

Global Political Economy
UNDERSTANDING THE
INTERNATIONAL
ECONOMIC ORDER

Robert Gilpin

WITH THE ASSISTANCE
OF Jean M. Gilpin

PRINCETON UNIVERSITY PRESS

PRINCETON AND OXFORD

Copyright © 2001 by Princeton University Press
Published by Princeton University Press, 41 William Street,
Princeton, New Jersey 08540
In the United Kingdom: Princeton University Press, 3 Market Place, Woodstock,
Oxfordshire OX20 1SY
All Rights Reserved

Library of Congress Cataloging-in-Publication Data

Gilpin, Robert.

Global political economy : understanding the international economic order /
Robert Gilpin with the assistance of Jean M. Gilpin.

p. cm.

Includes bibliographical references and index.

ISBN 0-691-08676-1 (alk. paper) — ISBN 0-691-08677-X (pbk.)

1. International economic relations. 2. Free trade. 3. International finance.
4. Technological innovations—Economic aspects. 5. Economic development.

I. Gilpin, Jean M. II. Title.

HF1359 .G5516 2001

337—dc21 00-051684

This book has been composed in Sabon.

The paper used in this publication meets the minimum requirements of ANSI/NISO
Z39.48-1992 (R 1997) (Permanence of Paper)

www.pup.princeton.edu

Printed in the United States of America by Princeton University Press,
Princeton & Oxford

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

(Pbk.)

CHAPTER THREE

The Neoclassical Conception of the Economy

DURING THE past two centuries, professional economists have studied the economy as a market system; economists from David Ricardo (1772–1823) to the present have formulated theories to explain economic affairs. These theories have had a significant influence on the trade, monetary, and other policies of national governments. Because the foundation provided by the discipline of economics is essential to comprehension of the economy as a “market,” this chapter will discuss the science of economics, its strengths, and its limitations.

THE DISCIPLINE OF NEOCLASSICAL ECONOMICS

In the 1955 edition of his influential textbook, *Economics*, Nobel Laureate Paul Samuelson coined the term “neoclassical synthesis” to characterize the theoretical consensus of professional economists. Samuelson was referring to the consensus that economists had achieved through integration of microeconomics (associated with Alfred Marshall and other leading economists of the late nineteenth century) with the new macroeconomics set forth by John Maynard Keynes in his *General Theory of Employment, Interest, and Money* (1936).¹ Even though this consensus later broke down in the 1970s when the economics profession fragmented into a number of competing schools of macroeconomic thought, the term neoclassical economics is still used to refer to mainstream, orthodox, or conventional economics. It is applied to the economics of the Keynesian, monetarist, or other divergent schools of contemporary economic thought because they all are based on similar assumptions regarding the nature of the market. Perhaps one could say simply that neoclassical economics can be defined as the body of methods and theories accepted and utilized by most members of the economics profession. In this book, I use the term “neoclassical economics” (or simply “economics”) in this general sense.

¹ John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (New York: Harcourt, Brace, 1936).

Neoclassical economics constitutes a systematic examination of economic affairs as they are defined by professional economists. Economics is a discipline or profession into which its practitioners have been thoroughly socialized. It is the most systematic and rigorous of the social sciences and the necessary starting point for understanding not only the economy but also many other aspects of society. However, economics is only that—a starting point; it is the beginning and not the end of analysis. The systematic approach taken by neoclassical economics provides many advantages but also embodies certain limitations. Social reality, despite the efforts of economic imperialists and many rational-choice analysts to persuade us to the contrary, cannot be reduced solely to the prices and quantities of economic science.

Modern economics, like physics and the other hard sciences and unlike the other social sciences (with the possible exception of demography and certain fields in psychology), had a founder or lawgiver who, in effect, defined the purposes, parameters, and methodology of the discipline. The role of the lawgiver in an academic discipline has been well characterized by Charles Gillispie in his portrayal of Galileo Galilei who founded physics, the first science worthy of the name. As Gillispie described his genius, Galileo earned recognition as the first true physicist and founder of modern physics because he asked the right questions, proposed answers (hypotheses or theories), and created an appropriate methodology (experimental techniques) with which to test possible answers.² In such other physical sciences as chemistry and biology, there are other creative geniuses who laid the foundations of their disciplines.

The foundations of a scientific discipline, or any academic discipline for that matter, must contain several elements. Each discipline requires a commonly accepted definition of the subject and general agreement on the questions that the members of the discipline must attempt to answer. Another component is a generally preferred means or methodology; the principal method of economics is methodological individualism (the rational-actor method), which assumes that rational, self-centered individuals are the basic economic actors. Possible answers, hypotheses, and eventually theories (perhaps laws) satisfy, at least for a time, the questions of interest to the discipline. The questions, methods, and answers evolve, accumulate, and are discarded over time, through open competition among ideas. The win-

² Charles Coulston Gillispie, *The Edge of Objectivity: An Essay in the History of Scientific Ideas* (Princeton: Princeton University Press, 1960), 7.

ning ideas in this intellectual struggle become part of the ever-evolving consensus of the profession.

The foundations of modern economics were laid by David Ricardo in the early decades of the nineteenth century.³ Ricardo and his fellow classical economists shared a number of basic assumptions, including the idea that everything of value was created by labor (the labor theory of value) and a belief that the three basic factors of production (land, labor, and capital) could not move across national boundaries. Ricardo and other classical economists were particularly interested in learning (1) what laws govern the distribution of income among the factors of production and (2) the determinants of international trading patterns; that is, the composition of the imports and exports of different countries. Seeking answers to these questions, Ricardo utilized basic mathematical techniques and formal models that continue to be the accepted methodology of professional economics. Ricardo also formulated the law of diminishing returns (or rent) to account for the distribution of national income and the principle or theory of comparative advantage to explain trade patterns. With that principle, he explained why Great Britain exported textiles and imported port from Portugal. While the questions, methods, and theories of the economics profession have changed over the past century and a half, Ricardo's basic approach to the subject has continued to guide his economist successors.

Economics as the Science of Rational Choice

Most contemporary economists would join Paul Samuelson in defining economics as the study of choice under conditions of scarcity.⁴ According to this definition, the study of economics originates in the fundamental fact that, in a world where everything is scarce, choices must be made. Economics is the science that guides individuals to make an efficient allocation of scarce resources to alternative and frequently equally desirable goals. In other words, modern economics is basically a science of rational choice or decision-making under conditions of scarcity or constraints. Economics, according to many if not most economists, can provide a comprehensive explanation of human behavior based on market principles.⁵

Every decision, whatever benefits it may bring, involves a cost or

³ David Ricardo, *The Principles of Political Economy and Taxation* (New York: E. P. Dutton, 1911; first published in 1817).

⁴ Paul A. Samuelson, *Economics: An Introductory Analysis* (New York: McGraw-Hill, 1967), 5.

⁵ Gary S. Becker, *The Economic Approach to Human Behavior* (Chicago: University of Chicago Press, 1976), 5.

what economists call an “opportunity cost.” In choosing to do one thing, one must necessarily forgo the opportunity of doing something else that might be of equal or even greater value. As economists frequently quip, “There is no such thing as a free lunch” (TSTFL). Even a free lunch involves an investment of time and, therefore, surrender of an opportunity to do something else. In more stark terms, everything incurs a cost as well as a benefit. The economist’s constant awareness that every decision involves a necessary trade-off between costs and benefits casts a conservative mantle over the social and political outlook of the profession and may explain why Thomas Carlyle characterized economics as “the dismal science.”

