### ECONOMIC TRANSITION AS A CRISIS OF VISION:

# CLASSICAL VERSUS NEOCLASSICAL THEORIES OF GENERAL EQUILIBRIUM

### John Peters

University of Southern California and School for International Training

### John Elliott

University of Southern California

and

### Stephen Cullenberg

University of California, Riverside

### INTRODUCTION

The dominant contemporary view of the classical vision of a capitalist market economy provided by such founders as Adam Smith and Karl Marx, is that of essential continuity with the neoclassical economics that succeeded it. At least, it is often held, the basic elements of economic discourse embodied in the late twentieth century version of neoclassicism, notably that found in or inspired by the Arrow-Debreu [1954] model of competitive general equilibrium, insofar as they differ from those of the classical forebearers, constitute a more or less seamless web of intellectual progress with them [Blaug, 1997].

Much of the attraction of the neoclassical general equilibrium vision is that it is regarded as providing the theoretical basis for Smith's classic insight that the unintended consequences of economic agents acting in their own best interests will lead to social coherence rather than chaos. Arrow-Debreu general equilibrium, it is commonly thought, captures the essence of Smith's invisible hand, and thus it follows that a neoclassical vision of equilibrium and the economy best informs the processes and policies for economic transition in post-Communist economies.

The classical vision of a capitalist economy explicated by Smith and Marx, however, differs from the neoclassical view embodied in the Arrow-Debreu model in critical ways. Indeed, as Pierangelo Garegnani [1976] has argued, the very notion of equilibrium changed as the Arrow-Debreu model became the dominant mode of representing the workings of market economies. These competing paradigms of equilibrium clash on several fundamental issues—efficiency, the role of markets, power, the nature of exchanges, time, institutions, and the types of equilibrium conditions sought

**Stephen Cullenberg:** Economics Department, University of California, Riverside, California, 92521. E-mail: stephen.cullenberg@ucr.edu

by the theories. It is primarily the contemporary neoclassical vision of the economy that underlies current shock therapy policy recommendations by western advisors, and which has had devastating effects on several of the transitional economies. In contrast, we shall analyze shock therapy through the theories of the classical economists in order to suggest alternative policy recommendations.

Moreover, once the verity of significant differences between classical and neoclassical theories are accepted, it is a small step to the proposition that classical perspectives may be superior to at least some ideas embodied in neoclassicism. As Joan Robinson [1974, 48] aptly put it, the challenge to develop a more satisfactory economics is upon us. The failures of shock therapy in post-Communist transitional economies reinforce the need for a better economics. Our argument, drawing inspiration from Robinson's comment, is that some of the important lessons we seek may be found by looking back to "clasp the hands" of the classicals.

Beginning in the early 1990s, western economists were invited to play key advisory roles in the transitions of the former socialist countries to market economies. One can only imagine the intellectual seductiveness and policy appeal of such an invitation, which in effect asked western economists to remake the former socialist countries in their own image. A decade after the transition, however, the efficacy of shock therapy as economic policy is perhaps as questionable as that of shock therapy as medical treatment. This point has been made forcefully by many economists. Joseph Stiglitz [1999], for example, argues that the failures of shock therapy and socalled "rapid" reform in the former socialist countries have less to do with government failures to administer the appropriate shocks, and more to do with the fact that the economic theory underlying transition, inspired by the Arrow-Debreu view of the world, misunderstands the capitalist economic system in fundamental ways [Stiglitz, 1999; Hoen, 1998]. The "failures of the reforms that were widely advocated go far deeper—to a misunderstanding of the very foundations of a market economy, as well as a failure to grasp the fundamentals of reform processes" [Stiglitz, 1999, 3]. For Stiglitz, "part of the problem [of shock therapy] was an excessive reliance on textbook models of economics" [ibid.].2

If the problematics of the preference for neoclassical over classical theories of equilibrium were restricted to academic debate, the practical import of such theories might be less alarming. But if the destruction of established institutions by shock therapy, combined with laissez-faire strategies to create their replacements in such countries as Russia and Eastern Europe during the last decade were generally based on neoclassical views of general equilibrium, and that this was at least one significant factor in explaining poor economic performance, then the general presumption of superiority of the insight of contemporary general equilibrium theory over classical visions of the economy and economic change may be questioned. And, conversely, if superior economic performance in such countries as China can be attributed, at least in part, to more classical, evolutionary strategies, then perhaps one corollary "lesson" is that the advice to "clasp the hands" of the classicals is by no means misdirected.

The basic argument of this paper is that the shift in equilibrium theorizing from classical to neoclassical economics has not been a wise one, and that economists looking to address real-world problems such as transition (or even those involved with the design of graduate economics education), may do well to dust off their copies of the

TABLE 1
Equilibrium in Classical and Neoclassical Economics

Issue	Classical	Neoclassical
Efficiency	Dynamic; Developmental	Allocative
Role of Markets	Creative role within a "disequilibrium" system of exploration	To facilitate exchange
Equilibrium Conditions	Necessary; Equal rate of profit condition (center of gravity) within a system- wide markup pricing model	Sufficient; Consistency: Center of gravity issue not addressed; goal to find prices where equilibrium "could" exist
Time	Real historical time	Ahistorical; Logical; Euclidean
Nature of Exchange	Exchange occurs in real historical time at disequilibrium and equilibrium prices	Exchange occurs only once equilibrium prices are reached
Power	Provides a degree of tension within the theory and points to policy implications	Destroys the framework of equilibrium
Institutions	Central to analysis; Necessary to economic activity	De-emphasized; Hinders smooth operation of the system

classics, as rich, useful interpretations of the economy can often be found therein. We thus consider transition as an *example* of a contemporary issue where the ideas, theories, and general methodological orientation of the classical economists can shed considerable light.

The organization of the remainder of the paper is as follows. In the following section, we compare the Arrow-Debreu and classical theories of general equilibrium. Second, we turn to the issue of transition, and argue that to their detriment, transition efforts have often been based on a neoclassical view of general equilibrium, rather than on a classical, dynamic theory of systemic equilibrium and market development. In this section we compare and contrast the Chinese and Russian experiences in reform. Third, since Smith's name is often invoked in connection with the former socialist countries' transition to market economies, we look to his work with regard to transition, and argue that, far from being a supporter, he would very much be a critic of shock therapy, strict laissez faire, and transition as is often currently practiced. We conclude by considering some of the implications of our analysis, for both economic policy and the economics discipline.

## CLASSICAL AND NEOCLASSICAL THEORIES OF GENERAL EQUILIBRIUM

Table 1 identifies seven issues in equilibrium theorizing, and summarizes classical and neoclassical conceptualizations of each issue.

### Efficiency, the Role of Markets, and Equilibrium Conditions

Classical Theory. The classical economists were concerned with the creative role of markets in realizing dynamic efficiency. The economy was envisioned as an "ongoing, self-reproducing process of production and accumulation" [Foley, 1990, 666]. For Smith, the "greatest improvement in the productive powers" of labor, and hence output, is the division of labor, which in turn is a positive function of the extent of the market [1976 (1776), 7]. The role of markets for Smith is to enable production to expand both qualitatively and quantitatively, and thereby, to foster the "wealth of nations."

Marx was also impressed by the creative, powerful role of markets in capitalism, expanding production possibilities and enabling the economy to develop in ways not remotely possible under feudalism. For Marx, the power of capitalism to unleash the productive powers of society was self-evident. "The bourgeoisie, during its rule of scarce one hundred years, has created more massive and more colossal productive forces than have all preceding generations together. . . .What earlier century had even a presentiment that such productive forces slumbered in the lap of social labor?" [1848 (in Sweezy, 1964), 10].

