BOOK REVIEWS

Perfect Competition and the Transformation of Economics

Frank M. Machovec

London: Routledge, 1995, 391 pp.

Rarely does a book have the power to improve economists' fundamental vision of their subject. Frank Machovec's *Perfect Competition and the Transformation of Economics* is such a book. We've all seen dramatic testimonials on the covers of popular novels: "It grips the reader from the first page...can't put it down...a real page-turner." Most economists will feel the same about Machovec's work. It is genuinely exciting, one of the most important works in economics published in the past 10 years.

Machovec's thesis is that the profession's embracing of perfect competition constituted a Kuhnian revolution in which, tragically, the superior conception of competition as rivalry was overthrown. He establishes, first, that rivalrous competition dominated economics from the classical period to the early 20th century but that perfect competition dominates it now. This demonstrates that those who perceive a smooth continuum, incorrectly identifying classical competition as a crude attempt at perfection, misread doctrinal history and that a revolution did in fact occur. He then argues that, in several respects important to both theory and policy, the consequences of this revolution have been disastrous and that a return to rivalry and the method it requires would much improve our subject.

Readers acquainted with some controversies in the history of macroeconomic doctrine may notice a parallel. Although Kuhn wrote about the physical sciences, economists quickly applied his thesis to Keynesian macroeconomics. But what did this revolution overthrow? W. H. Hutt (1979) in *The Keynesian Episode*, Leland B. Yeager (1973) in "The Keynesian Diversion," and a number of other writers, including Henry Hazlitt, Ludwig von Mises, and Arthur Marget, have argued that pre-Keynesian theory was superior to that which replaced it. They perceived the reemergence, from the Keynesian morass, of pre-Keynesian truths, and predicted that the profession would eventually look back on "the Keynesian episode" with shame and embarrassment.

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Neither these writers in monetary theory, nor Machovec in the theory of markets, yearn for a return to Adam Smith. Many advances had improved each field by the early 1900s, but both the macro and the micro states of the art (value theory excepted) were within the spirit of the classical conceptions. In this century's early decades, however, received doctrine was overthrown—consciously by Keynes and his young followers, unwittingly by those who misidentified rivalrous competition as a crude and bumbling effort to describe perfect competition. To the extent that they share a methodological cause, it is not coincidence that these revolutions occurred almost at the same time. In any case, each diverted generations of brilliant and hard-working economists into theoretical structures that hindered genuine advance, and one can share Hutt's (and Machovec's) convictions that, had these scholars not been hobbled by misleading paradigms, we would have avoided costly errors of policy and theory and be richer and smarter than we are.

Hutt and Machovec share the attributes of scholarship warmly received by the modern Austrian School, yet neither identifies himself as "an Austrian economist," each viewing his work as continuing and perhaps reestablishing the classical tradition. As Machovec puts it, "Austrian economists see the market process much as the classical economists saw it" (p. 22). If they are right, Frederick Nymeyer (1960), the American publisher of Bohm-Bawerk, was correct to advertise the Austrian School as "neoclassical," and what we know today as "neoclassical" should more accurately be considered neo-Ricardian, neo-Cournotian, or neo-Walrasian.

The book's exciting "real page-turner" character is partly attributable to Machovec's courage. He doesn't just argue that the prevailing history of the theory of competition is wrong; he forcefully maintains that the older paradigm, overthrown and largely discarded, is superior. This review will consider his history of the theory of markets, then turn to his positive case for a reestablishment of rivalry.

Machovec illustrates that a popular and perhaps dominant belief interprets perfect competition as the result of many decades of evolutionary refinement of the classical concept of competition, an understandably primitive version of it. As evidence for this reading of the classical concept, one thinks of classical writers' concern with long-run zero-profit equilibria (like Smith's "natural price"), their opposition to "monopoly," the implicit assumption of perfect knowledge in their "law of one price," their general belief in laissez-faire, and their muted role for the entrepreneur. The modern neoclassical economist, typically undertrained in the history of his subject and susceptible to evolutionary theories of the growth of knowledge, is likely to accept this evidence casually and generously as confirmation of something he wants to believe.

