## GLOBAL DEVELOPMENT AND ENVIRONMENT INSTITUTE WORKING PAPER NO. 00-02

# **Economics in Context: The Need for a New Textbook**

Neva R. Goodwin, Oleg I. Ananyin, Frank Ackerman and Thomas E. Weisskopf

February 1997

Tufts University Medford MA 02155, USA http://ase.tufts.edu/gdae

ÓCopyright 2000 Global Development and Environment Institute, Tufts University

### **Economics in Context: The Need for a New Textbook<sup>1</sup>** Neva R. Goodwin, Oleg I. Ananyin, Frank Ackerman and Thomas E. Weisskopf

ngoodwin@tufts.edu fackerma@tufts.edu

#### Introduction

In 1989 the Soviet Academy of Sciences asked Nobel laureate economist Wassily Leontief for help. They planned to throw out the old Soviet economics textbooks, and wanted to know which American textbook they should translate. Leontief passed on the request to Neva Goodwin, at Tufts University. The result, some years later, is a new textbook for Russia, *Microeconomics in Context*, by Neva R. Goodwin, Thomas Weisskopf, Frank Ackerman, and Kelvin Lancaster.<sup>2</sup> This article explains the rationale and scope of our textbook, and identifies some of the ways in which it differs from other available texts.

The Soviet Academy of Sciences did not foresee the pace of change, nor did it, in 1989, anticipate its own impending demise. But it was correct in two important respects regarding the teaching of economics. The first point, the need to discard the dogmatic Sovietera textbooks, requires little discussion. Equally important but less obvious, however, was the second point: the need to choose carefully among American texts and approaches.

American economics textbooks typically analyze and celebrate the workings of a highly idealized market economy. Little or nothing is said about the many limitations of a formal analysis of markets, or about the importance of the physical, historical, and social contexts within which markets exist. As the academic arm of economics has become increasingly rigorous and formal and less concerned with application, even while the problems and issues requiring theoretic economic attention have shifted, mainstream textbooks have reduced the attention given to older concerns of political economy and institutional economics. Simple assumptions about perfectly competitive markets, profit-maximizing firms and utility-maximizing individuals are increasingly inappropriate for American students seeking to understand the world they face, and are even less appropriate for students from very different situations.

Why has Western economic theory - and the associated textbooks - drifted in the direction just described? The reasons are complex. Much of the American economics profession had a mild case of Cold War ideological rigidity; defense of the optimality and feasibility of market outcomes was a matter of political pride and faith as well as scientific

<sup>&</sup>lt;sup>1</sup> A Russian version of this paper was published in the Russian economics journal, *Voprosi Ekonomiki*, in 1997. Since the publication of the article, we have been much saddened by the deaths of two great economists who played a role in the events described here. Kelvin Lancaster led the way to the new textbook, generously allowing us to build on his work. Wassily Leontief sparked the idea for the project and remained a source of encouragement and inspiration.

inquiry. At the same time, a subtler process of self-selection has been underway within the economics profession, pushing the field toward ever more abstract and mathematical formulations.

Over the last few decades it has become increasingly true that those Western economists who have something useful to offer to policy-makers and practitioners in the real world are the ones who are able to forget or ignore much of the formal theory they have been taught, replacing it with a combination of intelligence, worldly experience, and common sense. However, those who do not put aside the less useful parts of the theory or the techniques are not necessarily left without jobs. If they can master some very advanced technique for modeling economic concepts, rigorous "internal consistency" can more than make up for any lack of "external consistency"; that is to say, reasonably good logic and very difficult techniques will get a paper published without any requirement that its assumptions, its argument or its results can map onto the real world in a meaningful way. Thus, the divergence continues: those who have the interest and skills to deal with real world issues move outside of academia, while promotion and tenure in prestigious universities go to those whose papers are published in the journals whose peer-reviewers are academics like themselves.

This is not an unusual story in the history and sociology of science. Academic professions are motivated to make distinctions between "insiders" and "outsiders", both because of an interest in controlling the supply-and-demand ratio so as to keep wages up, and also on the basis of more socially responsible considerations, including the wish to maintain high standards. These motivations, however, tend to create a drift in favor of those characteristics (such as mathematical ability) which are easily tested and used as professional screening mechanisms, and against the less quantifiable characteristics (such as good judgment, or the ability to formulate the most useful questions) which are also harder to teach.