The classical vision further argues that markets play a crucial role in a disequilibrium system of exploration for profit opportunities. The classicals presented the idea of a systemic tendency toward the equalization of profit rates across industries. In their attempt to maximize profits, entrepreneurs (or capitalists) will search for and explore profit opportunities, increasing investment where profit opportunities lie, and decreasing investment in sectors where profit opportunities are less attractive. The tendency to search for the highest rate of profit occurs in an actual economy and in real historical time. Natural prices represent the center of gravity of the economy given its specific institutional structure. "The natural price . . . is, as it were, the central price, to which the prices of all commodities are continually gravitating. Different accidents may sometimes keep [prices] suspended a good deal above [the natural pricel, and sometimes force them down even somewhat below it. But whatever the obstacles which hinder them from settling in this center repose and continuance, they are constantly tending towards it" [Smith, 1976 (1776), 65]. Marx argues that the equalization of profit rates is the "consequence that generally obtains whenever, from whatever reason, the average rate of profit comes to differ in different spheres of production. Capital and labor would be transferred from the less remunerative to the more remunerative branches; and this process of transfer would go on until the supply in the one department of industry would have risen proportionately to the increased demand, and would have sunk in the other departments according to the decreased demand. This change effected, the general rate of profit would again be equalized in the different branches" [1910 (1898), 19].

The approach to general equilibrium developed by Smith and Marx is one of *adjustment* toward an equal rate of profit within a system-wide markup pricing model. That is, the "prices of production" (similar to what Smith called the "natural" price) will be determined in the long run by a markup of profit over costs that is equiproportionate across industries. The theory of system-wide equilibrium in classical theory thus asks the question of what prices are necessary, given a particular set of

institutions and production structure, to reconcile with a long-run equal rate of profit. This is an exploration and adjustment story through capitalist markets that occurs in real historical time. The goal is to understand this process as it develops toward the applicable center of gravity. We are therefore looking for "necessary," not "sufficient," prices given the historical set of institutions inherited by the economy.

Neoclassical Theory. Modern neoclassical equilibrium theorizing is built on a Walrasian [1954 (1874)] foundation.<sup>3</sup> In neoclassical general equilibrium theory (hereafter, GET), we do not search for the necessary conditions under which general equilibrium will obtain; instead, we determine the possible conditions under which a general equilibrium could theoretically exist—hence, the set of equilibrium prices in GET reflect "sufficient," and not "necessary," conditions. The bulk of the work on GET, from Walras to Arrow-Debreu, focuses upon showing the possibility of the existence of this general result. This is what is meant by the "proof of the existence of general equilibrium."<sup>4</sup>

The emphasis in neoclassical equilibrium is not on production and dynamic efficiency as in classical equilibrium, but rather on static, allocative efficiency. In fact, in the implied economy of GET, sometimes described as a pure exchange economy, production does not play a fundamental role. In contrast to the classical theory where the dynamic interaction of production and exchange plays a central role in the analysis, GET offers a theory of a capitalist economy focusing on exchange and regards production as a relatively passive set of input-output relations. Markets do not play a production-based, creative role in neoclassical equilibrium, but rather are for the purposes of facilitating exchange. As Foley puts it, the owners of commodities seek to exchange with each other to reach more satisfactory proportions in their holdings... They spend the day haggling over the relative prices of apples and lettuce, until they find equilibrium prices at which the amounts offered for sale are just matched by the amounts demanded. The same produce goes home at the end of the day in different carts" [1990, 666]. This is an exchange story. In contrast to the classical view, which sought to explain why markets exist and why they function the way they do, and to develop a causal schema between social phenomena, neoclassical GET makes no causal claims whatsoever. Instead, it says that a general equilibrium solution can be found to an axiomatic economy, hence saying that at least in principle, a general equilibrium solution to the blackboard economy is possible.<sup>5</sup>

There is no equal rate of profit condition in neoclassical equilibrium. Thus, the classical story of adjustment and the exploration of profit opportunities through entry and exit has no counterpart in neoclassical GET. In fact, the neoclassical story does not search for necessary conditions at all; rather, neoclassical GET investigates under what possible conditions a general equilibrium could theoretically exist; that is, it searches for sufficient conditions. David Kreps admits that "one thing that the concept of a Walrasian equilibrium doesn't provide is any sense of how markets operate. There is no model here of who sets prices, or what gets exchanged for what, when, and where" [1990, 195, emphasis in original]. Similarly, Kenneth Arrow has remarked that each "individual participant in the economy is supposed to take prices as given and determine his choices as to purchases and sales accordingly; there is no one left over to make a decision on price" [1959, 43]. Thus, the neoclassical general equilib-

rium program is largely silent on some of the key issues that inspired Smith and the classics—that is, the dynamic nature of competition, exploration, markets, equilibrium, and disequilibrium.

If the issues deemed so important by the classicals are swept aside by neoclassical GET, then what does it contribute beyond the classicals? Most important are the powerful normative claims of GET, claims that provide a confident rationale for much of the shock therapy policy recommendations. The normative claims are the two socalled fundamental welfare theorems—first, that any competitive equilibrium is Pareto-optimal, and second, that any desired Pareto optimum can be achieved as a competitive equilibrium given a suitable redistribution of initial endowments [Arrow and Hahn, 1971, 6]. Given the large number of technical assumptions one has to make to draw out the two welfare theorems from the axiomatic edifice, the popularity of these normative claims may seem peculiar. However, as Alexander Rosenberg [1992] suggests, the link to the two welfare theorems is one of the key elements of neoclassical equilibrium, allowing GET to become a framework for mathematical political philosophy. Frank Hahn similarly writes: "On certain assumptions an Arrow-Debreu equilibrium of an economy can be shown to be Pareto-efficient." But "this latter concept and [its required] assumptions" are so demanding "that to claim this efficiency for any actual economy would be a singularly weak claim in an argument designed to persuade us that the economy is also in some sense morally to be approved" [1973, 4]. For Hahn, the Arrow-Debreu model of GET is primarily useful as a negative heuristic, telling us in a counterfactual sense what the economy must look like in order for the claims of existence and optimality of an equilibrium set of prices to hold. GET suggests to us the limits of policy advice rather than providing a theoretical framework guaranteeing the efficacy of such advice.

### Time, the Nature of Exchange, Institutions, and Power

Classical Theory. The classical version of GET is set in real historical time. As Robinson put it the "main preoccupation of classical economists was with an historical process of accumulation in a capitalist economy and its relation to the distribution of the product of industry between the classes of society while the neo-classicals concentrated upon conditions of equilibrium in a stationary state" [1974, 48]. For classical theory, decisions "to consume today are analyzed in the light of their consequences for the future. Time in the classical model has no end; the economy always faces a continuing future" [Foley, 1990, 666]. Moreover, the classical economists did not shy away from the gritty world of institutions, for as Robinson makes clear, "the classics. . . .were concerned with actual contemporary problems and put their arguments in terms of the structure and behaviour of the economy in which they were living, while the neoclassics enunciated what purported to be universal laws, based on human nature—greed, impatience and so forth" [1974, 53]. While the analyses of the classicals were presented within a particular institutional framework, the neoclassicals "rarely say anything at all about the kind of economy to which an argument is to be applied. The suggestion is that the same laws which govern the supposed behaviour of Robinson Crusoe are equally valid for the conduct of the Gosplan, or rather for what its conduct ought to be, and for analysing the vagaries of Wall Street" [ibid.].

