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Murray N. Rothbard

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Articles

Eighteen Problematic Propositions in the Analysis of the Growth of Government

Robert Higgs*

Economists, public choice analysts, political scientists, and other scholars, especially during the past 10 to 15 years, have made many studies of the growth of government. As the literature has grown, a number of conventions have become established with respect to concepts, measures, assumptions and modes of analysis. Certain contributions have been viewed as paradigmatic and hence have served as models for subsequent contributors. No analytical consensus has emerged. Indeed, one can perceive the outlines of several competing "schools"— a Chicago school, a Washington school (see Proposition 16), a mainstream economics school, a libertarian school, several distinct positions within the public choice community of scholars, and others.

Despite the diversity of approaches and conclusions, much of the work has been premised, implicitly if not explicitly, on the acceptance of propositions that are questionable at best. In what follows, I shall state these propositions and criticize them. Although I shall provide citations and examples of scholars who have advanced or accepted the flawed propositions, my aim is not to compile a catalog of sinners. The examples are intended only to provide concrete illustrations of how various analysts have proceeded and to demonstrate that I am not quarreling with phantoms.

The discussion that follows pertains mainly to the growth of government as it has occurred in the countries of Western Europe and their overseas offshoots during the past two centuries, especially

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during the twentieth century. I have specific expertise with regard to only one case, the United States, so much of my discussion relates especially to that case. This restriction of the frame of reference does little harm, because the ideas I shall criticize have themselves been employed in the same empirical domain for the most part. Further, as will become obvious, I believe that attempts to achieve universally applicable explanations of the growth of government are doomed to fail in any event. I disavow at the start any pretension of contributing to the construction of a single all-encompassing theory.

Proposition 1

Government activities can be reduced to a single variable (the "size" of government), which can be accurately measured.

Modern governments undertake many distinct activities. They take money away from people by taxation and fines; they deliver the mail; they operate law courts where citizens resolve various disputes and tennis courts where people work on their backhands; they conduct medical research; and so forth in nearly endless variety. To sum up the various activities, one must measure each of them in a common unit—persons on the government payroll, for example, or dollars spent by the government. These methods of achieving commensurability seem to make sense until one inquires a bit deeper.

Suppose that, *ceteris paribus*, the government has added a billion dollars to its spending for operating the law courts and cut a billion dollars from its spending for farm subsidies. Has the government grown? If the changes had been reversed, would the government have grown? The answers are far from obvious. Government (as a set of activities) is what government (as a group of people) does, but because governments do so many diverse things, no common unit of account can scale the underlying reality satisfactorily.

Often government employees or dollars work at cross purposes in their impact on the economy. Many analysts have noted the prodigious "cross hauling" or "churning" associated with modern government activities (Becker 1983, p. 389; 1985, p. 341; Musgrave 1985, p. 305). On the one hand, government wheat researchers develop higher yielding varieties of the crop, thereby increasing the supply and decreasing the price. On the other hand, government acreage restrictions decrease the supply and increase the price. Such examples can be multiplied indefinitely. I do not mean to suggest that the churning is accidental or politically irrational in its inception, because interested parties set each part of the process in motion with their eyes open and their hands grasping. The implication for muddled measurement remains, however, regardless of the motives involved.

In view of the heterogeneity, incommensurability, and offsetting impacts of many government activities, the information content of any one-dimensional measure of "the" size of government verges on nil (Peters and Heisler 1983, pp. 178-81, 186; Rose 1983, p. 7). Much more informative would be an answer to the question: *What in particular* is government doing more frequently or less frequently? Most analysts of the growth of government simply ignore this problem.

Proposition 2

The best measure of the size of government is relative government spending, the ratio of government spending to the gross national product. Good alternative measures include relative tax revenues (the ratio of tax revenues to GNP) and relative government employment (the ratio of government employees to labor force).

Many analysts forgo entirely an attempt to justify measuring the size of government as the ratio of government spending to GNP. (Often GDP and occasionally NNP or National Income serve as the denominator.) They just plunge ahead (Lowery and Berry 1983, pp. 666-67; Mueller 1987, p. 115), noting, if anything, that "everybody does it." But choices still must be made. Should the analyst include all government spending, including transfer payments, or only the government's "exhaustive" spending for newly produced final goods and services, which is a component of GNP as conventionally defined? Both measures are used. Frequently, however, as in the United States during the past 40 years, the two measures behave quite differently—in this case the all-spending ratio tends to rise more or less steadily while the "exhaustive" measure remains more or less level (U.S. Council of Economic Advisers 1989, pp. 78, 397, 402). Regardless of the exact measure selected, using relative government spending to measure the size of government gives rise to many curiosities.

Consider some cases. (1) Suppose the cereal makers produce and sell more corn flakes, but nothing else changes. Implication: government has shrunk. (2) Suppose people from the Defense Department sit down with people from General Dynamics and agree to pay more per unit for this year's purchase of (the same number of) F-16s, but nothing else changes. Implication: government has grown. (3) Suppose the government switches, as it did in 1973, from a military conscription system to a volunteer military force, which will entail payment of higher salaries to military personnel, but nothing else changes. Very strange implication: government has grown. (4) Suppose that local governments across the country stop operating and

spending money for sewerage plants, mandating instead that every home or business releasing sewage into the system ensure that the effluent meets strict treatment standards, wth all costs to be borne by the private sewage generators, but nothing else happens. Implication: government has shrunk. Such examples can be produced virtually without limit. Nor are the examples merely contrived. Arbitrary or counterintuitive determinants of changes in the government's relative spending are part and parcel of this measure of the size of government.

Similar observations, and many others, might be made with respect to using relative tax revenues as an index of the size of government. Whenever an index is a ratio with GNP as its denominator, all sorts of oddities may arise. In the workaday world of government fiscal reports, the repeated shuffling of various taxes, especially some or all of the Social Security tax, between on-budget and off-budget status further confuses the historical record (U.S. Office of Management and Budget 1989, p. 6).

Michael Boskin (1987, p. 60, emphasis added) recently concluded that, for various reasons, "the accounting problems are so fundamental and pervasive that federal budget figures can not be used to compile an accurate representation of our *fiscal* history." (See also the strictures of Stiglitz [1989, p. 68] on the misleading way the national accounts treat government enterprises.) *A fortiori*, these figures cannot serve as a reliable basis for measuring the overall size of government in all its significant economic dimensions.

How, for instance, should one take into account the various activities of government in the credit markets? Governments now make many types of loans on their own accounts, insure private loans, subsidize or grant tax breaks on the extension of certain loans, and insure—sometimes far beyond the explicit promise—deposits in banks and savings institutions. Joseph Stiglitz (1989, p. 63) notes that "in the US today, approximately a quarter of all lending (to the private sector) is either through a government agency or with government guarantees. . . . The magnitudes of the implicit subsidies and costs—both the total value, and who receives how much—are hidden."

Relative government employment also is a fragile index of the size of government, partly because governments hire millions of "contractors" (Hanrahan 1983). These workers are classified as members of the private labor force, even though they work exclusively on projects set in motion by governments and receive compensation entirely, if often indirectly, from government revenues. Why are they considered any more "private" than regular government employees? Only be-

cause of legal technicalities and accounting conventions that do not reflect the substance of the matter. As the composition of the total effective government workforce (regular government employees plus "private" government contractors) changes, as it often does, the standard index of relative government employment becomes a spurious indicator of whether government has grown or shrunk.

Proposition 3

Even if relative government spending (or one of the commonly employed "good alternative measures") doesn't properly measure the true size of government, the two are highly correlated over time, and hence relative government spending is an adequate—indeed indispensable—proxy variable for empirical analysis.