Where there is a divergence between academic theory and reality, textbooks will tend to represent the academic side. This is natural; academia is the right setting for the writing of textbooks. It is unlikely that someone who is much involved in the activities of the world would have the time, the inclination or the pedagogical understanding to write a very useful basic textbook. At the same time, it is profoundly counterproductive to maintain and encourage such a divergence in a world where economists are often called upon to advise governments and other actors on issues that, in aggregate, have a large effect on the way a society develops.

Fortunately, the situation is not uniformly as bleak as this quick sketch may suggest. There are also a variety of sources of critical thinking and emerging new perspectives in and around the economics profession which may be drawn on by those who wish to respond to the need in the former Soviet Union for appropriate economics teaching materials. An ideal response for this need will combine the best of the traditional theory and the best of the newer alternatives.

#### A new approach: contextual economics

In terms of the question that originally brought together Russian and American authors of this paper - that is, the selection of the most appropriate U.S. textbook for use in Russia one existing text stood out in its realism, awareness of environmental and social issues, and clear presentation of both the strengths and the limits of markets. That book was *Economics*, *Principles and Practice* by Kelvin Lancaster, a Columbia University economist who is best known for his mathematical contributions. Unfortunately, this text is out of print in the United States; the last edition was published in 1979 (although translations have appeared more recently in Western Europe). Kelvin Lancaster agreed to let us use his text as the starting point for our work, to be updated to reflect new developments in the 1980s and 1990s, and revised to be more appropriate to the Russian context. In fact, the text that is emerging after several years of work is about 20% the original Lancaster text, and 80% new material written explicitly for this use.

In the task of updating and revising Lancaster's 1979 text we began with an examination of the goals of economics. This starting point underlined the need to understand the varied contexts within which economic activity occurs. We see this as a defining characteristic of our approach; it is for this reason that we have titled our textbook *Microeconomics in Context*. Based on the approach described in this paper, our textbook combines elements that will be familiar to most economists, analyzing the workings of the market system, along with elements that will be novel, discussing the goals and contexts of economic activity, and the limitations of the market.

In our view, good economics today is necessarily somewhat eclectic in its approach to theory. No single axiomatic system, no totalizing worldview, is adequate to explain what needs to be explained. It is useful in this regard to contrast three leading theories of economics: the neoclassical, Marxist, and institutional schools.

In neoclassical theory, the world revolves around the consumer. Individual consumption choices govern the process of production; the consumer's wish is the market's command. The goals of consumers are never specified, but are assumed to include the acquisition of more of almost everything. This perspective and the analyses that flow from it illuminate large, important areas of economic life -- but some areas are much better lit than others. People are more than consumers, and the economy is more than a system of markets. Neoclassical theory tends to overlook the analysis of goals other than private consumption, and to ignore the context of economic activity; unless carefully and elaborately amended, it misstates the nature of work and production, and trivializes the complex role of the public sector.

In Marxist theory, in contrast, the world revolves around the producer. The process of production is the source of value, which is then distributed throughout society. The struggle over the determination of wages and profits is the central drama of the capitalist economy; the labor process shapes the lives of the working population. This perspective illuminates some

important areas which neoclassical economics misses almost entirely. Yet even in versions of Marxism that avoid the dogmatism of official Soviet doctrine, the "neoclassical" problems of consumption and markets are addressed poorly, if at all.

The solution is not simply a synthesis of the two theories, even if that were possible. For people are not only consumers and producers, but also citizens, members of families and communities, and participants in a natural ecosystem. The multiplicity of roles and goals requires a multiplicity of perspectives. One might be tempted, then, to turn to other economic approaches, such as the institutionalist school, which explicitly recognize the wide variety of factors shaping the economy.

The problem is that institutionalists often seem to offer the context for economic theory without the rigorous analysis required to deal with such complex matters. Institutionalists have produced some of the best commentaries on the foibles of neoclassical economics, and of the American economy. The insightful satires and critiques by Thorstein Veblen in the early twentieth century, or John Kenneth Galbraith more recently, are more readable than most economics writings, and better supplied with common sense as well. Yet they and others in the institutionalist school have remained largely descriptive, failing to build a cumulative body of analysis reflecting their perspective. This is undoubtedly one of the reasons why they have had only limited influence on the development of economics.

While these three schools of thought can be formally contrasted with each other, the first is indisputably dominant in the economics profession today. Neoclassical economics, of course, has moved steadily in a direction quite opposite to our proposed multiplicity of perspectives. There is a widespread desire to make economics as "scientific" as the natural sciences; this has been taken to mean making economic theory "fully axiomatized." To the extent that this is successful, every element of the theory can be traced back to a single statement or axiom, the "rationality postulate" about human nature.

