*Journal of Economic Perspectives—Volume 7, Number 1—Winter 1993—Pages 109–114*

# Post Walrasian and Post Marxian Economics

Joseph Stiglitz

It is widely believed that the failure of the socialist experiment should have had a devastating effect on radical economics. Yet radical economics is not only alive and well, but flourishing, as the paper by Bowles and Gintis demonstrates. Years before the official demise of Marxist-socialism, they had broadened their critique of standard economics well beyond the received Marxist literature. Indeed, their arguments offered striking parallels with the mainstream critiques of Walrasian economics provided by the newly developing strand of thought which, for brevity, I shall refer to as "information economics."

The fundamental insight of information economics is to view the neoclassical model as one that makes a particular assumption: that prices affect only quantities, and that prices carry no information which might affect incentives or sorting. In Walrasian economics, information is free. Moreover, there are no costs associated either with making or enforcing contracts. But with imperfect and costly information and incomplete risk markets, the field of information economics has established that: 1) in general, markets are not (constrained) Pareto efficient;[1] 2) markets may not clear; 3) markets may not exist, or when they exist, may be thin; 4) rents are pervasive, and indeed, reputation rents are necessary to ensure that high quality products get produced, that workers do not shirk, and so on; 5) even when there are many participants in a market, competition may be highly imperfect; 6) the distribution of income matters for

[1]The term "constrained" is simply added to remind the reader that in asking whether there are any government interventions which could make some individuals better off, without making anyone else worse off, information and marketing costs and constraints parallel to those facing the market are taken into account.

■ *Joseph Stiglitz is Professor of Economics, Stanford University, Stanford, California.*

economic efficiency; the neat dichotomy between distribution and efficiency that characterized neoclassical economics is not, in general, valid.[2]

Of the many reasons that information economics has identified that markets "fail," Bowles and Gintis focus on what they call "contested exchange"—the problems that arise because monitoring and enforcing contractual relationships is costly. They provide a clear and intuitive discussion of why the resulting resource allocations may be inefficient; for instance, firms do not distinguish between real resource expenditures that enhance contract enforcement and rent payments, but society should. But it is important to recognize that there are a much richer set of information problems.

Though they do not couch their analysis in the standard form of "constrained Pareto optimality," it is clear that their arguments can be (and have been) made more precise.[3] These are not just theoretical niceties: as Shapiro and Stiglitz (1984) have pointed out, it may be Pareto efficient to provide unemployment insurance, but such insurance will not be privately provided by employers. The welfare consequences of such market failures may be significant.[4]

In several respects, Bowles and Gintis do not push their arguments concerning the revenge of *homo economicus* far enough. They focus on traditional concerns of the exploitation of workers by capitalists, but fail to note what may be a more relevant problem arising in the modern theory of the firm: the problem that because of public good and information problems, shareholders (capitalists) exercise very limited discipline over managers. Managers have considerable discretion, and considerable evidence suggests that they use that discretion to enhance their own interests, often at the expense of shareholders. After all, isn't this what rational, self-interested individuals are supposed to do?

There is a certain irony in all of this: in a world where a handshake is a handshake, in which individuals *irrationally* did not take advantage of each other, there would be no need for reputational rents, and the price mechanism would come closer to producing neoclassical efficiency. The more ruthlessly individuals pursue their self-interest—the more they behave as we economists

[2]Those interested in reading more about these results might begin as follows: on the first point, Greenwald and Stiglitz (1986); on the second, Stiglitz (1987); on the third, Akerlof (1970); on the fourth, Shapiro (1983), Shapiro-Stiglitz (1984), Klein and Leffler (1981), Stiglitz (1989); on the fifth, Diamond (1971), Salop (1977), Salop and Stiglitz (1977), Stiglitz (1989); and on the last point, Shapiro and Stiglitz (1984) and Stiglitz (1987).

[3]See Greenwald and Stiglitz (1986), Shapiro and Stiglitz (1984) and Ordover and Shapiro (1984).

[4]The information economics paradigm is, of course, closely related to the transactions costs paradigm; indeed, information costs can be viewed as one of the more important categories of transactions costs. But Williamson, perhaps the best-known advocate of a transactions cost view, takes a position of unwarranted optimism. He holds that institutions emerging from the competitive process will be "comparatively" efficient. But compared to what? Surely a voluntarily signed contract improves the lot of both parties, but that does not demonstrate that the general equilibrium of the economy is Pareto efficient. The theorems referred to earlier, establishing that markets are not constrained Pareto efficient, show that there is no general basis for Williamson's assertion.

teach our students they do behave—the less efficient, in a sense, is the economy.