Although some economic theorists such as Adam Smith, Karl Marx, and Joseph Schumpeter have attempted to comprehend the economy as a complete, dynamic, and ever-changing system of human interaction, economics in the early twenty-first century is essentially a toolbox of formal models and analytic techniques. In Keynes’s words, “The Theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions.”⁶ While its methodology provides economics with its analytic rigor, it encourages economic theorists to oversimplify economic reality and frequently has no social relevance. In the inevitable trade-off between rigor and relevance, economists will choose the former over the latter almost every time. One of the highest compliments that one economist can give another is to describe his or her work as “robust,” regardless of its utility in furthering understanding of the actual working of the economic system.

A formal economic model is an intellectual device used to explain a particular event or variable; such a model is an abstraction based on an economic theory. Although a model may take a literary form, the economics profession, ever since publication of Samuelson’s *Foundations*, has preferred that models be expressed in formal, mathematical, and abstract terms. Stated simply, a formal model contains a number of *endogenous* variables whose values (prices or quantities) are determined logically within the model.⁷ Explanation of an event

⁶ Quoted in G. R. Hawke, *Economics for Historians* (New York: Cambridge University Press, 1980), 7–8.

⁷ Economists frequently state that a particular action is “endogenous,” meaning that the action can be explained by an individual’s self-conscious effort to promote his or her economic interests. For example, if a scientific discovery were motivated by a desire for profits rather than being due to intellectual curiosity, one would say that the cause of the discovery was endogenous.

also requires *exogenous* or external variables and one or more behavioral assumptions that connect the exogenous and endogenous variables. The central behavioral assumption is that individual actors are rational and are always seeking to satisfy their own economic interests. The exogenous variable or variables are the “givens,” or initial conditions, that determine or influence the value of the endogenous variables. These explanatory or independent variables are external to the model; they could include a change in consumer tastes, innovation of a new technology, and/or other factors.

Economics, then, is essentially a collection of formal models applied to analysis of specific problems and to an explanation of economic phenomena. The fundamental purpose of economic research is to create new models or to extend existing ones.⁸ The professional training of the economist centers on the task of learning analytic tools and knowing which model is applicable to a particular circumstance. To paraphrase Paul Krugman, to say that models define the subject of economics means that, if there is no model available to explain a particular phenomenon, that phenomenon is of little interest to the economics profession regardless of its importance for the real world. Krugman has suggested that this explains why little attention has been given to the determinants of economic development, an area for which economists have not yet developed an adequate model.⁹

The utility of a model is situation-specific, and as situations are seldom identical, it can be difficult to know which model is in fact applicable and whether the model can actually predict or explain the outcome of a particular situation. Indeed, economists disagree on the validity of various models and on which model is applicable to a particular situation. As Charles Kindleberger has commented, the answer to every important question in economics is “it depends!” Or, in more formal terms, every economic model is qualified by the caveat of *ceteris paribus* (or, providing that all other things are equal!). Because all economic theories are partial theories and even such basic laws as supply and demand are contingent on specific circumstances,

⁸ Models play a crucial selective role in determining what economists choose to study. If a theory, for example, cannot be expressed in a formal model that, at least in principle, is subject to testing, then it is very likely not to be of interest to the economics profession. What this means in practice is that many ideas and theories that might, and I emphasize might, explain economic affairs are ignored by economists in favor of ideas that can be tested. This tendency leads to the frequently deserved charge that economics lacks relevance. Economists would no doubt respond that they would prefer to be irrelevant than to be wrong.

⁹ Paul R. Krugman, *Development, Geography, and Economic Theory* (Cambridge: MIT Press, 1995).

the utility of models is strictly limited. Economists must deal with a large number of variables and must employ simplifying assumptions.

Economics as the Universal Social Science

For many economists, economics is better defined by its methodological approach than by its precise subject matter. As Krugman has noted, the tools define the subject for the economist, and the domain of economics is determined by the range and applicability of its methods. Gary Becker, an influential proponent of this view, sets forth in his book, *The Economic Approach to Human Behavior* (1976), the basic assumptions underlying economics methodology and, thus, the economic approach to the study of social, political, and all other forms of behavior. The assumptions he discusses are:

- (1) Economics assumes rational end/means calculations, or “maximizing behavior more extensively and explicitly” than do other social sciences.
- (2) Rational or maximizing behavior guides efforts to obtain or maintain “stable preferences.” These preferences are not for specific items such as oranges versus apples, but for such basic aspects of life as food, honor, prestige, health, benevolence, and especially wealth. Economics assumes that people everywhere, regardless of their social condition, differ little on these basics. Economics is therefore considered to be a universal science of human behavior, and its methods and assumptions are believed applicable to all times and to all places, whether fifth-century Greece or contemporary industrial Japan.
- (3) Markets develop naturally in order to coordinate, with varying degrees of efficiency, the actions of different participants.¹⁰

The methodology based on these assumptions is known as *methodological individualism* or the *rational-choice model* of human behavior. Economic analysis assumes that individuals (individual consumers, producers, and households) are the only social reality. These individuals are further assumed to be rational optimizers; that is to say, they are individuals who make conscious choices to maximize (or at least satisfy) their interests at the lowest possible cost to themselves.¹¹ According to this doctrine of “constrained optimization,”

¹⁰ Becker, *The Economic Approach to Human Behavior*, 3–14.

¹¹ In the economic universe composed of supply and demand factors and prices and quantities, individual economic actors are treated as the bearers of these abstract variables or of processes explained by a formal model. For example, a worker is the bearer of a wage demand.

since every individual exists in a world of scarcity and constraints, an economic actor wishes to make the most efficient use of the limited resources available to him or her. This rational-choice model applies only to endeavor and not to outcome. An individual's failure to achieve an end or objective due to ignorance or some other cause does not, at least in the rational-choice model of human behavior, invalidate the premise that individuals act on the basis of a cost/benefit or means/ends calculus.

In the abstract world of the economist, all individual consumers are assumed to be alike; that is, homogeneous. All individual producers are assumed to be alike also. For example, every corporation, regardless of its nationality or ownership, is believed to make its decisions on the basis of prices, market considerations, and other objective factors, and their primary objective is assumed to be increased profits. Even though different cultures and historical settings provide differing constraints and opportunities, individuals everywhere are still believed to be essentially the same. While Americans, Japanese, and Brazilians find themselves in very different circumstances, their basic wants do not differentiate one from the other. The environment determines the constraints and opportunities that shape the means available to individuals to reach their goals. The belief that individuals everywhere are rational optimizers provides the foundation for the neoclassical economist's certainty that economics is a universal science based on the objective laws of the market and is applicable to every economy regardless of its level of development or its culture.

The behavior of individual consumers and producers in the rational pursuit of their objectives is governed by the principle of marginal utility, or marginality. On the demand side of the economy, according to marginal-utility analysis, as consumers consume more and more of a good they experience diminishing utility; that is, while the first ice cream sundae consumed may be devoured with great pleasure, each additional sundae provides less pleasure (decreasing utility) and the demand of the individual for more sundaes decreases. On the supply side of the ledger, in situations when there are no economies of scale, as producers expand production of a given good they begin to encounter diminishing returns and rising costs per unit. These diminishing returns and rising costs mean that, at some point, the producer no longer has an incentive to produce more of the commodity. In effect, a small change in one economic variable results in a small change in another economic variable. A competitive equilibrium in which the actor has no further incentive to consume or to produce is

eventually attained through such a process of incremental change. The one possible exception to the principle of marginal utility, at least for most individuals, is the desire for wealth itself, a desire that appears insatiable.

The model of competitive equilibrium is intellectually and morally attractive. A free-market competitive equilibrium becomes efficient when demand equals supply in every market and all the resources of an economy are fully utilized. Such an equilibrium has been reached when no individual or firm can achieve greater welfare by altering the allocation of resources in any way whatsoever without decreasing at least one other person's welfare; this is the concept of the Pareto optimum discussed below in this chapter. In other words, the distribution of income and wealth that emerges in such an equilibrium cannot be altered by economic policies without hurting at least one other person. In effect, economic policy necessarily must either have no effect or must hurt some group of citizens. Therefore, most economists believe that the role of government should be minimal.