Many analysts know that acceptance of this proposition is risky (Lindbeck 1985, pp. 314, 325; Borcherding 1985, pp. 376-77). Yet most proceed, often into extremely intricate modeling and highly sensitive econometric analysis, without further ado. Sam Peltzman, in a widely read and cited study (1980, p. 209), was commendable for his candor:

> I am going to equate government's role in economic life with the size of its budget. This is obviously wrong since many government activities (for example, statutes and administrative rules) redirect resources just as surely as taxation and spending, but the available data leave no other choice. My operating assumption has to be that large and growing budgets imply a large and growing substitution of collective for private decision in allocating resources.

This rationale, accepted by many others besides Peltzman, has several defects.

It simply is not true that one has no choice. There are mountains of evidence not only about the details of spending and taxing but about the multifarious commands expressed in statutes, regulations, and judicial rulings, all of which sit in the archives and libraries awaiting researchers. Perhaps studying such nitty-gritty evidence is beneath the dignity of modern, "high-powered" economists. If so, they need only make the "operating assumption" that a single data series, which they can retrieve from a standard statistical source, provides all the information required for an adequate analysis of the complex phenomena that constitute the actual behavior in question. One is reminded of the old joke about the people marooned on an island with cans of food but no can opener. After a chemist and a physicist propose esoteric technical solutions, the economist in the group offers his way of dealing with the problem: "Let us assume we have a can opener."

As for the assumed high correlation between the observed data series and the unobserved reality, how does one know? Unless one makes an effort to establish at least the likelihood of a close correlation, one is simply making a raw assertion, a leap into the void. (Borcherding [1985, p. 377] frankly recognizes the problem but does nothing about it.)

Proposition 4

Point-to-point or trend-rate measures are adequate explicanda for the analysis of the growth of government.

Analysts of the growth of government often rely on only a portion of their data (forget for the moment all that is wrong with the data anyhow). They may simply compare the size of government at one time with its size at a later time. Noting that government grew *X*-fold between the two dates, they proceed to explain the One Big Change by relating it to Other Big Changes in explanatory variables during the interim (Borcherding 1985, pp. 362-69). Others fill in more blanks, examining measures for "selected years" (North and Wallis 1982, p. 337; Bernholz 1986, pp. 662-63; Mueller 1987, pp. 116-17). Still others compute from annual or semi-annual data a series of decade averages or a trend rate of change, making that their explicandum (Bernholz 1986, pp. 664, 676, 678). In each case valuable information is ignored, at great risk to the validity of the analysis.

For example, Gerald Scully (1989, p. 6.93) makes much of a shift from local government spending to state and federal government spending in the United States between the average for 1902-1927 and the average for 1960-1988. Had he examined all the available data, he would have discovered that almost the entire shift occurred between 1932 and 1936 (Wallis 1985, p. 5). Obviously the change had more to do with the Great Depression and New Deal politics than with the long-term changes in the focus of rent-seeking emphasized by Scully.

Aside from the inadvisability of throwing away information in an empirical analysis, one has a more fundamental reason for examining the full sequence of data: the growth of government has been a path-dependent process. Because social understandings gained from experience constrain social beliefs and actions, where the relation of government to the economy can go depends on exactly where it has gone—that is, what precisely people's experiences have been—in the past. One needs to examine the entire profile of the growth of government to discover the dynamic interrelations of ideas and events over time. (Analysts who emphasize path-dependency include Hughes [1977] and Higgs [1987a].)

Some analysts believe that it is better to smooth the data or even to omit certain deviant years from consideration (Meltzer and Richard 1983). These analysts view the unruly observations as unlikely stochastic deviations from a smoothly changing central tendency; they prefer that their statistical analysis not be contaminated by "outliers" (and maybe that their coefficients of determination not be diminished). I shall criticize the theoretical foundation of these views when I discuss Proposition 7 below. For now it suffices to observe that the crises of history, when government expanded abruptly, were real. People did not forget them. Indeed, people were deeply affected by such experiences and later behaved differently as a result.

Proposition 5

Government can be analyzed as something having an abstract "functional" relation to the economy; it is unnecessary to consider government officials as autonomous decision makers having genuine discretion and making real choices.

The approach implied by this proposition frequently appears as what I call the Modernization Hypothesis, which maintains that a modern, urban-industrial, technologically advanced economy simply must have a big, active government. Modern socio-economic affairs are so complex. How could they possibly take place successfully without the guiding, regulating, coordinating hand of government? "The increased complexities and interrelationships of modern life," said Calvin Hoover (1959, p. 373), "necessitate this extension of the power of the state." Supreme Court Justice William Brennan echoed this view in a 1985 speech. "The modern activist state," he declared, "is a concomitant of the complexity of modern society; it is inevitably with us" (quoted by Kozinski n.d., p. 6).

One doubt arises immediately. Why is government so much bigger in some countries than in other, equally modernized countries (say, Sweden vis-à-vis Switzerland)? But this is not the most fundamental problem.

Anyone who has understood the message of Adam Smith, not to speak of the more penetrating and pertinent contributions of Ludwig von Mises and Friedrich Hayek, immediately doubts the Modernization Hypothesis. Indeed it seems backwards, for whereas government might be able to coordinate a simple pre-modern economy, it certainly could not coordinate successfully a complex modern economy. The now undeniable failure of all the centrally planned economies, confirming the early insights of Mises and Hayek, clearly supports the Austrian position on this question.

But my point is different; it has to do with methodological indi-

vidualism. Even if it were true that a modern economy "requires" bigger government for its effective coordination, the Modernization Hypothesis would be virtually worthless as an explanation of the growth of government. The fatal flaw is the absence of a human actor. Just because a course of action is "necessary" in some systemic sense for the successful operation of an economy does not ensure that anyone has a personal incentive to work toward fulfilling the requirement. In the Modernization Hypothesis the process is magical: the economy "needs" bigger government—POOF!—the government grows. But who did what to make it happen? And why did these actors find it in their interest to take such actions? To these questions, the Modernization Hypothesis, like every other "functional necessity" explanation, has no answer.

Functional necessity explanations implicitly view government officials as robots who lack genuine discretion and make no real choices, automatons programmed to accomplish whatever is necessary to optimally serve the known, unambiguous "public interest." This view is mystical and obscurantist; it is also patently, empirically wrong. (For more general observations on methodological individualism and "the false organismic analogies of scientism," see Rothbard [1979, pp. 15-17, 57-61] and sources cited there.)

Proposition 6

Government can be analyzed as if it were a single decision maker; it is unnecessary to consider conflicts of interest within government or migration back and forth between the ruling group and the ruled group.

The difficulties of formal modeling and the analytical attractions of simplicity have enticed many analysts to embrace this proposition. (An outstanding example is Auster and Silver [1979].) Of course, in ordinary discourse and in newspaper columns, we frequently encounter statements that "the government" did something or "the government" decided such and such, without any specification of which government officials in particular took the action. Sometimes such usage is a harmless abbreviation. But more is at stake when analysts adopt such a conception.

Even so astute a scholar as Douglass C. North (1981, pp. 20-32) built his "neoclassical theory of the state" on the assumption of "a state with a single ruler . . . a wealth- or utility-maximizing ruler" (p. 23) who can act in a way that his subjects cannot because, as a single person, "he has no free rider problem" (p. 32). However useful this conception may be in understanding a medieval lord of the manor or the court of Louis XIV, it has virtually no applicability to the govern-

ments of the western world whose growth during the last two centuries concerns us here.