These interpretations, Machovec explains, are unwarranted. Some result from the mistaken application of modern meanings to a period in which the same words were used differently. The simplest example is that Smith's disapproval of "monopoly" was of illegitimate government

privileges, not of downward-sloping demand curves (p. 16). As for laissezfaire, the modern theorist might be able to justify it on welfare grounds only under perfect competition, inferring that classical advocates unknowingly presupposed perfect competition. But laissez-faire is also consistent with, and more easily and strongly supported from, a rivalrous perspective.

Machovec defends classical economists' concern with long-run equilibria, but emphasizes their explanations of the active interplay by which equilibria are approached. He reminds his readers that every prominent Austrian economist—even Ludwig Lachmann—has acknowledged the importance of the analysis of equilibrium (p. 21).

Chapters 4 and 5 are devoted to proving that entrepreneurship and uncertainty were central to the British classical conception of competition, even if the entrepreneur was "more prominent and better developed in the Continental texts" (p. 136). Machovec's evidence for those attributes of competition and the institutions associated with them seem somewhat strained at times. In his discussion of Mill's social philosophy, for example, Machovec does not make it immediately clear that his discussion is intended to illustrate Mill's understanding of incentives and the superiority of general rules over designed outcomes in coping with uncertainty.

The rivalrous paradigm constituted Kuhnian "normal science" until the 1920s. There is no doubt that it was overthrown; but if Machovec is to associate that overthrow with *The Structure of Scientific Revolutions* (Kuhn 1970), he should identify the real or imagined errors—or the important outcomes incapable of explanation—in the prevailing paradigm. He does not do so, perhaps because (in this reviewer's judgment) the revolution was more a matter of methodological taste than of any substantive dissatisfaction with rivalry.

Although Keynesians thought (wrongly) they were dismissing a flawed theory filled with holes and errors, the motivation for perfect competition was the mathematical method. Encouraged by the discovery of some overlap between the conclusions of old-fashioned rivalry and the solutions to equations, economists embraced the modern age and, without much regret, brushed aside those aspects of the preceding paradigm that could not readily fit the new method. I don't know if Machovec would buy this interpretation; he identifies himself as "an unequivocal supporter of the value of formalism in economics" who agrees with William Stanley Jevons that "the widespread employment of calculus is inescapable" (p. 9). But a physical-science background like Machovec's does not inevitably lead to these conclusions, and while he commendably offers frequent cites of F. A. Hayek's essays on knowledge and competition, some attention to The Counter-Revolution of Science (Hayek 1980) and other discussions of scientism would have been helpful. (This book also never mentions Murray Rothbard, whose writings on method [e.g., "The Mantle of Science" (Rothbard 1960)] are undeservedly slighted by many young Austrians but accurately express what the method of Menger, Bohm-Bawerk, and Mises implies for mathematics in economic analysis.)

A Kuhnian story is more powerful if one can identify a unique revolutionary spark. For Machovec it was one book: Frank Knight's *Risk*, *Uncertainty and Profit* ([1921] 1971). He sees Knight as "the leading expositor of the perfectly competitive model" (p. 265). But Knight's role as "leading expositor" has been controversial, most recently on the Austrian economics Internet discussion group, and I shall not try to resolve it here. Knight, the classic "puzzler" (Hayek 1978), is often delightful (Knight 1956) but was on the wrong end of the capital controversy with Hayek.

Despite Machovec's criticism of Knight's refinement and formalization of the concept of perfect competition and his criticism of George Stigler's (1957) history of perfect competition, it seems as if Machovec goes too easy on the Chicago School. Neither Melvin Reder's (1982) "Chicago Economics" nor Milton Friedman's (1953) "Positive Economics" is mentioned. And although Machovec's praise is often deserved (e.g., of Stigler's contributions to industrial organization and the Chicago School's promotion of "the free market"), he should have addressed the Friedman/Stigler thesis that the model of perfect competition may be unrealistic, but that's not relevant—what matters is that the model provides the best prediction per complexity. Machovec should not let the Chicago School off so easily.

So why should anyone care, or regret, that perfect replaced rivalrous as the dominant concept of competition? This is Machovec at his most exciting, explaining not only that economics took a turn but that it took

a wrong turn, and why.