Exchange in classical economics takes place both at equilibrium and disequilibrium prices. Prices fluctuate in real markets and thus not all purchases can be called equilibrium purchases, as it is the very act of exchange that drives the dynamic adjustments that the classicals see as central to the nature of a capitalist economy. For the classical economists, when quantity demanded is greater than quantity supplied, the market price will have a tendency to increase, and should quantity demanded be less than quantity supplied, we can expect market price to fall. A variant of the classical equilibrium framework is taught to all introductory economics students as the partial long-run analysis that results in a zero rate of profit as an equilibrium condition. In stark contrast, the neoclassical GET that provides the core of graduate education has stripped modern equilibrium theorizing of this and other stories of dynamic adjustment, reformulating equilibrium in non-historical and allocative terms.

Furthermore, the existence and importance of time in classical economics allowed Marx to discuss temporal aggregate demand problems almost a half a century before John Maynard Keynes and Michal Kalecki. Marx was clear in his criticism of Say's law, and based his critique on the recognition of the role that real historical time plays in opening the door for aggregate demand problems and economic crises. "Nothing could be more foolish than the dogma that because every sale is a purchase, and every purchase a sale, therefore the circulation of commodities implies an equilibrium of sales and purchases. If this means that the number of actual sales is equal to the number of purchases, it is a mere tautology. But its real purport is to show that every seller brings his own buyer to market with him. . . . No one can sell unless someone else purchases. But no one is forthwith bound to purchase because he has just sold" [Marx, 1975 (1867), Vol. I, 113].

Power provides a degree of tension within classical economics. For Marx, of course, differential power between those who own the means of production and laborers who do not, facilitates the exploitation of the latter by the former. For Smith, power is recognized as a potential obstacle to the efficacious or equitable operation of the invisible hand and market system generally. For example, "people of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices" [Smith, 1976 (1776), 145]. Does power then destroy the operation of the equilibrium mechanism in classical economics? No, but it does outline some obstacles that can potentially exist for the market mechanism. Power in classical economics does not destroy the equilibrium, but rather identifies key areas where public action will be necessary to promote or supplement competition and to allow for the operation of dynamic adjustment.

The analyses of Marx and Smith do not only extend the classical argument, they also help to correct what some economists perceive as a logical flaw of neoclassical GET. Under perfectly competitive, long-run equilibrium, power is evicted from the analysis. But in classical economics, "power helps the market to function" [Wintrobe, 1998, 33n]. For instance, workers are believed to be "in need of a master" [Smith, 1976 (1776), 73] and therefore are "obligated" to offer to sell their labor-power to some capitalist employer [Marx, 1975 (1867), Vol. I, 169]. In the absence of differential power, workers would become proprietors, the labor market would atrophy, and "surplus values" would be competed away. Hence, the "notion that markets spontane-

ously solve these problems [of the effects of differential power on competition and equilibration] by themselves, so widely believed and propagated, is simply logically incorrect" [Wintrobe, 1998, 33n].

**Neoclassical Theory.** Neoclassical equilibrium is not set in real historical time but rather in logical time, where questions of dynamic adjustment are reduced to the concept of stability, and where stability is theorized as mechanical movements in reversible Euclidean space. The specific and variegated institutional details of history that matter so much in classical theorizing have no counterpart in neoclassical equilibrium. For GET, exchange does not occur at disequilibrium. Rather, the auctioneer, an "ad hoc" addition to the neoclassical equilibrium system, calls out prices until equilibrium prices are reached, and only then does exchange occur, exchange that allows for the simultaneous clearing of all markets. Such market clearing requires the auctioneer to be correct each time equilibrium prices are acted upon; that is, in GET, the stability stories are all decided at time "0," and are not acted out through the ebbs and flows of real historical time. In fact, GET provides no vision of the everyday trading by market participants, because trading outside equilibrium, or "false trading," is not allowed in the analysis.

Therefore, the description of exchange in GET is not that prices adjust when out of disequilibrium (a dynamic, and classical-oriented theory); rather, the story is that trading does not take place until the auctioneer calls out market-clearing equilibrium prices. Therefore history, or time, plays no significant role. Process and uncertainty (in contrast to risk) drops out of the discussion, and hence the dynamic issues focused upon by the classical economists (and other issues identified later by Keynes, Kalecki, and the institutionalists) are pushed off the table in neoclassical GET. Finally, neoclassical GET is coherent only if we assume that no power exists in the economy. No one can have a significant degree of power (with the exception of the auctioneer, of course, who is assumed to be omnipotent) so as to influence prices or output. Should any degree of market power be present, the market-clearing equilibrium of GET will not occur. And more importantly, unlike classical theorizing where we are provided with policy leads for how to think about and address issues of power, in neoclassical GET, issues of power are not addressed, as it is simply assumed that no individual person or firm has it.

### Two Frameworks not on the Same Track

Clearly, neoclassical GET has not "disproven" or "undermined" classical theories of equilibrium in a direct sense. Rather, it has undermined the equilibrium stories of Smith and the classics indirectly, by shifting the discussion of dynamic capitalist development toward a static, ahistorical, blackboard exercise and away from processes of actually existing economies. Furthermore, this shift in equilibrium theorizing, rooted in the works of Léon Walras and culminating in the Arrow-Debreu model, has had an impact on policy prescriptions offered by economists. Let us now consider economic transition and the light shed on it by the respective visions of a market economy offered by classical (Smith-Marx) and neoclassical (Arrow-Debreu) perspectives.

### CLASSICAL VS. NEOCLASSICAL ECONOMICS—SHOCK THERAPY VS. MARKET DEVELOPMENT

### Neoclassical Shock Therapy vs. Classical Market Development

If debate over the trend toward static over dynamic, exchange over production, ahistorical over historical, and so on, were limited to academia, perhaps it would not be so alarming. However, to their detriment, shock therapy programs implemented in some former Soviet Republics and some Eastern European countries have been based on a neoclassical view of equilibrium, rather than on a dynamic theory of equilibrium and market development.<sup>8</sup>

Keith Griffin [1998] provides an excellent summary of shock therapy as an exercise in comparative statics. The goal of shock therapy in the former Soviet Republics and Eastern Europe was to transform as rapidly as possible command economies into market economies characterized by neoclassical general equilibrium conditions. Consistent with neoclassical economics, the details of the transition, or historical and institutional factors, were considered to be relatively unimportant. Rather, importance was placed upon the desired end-result of the process—having a market economy in general equilibrium. Institutions were thus torn down overnight, and it was expected that the institutions of market capitalism would quickly and spontaneously emerge to take their place. These reforms included such things as the rapid privatization of state-owned enterprises, the immediate dismantling of central planning and controls, the comprehensive and instantaneous liberalization of prices (foreign and domestic) and the use of foreign capital to ease the pain of adjustment.

The vision of change underlying shock therapy was thus mechanical; it was "assumed that using the proposed stabilization measures as stimuli, the desired induction to changes in economic behavior was virtually guaranteed, as a chemist's combining of particular elements is certain to produce a specific reaction" [Angresano, 1996, 459]. But, as the classical economists argued, economies are socially and historically embedded in institutional settings, and therefore from the classical viewpoint the applicability of the given and nomothetic theoretical framework of shock therapy, insensitive to society-specific particularities where power is real and the emergence of new institutions are not automatic, is questionable.