Attempts to take this assumption literally end up either concluding that it must be interpreted as a tautology (if perceived utility is simply whatever it is that people seem to be maximizing, as in the ever-broadening applications of the theory by Gary Becker), or else that it is only true in rather carefully circumscribed circumstances. Veblen was already writing, a century ago, that the utilitarianism assumed by neoclassical economics was considered obsolete and no longer accepted in any other social science. But neoclassical economics has pursued mathematical refinement of this outdated behavioral postulate throughout the twentieth century.

#### Contrasts in methods, goals and content

As another example of how the neoclassical pool of light restricts economic inquiry, excluding issues that have been increasingly revealed as important for inclusion, we might consider what would happen if we analyzed economic activities in modern societies as taking place in five sectors: (1) business; (2) government; (3) the "voluntary" (sometimes called the "civic") sector; (4) the informal, non-monetized or family sector; and (5) what may be called the "eco/eco sector": the interface between the human and natural worlds which is a source and a sink for many aspects of human production and consumption.

Neoclassical economics, which is sometimes defined as the science that analyses "the allocation of scarce resources among competing goals", has not performed this analysis evenly across the five sectors. It has excelled at analyzing resource allocation decisions within an idealized business sector. It has shed some light upon resource allocation decisions within the first and fourth sector. It has paid relatively little attention to the third and fifth sectors; and it has ignored the issue, essential to modern societies, of how resources get allocated among (as distinct from within) the different sectors.

It is necessary to push the issue of content further, to inquire not only how neoclassical economic theory defines economic activity, but also how it handles the contexts within which these activities take place. Here we find even more deficiencies: in the remainder of this section we will take note of the *technological, ecological, historical, and institutional/cultural* contexts.

Neoclassical economic theory, especially when taught at the introductory level, tends to treat **technology** as given exogenously: science marches ever forward, automatically opening up new "production possibilities" for economic analysis. This perspective is deficient in at least two respects. First, the choice of an "efficient" technology is meaningful only in relation to a well-defined concept of the social optimum. Hence it depends on the discussion of economic goals: different technologies will be efficient in the pursuit of different goals. Second, the development of science and technology is not exogenous, but is shaped by economic institutions and incentives. Both American and Soviet research overemphasized military technology, at the expense of other areas, throughout the Cold War; this is not an exogenous fact about science, but a clear reflection of what both countries paid their scientists to do. An introductory economics curriculum can address these issues by relating the choice of technology to the problems of economic goals and social optima, and by devoting explicit attention to the forces shaping the patterns of technological development.

The fundamental **ecological context** within which economic activity takes place has often been neglected by economists. The classical British economists included land as a factor of production along with labor and capital, but the contribution of land receives little serious attention today. Negative production externalities such as air and water pollution are sometimes mentioned, but are treated as separable, individual issues rather than as evidence of systemic, pervasive problems. We believe that attention should be focused on the ecological environment as critical to the health of humans in their economic and other roles, both as a basic source of inputs and as a repository of waste products from the process of production. Among the problems that should be addressed are the question of the proper scale of economic activity in relation to the biosphere, the effects of production on the stock of depletable natural resources and the quality of the environment, the notion of "sustainable development", the problem of the "tragedy of the commons" and the economics of common property resources. Other environmental issues may provide good illustrations of basic concepts, such as examples of market failure and proposed remedies, potential extension of national income accounting to include environmental depletion, analysis of the Coase theorem and its limitations, and discussion of market incentives for environmental protection.

When we consider the **historical context** for economic activity we immediately encounter the fact that neoclassical economics is inherently ahistorical, focusing its attention on modeling a universal, timeless optimum. Most of the analysis, even in macroeconomics, is developed in terms of comparative static equilibria. The history of developed market economies, particularly Great Britain and the United States, are drawn on selectively to illustrate theoretical points, but never addressed systematically. Yet as seen in our discussion of goals, the history of economic development in different countries is of decisive importance. Accordingly, we believe that the introductory economics curriculum should include significant treatment of the historical development of the world economy in general -- and the appropriate national economy in particular. For Russia this implies discussion of the different histories of capitalist and socialist development, the nature of the Soviet economic system, and the current problems of transition to a more market-oriented system. Also important is recognition of the ways in which economic theory has developed in response to real-world economic problems; the emergence of Keynesian macroeconomics in response to the Great Depression is the most obvious example.