Horizontal demand curves are not, in themselves, the main culprit. When Machovec writes of "the concept of perfect competition and the analytical habits of thought attendant to it" (p. 1), he is referring to several ideas sharing the theme of knowledge. If, for example, each seller is a "taker" of the market equilibrium price and perceives himself incapable of affecting it, how does price ever reach equilibrium? The Walrasian auctioneer leaps conveniently to mind, the deus ex machina who analytically replaces the entrepreneur but obliterates any chance of understanding how markets really equilibrate. One is left depicting the entrepreneur as an exogenous force throwing equilibrium into disequilibrium, as (or more) likely to cause harm as good. In one way or another, it is this misunderstanding, this inability to appreciate the function of the entrepreneur, that forms the common theme of Machovec's argument that replacing rivalrous with perfect competition was a terrible mistake.

He introduces the theme early, with his wide-ranging "The Magnetic Lure of Market Socialism" (Chapter 3). Why did—and, to some extent, still does—this fatally flawed construct attract economists like iron filings to a magnet? Machovec's convincing answer is that they were "disarmed" (p. 4) by the perfect-competition model's dismissal of the entrepreneur and his knowledge-creating function. Lacking the rivalrous-process competition of the classical economists and Austrians that provides the analytical structure for understanding and appreciating entrepreneurship, they also undervalued the institutions required for its implementation. These include the recognition that since entrepreneurship is costless yet can

create immense value, gargantuan rewards stemming from little or no *effort* are not necessarily undeserved (p. 84). Citing writers as diverse as Dostoyevsky and Mises, Machovec concludes that "entrepreneurship and the process of a *private*-enterprise market are inseparable phenomena" (p. 94).

Machovec illustrates how these unfortunate misapprehensions have affected industrial organization and antitrust, economic development and comparative systems, and international trade. Observations on industrial organization are scattered throughout. He cites Nassau Senior's observation, for example, that "a large number of producers is not necessary to guarantee that price equals cost. An absence of entry barriers is sufficient to ensure this result" (p. 118). Sections of Chapter 6 ("The Perfectly Competitive Model: Evolution or Revolution") address product differentiation and advertising. Chapter 7 ("Competition and the Law") examines the "old" and "new learning" in antitrust, identifying the former structuralist view with the perfect-competition habit of thought and the latter with the reemergence of the rivalrous-process view. While the analysis and exposition are very good, some readers may regret Machovec's apparent approval of antitrust to thwart collusion (p. 219) and his book's omission of any reference to D.T. Armentano's (1990) classic Antitrust and Monopoly.

In Chapter 11 ("Stylized Assessment of Gain Versus Pain") Machovec summarizes his evaluation of the effects of the model on the four fields mentioned above. While one can never calculate the dynamic losses that antitrust policy shaped by "the Walrasian mode of thinking" imposed (imposes) upon the United States, "the costs of neoclassical thinking have been paid disproportionately by those who live in the Second and Third Worlds" (p. 295). With First-World economists promoting growth and development through deliberate planning, denigrating entrepreneurship, markets, and the institutions required for them, can one reasonably doubt Machovec's contention? His concluding Chapter 12 offers a convenient recap of his arguments and an optimistic belief for a non-Kuhnian (that is, non-overthrowing) synthesis of "new institutionalists, transaction-cost theorists, and Austrians (the I-T-A group for short)" with neoclassical theorizing.

A book this important deserves the best editing and production. One hopes that a subsequent edition will correct the many errata (the author's list of about 50 is welcome) and reorganize to eliminate choppiness. Has computerization actually reduced production values compared to academic books from commercial publishers of 50 years ago?

A book this important also deserves the widest reading. Routledge and its "Foundations of the Market Economy" series editors Mario Rizzo and Lawrence H. White warrant our congratulations for offering it to us, but it is Frank Machovec who is to be thanked for this superb contribution to our science. Everyone who reads it is sure to come out a better economist.

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Regulatory Takings: Law, Economics, and Politics

William A. Fischel

Cambridge, Mass.: Harvard University Press, 1995, 415 pp.

In 1922 Justice Oliver Wendell Holmes declared in *Pennsylvania Coal* v. *Mahon* that "while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking." Holmes did not explain how far is "too far," and subsequent efforts to provide an operative definition for the Fifth Amendment's "takings clause" have proved notably unsuccessful. Yet as environmental and other restrictions on land use and exactions on development have become more prevalent, the need for a secure and predictable definition of constitutionally protected property rights has grown more acute.