Herman Hoen [1998] argues persuasively that key to understanding the neoclassical predicament in offering useful policy advice to reform economies is the lack of institutional and historical analysis at its core. 10 "Standard neo-classical economics does not explicitly take institutions into account. These are assumed to exist, but do not restrict the behaviour of economic agents" [ibid., 8]. Thus, while Hoen argues that "Institution building must be at the core of reform economics. . . . [w]ithin neo-classical economics, the nature of transformation is a matter of instantaneous adjustment of rational agents without a past" [ibid., 3; 9]. Neoclassical economics, from Hoen's perspective, has little to add "to the understanding of the transformation into a market economy," save for the idea that rapid and comprehensive reform from the neo-classical perspective may make sense, as "the assumption of rationally behaving agents leads to the perception that exogenously implementing the new rules of the game may prove successful" [ibid., 9]. And as such, a market economy "can be pragmatically

constructed by dissolving the institutions of central planning. There is an instantaneous adjustment of agency behaviour, which in fact means that in the pure world of neo-classical economics transformation simply entails a jump from one equilibrium to another" [ibid.].

Nevertheless, shock therapy has often failed miserably in practice [Griffin, 1998; Stiglitz, 1999]. The argument behind so-called "rapid reform" was that though the pain of reform would be severe, it would be short-lived, because the market economy would quickly emerge to replace the old system. The alternative was seen as reforming slowly, which may lessen the pain at any one point in time, but draw out the disease for longer than would be the case once the correct dose of shock therapy was administered.

This "rapid vs. gradual" transition metaphor turned out to be quite misleading, however. So-called rapid reformers, notably Russia, taking a neoclassical view, focusing on the outcome and not the historical process, and placing over-emphasis on allocative efficiency (vs. dynamic market development), have yet to recover on all accounts, while evolutionary reformers, such as China, by proceeding sequentially in their reforms, paying attention to the details of transition (and thus history), focusing on dynamic market development, and more effectively managing a disequilibrium system (rather than assuming a quick adjustment to an equilibrium one) have reformed much more quickly than the so-called "rapid" reformers of shock therapy. Similarly, while China proceeded on an experimental basis, exploring and fostering the development of different institutional arrangements, the shock therapy countries made the mistake of ignoring their lack of capitalist institutions, or assumed the problem away by holding that such institutions would emerge automatically and quickly enough. As we have learned from the classical economists (and more recently as well, the Keynesians and institutionalists), however, capitalist institutions do not emerge overnight, and therefore to focus merely on the outcome and not the process is ill-advised.

### The Russian and Chinese Experiences

Looking at the reform efforts and comparative performance of the Russian and Chinese economies, China, representing an evolutionary approach to reform inspired more by a classical vision of equilibrium and the development of markets, has fared much better than Russia, a prime example of rapid shock therapy which, in principle, is consistent with an Arrow-Debreu, neoclassical vision of the market economy.

Comparative Performance. The contrast between China's and Russia's reforms extend to their respective performance. Average annual growth in China's GDP, 1990-1997, was 11.6 percent, while the Russian economy experienced negative growth at an average annual rate of 7.7 percent [World Bank, 1999]. Over the same period, China's gross domestic investment grew at an average annual rate of 14.2 percent, while the corresponding figure for Russia shrunk by 14.9 percent per year [ibid.]. All told, since 1989, Russia's GDP has almost halved, while China's has nearly doubled [Stiglitz, 1999, 1].

In the 1980s and early 1990s, China was one of only three economies in the world whose GDP growth rate exceeded 9 percent annually. The value of its exports rose by nearly 12 percent per year. The index of per capita consumption more than doubled between 1978 and 1992, from 100 to 252, and housing space performed similarly, while TVs per 100 people rose from 0.3 to 19.5 and physicians per 10,000 increased from 10.7 to 15.4. By contrast, in Russia in the same time period, virtually every indicator of overall economic performance plummeted dramatically, indeed, catastrophically. An index of net material product dropped from 100 to 48, gross industrial output to 50, and exports to 63. Moreover, things got worse as the 1990s proceeded. Textile and shoe production fell by one half between 1991 and 1993 and consumption dropped in 1992 by more than 30 percent [Nolan, 1995, Ch. 2; Khanin, 1993, 17].

Despite the inefficiencies of Soviet central planning, moreover, growth remained respectable up to the shock therapy era. Soviet growth in the seven-year period ending in 1988 averaged an annual rate of 3.5 percent, while post-shock therapy Russian growth has been negative [Griffin and Khan, 1995, 162]. Average life expectancy in Russia has also plummeted over the course of transition, falling from 69 years in 1989 to 65 years in 1999 [U.S. Bureau of the Census, 1999]; Russia's mortality crisis claimed an estimated 1.3 to 3.1 million people between 1990 and 1995 alone [Bloom and Malaney, 1998, 1]. Other indicators of the severity of the Russian depression are greater unemployment and inflation, and lower real income. By mid 1994, unemployment in Russia was 10 million or about 13 percent, inflation had reached the drastically rapid annual rate of 1292 percent, and average real income had dropped precipitously by summer 1992 to 57 percent of its 1986 level.

China's growth since the introduction of reforms in 1978 is especially impressive. Although China's pre-reform economic growth was strong, reforms seem to have accelerated this rate of growth, and in no year since the introduction of reforms has China's growth been negative, in stark contrast to the Russian case. Mortality has steadily dropped and real incomes have steadily expanded. Inflation and unemployment have been moderately low compared to Russian experience (though inflation has ranged from rates lower than 1 percent to nearly 20 percent) [Nolan, 1995, 17-23, 294-97].

Finally, in terms of income distribution, the Chinese experience with reform has been much more egalitarian than that of Russia. In China, rapid growth and a commitment to an egalitarian distribution of assets and productive resources (particularly in agriculture) have dampened pressures that might otherwise significantly increase inequality and poverty. Indeed, the reduction of poverty in China since the beginning of the reform era has been "remarkable." The combination of uninterrupted growth and anti-poverty policies, according to World Bank estimates, has reduced the total number below the poverty line from 270 million in the late 1970s to about 100 million by 1990. Inequality grew somewhat, as the role of market forces spread. But rural incomes expanded more rapidly than did urban incomes, and this, combined with falling poverty via growth, moderated the social impact of increased inequality [ibid., 12].<sup>13</sup>

In contrast, Russian income inequality has risen sharply since the introduction of reforms. Individuals living below Russia's official poverty line increased from 27 per-

cent in 1992 to 41 percent in 1995, and there "are indications that a group of long-term poor may have emerged" in Russia [Klugman and Braithwaite, 1998, 44-45]. No doubt, the unusually long and severe Russian depression of the 1990s would have caused an alarming spread of poverty even if inequality had remained the same. But along with "spiraling collapse" there occurred a "massive" unequalizing redistribution of wealth and income, and "explosive" growth of the real income of a "new capitalist class," associated with "rampant individualism" of the reform era and a state, weakened by disintegration of central governmental power in the late Gorbachev period, evidently unwilling or powerless to guide the reform process along more egalitarian paths [Nolan, 1995, 21, 295-96].

The Vision of Markets and Market Development, Real Historical Time, Power, and the Importance of Institutions. Chinese reform since 1976 has been based on a sequential (or historical) approach of flexible, pragmatic trial-and-error. Chinese reformers "were flexible, adapting to changing circumstances rather than adhering to a strict ideology or loyalty to past commitments" [Angresano, 1996, 531]. For China, reform was a disequilibrium process of exploration of economic organization, for what worked and what did not. China's incremental and sequential reform allowed it to explore various organizational modes, including "urban and rural collectives (TVEs), joint ventures and individually owned (private) enterprise, [and] experimental institutions or regions (e.g., a stock market, special economic zones)" [Angresano, 1996, 544]. The vision of markets in Chinese reform was thus consistent with a classical focus on dynamic market development, economic exploration, and, on a regional basis, diversity of reform outcomes.