An important and far-reaching implication of these fundamental ideas is that economics and its emphasis on individual choice is applicable to all aspects of human behavior. As a universal science of choice, economics has no clear and separate domain of its own but can be used to analyze and understand almost every facet of human behavior. Moreover, the theories of economic science (like those of physics and chemistry) are considered objective, universal, and applicable across all societies and historical periods. The fundamental principles of economic science and its methodology are not limited by boundaries of any kind.

This proposition, that economics is the "one and universal" social science, has been defended by Lionel Robbins in the following words:

It has sometimes been asserted that the generalizations of Economics [the upper-case letter is his] are essentially historico-relative in character, that their validity is limited to certain historical conditions, and that outside these they have no relevance. . . . This view is a dangerous misapprehension. . . . No one will really question the universal applications of such assumptions as the existence of scales of relative valuation, or of different factors of production, or of different degrees of certainty regarding the future. . . . It is only failure to realize this, and a too exclusive preoccupation with the subsidiary assumptions, which can lend any countenance to the view that the laws of Economics are limited to certain conditions of time and space.¹²

¹² Lionel Robbins, quoted in Lloyd G. Reynolds, *The Three Worlds of Economics* (New Haven: Yale University Press, 1971), 19–20.

CHAPTER THREE

Despite claims of the universality of economic laws, economists have extreme difficulty identifying such laws, and agreement on the validity of any specific law may be impossible to achieve.¹³ For this reason, John Stuart Mill referred to economics as an inexact science and characterized its laws as *tendency* laws; that is, as generalizations regarding what will happen if no disturbing event should intervene.¹⁴ Obviously, differing national policies and social systems can become intervening variables.

NATURE OF A MARKET

The concept of the market as a self-regulating and self-correcting “smoothly functioning machine” governed by objective laws and universal principles is at the heart of economics. Moreover, this concept leads to the conclusion that the free-market system, under certain circumstances and assumptions such as complete information and non-oligopolistic competition, leads to an optimal allocation of given resources. Economists work to define the laws governing markets of all kinds, and their principles and generalizations are the best available guide to explain how markets work and, to a lesser extent, why they sometimes do not work. Although all of us have observed and participated in markets where goods, services, and money are exchanged, “the market” conceived by economists is an abstraction or intellectual construct. While some markets may have a physical location like a stock market or an auction, many markets do not have a physical existence that one can experience directly. Indeed, the market economy as conceived by economic theory consists only of interdependent equations that are solved continuously and simultaneously.

Economists believe that a market arises spontaneously to satisfy needs. Human beings are by nature economic animals who, according to Adam Smith, have an inherent propensity to “truck, barter and exchange.” To facilitate exchange and improve their well-being, people create markets, money, and economic institutions. However, once a market exists, it is believed to function in accordance with its own internal logic and without central direction. Coordination among the

¹³ Obvious candidates are the laws of supply and demand and the law of diminishing returns. However, even if they do qualify as laws, the claim that they are laws of economics rather than physics or psychology is in dispute.

¹⁴ This discussion is based on Roger E. Backhouse, *Economists and the Economy: The Evolution of Economic Ideas*. 2d ed. (New Brunswick, N.J.: Transaction Publishers, 1994), 225.

activities of individuals participating in a market is spontaneous and is guided by the “invisible hand” of self-interest.

The rational and homogeneous individuals of economic science live in an economic universe composed solely of prices (p) and quantities (q) that possess no ethnic, national, or other identity. Changes in prices and quantities constitute the signals to which individuals respond in their efforts to maximize their goals or, as economists prefer, their utilities. Individual consumers and producers make decisions based on changes in relative prices, market opportunities, and external constraints. Prices, at least over the long term, are determined by such objective economic laws as the law of diminishing returns and the law of supply and demand. The law of demand is the most important of the laws that drive or govern the economy. This “law” holds that people will buy more of a good if the relative price falls and less if the relative price rises; people will also tend to buy more of a good as their relative income rises and less as it falls. Any development that changes the relative price of a good or the relative income of an actor will create an incentive or disincentive for an individual to acquire (or produce) more or less of the good. This simple yet powerful law of demand is fundamental to the functioning of the market system.

One of the most important concepts employed by economists to understand market functioning is static equilibrium (or simply equilibrium). An equilibrium exists when there is no tendency for the balance between such interrelated variables as prices and quantities to change.¹⁵ In less technical language, an equilibrium means that no economic actor has an incentive to change his or her behavior and the costs and benefits of the existing situation are judged to have achieved the best balance that an individual could reasonably expect. Therefore, the potential gains from changing the situation are not worth the potential costs, so no change takes place.

The concept of equilibrium is central to explanations of both economic stability and economic change. Neoclassical economics assumes that markets, at least over the long term, tend toward an equilibrium in which supply matches demand. When a disequilibrium exists, powerful forces will bring the system back into equilibrium. Economists use the term “disequilibrium” to mean any change in demand, opportunities, or relative prices that gives an economic actor an incentive to change his or her behavior in order to increase his or her gains or decrease his or her costs. For example, an increase in the

¹⁵ Fritz Machlup, quoted in Yanis Varoufakis and David Young, eds., *Conflict in Economics* (New York: Harvester Wheatsheaf Press, 1990), 14.

supply, and hence a decline in the price of a good, will give some actors an incentive to increase their consumption of the good (subject, of course, to the principle of diminishing returns). Over time, the imbalance between the increased supply and the increased demand for the good will be overcome, and the market will be restored to an equilibrium condition in which no actor has an incentive to change her or his behavior. Thus, a market equilibrium is defined by economists as a system of prices and quantities in which there is a balance between opposing forces.

The concept of equilibrium is a powerful analytic tool. Yet, this concept can also be quite misleading. Economists generally use the term as if they really could determine at any particular moment whether or not an equilibrium actually exists in a particular market. However, as Fritz Machlup emphasized, the concept of equilibrium is an abstract concept and cannot tell us whether in reality equilibrium actually exists.¹⁶ Moreover, rather than being a neutral term, the concept may be loaded with policy and political biases. The equilibrium concept is central to economists' study of the market, but there are problems in using equilibrium as an explanatory or predictive tool.

Markets are highly dynamic and are continually revolutionizing societies. Certain characteristics of a market economy explain its dynamic nature: (1) changes in relative prices in the exchange of goods and services, (2) competition as a determinant of individual and institutional behavior, and (3) the effect of efficiency in determining the survivability of economic actors. The market's profound consequences for economic, social, and political life flow from these characteristics. The pressures of market competition and the imperative to achieve ever greater efficiency lead to the continuous innovation of new technologies, organizational forms, and productive techniques, and to discarding of the old in what Joseph Schumpeter called a "process of creative destruction." At both the domestic and international levels, a market system creates a hierarchical division of labor and distribution of wealth among producers, a division based principally on specialization and the law of comparative advantage. Market forces lead to the reordering of society (domestic or international) into a dynamic core and a dependent periphery. The core is characterized principally by its more advanced levels of technology and economic development; the periphery is, at least initially, dependent on the core as a market for its exports and as a source of productive

¹⁶ Fritz Machlup, *Economic Semantics*, 2d ed. (New Brunswick, N.J.: Transaction Publishers, 1991), 43–72.

techniques. In the short term, as the core of a market economy grows, it incorporates into its orbit a larger and larger periphery; in the long term, however, due to the growth process and diffusion of productive technology, new cores tend to form in the periphery and then to become growth centers in their own right. Examples of these tendencies for the core to expand and to stimulate the rise of new competitive cores and the profound consequences for economic and political affairs produced by such developments will appear throughout this book.