In one form, this point is hardly new. The prisoner's dilemma taught economists that there might be equilibrium in which cooperation would be far better than rational pursuit of self-interest. However, these "small group" interaction problems did not arise in competitive market economies. What is new in the analysis of contested exchange is the recognition of the pervasiveness of these problems, even in markets in which there are many participants on both sides: as Bowles and Gintis point out, the standard theory simply assumed that contracts would be adhered to, or could be costlessly enforced.[5]

But if they do not push their argument far enough in some directions, they go too far in others. There are good economic reasons, beyond the exercise of "power" (whatever that much-used term means) for the existence of hierarchical relationships.[6] Bowles and Gintis are correct that issues of efficiency and equity cannot be separated, and that there are circumstances in which redistributions of wealth can increase economic efficiency: redistributions of land that have allowed a switch from sharecropping to owner-tiller farming have increased incentives for farmers and led to increased productivity. But some redistributions of wealth may increase agency problems and reduce economic efficiency. For example, increased taxes on corporations may reduce the firm's equity base; information problems may make it difficult (costly) for firms to raise an offsetting amount of equity in the capital market; and the reduced equity base may reduce firm's willingness and ability to undertake risky actions. To make a giant leap from theory to practice: Korea's remarkable economic growth over the past three decades was based on large corporations, with highly concentrated ownership claims. It seems very unlikely that redistribution of these corporate assets would have helped Korea grow even faster.

In one aspect, Bowles and Gintis provide a more basic critique of standard economics, including the strands of literature to which I referred earlier: the standard theory begins with the assumption of fixed preferences, unaffected by the social context.[7] It approaches problems from the perspective of the individual ("methodological individualism"). Simon (1991) has provided a convincing case that agency problems are often overcome best by attempting to change the preferences of workers, making them "identify" with the firm with which they

[5]There are other reasons that their criticism of the Walrasian model is too narrow; for instance, as is now widely recognized, the Walrasian model ignored coordination problems, or more accurately, focused only on those situations where what coordination was required could be attained through the price system.

[6]See, for instance, Sah and Stiglitz (1986) for a discussion of the circumstances under which hierarchical decision–making has advantages over polyarchical decision–making.

[7]Akerlof's work has, perhaps, been among the more influential of those trying to break out of the straitjacket imposed by methodological individualism. See, for example, his papers on gift exchange (1982) and on fair wages, Akerlof and Yellen (1988). More recently, important strands in game theory have focused attention on norms and convention equilibrium. In this journal, for instance, see the "Symposium on Social Norms" in the Fall 1989 issue.

work, and that successful firms manage to do this. How work is organized may not only affect the productivity of workers, but how they view themselves and their world, and how they behave outside the work place.[8]

The issue has not been wholly ignored by standard economic theory, which has long discussed one aspect of endogenous preferences: advertising (for example, Schmalansee, 1982). In addition, while standard subjective utility theory took the probabilities of different states as exogenous; making them endogenous induces a form of endogenous preferences, which has been the subject of extensive study. There have been other contributions to the theory of endogenous preferences (for example, von Weizsacker, 1971).

But what is at issue in the formation of such preferences is far more complicated, and more subtle, than the kinds of changes that Bowles and Gintis discuss in terms of worker cooperatives. While these cooperatives have been remarkably successful in a few instances, in other cases they have been utter failures. Changing the ownership structure appears neither necessary nor sufficient.

Alfred Marshall once wrote that "... highly paid labor is generally efficient and therefore not dear labour; a fact which though it is more full of hope for the future than any other that is known us, will be found to exercise a very complicating influence on the theory of distribution." Marshall was right; and we now recognize some of the important ways in which it has changed standard economic analysis. Similarly, it is clear that endogenizing preferences will "exercise a very complicating influence" on standard theory; but whether it is similarly "full of hope"—or even of important new insights—is a question which remains to be answered.

While radical economics has provided a critique of economic theory, it has been more concerned with presenting a critique of capitalism. It is not just that markets do not provide a constrained Pareto efficient outcome—though that is a welcome first step in the critique—but that capitalism is fundamentally flawed. Mainstream economists have not only found concepts like exploitation and power to be useless in explaining economic phenomena, but they worry about introducing such emotionally charged words into the analysis. But that is presumably precisely why the radical economists choose to use such words: they want the analysis to motivate action.

It is in their implicit or explicit policy prescriptions that radical economists fail to make their case. The contention that markets are not constrained Pareto

[8]There is a sense, then, that the traditional conception of *homo economicus* does not provide an adequate characterization of homo sapiens, even for the relatively narrow aspect of life upon which economists focus. It has long been widely recognized that individuals are motivated by a much wider range of concerns than simple self-interest. Not only may non-self-interested behavior—altruism—be important, but so too may be other characteristics, like "cooperativeness," "social approval," and so forth. While evolutionary theory may discuss how these characteristics evolved and whether, under capitalism, they have "survival value," there is a much more immediate concern: how do they affect economic behavior, or what do they imply about how we should design economic organizations?

efficient does suggest a role for government, but even that needs to be qualified: the theorems have little to say about whether actual governments can undertake the appropriate roles. Moreover, proving that markets are imperfect does not necessarily imply anything is radically wrong with the capitalist system.