The evolutionary nature of Chinese reform allowed for the development of institutions necessary for creation and evolution of new working rules and capabilities. This was the method employed in Chinese agriculture, industry, and foreign trade [Griffin and Khan, 1995, 156-57]. Several alternative arrangements were proposed to the agricultural commune, and still more local and regional variants. After a period of local and regional experimentation, a national model, the household responsibility system, was agreed upon and adopted, with allowances for local variation. 14 In industry, reform didn't attack the large state-owned enterprises wholesale, but rather focused first upon creating cooperative, individual, and private businesses from village and township enterprises. Thus, the "weight of the state sector in industrial output was rapidly reduced by allowing small-scale private enterprise to emerge" [ibid., 157]. In foreign trade, China did not follow the standard recipe of rapid tariff, quota, and foreign capital reform, but rather proceeded on an experimental basis by promoting carefully selected joint ventures, by slowly liberalizing trade and adjusting the exchange rate, and by promoting semi-free trade in two Special Economic Zones. When the latter proved to be successful, freer trade was promoted in several coastal cities. With an emphasis on sequence and regional variation, China's reforms were just as much bottom-up as they were top-down. This "lack of uniformity [of reforms], abhorrent to a Western-trained economist, had positive advantages during a period of transition: it enabled policymakers to avoid the political confrontations that would have been created by an attempt to impose a uniform national policy from the beginning, it provided valuable experience and information that could be used to fine-tune policies

and it gave policymakers time to build political support on the basis of demonstrated achievements" [ibid., 157].

Yeltsin's Russia, throughout much of the 1990s, followed a more revolutionary approach, popularly characterized as "shock therapy" or the "big bang" toward old institutions and laissez faire toward new ones. The goal was to replace the former (state) socialist economy with a market capitalist system, embodying such measures as: abandonment of the remnants of the old arrangements for central planning, allocation, and control; privatization, both of large state enterprises and emergence of new, small and medium-sized firms; elimination of state controls over most prices; macroeconomic stabilization to check inflation, through austere monetary and fiscal policies; and freeing of the economy from obstacles to international trade and investment.

Shock therapy was more than the sum of these various policies, however imperfectly or incompletely applied. The intention was to start afresh, wiping out all vestiges of the prior Soviet system and starting at institutional ground zero. It was believed that the communist system had to be leveled quickly to prevent the old elite from foiling plans to move to a market economy based on private property, and to make that move irreversible. Experimentation and exploration of various forms of social organization and institutional development were, at best, secondary concerns, and systemic reform was seen as something that could be best accomplished rapidly and comprehensively. Such a perspective is informed by a neoclassical view of the economy, where the institutions upon which an economy is to be built are believed to emerge spontaneously once the state gets out of the way of natural market forces. "Economic problems solve themselves: markets spring up as soon as central planning bureaucrats vacate the field" [Sachs, 1993, xiii]. Unfortunately, and in contrast to the neoclassical presumption, however, economic problems do not solve themselves, and desired market structures do not emerge spontaneously, in the absence of a working institutional and regulatory framework.

While creativity and experimentation should have been the "order of the day" to remobilize social resources, Russian shock therapy was very much top-down [Stiglitz, 1999, 9]. In contrast to the Chinese reforms, Russian shock therapy involved little experimentation and exploration. Reform was systemic and homogeneous, rather than experimental and encouraging of regional diversity. This stems from a neoclassical view of markets as primarily allocative: "Get the prices right, and the rest will follow" [Chen, 1993, 140]. Thus, while in China "emphasis was placed on growing out of systemic inefficiencies and on using a high rate of investment to reallocate resources and increase microeconomic efficiency," in Russia, "policymakers seem to have been unduly preoccupied with systemic reform and static allocative efficiency at the cost of stifled growth" [Griffin and Khan, 1995, 165]. Proponents of shock therapy based on "market fundamentalism" tend to neglect or reject history in the process of economic transformations and transitions [Amsden et al., 1994, 4]. This results in a "highly abstract type of theorizing which dominates modern Western economics [and] does not lend itself to understanding the complex process of institutional change and development which characterizes a transition from one economic system to another" [Kotz and Weir, 1997, 275]. In extreme versions of such arguments, historical context and specificity are rejected outright in favor of a kind of theoretical universalism.

Peter Aven, for example, Minister of Foreign Economic Relations in Russia, claimed (in 1992) that "there are no special countries from the point of view of economists. If economics is a science with its own laws—all countries and all stabilization plans are the same" [cited in Goldman, 1994, 106].

Classical and other perspectives (for instance, institutionalist, Post Keynesian), by contrast, while no less generous in praise of capitalist market economies, emphasize historical context and specificity, and draw "lessons" from history concerning the pace and comprehensiveness of transitional change. First, rapid, especially both rapid and comprehensive, transitions into capitalism in history have been rare at best. The classic instance of capitalist transition—out of feudalism in Western Europe in early modern times - and its transplantation to North America—took several centuries. Countries that played the economic game of "catching-up" to Great Britain in the late nineteenth century—notably, Germany, Russia, the United States, and Japan, took at least decades. The reconstruction of the capitalist economies of West Europe after World War II, and transitions to industrializing capitalism in such developing countries as South Korea and to hybrid forms of economy in former state socialist countries such as China, similarly can be measured in decades rather than months or just a few years. Thus, "history shows that gradual economic transitions can indeed work" [Kotz and Weir, 1997, 193].

Second, according to Yeltsin's critics, inside and outside Russia, what we might call transitional incrementalism not only can work, but may well be essential or necessary. Because market capitalism is decentralized, with many loci of decision-making, it "necessarily takes a significant period of time to develop" [ibid.]. Shock therapy's conceptualization of rapid and comprehensive transition to capitalism is inconsistent with the institutional inheritance from Soviet state socialism. "It may be that the only effective way" to construct capitalism out of state socialism is to follow the lead provided by capitalism's emergence out of feudalism, as the Chinese have done, and build "at the edges" and in the "interstices" of the "pre-existing economic system" [ibid., 197]. Moreover, shock therapy in Russia has generated dramatic inegalitarian shifts in the distribution of wealth, power, and income, away from the majority of working people, pensioners, and farmers, to bankers and financial "oligarchs," mafialike families and groupings, and some industrial managers and former members of the party-state elite. Growing inequality, combined with overall depression, inflation, and stagnation, has brought massive social costs, political disillusion, and erosion of an already fragile democracy, and threatens to "undermine the entire process of transition to capitalism in Russia" [ibid., 199]. Another lesson from history is that "activist governments" have typically regulated and guided emerging markets and capitalists in practice, ranging from provision of credit, to industrial policies, to support to infant industries. Such measures, rather than thwarting capitalist market development, "seem to be essential to the success of that process today" [ibid., 194]. Even if Russia were willing to wait for the decades, if not centuries, that a (relatively) "spontaneous" strategy of capitalist creation might well require, it is "unlikely that, in the face of powerful industrialized capitalist economies as competitors, Russia could ever achieve an industrialized capitalist economy without an activist state to guide its development" [ibid., 193-194, 197-199].

#### ADAM SMITH: PRECURSOR OF SHOCK THERAPY AND LAISSEZ-FAIRE?

### Rapidity and Spontaneity in the Transition to a Market Economy

Adam Smith is often characterized as a precursor of contemporary theories of shock therapy and laissez-faire, that is, that transition from pre- or non-market economy to what today is described as market capitalist economy and society, can efficaciously, perhaps best, be accomplished rapidly, spontaneously, and with little guidance or regulation by government. However, it is our contention that Smith would be a critic, and not a wholesale supporter, of "shock therapy" combined with laissez faire, as often practiced. More focused consideration of what Smith had to say on transition and laissez-faire, as can be gleaned from a reading of *Wealth of Nations* (hereafter *Wealth*), would be worthwhile.