METHOD OF COMPARATIVE STATICS

The concept of equilibrium constitutes the foundation of the method of comparative statics, one of the most important analytic techniques in the economist's toolbox.¹⁷ It is a method of analyzing the impact of a change in a model by comparing the equilibrium resulting from the change with the original equilibrium. In their analysis of economic change, economists rely on this presumed tendency of a market to return to an equilibrium. The method of comparative statics is as old as economics itself and was used by David Hume (1711–1776) in his theory of the price-specie flow mechanism—his analysis of the domestic and international effects of a change in a nation's balance of payments. The method, however, was not formalized until the 1930s and the 1940s in the work of John Hicks (1939) and in Paul Samuelson's classic *Foundations of Economic Analysis* (1947).¹⁸ Consideration of this method of comparative statics enables one to appreciate both the strengths and the limitations of the economic analysis of economic change.

In an equilibrium condition, as already noted, no participants in a market have an incentive to change their behavior. This situation is assumed to continue until an exogenous factor is introduced. A change in relative price, a technological innovation, or a shift in consumer tastes provides an incentive for economic actors to alter their behavior; an exogenous change may also involve imposition of new constraints on economic actors or appearance of new economic opportunities. In response, say, to a change in relative prices, a rational economic actor will have an incentive to maximize gains or minimize losses. Or, a new technology that reduces the cost of producing a

¹⁷ For a technical discussion of the method, consult Paul A. Samuelson, *Foundations of Economic Analysis* (Cambridge: Harvard University Press, 1983), 7–8.

¹⁸ Ibid.

particular good might be adopted by an entrepreneur to cut costs, expand market share, and/or increase income. Then, competitors would either have to adjust to this development or else be forced out of business; in either case, the exogenous change has powerful ramifications throughout the economy as actors adjust to its consequences. When equilibrium is restored, there is no longer any incentive for actors to change their behavior until another exogenous change enters the market.

Exogenous developments that cause disequilibrium and give individuals an incentive to change their behavior are frequently quite minor and may require little more than a small adjustment by the economic actors. This means that the evolution of an economy is a generally continuous and relatively smooth process consisting of an equilibrium, a destabilizing disequilibrium, and eventual creation of a new equilibrium. Economists agree with Gottfried Leibnitz (1646–1716) that nature does not take jumps and that change tends to be incremental.¹⁹ However, upon occasion, exogenous developments can be revolutionary and can cause a profound shock to the economy; then the resultant adjustment or transition to a new equilibrium can have significant implications for both economic and political affairs. The sudden large increase in petroleum prices in 1973 exemplified dramatically how a change in relative prices could have a disproportionately huge impact on international economic and political affairs when the increase in world energy prices plunged the world economy into a decade of economic “stagflation.” Throughout the 1970s and beyond, the economies of the world struggled to adjust to this dramatic increase in energy prices.

According to neoclassical economics, the outcome of a disequilibrium is totally dependent upon the interplay of economic forces and the interaction of many individual decisions responding to changes or anticipated changes in relative prices. The focus of analysis is on the disequilibrium itself and on the economic forces it generates. The history of the events leading up to the disequilibrium or initial conditions is not relevant for the outcome or to restoration of an equilibrium. As Paul Samuelson has argued, whatever initial conditions may be, eventually prices and quantities converge to a new equilibrium

¹⁹ For example, an economist wrote that the stock market crash of October 1987 could not have been caused by such a small event as the American-German clash over interest rates. Causes and effects, he argued, must equal one another. Chaos theory, on the other hand, teaches us that small events can have disproportionately large consequences.

without regard to initial conditions.²⁰ In other words, history is generally irrelevant to an *economic* explanation of an event. All one needs to know is the vectors and the strength of the forces at work. The attitude of economists toward dynamics is not unlike that of physicists; a physicist does not need to know the history of a baseball game nor have a detailed knowledge of the batter to calculate the trajectory of a batted ball. Nevertheless, introduction of the idea of path dependence into economic analysis has helped moderate antihistorical thinking in economics.

Although the method of comparative statics is a powerful tool of analysis, its usefulness as a means of understanding economic change in the real world is severely limited. The method cannot provide an analysis of the historical forces responsible for the original equilibrium position nor of the transitional process involved in the move from one equilibrium position to another. In effect, economics cannot account for the causes of the disequilibrium because the exogenous variables that produced the equilibrium lie outside the realm of economic analysis. Moreover, economics cannot predict, nor is it concerned with, the course of historical events that lead to the new equilibrium; yet, as the path dependence concept informs us, the many important developments on the way to the new equilibrium will have a determining effect on the nature of the new equilibrium and hence on the overall condition of the economic system. Finally, even though an economic system eventually finds a new equilibrium, the system never returns to the old equilibrium. In brief, the world has been transformed, but economics is of no more than limited utility in explaining the outcome and how it was achieved.

At the time of the 1973 oil crisis, some economists argued that the price rise was caused solely by market forces. The high inflation of the late 1960s and early 1970s, they asserted, had caused a wide gap, or disequilibrium, between the nominal price and the real price of petroleum. According to this interpretation, the oil price change was merely a rapid movement toward the new equilibrium between the price and the supply of petroleum. While this comparative statics analysis does indeed tell part of the story, it omits the crucial role played by the Yom Kippur War between Israel and its Arab neighbors and the impact of the oil price rise on world affairs. It is actually highly doubtful that the huge rise in the price of oil would have taken

²⁰ Paul Samuelson, quoted in Rod Cross, ed., *Unemployment, Hysteresis and the Natural Rate Hypothesis* (Oxford: Basil Blackwell, 1988), 3.

place, at least at that time, if the Arab-Israeli war had not occurred. In addition, the ways in which different countries adjusted to the oil shock and returned to equilibrium had profound consequences for the world economy. Whereas the United States responded to the deflationary effects of the oil price rise with efforts to stimulate its economy, West Europeans were more concerned about the inflationary effects and restrained their economies. Important policy conflicts resulted from these differing responses, and the conflicting paths chosen by the United States and other major economies contributed to instabilities in the world economy throughout the 1970s.

Economic analysis is a necessary ingredient in any effort to understand the dynamics of the world economy; indeed, the comparative statics analysis of the oil price rise is very useful. However, economics provides only a partial explanation of the event and leaves out such essential parts of the story as the war that triggered it, the different paths taken toward new equilibria, and the overall consequences for the international economic and political system. While it would be too much to expect the method of comparative statics to take account of these matters, the point is that economic analysis alone does not substitute for historical, political, and sociological analysis.

INTELLECTUAL LIMITATIONS

As many economists themselves acknowledge, economics has a number of intellectual limitations that weaken both its claims to be an exact science and its usefulness as an analytic tool. Perhaps most important of all, certain assumptions underlying economics are unrealistic. For example, the central assumption of individual rationality has frequently been demonstrated to be inaccurate.²¹ Nor is the assumption that an economic actor has *complete* information always correct. And markets are frequently not the perfect competitive markets they are assumed to be by conventional economic analysis. Even though they have given considerable attention to these issues and have dealt with them in various ways, economists still assume that such problems are exceptions rather than inherent limitations. Economists have given increased attention to the problem of uncertainty; yet there has been a tendency to ignore the problem of uncertainty and/or to wish

²¹ An attack on the assumption of rationality is found in the research of Daniel Kahneman. Consult his "New Challenges to the Rationality Assumption," *Journal of Institutional and Theoretical Economics* 150, no. 1 (1994): 18–35.

it away. Economists do, however, utilize various techniques to side-step difficulties raised for economic analysis by the unrealistic assumptions of their discipline.