Keynes's far more fundamental criticism of capitalism, arguing that there could be extended periods of unemployed, was conservative in the end; it said that one of the worst problems of capitalism—the periodic episodes of massive underutilization of its physical and human resources—could be reduced. The neoclassical synthesis that followed was not a theorem, not even a logical proposition; it was no more than dogma that, once the massive market failure of recessions and depressions had been cured, all was well with capitalism. Economists now understand better why the economy may have recessions; and we understand that the same forces, limiting the efficiency of the economy in less dramatic forms, may operate at other times as well. The analysis has identified a number of interventions in the market which may make markets work better.

Economists are also now aware that capitalism may take on a number of different forms: the institutional structure of Japan differs markedly from that of the United States. Some of the differences are related to how effectively information problems (including agency and government problems) are dealt with.

The ideas of contested exchange, as well as other developments in modern economic theory, including those associated with the "economics of information," have necessitated major changes in economists' view of the economy: as Bowles and Gintis correctly point out, post-Walrasian economics is markedly different from Walrasian economics.

But it remains more problematic whether the theory of contested exchange, or the other information-based theories, necessitate a more radical alteration of economic structures. The critique of information economics can also be interpreted in more conservative terms—that while markets are imperfect, the appropriate response is a limited reliance on a relatively small number of well-designed government interventions, taking into account the limitations of government, including its limited information, with each intervention carefully aimed at a particular market failure. At the very least, the case for radical alteration of the economy or the views of mainstream economists remains unproven.

## References


**Akerlof, George A.,** "The Market for Lemons: Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, August 1970, *84*:3, 488–500.

**Akerlof, George A.,** "Labor Contracts as Partial Gift Exchange," *Quarterly Journal of Economics*, November 1982, *97*:4, 543–69.

**Akerlof, George A. and Janet L. Yellen,** "Fairness and Unemployment," *American Economic Review*, May 1988, *78*:2, 44–49.

**Diamond, Peter A.,** "A Model of Price Adjustment," *Journal of Economic Theory*, June 1971, *3*:2, 156–68.

**Greenwald, Bruce C. and Joseph E. Stiglitz,** "Externalities in Economies with Imperfect Information and Incomplete Markets," *Quarterly Journal of Economics*, May 1986, *101*:2, 229–64.

**Klein, Benjamin and Keith B. Leffler,** "The Role of Market Forces in Assuring Contractual Performance," *Journal of Political Economy*, August 1981, *89*:4, 615–41.

**Marshall, Alfred,** *Principles of Economics*. 8th Edition, London: Macmillan 1920; in *Journal of Economic Literature*, March 1987, *25*:1, 2.

**Ordover, Janusz A. and Carl Shapiro,** "Advances in Supervision Technology and Economic Welfare: A General Equilibrium Analysis," *Journal of Public Economics*, December 1984, *25*:3, 371–89.

**Sah, Raaj-Kumar and Joseph E. Stiglitz,** "The Architecture of Economic Systems: Hierarchies and Polyarchies," *American Economic Review*, September 1986, *76*:4, 716–27.

**Salop, Steven,** "The Noisy Monopolist: Imperfect Information, Price Dispersion and Price Discrimination," *Review of Economic Studies*, October 1977, *44*:3, 393–406.

**Salop, Steven and Joseph E. Stiglitz,** "Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion," *Review of Economic Studies*, October 1977, *44*:3, 493–510.

**Schmalansee, Robert,** "Advertising and Market Structure." In Mathewson, G. F., and J. E. Stiglitz, eds., *New Developments in the Analysis of Market Structure*. Cambridge: MIT Press, 1982, 373–90.

**Shapiro, Carl,** "Premiums for High Quality Products as Returns to Reputations," *Quarterly Journal of Economics*, November 1983, *98*:4, 659–79.

**Shapiro, Carl and Joseph E. Stiglitz,** "Equilibrium Unemployment as a Worker Discipline Device," *American Economic Review*, June 1984, *74*:3, 433–44.

**Simon, Herbert A.,** "Organizations and Markets," *Journal of Economic Perspectives*, Spring 1991, *5*:2, 25–44.

**Stiglitz, Joseph E.,** "The Causes and Consequences of the Dependence of Quality on Price," *Journal of Economic Literature*, March 1987, *25*:1, 1–48.

**Stiglitz, Joseph E.,** "Imperfect Information in the Product Market." In Schmalensee, Richard and Robert D. Willig, eds., *Handbook of Industrial Organization*. Vol. 1, Handbooks in Economics, no. 10. Amsterdam, Oxford and Tokyo: North-Holland; U.S. and Canada: Elsevier Science in New York, 1989, 769–847.

**von Weizsacker, Carl Christian,** "Notes on Endogenous Change of Tastes," *Journal of Economic Theory*, December 1971, *3*:4, 345–72.