Smith states that if "all systems of preference or restraint are removed, the obvious and simple system of natural liberty establishes itself of its own accord" [Smith, 1976 (1776), Vol. II, 208, emphasis added]. Taken at its face value, and leaving aside Smith's several important caveats, this statement does suggest an element of spontaneity, rapidity, and laissez faire in both the emergence and functioning of "natural liberty." Smith, however, does make powerful qualifications, leaving his net position as more moderate and closer to an evolutionary view, than to a rapid and automatic one. First, Smith presupposes a "modern commercial society" and, in that context, says in effect that "natural liberty" (or "free competition"), in the absence of systems of preference or restraint, is derivative from self-interest. This is a fairly strong claim, but not nearly as strong as the (mis)interpretation of this passage as claiming that a commercial society itself historically emerges spontaneously and without collective assistance and guidance in, for example, the rearrangement of property relationships.

Second, even if it is supposed that the historical emergence (as well as functioning) of free competition and market processes exhibit elements of automaticity because the division of labor is rooted in a "certain propensity of human nature," namely, the propensity to "truck, barter, and exchange," that process, and hence the historical spread of commercial society, is no more rapid than it is automatic. Indeed, it is "very slow and gradual" [Smith, 1976 (1776), Vol. I, 17].

### Free Competition, Monopoly, and the Natural Order

Third, Smith propounds the desirability of a freely competitive market economy once a modern commercial society emerges historically. Free competition is a "system of natural liberty," minimizes inequality in the context of a private property regime, fosters social coherence, and promotes good economic performance through economic growth, stability, and efficient resource allocation.

Thus, Smith argues that "every individual," in a freely competitive economy, "necessarily endeavors" to direct his capital and industry so that production and the "annual revenue of society" "may be of the greatest possible value." "Every individual, . . . .generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it." In many instances, he is thus "led by an invisible hand which was no part of his intention" [Smith ,1976 (1776), Vol. II, 477].

Generalizations such as these, however, play a modest role in Wealth. His argument for harmony in a system of natural liberty typically is set in some specific problem or data. In such contexts, Smith subjects his analysis to numerous and major qualifications. "Natural liberty" is thus more a vision of an ideal future than a description of an extant economic system. In another caveat, Smith states that, in a regime of "natural liberty," "every man" is "left perfectly free to pursue his own interest in his own way" [ibid., 208]. But only, he adds, "as long as he does not violate the laws of justice," that is, only within a functioning legal and moral system [ibid., 208, emphasis added]. In a country in transition, like Russia, for example, where corruption and crime are rife, the "laws of justice" are frequently violated as business and financial oligarchs scramble for wealth and power in an atmosphere where "nobody care(s) about legal or illegal, right or wrong," and a yawning chasm separates a few billionaires at the top of the social hierarchy from a nation of paupers underneath. A "strong," if not authoritarian, central government may well then be needed to counter disorder, collect taxes, and get the funds to do such "basic jobs" as "keeping hospitals running, paying teachers, and getting pension checks to senior citizens on time" [Mead, 20001.

Next, Smith presupposes the absence or supercession of monopoly for natural liberty (and associated minimalist government) to prevail. This requires major reforms to establish the requisite preconditions for competition and thereby enable "every man" to "bring both his industry and capital into competition with those of any other man, or order of men" [Smith, 1976 (1776), Vol. II, 208]. These reforms include free choice in occupations, free trade in land, and commercial free trade internally and externally. Again, in a monopoloid country like Russia, this would require an activist government to confront the "oligarchs," dissolve the monopolies, and establish competitive conditions.

Fourth, Smith acknowledges "flaws in the natural order," or "exceptions to the doctrine of a natural harmony in the economic order even when left to take its natural course" [Viner, 1927, 316]. A major source of disharmony is massive inequalities in the distribution of power, even under natural liberty. As noted, Smith believes that power inequalities are lower under free competition than under monopoly. But he makes clear that monopoly is widespread. Consequently, things are not left at "perfect liberty," free competition does not actually prevail, and substantial inequalities emanate from monopoly power, even in the absence of public policy designed to foster monopoly.

A second form of power inequality is that rooted in unequal distribution of wealth. In an "early and rude state of society which precedes both the accumulation of stock and the appropriation of land," wealth power based on such asset ownership is nonexistent and the "whole produce of labour belongs to the labourer" [Smith, 1976 (1776), Vol. I, 53-54]. But in modern commercial society, the "produce of labour" is shared among workers, "undertakers," money lenders, and landlords, and the greater the inequality in asset ownership, the greater the inequality in income distribution. In the highly inegalitarian British society of the late eighteenth century, where land is scarce and expensive, the ownership of land and capital is highly concentrated, and wage labourers "make up the far greater part of . . .political society," "rent and profit

eat up wages, and the two superior orders of people oppress the inferior one" [Smith, 1976 (1776), Vol. II, 76].

A third example of economic inequality and social disharmony in *Wealth* lies in the relationship between employers and employees. Typically lacking ownership of land or capital and the economic capacity or managerial skills to function effectively as independent proprietors, most "workmen stand in need of a master," under whose thumb their employment is directed, production is overseen, and market relationships are skewed to the employer's "advantage" [Smith, 1976 (1776), Vol. I, 73]. Masters and workers dispute over the terms of employment. It is easy "to foresee which of the two parties must, under all ordinary occasions, have the advantage in disputes, and force the other into a compliance with their terms" [ibid., 74]. Workers seldom benefit from "tumultuous combinations" to raise wages, "partly from the interposition of the civil magistrate, partly from the superior steadiness of the masters, [and] partly from the necessity which the greater part of the workmen are under, of submitting for the sake of present subsistence" [ibid. 76].

Workers may obtain benefits from division of labor and use of machinery. But these benefits are alloyed with harmful effects. Society often "does not place the greater part of individuals" in positions of well-rounded division of labor, which provide opportunities for cultivation "of all the abilities and virtues which that state requires" [Smith, 1976 (1776), Vol. II, 302-03]. The worker's "dexterity at his own particular trade seems . . .to be acquired at the expense of his intellectual, social, and martial virtues. But in every improved and civilized society this is the state into which the labouring poor, that is, the great body of the people, must necessarily fall *unless* government takes some pains to prevent it," notably through education [ibid., emphasis added].

### Exceptions to Laissez-Faire and Free Trade

A characterization of Adam Smith's views on institutions and policies as one of laissez-faire could not be literally true because (selected) government actions in economic life are themselves an integral part of the natural order, indeed, as in the instances of free competition and the maintenance of justice, essential prerequisites to its efficacious operation, and do not interfere with the "system of natural liberty." The "modern advocate of laissez faire," Jacob Viner aptly wrote, "who objects to government participation in business on the ground that it is an encroachment upon a field reserved by nature for private enterprise cannot find support for this argument in the *Wealth of Nations*" [1927, 324-25]. Smith's proposals for institutional and policy reform may be classified as negative and positive, general and specific, and domestic and foreign. Negatively speaking, the flaws in the natural order noted earlier indicate striking disharmonies between such realms as private versus public, masters versus workers, rich versus poor, and monopoly versus competition. These flaws suggest a potentially substantial agenda for a governmental role in fostering public welfare

Positively speaking, Smith takes a middle ground position. In general, he propounds, in effect, a functional division of labor between private and public realms. There is a private sector, the arena of the production and sale of what we today would

call divisible, marketable goods. Because, even in principle, "no human wisdom or knowledge could ever" suffice to enable government to provide a "proper performance" therein, the sovereign is "completely discharged" from "the duty of superintending the industry of private people, and of directing it towards the employments most suitable to the interests of society" [Smith, 1976 (1776), Vol. II, 208]. In general, the sovereign's duties are limited to a public sector wherein government has the knowledge, wisdom, and experience to provide a "proper performance" or where the private sector is ill-equipped to provide a socially desired (public good), "which it can never be for the interest of any individual, or small number of individuals to erect and maintain; because the profit could never repay the expense . . .though it may frequently do much more than repay it to a great society [ibid., 209].