Economists' treatment of uncertainty and technological change provides a valuable illustration of unrealistic assumptions. Although the profession recognizes technological advance as the most important determinant of long-term economic growth and hence the most important factor propelling economic change in the modern world, it also acknowledges that technological innovation is uncertain and unpredictable by its very nature. Nevertheless, Gene M. Grossman and Elhanan Helpman in their pioneering *Innovation and Growth in the Global Economy* (1991) explicitly base their analysis of technological advance and its consequences on the unrealistic assumption of *certain* and *complete* information about the nature and consequences of technological innovation.²² The very nature of technological developments, on the other hand, is that they and their effects are highly unpredictable.

From my perspective, one of the most important intellectual limitations of economics is its neglect of the role of the state in economic affairs and especially in international economic developments. The discipline focuses on the behavior and interactions of autonomous individuals and enterprises responding to impersonal market signals. It is obvious, of course, that economists are well aware that national policies and activities can be relevant for economic outcomes. However, political considerations tend to be either ignored or conveniently forgotten.²³ Economists formulate laws of economic behavior on the assumption that markets count and states do not.

Although many economists acknowledge the unrealistic assumptions underlying economic science and do their best to transcend them, many and perhaps even most would agree with Milton Friedman's methodological prescription that it is of no significance whether or not the assumptions underlying economics are realistic.²⁴ What is important, according to Friedman, is whether those assumptions lead to fruitful propositions that can be tested empirically and thereby shown to be valid or invalid. In other words, do the assump-

²² Gene M. Grossman and Elhanan Helpman, *Innovation and Growth in the Global Economy* (Cambridge: MIT Press, 1991).

²³ Benjamin J. Cohen, *Organizing the World's Money: The Political Economy of International Monetary Relations* (New York: Basic Books, 1977), 41.

²⁴ Milton Friedman, "The Methodology of Positive Economics," in his *The Methodology of Positive Economics* (Chicago: University of Chicago Press, 1953), 3–43.

tions of rational individuals, perfect markets, and complete information enable economists to make accurate predictions about economic behavior?

In principle, of course, Friedman is quite correct that what is important is the empirical testing of a theory. However, his attack on those who call for realistic assumptions would be more convincing if economists' predictions and forecasts were indeed as accurate as he apparently assumes. Also, if economists really did choose among theories solely on the basis of empirical evidence, Friedman's argument would be strengthened. However, as Donald McCloskey has noted, few theories are tested empirically and economists choose theories for a number of ideological, philosophical, and, in his language, "rhetorical" reasons. More devastating is the fact that few theories or hypotheses meet the Popperian test of falsifiability. In other words, they cannot be tested empirically to determine their validity. Moreover, economics, like the other social sciences, is frequently hampered by absence of a counterfactual against which a theory may be tested.²⁵

In addition, economists frequently redefine the terms of a theory to make it consistent with empirical evidence. A notable example relevant to this book was the discovery by Wassily Leontief that the United States had a comparative advantage in agriculture, which, at the time of his research, was considered to be a labor-intensive activity.²⁶ Prior to Leontief's research, conventional trade theory had predicted that the United States should have a comparative advantage in capital-intensive goods. To resolve what became known as the "Leontief Paradox," economists introduced the concept of "human capital." According to this reformulation of the meaning of capital, the comparative advantage of the United States in agriculture was explained by the fact that it had invested heavily in agricultural skills, knowledge, and equipment. Broadening the concept of capital to include human capital greatly weakened the predictive power of conventional trade theory based on the idea of factor endowments.

This modification of the definition of capital and, by implication, of conventional trade theory, raises the important epistemological

²⁵ Donald N. McCloskey, *The Rhetoric of Economics* (Madison: University of Wisconsin, 1985). On the failure to meet the test of verifiability, consult Mark Blaug, "Disturbing Currents in Modern Economics," *Challenge* 41, no. 3 (May/June 1998): 11–34; interview with Mark Blaug, "The Problem with Formalism," *Challenge* 41, no. 3 (May/June 1998): 35–45.

²⁶ W.W. Leontief, "Domestic Production and Foreign Trade: The American Capital Position Re-examined", *Proceedings of the American Philosophical Society* 97 (September 1953), 332–49. Reprinted in *Readings in International Trade*, ed. H. G. Johnson and R. E. Caves (Homewood, Ill.: R. D. Irwin, 1968).

question of whether or not the idea of human capital is a logical extension of the conventional theory of international trade based on factor endowments or whether it actually is an ad hoc hypothesis intended to rescue a theory that is crumbling in the face of contrary evidence. As Thomas Kuhn demonstrated in *The Structure of Scientific Revolutions* (1962), scholars and scientists are frequently strongly tempted to resort to ad hoc hypotheses to defend a long-accepted "truth" that has become subject to serious attack.²⁷ In fact, use of ad hoc hypotheses and of ex post facto redefinitions of important terms in a theory makes it difficult to prove a theory or hypothesis wrong. Proponents of a theory whose validity is threatened by contrary evidence sometimes merely change the terms of the theory to make it conform to the empirical evidence. Modification of the meaning of capital in the above example suggests that economists do change their assumptions in order to make their predictions work. At the least, the inclusion of human capital significantly enlarged and modified the content of conventional trade theory.

The predictions of economists are in fact notoriously poor. As some quip, "Economists have successfully predicted seven of the last five recessions." Moreover, a significant portion of the accepted body of economic theory has never been adequately tested. For students of political economy, the *ceteris paribus* (other things being equal) caveat offered by economists is exceptionally significant because political factors and social institutions do affect the outcome of economic activities and are rarely equal in their consequences. For this reason alone, the problem of the validity of the assumptions on which economics is based cannot be as easily dismissed as Friedman and other economists would like.

Economists' efforts to employ econometrics, the principal mathematical technique/s to test theories against facts, have produced only moderate success in resolving theoretical controversies. While econometrics has had many successes, it has failed to transform economics into the formal and mathematical science foreseen by Samuelson. Successful application of econometrics has been limited by the lack of good data and the sheer complexity of the economy. In the harsh judgment of *The Economist*, econometric studies have not settled a single major theoretical dispute.²⁸ Moreover, many if not most economic theories are never submitted to empirical testing. In the ab-

²⁷ Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).

²⁸ *The Economist*, 9 May 1987, 68–69.

sence of empirical testing of their theories, strong differences flourish. Rather than a theoretical consensus on macroeconomics, one encounters Keynesians, New Keynesians, Post-Keynesians, Classicists, New Classicists, monetarists, proponents of rational expectations, and other fractious schools of economists, all using formal mathematical techniques and coming to quite different conclusions, largely because they start with differing assumptions.

Another problem limiting the usefulness of economics as an analytic tool is found in large and important subfields of economics that have never been tested or are in fact nonempirical and therefore not really testable. One such subject is the field of industrial organization. The theory of industrial organization has made major theoretical strides, especially through application of the model of noncooperative games from game theory, a development that has made industrial organization one of the most theoretically developed subfields of economics. Even so, the field of industrial organization is confronted by the serious methodological problem that, although many alternative models of corporate behavior applicable to specific industries have been developed, there is still no general model or overarching theory of industrial organization. In fact, as Joseph Stiglitz has observed, economists do not even agree on the fundamental model for analyzing or describing the economy.²⁹ As Daniel Bell and Irving Kristol have pointed out, most economic controversies involve differences over the nature of economic reality.³⁰ And prospects for a science of economics are indeed limited without agreement on the nature of the economy itself; that is, which economic model/s should be applied to describe the market. This leads to a situation where political and ideological biases play a larger role in the acceptance of theories than economists generally admit.³¹

Economists' assumption that economics is a universal science applicable to all times and places can lead to analytic distortions and faulty policy prescriptions. Their inability or unwillingness to recognize the significance of differences among states and societies and/or the influence of cultural and historical settings limits the usefulness of economics. The imposed policy prescriptions of the International Monetary Fund (IMF) following the East Asian financial crisis provide an

²⁹ Joseph E. Stiglitz, "Another Century of Economic Science," *Economic Journal* 101, no. 404 (January 1991): 134–39.