Modern governments consist of thousands of important decision makers, not to mention the millions of minions who have at least a bit of discretion in carrying out delegated activities. In the United States today, for example, there are more than 80,000 separate governments, more than 60,000 with the power to tax (Higgs 1987a, p. 6). Moreover, people are constantly passing back and forth between the ruling group and the ruled group. The "revolving door" is notorious at the Department of Defense, but a similar phenomenon occurs at many other places in the government. In many instances, one would be warranted in regarding certain persons formally outside the government as more a part of it than most of those formally inside it—just think of the exogovernmental potency of such figures as Walter Lippmann, Felix Frankfurter, John J. McCloy, David Rockefeller, and Henry Kissinger, to name only a few notables among many. (For a plethora of contemporary examples, see Dye [1990].) In any event, no one person, no small group, calls the shots for the whole hydra-headed creature that is "the state." People within the ruling circles, though they may share at least one goal (retaining their own powers and privileges) constantly engage in internecine struggles. Supposing that the government operates as if it were a single decision maker cannot take us far toward a realistic understanding of modern government or its growth.

Proposition 7

There exists a structure of politico-economic behavioral relations (an "underlying model") whose workings generate the growth of government as a dynamic equilibrium outcome; and this structure does not change over time.

Whether they think about it or not, analysts who test their theories of the growth of government by fitting a linear regression model to the time-series data for a certain period are accepting this proposition. Econometric theory admits of no exception if the estimated coefficients are to have the meaning they are supposed to have. Thus, if the theory contains the equation

$$(1) \qquad G = \alpha + \beta X + u$$

and, using linear regression techniques, one estimates the parameters α and β from time-series data for the years 1901-1989 as a and b, respectively, then one is assuming, *inter alia*, that the politico-economic world was working such that whenever X took the value x', *then* G as a result took the value $a + b(x')$, plus or minus a purely

random amount u', and this result was the case regardless of whether X took the value x' in 1901, in 1989, or in any other year during the time period to which the model is fitted. That is, the underlying model is assumed to be invariant as specified by equation (1). The econometric estimation is designed only to ascertain the numerical values of the parameters, not to test or otherwise call into question the functional specification of the model. The specification is presumed to be given to the investigator by his theory independent of any empirical observation—in effect, by divine revelation, though the source may well be one of the lesser deities.

Suppose that G denotes total government spending and X denotes total personal income as defined in the standard national income accounts. Suppose further that the estimated value of β turns out to be $b = 0.3$. The interpretation would be that every additional dollar of personal income gave rise to an additional 30 cents of government spending, *no matter when* during the period that extra dollar came into people's possession: the identical quantitative linkage existed for income changes occurring between 1901 and 1902, between 1988 and 1989, indeed between *any* two years in the test period, whether the pairs be 1933-1934, 1945-1946, or any other. The dates just don't matter—by assumption.

Is the assumption plausible? No. The world of 1901 differed in many pertinent ways from the world of 1989. Among other differences, people at the two dates had quite different ideas about what they wanted the government to do. In the United States in 1901 many people still thought in terms of a variant of classical liberal ideology. They wanted not much more than a night-watchman state, and they already had more than that (Higgs 1983; 1987a, pp. 77-105; 1989c, pp. 92-98). In 1989, in contrast, most Americans had relatively inflated ideas about the range of social and economic "problems" they wanted the government to "solve" (Smith 1987; Higgs 1989c, pp. 101-03). Even if the ideology had not changed—and historians may reasonably differ about precisely how and when it did shift—socio-economic and political conditions certainly had changed enormously. In 1901, a majority of the population still lived in rural areas and 43 percent of the labor force worked in farming, fishing, and mining. In 1989, less than a quarter of the population lived in rural areas (many of them with easy access to a city) and less than 4 percent of the labor force worked in farming, fishing, and mining. These differences in socio-economic conditions are but two of the many that starkly distinguish the people of 1901 from those of 1989. Wouldn't it be strange if people so differently situated, even without subscribing to different views concerning the desirable scope of government, should just

happen to get 30 cents of additional government spending every time their personal incomes rose by a dollar? Very strange indeed. If such constancy were found to have been the case, wouldn't the analyst be on firmer ground to interpret it as a coincidence, a parametric peculiarity, rather than the manifestation of a politico-economic law? After all, the meaning of 30 cents of additional government spending—the precise collection of goods and services associated with it—was dramatically different in 1901 and 1989.

Further, given that people's behavior depends on their ideas and that people learn from their experiences, it is extremely unlikely that an aggregative "behavioral" relation between a more or less inaccurate index of government activity and any of the usual "explanatory" variables would have remained invariant over nearly a century of tumultuous experience—wars, depressions, deflations, labor upheavals, inflations, energy crises, environmental panics, and so forth (contra Becker [1985, p. 332], who postulates a similar sort of constancy, and Peltzman [1985], who claims to have confirmed a related political stability econometrically). Can we really believe that none of these great events budged people's commitment to, or acquiescence in, spending 30 cents out of every additional dollar of personal income on government? Even regarding much shorter periods, similar doubts may be raised. Can anyone really believe, for example, that the structure of politico-economic behavioral relations did not change in the United States between 1929 and 1933?

We might well take seriously the conclusion reached by Assar Lindbeck (1985, pp. 325-26): "there is no compelling reason to model a process of an expansion of public spending [or the growth of government in other dimensions] as a series of static equilibria positions at different values of a set of exogenous variables, or even as a dynamic sequence of equilibria." We are dealing with "a disequilibrium process, the *speed* of which is determined by characteristics of political competition."

A final caveat, noted by Johan Myhrman (1985, p. 279), pertains to the example itself: "we have to avoid the temptation that many have fallen for and that is to conclude that rising income is the *cause* of the growth of government." Temporal association, no matter how close, does not establish a causal relation in any event.

Proposition 8

Which particular persons compose or influence the government doesn't matter. Only broad socio-economic changes and the relative strengths of interest groups need be considered.

In analyzing the operation of the market system, economists are accustomed to ignoring the personal identities of the actors; and usually they are justified in doing so. We can probably understand the demand for and supply of potatoes well enough without naming consumer Jones as a demander and farmer Smith as a supplier. In markets with many small demanders and suppliers, no one in particular has any perceptible influence over the prevailing price or the volume of sales. So nothing is gained by worrying about specific people.

When economic methodology has been carried over to the analysis of political, governmental, and legal matters, the nameless quality of the analysis also has been carried over. Hence, public choice scholars speak of voters, legislators, bureaucrats, and others only as anonymous members of categories of actors. The theory is supposed to apply regardless of which particular person occupies a theoretical category. The theory is supposed to be—indeed one of its imagined glories is that it is—general in the sense of abstract. (Like physics, you see: no one cares *which* uranium atom we work with.) For some analytical purposes, this approach may serve satisfactorily, but it has limits well short of its pretensions.

One fact that should give pause to the analysts is that the political actors themselves certainly seem to have acted as if particular personalities mattered to them. Legions of Roosevelt haters seethed with animosity toward "that man"—he is said to have agitated them so mightily that they could not stand even the sound of his name! Would they have hated any other democratic president as much and acted the same if, say Al Smith had been elected in 1932? Not likely. Smith himself served as an officer of the leading Roosevelt-haters' group, the Liberty League (Leuchtenburg 1963, p. 92). Would nothing have changed had someone other than Woodrow Wilson been president during and immediately after World War I? Would the events of the 1980s have unfolded without essential difference if, say, Howard Baker had been president instead of Ronald Reagan? In the mid-1930s, when the Supreme Court was more or less evenly divided between those eager to affirm and those eager to deny the constitutionality of major New Deal programs, did nothing of substance depend on the personal character of Justice Owen J. Roberts, the famous "swing man"?