Smith lists three general duties for government: protecting society from the "violence and invasion of other independent societies;" internal order and justice, or protecting every member of society against the "injustice or oppression" of others through provision of "an exact administration of justice;" and the erection and maintenance of "certain public works and public institutions," for example, education and public infrastructure, such as roads, dams, and harbor facilities [ibid., 208-209].

Although Smith limits government in economic life, it is strategic, indeed necessary, for the successful conduct and performance of a market economy. Qualitatively, although the institutions and policies of government are limited, and are determined by collective choice, they are of "great importance," as essential components of public infrastructure [ibid., 208]. Quantitatively, Smith proposes to limit government by function, not by size. A government could be limited to Smith's three major duties, yet be quite large and activist, as, for example, in building new institutions and infrastructure for transition to a market economy. Additionally, the richer the economy, the more advanced the technology, and the more complex the social relationships, the greater the expansion in both the functions and size of government.

When Smith turns from the general to the specific, exceptions to laissez-faire multiply. Although a sharp critic of monopoly and of pro-monopoly government policies in general, he supported the protection of temporary monopolies through methods such as patents and copyright laws. He favored market choice and allocation, again in general; but approved of selected government regulations over markets, such as government restraint on maximum interest rates (at 5 percent), to discourage lending to prodigals and spendthrifts. When they are parsimonious and efficient (as in Venice and Amsterdam), their management of business projects is "proper." When governments are corrupt and inefficient (as in England), then their good management of mercantile projects is highly "doubtful".

Finally, Smith is an enthusiastic advocate of "free trade" in general. His support for the principle, however, is qualified by important particular exceptions. For instance, he states that because defense is "of much more importance than opulence," the Navigation Acts, promoting the British merchant marine, "are perhaps the wisest of all the commercial regulations of England" [Smith, 1976 (1776), Vol. I, 487]. He further observes that by foreign trade regulations, such as tariffs, "a particular manufacture may sometimes be acquired sooner than it could otherwise, and after a certain time may be made at home as cheap (or cheaper) than in the foreign country"

[ibid., 479]. This *infant industry* argument clearly shifts from a static, allocational focus, typical of neoclassical analyses, to a dynamic, developmental one, more characteristic of classical approaches. Moreover, partly because exports facilitate the sale of goods that are in "surplus" at home, trade restrictions may serve as a useful bargaining chip to obtain *mutual* reductions in tariffs and other trade restraints. Smith also states that transition toward freer trade should proceed *gradually*. If high duties or prohibitions were removed "all at once," as enthusiastic Western advisors have often proposed for former Communist countries in the 1990s, considerable "disorder," including severe unemployment, might well ensue, as imports expand, but exports lag behind [ibid., 491]. To suppose that free trade "should ever be entirely restored in Great Britain," he concludes, is "absurd" and utopic [ibid. 493].

In short, Smith "saw a wide and elastic range for government. . . .He did not believe that laissez faire was always good or always bad" [Viner, 1927, 327-28]. Of course, neoclassicism also includes some analysts who exhibit elements of skepticism and eclecticism about their own main line arguments. But this frequently occurs despite, rather than because of, adherence to a neoclassical general equilibrium type of modeling, and remains in contrast to a more classically-inspired economics that puts the issues of power, institutions, and dynamic social change in real historical time more at the center of professional discourse.

### CONCLUSION

In the early 1980s, Hahn reflected on general equilibrium theory (GET) as an argument for the free market policies of Margaret Thatcher, and argued that they were based on a dangerous misappropriation of the Smithian metaphor of the invisible hand as everywhere equally applicable. He argued instead that a "wishy washy, step by step, case by case approach seems . . .to be the only reasonable one in economic policy" [1982, 21]. And he despaired that "The age of prophets and of witches is upon us and such an age is not friendly to reason" [ibid.]. Given the results of recent shock therapy "experiments" his despair was all too prescient.

Robert Heilbroner and William Milberg have argued that contemporary economic thought is plagued by a crisis of vision [1995]. Perhaps this crisis is most evident in modern neoclassical GET, which seems to be largely irrelevant to the workings of, and problems facing, actually existing economies. The problem, as argued by Deirdre McCloskey, is that for all of the time and attention it has received from the economics discipline "the general equilibrium theorem of Arrow and Debreu . . . [does] not, strictly speaking, relate to anything an economist would actually want to know" [1994, 135]. For unsurprisingly, "under some assumptions the equilibrium does exist and under others it does not; under some assumptions the equilibrium will be efficient and under others it is not. Well, so what? Sometimes it rains and sometimes it does not. In some universes the moon is made of green cheese and in others it is not" [ibid.].

In conclusion, the main focus of the argument of this article can thus be seen as a plea for a return to (or at least a refocus in the direction of) classical views of the economy and equilibrium, as exemplified by Smith and Marx. As demonstrated by our example of transition, classical interpretations of the economy can often provide

valuable guidance and insight, while the formalism and ahistorical nature of neoclassical equilibrium can often hinder practical investigations and policy advice regarding the institutional evolution and dynamics of actually existing economies. While the classicals acknowledged the issues of power, the creative and dynamic role of markets, the exploration of profit opportunities, history, and institutions, and put at the center of analysis, all of these issues are assumed away, or at best given minimal importance in the neoclassical vision of GET. And yet, as noted, these are often precisely the issues that need to be at the center of professional focus when it comes to policymaking and applicability to real-world situations. On transition specifically, Coase in his Nobel lecture made the point effectively when he noted that "Even more surprising . . .is the neglect of the market or more specifically the institutional arrangements which govern the process of exchange. . . . The value of including such institutional factors in the corpus of mainstream economics is made clear by recent events in Eastern Europe. These ex-communist countries are advised to move to a market economy, and their leaders wish to do so, but without the appropriate institutions no market economy of any significance is possible. If we knew more about our economy, we would be in a better position to advise them" [1992, 713-14].

A return to classical views of the economy and equilibrium would offer a challenge to pursue the analysis of many of the pressing economic issues of our time. Economics, especially at the center of its professional discourse, needs to be a discipline that focuses on the analysis of actually existing economies. As Robinson has argued, economics should be "concerned with actual contemporary problems" and thus, put its "arguments in terms of the structure and behaviour of the economy" in which we live [1974, 53]. The implications of this argument reach deep into the structure and direction of the discipline, and, if the situation is to improve, require substantial changes away from what Coase has called "blackboard economics" [1992, 713]. More specifically, it requires substantial changes in the sociology of how economic research is evaluated, and how scientific research is to be conceptualized by the economics discipline.

### **NOTES**

We are saddened to report that John Elliott passed away before this article came to press. John Peters and Stephen Cullenberg would like to acknowledge not only Professor Elliott's contribution to this article, but also the many influential contributions he made over his long career. We thank the editors of this *Journal* and three anonymous referees for their helpful comments on previous drafts. The usual disclaimer applies.