³⁰ Daniel Bell and Irving Kristol, eds., *The Crisis in Economic Theory* (New York: Basic Books, 1981), viii.

³¹ John Tiemstra, "Why Economists Disagree," *Challenge* 41, no. 3 (May/June 1998): 46–62.

unfortunate example of economists' failures to comprehend local social and political conditions. An understanding of the international political economy must be based on appreciation of state policies, social norms and institutions, and historical legacies, and also of the ways in which economic outcomes are shaped by such external factors.

Although neoclassical economists claim that economics is an objective science like physics, economics is actually built upon a number of normative assumptions or value judgments accepted by most economists. These normative assumptions influence the choice of subjects that economists study and the answers they will accept. Economics offers many conflicting explanations of the causes of trade flows and the determinants of exchange rates; indeed, value preferences frequently play a significant role in determining which model a particular economist accepts or rejects. In this way, normative assumptions sometimes influence economists' policy prescriptions. Although one may share some of their assumptions, as I do, including the desirability of free trade and of open economies, these assumptions can have a distorting effect on analysis and resulting policy recommendations.

Modern economics, based on the philosophy of political liberalism, assumes that the individual rather than groups or classes is the basic unit of society,³² and that there is a harmony of interests among individuals, at least over the long term, with this harmony accounting for social and political stability. The underlying harmony in a market system is the result of what Adam Smith called "the invisible hand," which means that the actions of each individual, as he or she pursues selfish interests, lead automatically to betterment of the human race. Belief in the harmony of interests among individuals also constitutes the basis of the liberal belief in moral and social progress. Liberals argue that, despite frequent setbacks, history is moving toward achievement of the greatest good for the greatest number.

Liberalism incorporates a normative commitment to individual rights, the free market, and political democracy. Or, to put the point differently, liberal thought tends to believe that all good things go together. As Charles E. Lindblom has pointed out, political democracy and economic liberalism have tended generally to accompany one another in the modern world.³³ Tension does exist, however, between liberalism's commitment to equality (equity) and its commit-

³² The idea that society is composed of conflict groups, of which the state is the principal example, was set forth by Ralf Dahrendorf, *Class and Class Conflict in Industrial Society* (Stanford: Stanford University Press, 1959).

³³ Charles E. Lindblom, *Politics and Markets: The World's Political Economic Systems* (New York: Basic Books, 1977).

ment to freedom (liberty). The split between those liberals who give priority to one or the other of these fundamental values underlies dissension in modern democracies over the role of the state in the economy. Americans apply the term “liberals” to those partisans who give precedence to equality and therefore urge government intervention in the economy to promote equality. Conservatives, on the other hand, give precedence to liberty and, at least in principle, oppose government intervention in the economy. From this perspective, both Franklin D. Roosevelt, with his New Deal policies of state intervention in the economy to promote economic equality, and Ronald Reagan, whose economic policies (Reaganomics) began to roll back the New Deal in the interest of economic freedom, were “liberals.” They simply placed a differing degree of emphasis on equality versus liberty.

An important normative assumption held by mainstream economists is that the purpose of economic activity is to increase the welfare of the individual consumer and to maximize global wealth. The harmony-of-interest doctrine assumes that if the market is left alone and “prices are right,” resources will be employed efficiently, and over the long term everyone’s welfare will improve. Such beliefs lead to the conclusion that the state should not intervene in the economy. Politicians, economists believe, invariably get prices wrong and thereby distort the efficient functioning of the market.

Defining economics as a science of efficient resource allocation, economists tend to have a strong bias in favor of efficiency over equity. That is, economists generally prefer the efficient allocation of economic resources to maximize production of wealth rather than distribution of wealth according to some subjective standard of what is fair. This emphasis on the driving force of efficiency encourages economists to believe that, despite frequent setbacks caused by such developments as war, trade conflicts, and other disruptions, the world is moving inexorably in the direction of free trade and a global market economy. The movement toward integration of national economies and increasing global economic interdependence has developed because markets are more efficient than other forms of economic organization.³⁴ The collapse of the Soviet-type command economy strongly reinforced this conviction.

Most neoclassical economists accept implicitly the existing distribution of wealth and property rights. Yet economists have, of course,

³⁴ This argument is set forth in John R. Hicks, *A Theory of Economic History* (London: Oxford University Press, 1969).

addressed the equity-efficiency trade-off and have also carried out research on the most efficient distribution of wealth and property rights to achieve the social conditions most conducive to rapid economic growth. Many economists have strong personal concerns about wealth inequities; even an economic conservative like Milton Friedman has proposed a negative income tax as a solution to growing inequalities in American society. Nevertheless, concern over the distribution of income lies outside the primary focus of the discipline. Instead, economists generally accept and seldom challenge the legitimacy of the status quo distribution of wealth and property rights in society, an attitude that sometimes leads to indifference to social issues. An admittedly unscientific survey of Princeton University economists regarding the economic priorities of the first Clinton Administration revealed such a conservative social bias. All but one of the half-dozen economists interviewed proclaimed that the newly elected President's first priority should be to leave the economy—then in a recession—alone. The one exception was the economist-president of Princeton, Harold Shapiro, who stressed the importance of maintaining healthy social welfare programs!³⁵

At the international level, economists generally assume what Charles Kindleberger calls a “cosmopolitan” rather than a nationalist stance.³⁶ With few exceptions, economists believe in free trade and oppose protectionist practices; they strongly believe that open and unrestricted markets are the best way to increase consumer choice and maximize efficient use of the planet's scarce resources. At the same time, however, economists qua economists place a low priority on the distribution of wealth within and among national economies. They eschew the controversial issue of “distributive justice” because it involves a value judgment and thus lies outside the realm of economic science. Many critics regard mainstream economics as politically conservative and therefore tolerant of the evils of the domestic and international status quo. Indeed, the beliefs that resources are scarce and must be used efficiently, and that hard choices must be made among alternative uses, reinforce the conservative bias pervading the discipline.

Economists in general believe that trade and economic intercourse promote peaceful relations among nations because the mutual benefits of trade and expanding interdependence foster cooperative rela-

³⁵ *Princeton Alumni Weekly*, 10 March 1993, 56.

³⁶ Charles P. Kindleberger, *Power and Money: The Economics of International Politics and the Politics of International Economics* (New York: Basic Books, 1970).

tions. Whereas politics tends to divide, economics is believed to unite peoples. A liberal world economy based on openness and free trade should have a moderating influence on international politics because it creates bonds of mutual interest and a commitment to the status quo. However, it is important to emphasize again that although everyone will, or at least could, benefit in absolute terms under a system of free exchange, individual relative gains will differ depending on the marginal contribution to the social product made by those individuals. This issue of relative gains and the uneven distribution of the wealth generated by the market system has given rise to Marxist and nationalist criticisms of economic liberalism.

Neoclassical economists believe that markets should be left alone by politicians. Except in rare cases of market failure, the government should neither intervene in the economy nor try to influence market outcomes. Economists use the term “market failure” to describe a situation in which markets fail to produce either economically optimal or socially desirable outcomes, and they define four principal types of market failure. One type occurs when there are externalities or “spillovers” of economic activities so that one actor’s economic activities harm those of another (as in environmental pollution). Increasing returns and declining marginal costs that lead to a monopoly constitute another type of market failure. Still another is found in such market imperfections as market rigidities and consumer lack of information. And a more controversial type is distributional inequalities. While most economists acknowledge market failures, they are far from agreement on ways to resolve such failures. There is a particularly clear difference of opinion about income inequalities.