If merely raising these questions does not indicate obvious answers to them, then it must at least create serious doubts about political explanations devoid of personalities. To most historians, the significance of particular persons in determining the course of political history seems manifest. Politics is not, in this regard, like

economics. (Maybe economics [in reality] is not always like economics [in the models] either.) In politics one person can make a difference—not that very many can or do, but the potential exists when the right person and the right occasion conjoin. To understand the growth of government, which is obviously the outcome of a political process, we may need to attend to the roles played by particular actors at critical junctures.

Proposition 9

In studying the growth of government, econometric analysis is superior to historical analysis.

The idea that econometrics trumps history seems quite warranted if one accepts Proposition 7 (invariant structural model) and Proposition 8 (personalities are irrelevant). I have already criticized those propositions, but additional objections may be raised.

One problem has to do with the distinction between the creation of a new government power and its exercise, say, by means of government spending or employment. In the United States, authorization must precede the appropriation of public funds. Often certain political events prompt the creation of new authority, but a long time may pass before much money is spent under that authority.

Consider, for example, the Social Security system created in 1935. Clearly the program reflected the unique configuration of socio-economic and political conditions in the mid-1930s (Weaver 1983). For the next 20 years it remained a minor element in federal spending; as late as 1955, only $4.3 billion was spent for Social Security (OASI) transfers to the aged and to eligible survivors (U.S. Office of Management and Budget 1989, p. 189). It is estimated that in 1990 these types of transfers will reach about $218 billion, thereby accounting for a large share of the increase in federal spending over the past 35 years—a period when OASI payments grew from about 6 percent to about 16 percent of all federal spending (U.S. Office of Management and Budget 1989, p. 232; note that these data do not include other Social Security transfers, authorized later, such as disability payments or Medicare).

Of course, the increase in OASI transfers during 1955-1990 reflects the unfolding of political events during those years, as members of Congress catered to a segment of the electorate by expanding the scope of eligibility and increasing the allowable amount of payment per eligible recipient. But one who tracks the yearly pulling and hauling of events that resulted in changing amounts of aggregate spending, as the econometrician does in an abstract way, is attending to only one aspect of the growth of government, and it is a consequen-

tial or derivative rather than a fundamental aspect. The increase in Social Security transfers during each year of the 1960s, for example, resulted not simply from the playing out of the politics of the 1960s. It was also a lagged effect of the events and political actions of the 1930s. The increased OASI payments in the 1960s could not have occurred without a Social Security system in place, and that system owed its existence to much earlier events and actions. As Richard Rose (1984, p. 21) has remarked, the growth of government taxing and spending "is not so much a function of new laws as it is a consequence of the continuance of old laws."

An even more compelling example is the veterans' program. As recently described by Julie Johnson (*New York Times*, December 13, 1987),

> The V.A. serves 27 million veterans and 53 million dependents and survivors, more than a third of the population. It is the largest independent agency in the Federal bureaucracy, with an annual budget of $27 billion and more than 240,000 employees. It operates one of the largest health care systems in the world, and the number of patients it treats is expected to skyrocket as more World War II veterans age; it administers one of the largest home loan guarantee programs in the Federal Government, having guaranteed some $263 billion in mortgage loans since 1944; and it has helped 18 million veterans go to college or get job training.

Here is a welfare state in itself. Again, one can ascertain that spending for the veterans' programs grew in connection with an ongoing political process during the past 45 years. But no one can really understand how this gargantuan complex of government activities emerged unless one understands how the G.I. Bill of 1944 gained enactment: 12 million people, most of them draftees, were serving in the armed forces, and an election was coming up (Ross 1969; Higgs 1987a, p. 229). Once the institutional apparatus of the VA had been established, its vast potential to serve as a single-agency welfare state had only to be exploited at the margin as events and political conditions permitted. To use an analogy from cosmology, none of this evolution could have occurred without the original Big Bang.

Econometric models of the growth of government typically relate the explicandum to contemporaneous events alone or to events a year or two earlier. Such models are ill suited to capture the distinction between what is essential or fundamental (creation of new powers expanding the scope of government action) and what is consequential or derivative (increased government spending within an unchanged scope of government powers). As a rule, the econometrician "falsely

assumes that the causes of government growth represent current choice rather than the inertia force of established commitments" (Rose 1983, p. 6). In modern democratic political systems, it is much easier to start a program than to terminate one; just keeping programs from growing, far from killing them, requires political courage and commitment of a sort rarely evinced.

Other problems arise because, by admitting only one aspect of reality (the quantifiable), econometric models of the growth of government, in effect, throw away information. Because no number can measure a politician's personality and its political import, the econometrician has no way to appreciate the difference in the potential for the growth of government between, say, a government headed by Franklin Roosevelt and a government (that might have been) headed by Herbert Hoover in 1933. Except as the measured variables allow, the econometrician cannot appreciate any difference between, say, 1929 and 1933. A year is a year is a year; a variable is a variable is a variable; and real people with all their quirks and fickleness don't exist at all. This quantitative homogenization squeezes all the life, blots all the color, freezes all the feeling out of human history in general and political strife in particular.

By characterizing only abstract aggregative variables linked by rigid functional relations, an econometric model of the growth of government implicitly affirms that people had *no real choice.* They could not have done otherwise but to act in accordance with fixed formulas; the only deviations allowed are stochastic, as if those who deviate from the formulaic central tendency are lunatics acting randomly. This way of representing human history is not just a simplification; it is a basic distortion, a denial of the very thing the Austrians call human action (Mises 1957; 1966; 1978; Rothbard 1979; Buchanan 1979, pp. 39-63).

Proposition 10

The process generating the growth of government is internal to each country; each one's relations with the rest of the world can be ignored.

Virtually all existing economic models of the growth of government are models of a behaviorally closed economy, that is, an economy operating and developing independently vis-à-vis the rest of the world. Of course, external events may indirectly enter the explanatory framework. For example, the gross national product may increase because net exports increase, and the rise in GNP may be assumed to increase the public's demand for government services. But in this model an identical effect would have resulted from an

increase in GNP occasioned by a rise in domestic spending; there is nothing distinctive about external demand as such.

"Rigorous" analysts usually ignore genuinely external causes of the growth of government in part because their models exclude any role for changes in economic or political ideas, which are readily "imported" and "exported." So, analysts of the twentieth-century growth of government in the United States suppose that the same politico-economic structure persisted throughout the past 90 years even though, roughly speaking, (a) traditional balanced-budget fiscal doctrines held sway for the first half of the period but Keynesian macroeconomic theory and chronic-deficit politics prevailed during the second half, (b) traditional "isolationist" doctrines had great influence on foreign policy during the first half of the period but virtually no influence during the second half, and (c) peacetime defense spending usually amounted to about 1 percent or less of GNP during the first half but more than 7 percent of GNP during the second half (Higgs 1988b, pp. 18-22).

Increased defense spending by itself accounts for over 35 percent (4.4 percentage points) of the increase in federal spending relative to GNP (12.4 percentage points) between fiscal year 1940 and 1988 (U.S. Office of Management and Budget 1989, pp. 46, 51). Can anyone seriously contend that this increase had nothing to do with external military and political events and hence with the ideas Americans held about international communism and the threats they came to believe it posed for their well-being after World War II? Readily available facts refute such a supposition (Higgs 1988b, pp. 11-19).