Neoclassical economics and conventional economics textbooks treat **institutional and cultural factors** as exogenous to economic activity, and often as irrelevant. Government is typically granted a limited role, as a benign (if often incompetent) agency charged with mopping up market failures and pursuing public objectives such as amelioration of inequality. Other institutions and cultural traits are taken for granted, assumed to be of secondary importance in the understanding of markets. Our discussion of the ecological and historical contexts already implies an expanded treatment of the role of government. But this is not an isolated example; the institutional and cultural context has a pervasive influence on the market. Three areas can be cited where institutional and cultural issues are especially salient.

First, the nature of enterprise structure and organization deserves a fresh look; the view of the firm as a "black box" efficiently combining inputs to produce outputs ignores some of the most distinctive attributes of business enterprises. The firm must be understood as a locus of command within a market system, and the reasons for non-market organization within the firm must be explored. This raises questions of the relationship between management, shareholders, and public officials, and the topic of principal-agent theory in general.

Second, labor markets are fundamentally different from other markets, in ways that depend on cultural and institutional factors. The analysis should emphasize the fundamental differences between labor and other commodities, the effects of different types of workplace social relations on worker motivation and perform, and the importance of conceptions of fairness, and expectations about security and stability, in the determination of wages and productivity.

Third, a number of recent analyses have emphasized the economic importance of what may be called "social capital." A society's patterns of interaction, social connections, levels of mutual trust and expectations of honesty, and other behavioral norms, have an influence on economic activity which is in some ways comparable to the influence of human capital created by education, or natural capital provided by the environment. The low level of social capital at the end of the Soviet era is part of the explanation of the appearance of "gangster capitalism" in Russia in the early 1990s.

#### Conclusion

To summarize, by way of an analogy one might imagine neoclassical economics as one instrument in an orchestra. With its brassy self-confidence, it might be the trumpet section. In concert with other instruments, the trumpets are indispensable to most symphonies, and get to play the lead often enough. But if the trumpets insist on drowning out the flutes and violins, the subtle harmonies of the symphony will be replaced by an endlessly repetitive fanfare.

*Microeconomics in Context* is our attempt at introducing students to the symphony of economics. We believe that this text, which aims to assist Russians to understand the diversity of possibilities attached to the process of marketization, and examines the interconnections between the workings of the economy and the health of the social and physical environment, makes a good start on incorporating the most critical correctives and new directions. We hope that the publication of *Microeconomics in Context* will energize others -- in this country and in other parts of the world -- to continue the quest for an economic theory that responds to the realities and the needs of the twenty-first century.

Neva R. Goodwin is Co-director of the Global Development And Environment Institute at Tufts University.

Oleg I. Ananyin is Director of the Research Center at the Institute of Economics, Moscow, Russia.

Frank Ackerman is Director of the Research and Policy Program of GDAE and Research Associate Professor at Tufts University's Urban and Environmental Policy Program.

Thomas E. Weisskopf is Professor of Economics and Director of the Residential College, University of Michigan, Ann Arbor, MI. The Global Development And Environment Institute (G-DAE) is a research institute at Tufts University dedicated to promoting a better understanding of how societies can pursue their economic goals in an environmentally and socially sustainable manner. G-DAE pursues its mission through original research, policy work, publication projects, curriculum development, conferences, and other activities. The "G-DAE Working Papers" series presents substantive work-in-progress by G-DAE-affiliated researchers. We welcome your comments, either by e-mail directly to the author or to G-DAE, Cabot Center, Fletcher School, Tufts University, Medford, MA 02155 USA; tel: 617-627-3530; fax: 617-627-2409; e-mail: gdae@tufts.edu; web: http://ase.tufts.edu/gdae.

#### **Papers in this Series:**

**00-01** Still Dead After All These Years: Interpreting the Failure of General Equilibrium Theory (Frank Ackerman, November 1999)

**00-02** Economics in Context: The Need for a New Textbook (Neva R. Goodwin, Oleg I. Ananyin, Frank Ackerman and Thomas E. Weisskopf, February 1997)

**00-03** Trade Liberalization and Pollution Intensive Industries in Developing Countries: A Partial Equilibrium Approach (Kevin Gallagher and Frank Ackerman, January 2000)

**00-04** Basic Principles of Sustainable Development (Jonathan M. Harris, June 2000)

**00-05** Getting the Prices Wrong: The Limits of Market-Based Environmental Policy (Frank Ackerman and Kevin Gallagher, September 2000)

**00-06** Telling Other Stories: Heterodox Critiques of Neoclassical Micro Principles Texts (Steve Cohn, August 2000)