Although there is intense controversy within the economics profession concerning market failure and what, if anything, should be done about it, most economists would agree that the problem of government failure—policies that distort the market and cause gross inefficiencies—constitutes a more serious problem. This *laissez-faire* attitude holds that if the market were left alone, it would get prices (of wages, profits, and rents) right, incentives and disincentives would encourage individuals to make their maximum contribution to the economy, and the economy would produce optimum outcomes for society. On the other hand, economists believe that government intervention in the economy invariably gets prices wrong, distorts incentives, and produces economic outcomes that are suboptimal for the society as a whole.

Finally, commitment to Pareto optimality provides a guiding nor-

mative principle for economics.³⁷ As a moral principle for individuals, this idea cannot be faulted. However, its relevance for the real world of political affairs is not only dubious, but the principle is highly questionable in political terms because it assumes that absolute gains are important but related losses are insignificant.³⁸ State-centric analysts, on the other hand, stress the importance of relative gains or losses as much or more than absolute gains.

This difference in emphasis can be crucial to evaluation of a particular development. For example, viewed by the criterion of Pareto optimality, an absolute gain to one state is justifiable. However, a state-centric assessment could be very different. A case in point would be an absolute gain in the wealth and hence in the power of an aggressive state such as Nazi Germany in the 1930s. Such a development would have been morally justifiable according to the Pareto criterion. However, in political terms, a wealthier Nazi Germany could shift the international distribution of power in favor of that potentially aggressive state and thus the likelihood of war could increase. Economists' emphasis on absolute gains and state-centric analysts' emphasis on relative gains in a world of competitive states arise from their very different assumptions.

ECONOMISTS AND PUBLIC POLICY

The prominent role of professional economists in American public life has been an important feature of American society since the end of World War II. In 1946 the Full Employment Act assigned the important task of ensuring full employment to the federal government; the Council of Economic Advisors, whose members have included some of America's most distinguished economists, was created by that Act to assist the President and the federal government to carry out this responsibility. Gradual acceptance within the economics profession of the Keynesian doctrine of demand management provided the Council with the rationale and tools for macromanagement of the American economy.

Celebrating the elevated status of the economist in American public affairs, Walter Heller, chairman at that time of President Lyndon

³⁷ This term is named after Vilfredo Pareto (1848–1923), an Italian economist and sociologist.

³⁸ A Pareto-optimum equilibrium is one in which at least one individual's welfare would be improved and no other individual's welfare would be lessened.

Johnson's Council of Economic Advisors, proclaimed in his 1965 Godkin Lectures at Harvard University the arrival of "the age of the economist."³⁹ The theoretical triumph of Keynesian economics, Heller told his audience, meant that economists now knew how to "fine tune" the economy in order to avoid the twin perils of recession and inflation; at long last, the destructive business cycle had been conquered. Moreover, he added, the American political elite had accepted Keynesian macroeconomics. (Even President Richard Nixon agreed a few years later that "we are all Keynesians now!"). Heller pointed out that, as a consequence, economists now sat at the right hand of the President and advised the President on how to guide the economy to ever-increasing prosperity. A few years later, Harry Johnson, an economist of a much more conservative inclination, proclaimed that the ability of economists to quantify and predict constituted their claim to superiority over most intelligent individuals with an interest in economic problems.⁴⁰

These statements by Heller and Johnson reflected economists' confidence in the efficacy of their methods and theories in the early decades after World War II. Unfortunately, economists frequently have been overly confident in their methods; believing that if something cannot be measured, quantified, or tested by the methods of economics, it either does not exist or at least is irrelevant, economists have often excluded other analytic approaches. The economics profession often ignores crucial aspects of social reality that cannot be modeled or made consistent with neoclassical assumptions. Kenneth Arrow, one of the truly great minds of modern economics, has suggested a plausible explanation for this excessive self-confidence. Economists, Arrow points out, see themselves as privileged purveyors of rationality; certainly the intellectual confusion and imprecise thinking encountered in public debate on economic issues lends credence to such a self-perception. Yet, as Arrow continues, "Unfortunately, there is a close connection between rationality and intolerance: If you know a thing *a priori*, the way you know a column of figures is right when it is correctly calculated, there is no room for argument and anyone who disagrees must be either stupid or dishonest."⁴¹

³⁹ Walter W. Heller, *New Dimensions of Political Economy* (Cambridge: Harvard University Press, 1966).

⁴⁰ Harry G. Johnson, *On Economics and Society* (Chicago: University of Chicago Press, 1975).

⁴¹ Kenneth Arrow, quoted in E. L. Jones, "Economics in the History Mirror," Economic Discussion Papers No. 6/88, School of Business, La Trobe University, Bundoora, Victoria, Australia, 7–8.

The predilection among economists to ignore those social and political aspects of public affairs that cannot be modeled means that economists generally analyze public problems or make policy pronouncements as if the fundamental issues at stake were solely, or at least primarily, economic. Of course, experts in many other fields have similar predilections. The knowledge (expertise) of experts is frequently more limited than they are willing to admit to themselves or to anyone else. In this way economists and other experts exhibit a "trained-incapacity."⁴² Robert Keohane, in his incisive critique of the McCracken Report, has demonstrated superbly the tendency of economists to disregard the opinions of experts in other fields, to be totally unaware of the political/ideological biases inherent in their own policy recommendations, and to go beyond their competence when advising governments.⁴³

During the early decades following World War II, the world economy experienced rapid economic growth and relatively low rates of inflation. In the early 1970s, this happy situation suddenly turned sour. During the previous decade, particularly after escalation of the Vietnam War, the rate of inflation had accelerated, and this began to dampen the rate of growth. Other developments, including a slowdown in the rate of growth in productivity in the United States and in Europe, had contributed to growing problems in the world economy. In 1973 the crisis caused by a sudden large increase in the price of oil changed matters dramatically and plunged the world economy into stagflation (an unprecedented combination of low economic growth, rising unemployment, and severe inflation). Much to their embarrassment, economists had to admit that at this time they knew neither how to "fine-tune" the economy nor how to avoid the scourge of the business cycle. Trying to find out what had gone wrong, the Organization of Economic Cooperation and Development (OECD) in Paris appointed a commission of eight eminent economists from advanced capitalist economies, led by chairman Paul McCracken, to study the situation. The commission was asked to prepare a report on the "main policy issues involved in the pursuit by member countries, of non-inflationary economic growth and high employment levels in the light of the structural changes which have taken place in the recent past." After eighteen months of work, the OECD Secretariat

⁴² This thesis is elaborated in my book, *American Scientists and Nuclear Weapons Policy* (Princeton: Princeton University Press, 1962).

⁴³ Robert O. Keohane, "Economics, Inflation, and the Role of the State: Political Implications of the McCracken Report," *World Politics* 31, no. 1 (October 1978): 108-28.

published the commission's report, entitled *Towards Full Employment and Price Stability* (1977).

The thesis of the report was that the economic troubles of the 1970s had been caused primarily by certain policy errors of OECD member governments, errors that included overexpansionary economic policies and failure to respond properly to the inflationary consequences of the breakdown of the system of fixed exchange rates. Although presented as economic truth, the report's analysis was actually based on a politically conservative, market-oriented ideology. As Keohane writes, "Pervading the report is the view that contemporary democratic governments are unwilling to exercise sufficient domestic discipline, particularly monetary discipline."⁴⁴ Governments, the report suggests, had been too lax and had given in to the temptation of easy monetary policies in order to win favor with their electorates. The solution offered by the report was reimposition of economic discipline and limitation of the public's economic aspirations. The report's idea that a "disciplinary" (rather than a welfare) state was needed to make capitalism work was adopted by economic conservatives and put into practice by President Ronald Reagan and Prime Minister Margaret Thatcher in the 1980s.