Readily available facts also attest to the power of ideas imported from abroad in various other realms of thought. Information about social and economic developments in the European welfare states, for example, has heavily influenced the political thinking and practices of Americans ever since the late nineteenth century with regard to income taxation, central banking, nationalized retirement and health insurance, public housing, and countless other matters. Keynes's ideas alone had an immense influence on macroeconomic policy in the quarter-century after World War II, an influence that is still alive today (Stein 1969; 1984; Buchanan and Wagner 1977), not to mention Keynes's and other British influences in establishing postwar institutions for the international financial system, including the International Monetary Fund and the World Bank. From the late nineteenth to the late twentieth century, western European thinking exerted a magnetic attraction pulling American thinking toward collectivism. To ignore this powerful external influence on the course of events is

to abstract from an essential aspect of the process whereby government grew in the United States.

Proposition 11

Putative "public demand," especially as expressed by voting, drives the political-governmental system. Elected officials (and hence the bureaucracy subordinate to them) may be viewed as perfect agents of the electorate.

Adherence to this proposition characterizes the bulk of all analysis dealing with the growth of government in the West, regardless of analytical tradition or ideological leaning. (Specific citations seem unnecessary. See virtually any issue of *Public Choice* as well as the widely cited articles by Meltzer and Richard [1978; 1981; 1983], Peltzman [1980; 1984; 1985], Becker [1983; 1985], and Borcherding [1977; 1985]. The most recent and most extreme contribution along these lines is Wittman [1989].) This approach displays a professional deformity related to the economist's basic tool of analysis, the theory of markets with its component theories of demand and supply. Applying their familiar tools to the analysis of politics, economists immediately look for analogues. What is the "good" being traded? Who is the "supplier" and who the "demander"? What is the "price"? The answers seem obvious. Public policy is the good; the elected legislators are the suppliers; the voters are the demanders; votes are the currency in terms of which political business is being transacted. Thus voters "buy" the desired policies by spending their votes; the legislators "sell" policies in exchange for the votes electing them to office. (See Benson and Engen [1988] for an especially straightforward application of such analogues.) Economists view consumer demand in ordinary markets as ultimately decisive for the allocation of resources; hence consumer "sovereignty," a political metaphor imported into economics. Applying their familiar apparatus of thought to politics, economists tend to think that ultimately the political system gives the voters what they want. Therefore, if government grows, it does so because that is what the people want (Musgrave 1985, p. 306; Stiglitz 1989, p. 69). Demand creates its own supply. Voting is ultimately all that matters for determining the growth of government. As Dennis Mueller (1987, p. 142) has observed, "In the public choice literature the state often appears as simply a voting rule that transforms individual preferences into political outcomes."

It is easy—and probably healthy—to mock this view of the political process. Joseph Schumpeter (1954, p. 429) called it "the perfect example of a nursery tale." There are, after all, many significant

differences between ordinary markets and the "political market" (Higgs 1987a, pp. 14-15). Even Benson and Engen (1988, pp. 733, 741), adherents of this model, describe their output variable as "somewhat artificial and very restrictive" and their price variable as "clearly an incomplete proxy."

Not least of the problems is that voters rarely vote directly for or against policies. Rather, they vote for candidates for office. Winning candidates subsequently enact a multitude of policies, many of which neither the voters nor their representatives had thought about at the time of the campaign. It is not enough that voters know something about the general ideological reputation of office seeks (à la Dougan and Munger 1989); the devil is in the details. Besides, notwithstanding the elaborate theoretical and econometric attempts to show that politicians are perfect agents (Becker 1983; 1985; Peltzman 1984; 1985; Wittman 1989), we can easily demonstrate that political representatives frequently act in ways that must necessarily run counter to the dominant preference of their constituents. We see this in the U.S. Senate, for instance, every time the two senators who represent the same state split their votes—and such splitting occurs commonly (Higgs 1989d). Remarkably, and quite damningly for models that presume tight linkages between voters and their elected representatives, many of the vote-splitting senators are reelected time and again. So elections are reliable neither as an *ex ante* nor as an *ex post* check on the substantial autonomy of officeholders.

Perhaps the most important case in which legislators and other (including many *non*elected) officials act independently of control by the voters concerns political action during crises. How many voters could possibly have known in the election of 1940 what the elected federal officials would do during their upcoming terms in office, which were to include, depending on the office, some or all of the years of World War II? How many voters in the election of 1972 had any idea how they wished their representatives to deal with the "energy crisis" of 1973-1974, or even that such a crisis loomed? Who anticipated that George Bush would send U.S. troops into Saudi Arabia to oppose Iraq? During crises, government officials, lacking any reliable means for discovering dominant constituent preferences, necessarily exercise more or less discretionary power. But they do act, often in dramatically important ways.

Once those actions were taken, in a world of path-dependent historical processes the course of events was changed irrevocably (Brennan and Buchanan 1985, pp. 16, 74; Higgs 1987a, pp. 30-33, 57-74). (Ratcheting growth of government spending associated with participation in global wars is confirmed statistically by Rasler and

Thompson [1985], using Box-Tiao tests.) If U.S. voters actually had preferred that the nation not go to war, it was too late to rectify the legislators' mistake in the election of 1942—the fat was already in the fire.

Further, political actions are usually followed by carefully crafted rationalizations, excuses, and propaganda emanating from the politicians and their friends who initiated or supported the actions. (How often do politicians admit policy mistakes?) In this way political preferences, public opinion, even the dominant ideology may be altered, becoming more congruent with what has been done and thereby reversing the direction of causality usually assumed in political models. (On ideology and policy as interactive, see Higgs 1985; 1987a, pp. 67-74; 1989c, pp. 96-98.)

Proposition 12

A corollary of Proposition 11: The judicial branch of government can be ignored.

If analytical political economists have greatly *over*stated the role of legislators (too often viewed as perfect agents of voters) in the growth of government, they have to an even greater degree *under*stated the role of judges, at least in U.S. history, where legislation must withstand judicial review of its constitutionality to survive and have ongoing effect. The public choice and related analytical literatures contain almost nothing empirically concrete about the judiciary's role in the growth of American government, although the literature of law and economics offers some useful insights (several chapters in the volume edited by Gwartney and Wagner [1988], as well as Hughes [1977], are pertinent) and the literature on constitutional political economy offers suggestive insights, albeit at a very abstract, quasi-philosophical level (e.g., Friedrich Hayek's *Law, Legislation and Liberty* or various works by James Buchanan and his collaborators). The index of the recent, admirably comprehensive survey of public choice by Dennis Mueller (1989) has no entry for judges or judiciary. Mueller mentions but does not dwell on an oft-cited paper by William Landes and Richard Posner (1975), enticingly titled "The Independent Judiciary in an Interest-Group Perspective." Unfortunately, the thesis of this paper—legislators tolerate an independent judiciary only to augment the longevity and hence enhance the value of the legislative products they sell—is hard to take seriously, at least for anyone who has spent much time studying the constitutional history of the United States. (Cogent critics of the Landes-Posner paper include Buchanan [1975], Samuels [1975], and North [1981, pp. 56-57].)

The U.S. Supreme Court—nine persons appointed for life, answerable to no electorate, legislature, or interest group—played a key role in the growth of American government over the past century. (The relevant legal and historical literature is enormous. For selected references, see the footnotes and bibliography of Higgs [1987a].) Evidently, no one wants to deny this fact, but many analysts seem content to ignore it. The reason, one suspects, is that it doesn't fit into the profession's standard set of puzzles or lend itself to solution by the usual methods of analysis. It requires that one pay attention to particular autonomous individuals with specific values and beliefs. As North (1981, pp. 56-57) has observed, the behavior of the independent judiciary presents us with "the clearest instance of the dominant role of ideology." That fact makes most economists either run for cover or take up arms in visceral opposition.