- 1. The terms "neoclassical" and "classical" have many meanings and some would argue by linking the former term to Arrow-Debreu general equilibrium models we have presented an overly narrow conception of neoclassical theory today. Others will consider our classifying Marx as a classical economist inappropriate. We wish to maintain this basic dichotomy here, however, because we feel it captures the basic differences that have informed the analysis of systemic change in some of the transition economies well, especially with regard to the shock therapy policy recommendations.
- 2. Stiglitz' concern for the transition is quite warranted. Out of 22 formerly socialist, transitional countries in Eastern Europe and the former Soviet Republics, only three had reached their 1989 levels of GDP a decade into the transition [*The Economist*, 1999, 150]. And indeed, when compared to textbook niceties, a Bulgarian account of reform, ten years in the making, is quite telling: "What has happened in these ten years? . . .[We now have] hordes of unemployed workers, beggars in the

streets, old people digging in rubbish containers for some rag or moldy piece of bread. Our social fabric is falling apart. . . . I see more and more children who have dropped out of school. Their parents cannot provide them with shoes and clothes, never mind textbooks and paper. Things are no better for the elderly. In 1989, my friend's mother's pension had been about 105 leva a month. Now it is 46 leva a month, a little more than \$24. Many people, especially those who are older than 30, are not working. Nobody needs them; nobody offers work to them. . . . We in Bulgaria have learned the hard way what those pretty [reform] slogans mean. . . . I live in misery, but I manage. It is the sight of the old men and women digging into the rubbish containers that is breaking my heart" [Doncheva 1999, 10].

- 3. Geoffrey Hodgson [1999, 39-40] argues that a distinction should be drawn between Walras' theory and "Walrasian theory." Walras himself, Hodgson notes, considered the possibility of changing preferences, something that is not found in the main thrust of what has come to be known as Walrasian theory. See Martin Currie and Ian Steedman [1990] for more "evolutionary" interpretations of Walras.
- 4. See David Kreps [1990] for a formal proof of the possibility of general equilibrium.
- 5. Deirdre McCloskey writes: "From everywhere outside of economics except the department of mathematics the proofs of existence of competitive equilibrium will seem strange. The proofs do not claim to show that an actual existing economy is in equilibrium, or that the equilibrium of an existing economy is desirable. . . .[Instead, it shows] that certain equations describing a certain blackboard economy have a solution, but they do not give the actual solution to the blackboard problem, much less to an extant economy" [1994, 133].
- 6. At the level of economic principles, the notion of long-run partial equilibrium is of a much more classical nature. In this analysis, the entry into and exit from competitive industries results in price adjustments until price is equal to minimum long run average cost, thus enforcing the zero-profit equilibrium condition. The zero-profit condition in this context is equivalent to the equal rate of profit condition of the classicals, because the neoclassical notion of cost embodies the opportunity cost of alternative investments. This partial equilibrium approach derives from the work of Alfred Marshall [1952 (1924)], who, for some purposes (such as equilibrium), can be considered more in the classical than the neoclassical tradition.
- 7. Some observers may argue that "time" does enter into GET with Arrow and Debreu's theory of contingent claims markets. The basic idea is that in making consumption decisions, the consumer can trade not only oranges for apples today, but oranges today for oranges tomorrow. This does not qualify as recognizing and accounting for real historical time. Uncertainty in this theory is pulled under a classic probabilistic structure where either subjective or objective probability distributions are assumed known, effacing the concept of uncertainty of its strategic importance in real time capitalist decision-making. Hodgson [1999, 39-40] provides a brief but excellent discussion of the lack of a role for real historical time in neoclassical theory.
- 8. We do not mean to imply that *only* classical theorizing offers useful policy guidance on issues transition. Rather, we *only* mean that classical theorizing does in fact offer useful policy guidance, including on issues such as transition. For example, Peter Murrell [1991] argues that while standard neoclassical economics has little to offer the analysis and policy prescriptions of transition, much can be gained by an emphasis on recent developments in the economics of information. We have no reason to quarrel with this argument. Just because we believe that the classicals have important things to say on issues of transition does not mean that we believe that nobody else does.
- 9. James Angresano [1989] provides a contemporary classical-institutional theoretical and research framework that places economies in their socially-embedded contexts.
- 10. In addition to an analysis of the relationship between reform economics and neoclassicism, Hoen explores possible connections between transition and other schools of economics, namely Post-Keynesianism and Austrian economics. As noted earlier, many of our arguments for the strengths of classical economics also apply to the economics of Keynes, in particular in regard to Post-Keynesian interpretations of Keynes on the issues of uncertainty, time, and the importance of institutions. Hoen's discussion of Austrian economics is particularly interesting, and we can also find some affinities with our argument there, as well as key differences. Unfortunately we do not have time to explore these issues here, and thus the reader is referred to Hoen [1989, 13-17]. The reader may also wish to consult Ronald McKinnon's [1992] examination of Friederich A. Hayek on the question of transition.
- 11. We cannot do full justice to the voluminous work on transition here. The reader may find the following references useful. General reviews of the transition literature can be found in John Elliott [1995], Thomas Hall and John Elliott [1999], and Hall [1999]. Elliott [1997] addresses the role of institu-

tional change in transition. Elliott and Hall [1999] discuss Russia's "Rocky Road" to Capitalism, tracing out within an historical context the views of reform of Gorbachev and Yeltsin. Phillip Giffin and Lucien Ellington [1995] compare Polish and East Asian reform, and argue for the role of government in fostering the development of a market economy. Ronald McKinnon [1991] gives a theoretical review of the case for a gradualist reform policy. The edited volume by John McMillan and Barry Naughton [1996] offers multidisciplinary perspectives on Asian experiences in reform. Peter Murrell [1991] doubts the relevance of standard neoclassical economics to the reform experience, noting that recent theoretical developments in informational economics may offer a more useful reference point for transition efforts. Murrell [1996] assesses the progress of reform, and argues that institution building takes time. On the issue of comparing the Chinese and Russian experiences with reform, the reader is referred to Peter Nolan's [1995] impressive work, aptly entitled China's Rise, Russia's Fall. Jack Reardon [1996] analyzes the transition experiences of the Baltic republics of Estonia, Latvia, and Lithuania. In contrast to our interpretation of the evidence, Wing Thye Woo, et al. [1997] argue that the Asian and Eastern European reform experiences can be understood using a single explanatory framework of adherence to neoliberalism as the determinant of success; also see its critique by Dic Lo [1998].

- 12. We do not claim that an evolutionary transition strategy is *invariably* better than rapid reform. Transition strategy in Belarus, for example, has been more gradualist than in Russia, but in many respects it has exhibited an even more abysmal economic record. Likewise, the Czech Land implemented a transition program even closer to shock therapy than did Russia; but its economic performance has been much stronger.
- 13. Despite rapid growth of rural incomes, however, a large gap remains between urban and rural incomes in China. Per capita, household income in urban China is 2.42 times that in rural areas [Griffin and Khan 1995, 178]. This figure, moreover, understates the urban/rural gap, as consumer subsidies are higher in urban areas. This urban/rural divide remains both a challenge and an opportunity for Chinese policymakers in their continued reform efforts.
- 14. We do not argue, of course, that China's reformers have always chosen the correct reform paths, that their outcomes have been optimal, or that their reforms have created the best possible institutions. For example, an argument could be made that the agricultural commune could have been saved and reformed rather than abandoned. Griffin [1984] discusses the various reform experiments in rural China.

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