Although the McCracken Report concluded that the causes of the economic disarray of the 1970s were located in the realms of social and political affairs, none of the economists on the committee were experts in those areas. As Keohane pointed out, the fundamental issue confronting the McCracken committee was the conflict, or at least the apparent conflict, between the necessary conditions for modern economic growth and the nature of both modern democracy and the welfare state. Yet the economist-authors of the report, Keohane suggests, appear to have been totally unaware that they were dealing with a classic conflict between capitalism and democracy. Nor did they make any attempt to judge the political feasibility of their recommendations for resolving this fundamental clash. In Keohane's words, "A more profound understanding of macroeconomic events will only be achieved by combining the economic argument with the analysis of conflicts of interests, and the exercise of power, as they take place within different national societies and the international political economy."⁴⁵

Economists' neglect of the social and political dimensions of public affairs and public policy originates in their tendency to treat economic

⁴⁴ Ibid., 111–12.

⁴⁵ Ibid., 116.

issues as if they were solely or at least primarily technical problems. Because economists believe that reality consists of only those matters that they can model and quantify, even when they are aware of the role of social factors or political forces that shape economic and public affairs, they deem such matters to be outside the scope of economics and therefore irrelevant because they cannot be measured or modeled. Therefore, economists deliberately ignore or downgrade such factors in their analyses and policy recommendations. Whereas economists believe that economics is scientific, they frequently regard social and political affairs as matters of personal taste and private opinion.

Nonetheless, as Paul Krugman's popular writings have indicated, economists' confidence in their ability to guide the economy and to advance the commonweal had significantly weakened after Heller's 1965 Godkin Lectures, mentioned earlier. The discovery of the "natural rate of unemployment" and development of the theory of rational expectations revealed the limitations of economists' macroeconomic policy tools.⁴⁶ Moreover, Krugman bemoaned the fact that "policy entrepreneurs" frequently displaced economists in providing economic advice to society. Referring to supply-side economics and other questionable economic doctrines, Krugman, using less than elegant words, suggested that a major task for economists must be "to flush such economic cockroaches down the toilet."⁴⁷

As I discuss both the strengths and limitations of economics, I note that the strengths generally outweigh the weaknesses. With the rigor of their methods and the insights of their theories, economists have made major contributions to public affairs and have tried, not always with success, to safeguard the public against such a dubious idea as trade protectionism and against the excesses of economic regionalism. The economics profession itself, however, is deeply divided on such issues as trade, monetary affairs, and economic development even though the problems of the global economy and possible solutions are often treated by economists as if they were solely technical matters amenable to the methods of economic science. Although the contributions of economics have been crucial to our understanding of the world economy, one must also appreciate the role of political and

⁴⁶ In nontechnical terms, the natural rate of unemployment is the lowest rate that an economy can sustain without experiencing inflation. The doctrine of rational expectations posits that the market will always anticipate government policy and will neutralize its intended effects.

⁴⁷ Paul R. Krugman, *Peddling Prosperity: Economic Sense and Nonsense in the Age of Diminished Expectations* (New York: W. W. Norton, 1994), 291–92.

CHAPTER THREE

other factors in determining the nature and dynamics of the world economy.

COMPARISON OF ECONOMICS AND POLITICAL ECONOMY

Economics is clearly a more rigorous and theoretically advanced field of study than are political economy and the other social sciences. However, economics is based on highly restrictive methodological assumptions and, despite flourishing “economic imperialism,” the domain of formal economic analysis is quite limited. Moreover, efforts to apply the rational choice techniques of economic analysis to the messy world of politics and social affairs more generally have not achieved consistent success. Although economic theories and methods are important and provide an essential foundation for the study of political economy, they are not in themselves sufficient to explain the nature and dynamics of the “real” world economy. This writer believes that combining the insights and theories of economics with the more intuitive and less rigorous techniques of history and the other social sciences leads to a more profound and useful comprehension of economic affairs than does adherence to any one field alone.

The most fundamental difference between neoclassical economics and the study of political economy is in the nature of the questions asked and of the answers given. Neither is superior to the other, nor is there any necessary conflict between the answers given by neoclassical economists to the questions that interest them and the answers given by political economists to their different questions. The two subjects complement one another, and political economists of almost every persuasion do, in fact, accept most, or at least much, of the corpus of conventional neoclassical economics. Even though political economists frequently consider the theories of neoclassical economics to be too limited, too abstract, and in many cases not directly relevant to the particular questions of interest to them, insofar as they are technically competent to do so, they draw upon the accepted theories of economics as they study many specific issues.

Economics and political economy differ significantly in their view of the role of the market in economic affairs and of the relationship of the market to other aspects of society. Whereas neoclassical economists believe that the market is autonomous, self-regulating, and governed by its own laws, almost all political economists assume that markets are embedded in larger sociopolitical structures that determine to a considerable extent the role and functioning of markets in social and political affairs and that the social, political, and cultural

environment significantly influences the purpose of economic activities and determines the boundaries within which markets necessarily must function.⁴⁸

Neoclassical economists and scholars of political economy also disagree with one another regarding the limitations of economics as an analytic tool useful for understanding the dynamics of social, political, and even economic affairs. While economic science provides a useful framework for static analysis, it seldom can explain changes in fundamental economic variables; for example, despite the central role of technological developments in economic affairs, economists do not have an explanation for technological change. In fact, the crucial determinants of economic change lie outside the framework of economic analysis. Reviewing the economics literature on the subject of economic change, Joseph Stiglitz comes to the astonishing conclusion that economists have not learned much about the dynamics of the economy.⁴⁹

Despite the attempts of economic imperialists and rational-choice theorists to explain all forms of human behavior through application of the techniques of microeconomics, these techniques have limited utility for analyzing and explaining human behavior. Most political economists, I believe, would agree with the distinguished economist Joseph Schumpeter that economic analysis progresses until it inevitably encounters social, political, and psychological factors that economics cannot explain.⁵⁰ Although the research strategy of economic science is to "endogenize" exogenous variables, economic analysis and explanation are unlikely ever to exceed a certain limit.⁵¹ There will always be exogenous variables such as culture, technology, and institutions that affect economic outcomes but cannot themselves be

⁴⁸ The concept of "embeddedness" is taken from the literature on economic sociology. An excellent discussion of this field of scholarship is Neil J. Smelser and Richard Swedberg, eds., *The Handbook of Economic Sociology* (Princeton: Princeton University Press, 1994). While this field of scholarship has produced classic works by Max Weber, Talcott Parsons, and others, economic sociology, with the major exception of radical sociology, has not devoted much attention to the international economy.

⁴⁹ Joseph E. Stiglitz, "Another Century of Economic Science," *Economic Journal* 101 (January 1991): 139.

⁵⁰ Joseph A. Schumpeter, *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle* (Cambridge: Harvard University Press, 1934), 4–5. I am indebted to Robert Keohane for bringing Schumpeter's comments to my attention.

⁵¹ To endogenize an exogenous variable, such as the behavior of a politician, means that the exogenous variable can be explained by the logic of economics: individuals rationally seek to increase their own interests. This assumption is of course the basis of the public-choice school.

CHAPTER THREE

explained endogenously by the methods of economics; that is, in terms of rational individuals attempting to maximize their economic self-interest.

As Schumpeter states in another context, conventional economics can tell us how to manipulate the existing economic apparatus in order to increase its efficiency, but economics cannot explain how that economic apparatus came into existence in the first place.⁵² Yet, identifying the determinants of an economic system is one of the most important problems that should be solved by economists and political economists alike. Indeed, how can economic development be understood without an answer to this question?

CONCLUSION

The analytic techniques, rich empirical data, and theoretical insights of neoclassical economics are essential ingredients in the study of political economy in general and international political economy in particular. Nevertheless, it is important to keep in mind the fact that economic activities occur within differing sociopolitical structures and that these structures greatly influence their outcomes. Understanding of the international economy must therefore be based on the contributions of international political economics as well as on economics itself.

⁵² Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper and Brothers, 1947).