Proposition 13

Ideology doesn't matter.

Indeed, the idea that people act on the basis of ideology strikes most mainstream economists, including many of those who have written about the growth of government (e.g., Becker and Stigler 1977; Peltzman 1984; 1985), as utterly anathematic. They flee from it as a vampire flees from holy water—perhaps for the same reason, too. Surprisingly, in view of his leading position in the Chicago School, Gary Becker (1985, p. 345) once wrote that "undoubtedly, the decline in laissez faire ideology contributed to the growth of government." He immediately backed away, however, issuing the obiter dictum: "but most of the decline was probably *induced* by the arguments and propaganda of the many groups seeking public largess."

More than 10 years ago, when a few neoclassical economists began to toy with the idea that ideologically motivated behavior might be the cause of certain apparent anomalies of public choice theory (e.g., why people vote), the economic literature took an unfortunate turn. Economists, political scientists, and public choice analysts began to produce an outpouring of problematic econometric studies of roll-call voting in the U.S. Congress. (Recent contributions, with many references to the earlier literature, include Nelson and Silberberg 1987; Lott 1987; 1988; McArthur and Marks 1988; Davis and Porter 1989; Dougan and Munger 1989; Lott and Reed 1989; Richardson and Munger 1990; Zupan 1990; Nollen and Iglarsh 1990.) Roll-call voting was a poor choice of observations for testing whether ideology matters—it was seized upon because it produces numbers that can be cranked through the econometric mill—though even in these studies it seems fairly clear that ideology does matter insofar

as the indexes used to measure it mean what they are supposed to mean.

Elsewhere, I have tried to clarify the concept of ideology, to show how ideology can be understood as consistent with rather than the antithesis of rational action, and to document how ideology affected and in turn was affected by the growth of American government over the past century (Higgs 1983; 1985; 1987a; 1989c). I shall not repeat everything I have written on this subject, but one point requires restatement and emphasis.

The existing thrust of the economic literature, the quest to determine econometrically whether ideology mattered in determining a certain set of political actions, seeks to answer a non-question. Of course it matters. *It always matters*, because people cannot even think about political questions, much less undertake political actions, without an ideology (Siegenthaler 1989; Higgs 1989a; 1989c, pp. 98-100).

How can I make such a claim? Economists are supposed to believe, or at least to postulate for analytical purposes, that people pursue their "economic interests." Open any mainstream text on economic theory and check the arguments of the utility function: sure enough, they consist of amounts of "goods" consumed by the individual; nothing about ideas here, just pounds of potatoes, bottles of beer, trips to the shore, hours of leisure, and so forth. In the words of Gary Becker (1983, p. 374, emphasis added), "the utility of each person . . . depends *only* on own commodities." To consume more of these things is, the mainstream economist supposes, precisely what is meant when one speaks of people's acting in their self-interest. In this context, to speak of a person's economic or material interest would be redundant, because the theory recognizes no other kind. Thus, Thomas Borcherding (1985, p. 378, emphasis added) declares it "an open question whether after the *obvious elements of self-interest* are separated from political action, scope for ideology remains."

The most charitable thing I can say about this view is that it is simply wrong. No one ever explained why it is wrong more clearly and succinctly than Mises (1957, pp. 140, 142, emphasis added):

> In the world of reality, life, and human action there is no such thing as interests independent of ideas, preceding them temporally and logically. What a man *considers* his interest is the result of his ideas. . . . Free men do not act in accordance with their interests. They act in accordance with what they *believe* furthers their interests.

Nor are the Austrians alone in appreciating the dependence of interest on belief. Jon Elster (1989, p. 20), for example, recently wrote:

"What explains the action is the person's desires together with his *beliefs* about the opportunities. Because beliefs can be mistaken, the distinction is not trivial."

Ideologies are belief systems about social relations. Chief among their dimensions is the cognitive: ideologies structure and give meaning to a person's perceptions of social life. They also place affective weight on those apperceptions, designating some things good or right, other things bad or wrong. They also point toward a justifiable political program and open up the potential for solidarity with like-minded comrades. Such solidarity serves as an important means of establishing and maintaining a social identity; it helps to determine people's psychologically essential conceptions of who they are.

In myriad ways, the growth of government has involved collective action, a transcendence of the free-rider problem regarded by neoclassical theorists as more or less paralyzing. This transcendence reflects ideologically motivated action. It poses no great puzzle for those who understand that real people act on the basis of two equally propulsive—but inextricably intertwined—motives: to get something *and* to be someone (Higgs 1987b). (See also the discussions of "artifactual man" by Buchanan [1979, pp. 93-112] and "preferences for preferences" and "the role of norms" by Brennan and Buchanan [1985, pp. 68-73, 146-47]; and the discussion of self-interest and the free-rider problem by Hummel and Lavoie [1990].)

Proposition 14

Government grows in order to correct the distortions stemming from externalities.

This proposition, along with Proposition 5 and 15, lies at the heart of the theory of the growth of government usually embraced by mainstream economists (e.g., Baumol 1965; Stiglitz 1989, p. 57). The theory maintains that governments grew in a process of correcting emerging "market failures" associated with monopoly power, externalities, and public goods. As a positive theory of the growth of government the idea suffers, as already indicated, from reliance on magic: a market failure emerges—POOF!—government undertakes a program to remedy the associated deviation from the "efficient" allocation of resources. In the words of Richard Musgrave (1985, p. 287), "the assumption was that government, once advised of proper action, will proceed to carry it out." But no account is given of (a) why either the public or specific government officials know or care about systemic efficiency and (b) even if they do know, what personal incentives they have to take the implied corrective action. In short, a black box stands between the alleged cause and its presumed effect.

What actually fills the black box are the Two Big Collectivist Assumptions: government officials *know* what needs to be done to promote the public interest, and they *act* on the basis of that knowledge.

Apart from the implausibility of the theory because it has nothing to say about the personal incentives and constraints of actual decision makers, the theory does not stack up empirically. A reasonable survey of how the government has grown—that is, an accounting of what it has come to do more often and what it has undertaken now and then to do for the first time—must conclude that only a small proportion of all government activities has anything to do with externalities. One need only examine an organization chart for the government, leaf through the Federal Register, or scrutinize U.S. Statutes at Large, not to mention the detailed budget documents. Evidence of the alleged connection rarely appears. Studies that have sought to find a relation between the growth of government and proxies for growing externality problems (e.g., population density, urbanization, ratio of manufacturing to agricultural activities) have found little or nothing (Borcherding 1977, p. 53; 1985, p. 368; Mueller 1987, p. 119).

The theory of government as fixer of externalities is often quite backwards. Governments themselves compose "the prototypical sector in which decision makers do *not* take accurate account of all the costs as well as all the benefits of each activity" (Yeager 1983, p. 125). In reality, the government is more likely to cause a negative externality than to reduce one. Since the recent revelations in Eastern Europe and the Soviet Union, everyone has become aware of the vast environmental destruction wreaked by government officials there, but one need not rely on these egregious cases to establish the point. According to studies of the United States cited by James Bennett and Manuel Johnson (1980, pp. 133-34),

> federal government agencies emit huge quantities of pollutants into the water and atmosphere. The U.S. Department of Defense alone discharges over 335 million gallons of human waste per day, of which 30 percent received secondary treatment or less. The Tennessee Valley Authority (TVA) is the country's largest sulfur dioxide polluter, accounting for 38 percent of total sulfur emissions in the Southeast U.S., and its compliance record with pollution laws is only 16 percent as compared to 74 percent for all utilities nationally.

