko SUNY-Oswego

## References

Buchanan, J.M. (1975) The Limits of Liberty: Between Anarchy and Leviathan. Chicago: University of Chicago Press.

Habermas, J. (1974) Theory and Practice. Boston: Beacon Hill.

Hayek, F.A. (1979 [1952]) The Counter-Revolution of Science. Indianapolis, Ind.: Liberty Classics.

Offe, C. (1985) "The Divergent Rationalities of Administrative Action." In C. Offe, Disorganized Capitalism: chap. 10. Cambridge, Mass.: MIT Press.

- Offe, C. (1984) Contradictions of the Welfare State. Cambridge, Mass.: MIT Press.
- Prychitko, D.L. (1995) "The Critique of Workers' Self-Management: Austrian Perspectives and Economic Theory." In P.J. Boettke and D.L. Prychitko (eds.) Advances in Austrian Economics, Vol. III. Greenwich, Conn. JAI Press.
- Schumpeter, J.A. (1991) "The Crisis of the Tax State" (1918). In R. Swedberg (ed.) Joseph A. Schumpeter: The Economics and Sociology of Capitalism. Princeton, N.J.: Princeton University Press.