Recent press reports tell us, and government spokesmen such as Energy Secretary James Watkins admit (*Wall Street Journal*, November 27, 1989), that the government's plants for manufacturing nuclear materials have been poisoning the surrounding air, land, and water for decades while hiding behind their top-secret national security classification. The Energy Department forecasts that the future

expense of cleaning up this mess will accumulate to more than $80 billion (*Wall Street Journal*, December 12, 1988). Nor are the nuclear plants the only problem of this sort. Already 87 military installations have been placed on or proposed for the Superfund list of the nation's most dangerous toxic-waste sites, and more than a hundred other military facilities may be added to the list. A "Newsday" study concluded that "the armed forces have been slow to move, have resisted state regulators' efforts to force compliance with environmental laws, and continue to violate anti-pollution laws even as officials in Washington, D.C., insist their bases are trying to be better neighbors" (*Seattle Times*, February 5, 1990).

Still, one should not leap to the conclusion that the growth of government had *nothing* to do with programs in response to emerging externality problems, although one ought to refrain from immediately labeling those perceived problems "market failures." Historically, for example, urbanization created severe externality problems in relation to the spread of contagious diseases, and the (mainly local) governments' public health programs responded to these problems in a fashion that in retrospect seems remarkably successful (Higgs 1971, pp. 67-72; 1979; Meeker 1974). Other examples also might be found, perhaps in other areas where public health and safety are at stake. The point, however, is that such examples cannot bear much weight as significant explanations of the growth of government. They do not add up empirically to a big part of the relevant record.

Proposition 15

Government grows in order to supply public goods that the public demands but the free market won't supply.

As already indicated, this proposition belongs to the class of "market failure" explanations of the growth of government. Like all such explanations, it suffers from the infirmities of the behavioral black box. Empirically, however, it seems to possess greater warrant than its cousin, the externality proposition. Although many examples of public goods are problematic—they do not actually involve goods that are totally nonrival in consumption or nonpayers who cannot be excluded—at least one important case remains, namely, national defense. Especially when one conceives of defense as the deterrence of nuclear or other widely devastating attacks against national territory, it seems to be a genuine public good, one for which the free market would make insufficient provision. Nor is the necessity of government provision affirmed only by mainstream economists. Mises himself concluded that "in a world full of unswerving aggressors and enslavers . . . isolated attempts on the part of each individual

to resist are doomed to failure, [and therefore] the only workable way is to organize resistance by the government." Mises went even further, supporting conscription of people to serve in the armed forces (1966, p. 282).

As indicated above, increases in military spending over the past 50 years account for a substantial share, more than a third, of the rise of federal government spending relative to GNP. The arms industries also have become the most heavily regulated sector of the U.S. economy (Kovacic 1990). It would seem, then, that Proposition 15 has a good deal, both theoretically and empirically, to recommend it to students of the growth of government. Of course, the empirical weight that this explanation will bear needs to be kept in perspective: defense spending, for example, now amounts to only about a quarter of federal spending, less than a fifth of all government spending, less than 6 percent of GNP (U.S. Office of Management and Budget 1989, pp. 51, 364), and the defense spending shares are substantially below their levels during the 1950s and 1960s (Higgs 1988b, pp. 18-22).

Before embracing Proposition 15 fully, however, one needs to consider a rather difficult question: how much of the observed increase in the government's military activity represents a response to the public good dilemma (the free-rider problem) and how much represents self-serving exploitation of the public's insecurities by people making little or no contribution to the maintenance of genuine national security (the free-loader problem)?

No simple answer can be given, but some things are fairly obvious. Much military activity has served the interests not of the general public but of the government itself (Hummel and Lavoie 1990). The recent invasion of Panama is an example, as was the earlier invasion of Grenada. Far from seeking a "revelation" of the public's true demand for defensive actions and the derived demand for arms production, the national security establishment has engaged in a series of mendacious efforts to scare the public and stampede the taxpayers into supporting higher levels of military spending—just recall all the weapons "gaps" announced over the past 40 years, most of which were revealed in due course to be overblown or completely bogus (Higgs 1988b, pp. 11-19). Much military spending has done nothing to promote national security, for example, lavish officers' clubs and golf courses, cushy military retirement systems, and maintenance of obsolete facilities such as Fort Monroe, the fort with a moat. Members of Congress have twisted the defense program again and again to aid their quest for reelection (Higgs 1988a; 1989b; 1990a; and many of the chapters in the volume edited by Higgs [1990b]). Anyone who reads the newspapers, not to mention the literature on

military procurement, knows that the big defense contractors, in league with their friends at the Pentagon and in Congress, have siphoned many billions of dollars in rents out of the public treasury during the past half-century, never more than during the bonanza of the 1980s (Stubbing 1985; Fitzgerald 1989).

In sum, it is obvious that the growth of government via increased military activities represents far more than a straightforward effort to achieve a solution to the public good problem. To a large extent, it represents a poorly disguised form of redistributive politics.

Proposition 16

Government grows in order to reduce the transaction costs inherent in a complex modern economy, thereby facilitating a high degree of division of labor and enhancing productivity.

I call this proposition, which is a more sophisticated variant of the Modernization Hypothesis, the theory of the Washington School. Its prime proponent is Douglass C. North, long of the University of Washington (Seattle) and more recently of Washington University (St. Louis). North draws from theoretical work on measurement and transaction costs by Steven N. S. Cheung (formerly of the University of Washington) and Yoram Barzel (still there). Collaborating with North on empirical work connected with the theory has been John Wallis, who earned his Ph.D. at the University of Washington. The thesis began to take shape more than 10 years ago and appeared in North's *Structure and Change in Economic History* (1981, especially pp. 187-98 on the United States). Later papers (North and Wallis 1982; North 1985; Wallis and North 1986) clarified and extended the argument and presented empirical materials in support of it.

An early summary conveys the essence of the argument (North and Wallis 1982, p. 336):

> The wedding of science and technology in the late nineteenth century made possible a technology of production whose potential was only realizable with an enormous increase in the resources devoted to political and economic organization—the transactions sector of the economy. A substantial part of this increase has occurred in the market and through voluntary organization, and a substantial share has also been undertaken by government.

The government's part evidently has outpaced the market's part; hence the growth of government.

North's argument traces virtually everything back to a single aspect of societal modernization, the increase in specialization. That increase caused the rise in productivity, hence economic growth; it

necessitated more "contracts across time and space and with unknown second parties," hence a demand for bigger government to supply "effective third party enforcement" (North 1989, p. 113); it fostered ideological divisions, hence the proliferation of politicized interest groups (North 1981, pp. 51, 196-98; 1985); it cheapened tax collection and hence shifted outward the supply schedule of government activities. (Becker [1985, p. 345] tells a similar tale.)

Although Wallis and North's empirical exercises in creative national income accounting are not compelling, partly because the empirical categories just don't match the theoretical counterparts (for some details, see Davis [1986]), there may be something to the Washington thesis. North continually emphasizes that government has grown throughout the Western world and elsewhere over the past century; and, by conventional measures, government is bigger in the more developed countries than in the less developed. A good theory, it seems, ought to account for the apparently pervasive association of economic progress and growth of government in the West. Because rising specialization marks every case, it would appear to resolve the issue. Perhaps to some extent it does, but problems remain.

One difficulty is that the theory is *too* general. Although it seems to match the long-term trend in every Western country—and many others as well—it cannot account for the marked irregularities that have appeared in most cases. The specific shape of the historical profile must be explained by auxiliary theories or in an *ad hoc* manner. The abrupt growth of government that occurred in the United States during the world wars and the Great Depression, for instance, would seem to have little to do, in any immediate way, with changes in the degree of societal specialization (Higgs 1987a, pp. 123-236). Similar questions can be raised about the precise paths followed by other countries.

Another problem: the theory is rather vague, and the attempts to give it empirical substance only heighten one's misgivings in this regard. The concepts of "transaction cost" and "transaction sector" have been stretched to the breaking point. The distinction between "transaction" and "production transformation," though central to the thesis, is blurry at best (Davis 1986).

Further, the explanation of why remote transactions and other features of modern economic life could not be accommodated in the market, an explanation that appeals to "moral hazard, adverse selection, and the demand for public goods" (North 1985, p. 392), is offered almost in passing and needs a much more extensive argument before it can become persuasive. (See Lindbeck [1985, pp. 315-16] for trenchant criticism with regard to the alleged roles of adverse selection

and moral hazard.) Myhrman (1985, p. 277) argues that while North's thesis may explain why governments got bigger during the early stages of economic growth, it does not account for why the growth of government has continued to exceed the growth of the private sector. (Davis [1986, p. 158] makes a similar point.)

Finally, stepping back from the theory and viewing it as a whole, one may get an eerie feeling of unreality. Many of us are convinced that, all things considered, modern governments—the American and just about all the others—hugely *increase* the costs of transacting mutually beneficial exchanges in comparison with what those costs would be in a minimal or night-watchman state. In view of all the taxes, all the direct, highly politicized government participation in markets, all the regulations, all the laws infringing economic liberties on every side, how can anyone suppose that *on balance* the growth of government has reduced transaction costs and promoted economic growth? Perhaps cause and effect have been reversed in the Washington Thesis; perhaps only economically progressive societies can *afford* the deadweight costs of ever bigger governments.

Proposition 17

Government is nothing but an engine of redistribution.

Many of the most cited contributions to the literature make this assumption their point of departure (Meltzer and Richard 1978; 1981; 1983; Peltzman 1980; 1985; Becker 1983; 1985; Benson and Engen 1988; and others cited by Mueller 1987, pp. 122-28). Evidently analysts adopt the assumption because it facilitates the construction of tractable formal models. To simplify the analysis further, investigators usually assume that the redistribution runs from richer to poorer. There is something to be said for simple models, but in this case it is not much.

These models lack even the elementary saving grace of positivism: they do not generate predictions that fit the facts. (For criticism, see Higgs [1987a, pp. 12-15] and Mueller [1987, pp. 126-28].) Peltzman, in his influential 1980 article, claims to present empirical confirmation, but the claims are too ill-founded to be acceptable. Indeed, the econometric methods employed in that article—presumptuous proxy variables, *ad hoc* substitutions for "missing" data, unwarranted specification switches, *inter alia*—fill a chamber of horrors sufficient to discredit the entire undertaking. The methods employed in Peltzman's 1985 article warrant a similar evaluation.

More fundamentally, assuming that government just redistributes wealth simply isn't true, isn't even an approximation to the truth. It's hard for the hard-core anarchists to swallow, but govern-

ments in the West do provide some desired services. Deterrence of foreign aggression, a degree of local protection of life and property, a body of property law and a system of courts for resolving civil disputes, a public health system, public water supplies and sewage disposal, the roads and the traffic rules—all seem to qualify as more or less public goods and as goods genuinely demanded by the overwhelming majority of the public. Of course, even these goods are supplied in ways that one might lodge many complaints against. But the point remains: they are not *just* means of redistribution, even though their financing, production, and distribution have many undeniable redistributive aspects.

National defense, perhaps the most important example, surely receives much political impetus from those who privately appropriate benefits from its provision (Higgs 1990a; Lee 1990; and other chapters in the volume edited by Higgs [1990b]). Still, not many citizens favor unilateral disarmament. Most people want the government to maintain a military establishment adequate to deter foreign aggression. (The evidence of public opinion polls and elections indicates that a substantial number also support military aggression against others, although one might apologize for at least some of those who maintain this position on the grounds that they have been duped to believe the aggression is actually defensive.) In any event, they do not support just giving money to the owners and employees of General Dynamics (GD) in the same way that they support Aid to Families with Dependent Children. Most of them want the military potency produced by the Trident submarines, M-1 tanks, and F-16 fighter planes; only a few of them care whether GD or somebody else supplies the weapons. For the general public, GD's rents are incidental, though of course they are far from incidental in the actual political process by which GD becomes the supplier (Goodwin 1985).

Proposition 18

The modern welfare state merely "filled the vacuum" left by the deterioration of private institutions.

This proposition is still another variant of the Modernization Hypothesis. Modern economic development, it is said, caused socio-economic transformations (e.g., urbanization, greater personal mobility, increased survival of the aged) that sapped the vitality of private institutions. Families, churches, and voluntary associations became less and less able to accomplish their traditional tasks. Hence, government increasingly substituted for them "as the principal institution assisting individuals in time of economic or social misfortune"

(Fuchs 1979, p. 13). Government had to hold the "safety net" when others no longer could or no longer would.

Certainly government activities in immense profusion—countless programs ranging from sex education to mental health care to the federal Foster Grandparents Program—can be viewed as illustrating this thesis. Perhaps the proposition contains more than a grain of truth. But as an explanation of the growth of government, the proposition by itself does not carry us far, and even that much is partly illusory.

A serious defect of the proposition is that once the alleged process of "vacuum filling" had got under way, if not before, the direction of causality must have run in both directions. Yes, perhaps certain socio-economic changes did, say, promote the breakdown of individual responsibility among family members. But the availability of governmentally provided substitute services lowered the cost of irresponsible private actions and hence increased their frequency. Government did not simply substitute for responsible private efforts; it also crowded them out. Without narrowing the focus to a specific activity, not much more can be said. But the crowding-out theory itself is logically unimpeachable, and those with normal eyesight and a little knowledge of history can see evidence of such crowding out on all sides. (See Wagner [1989] for an extended discussion and references.)

Of course, Proposition 18, as an explanation of the growth of government, presents us with yet another case of the black box. When we fill the box in a theoretically and empirically warranted manner, the nature of the explanation changes completely. Question: How do the kinds of people who need a government safety net—presumably those who are destitute, physically or mentally handicapped, aged and infirm, or otherwise in dire straits—exert enough political pressure to elicit the creation of a safety net by those who control the political process? Short answer: They don't. But notice the millions of middle-class administrators, school teachers, social workers, lawyers, urban planners, doctors, nurses, professional and technical specialists, and all the others who act as well paid providers and facilitators of governmentally funded services for the helpless, and then the politics of the welfare state becomes a lot plainer. Also plain is that the rise of the welfare state involved far more than unvarnished altruism (Weaver 1978; Higgs 1987a, pp. 248-51).

Not surprisingly, it involved a great deal of redistributive politics: redistribution not so much from the fortunate to the unfortunate as from the taxpayers to the bureaucrats, providers, and hangers-on. As Lindbeck (1985, p. 327) puts it, "the original 'welfare state,' designed

mainly to provide basic economic security, has gradually developed into a free-for-all competition for favors from the state, with 'every politician trying to buy votes from everybody.'"

Conclusion

In the literature on the growth of government, much that is misguided can be seen as unwarranted reduction. This in turn can be seen as arising almost inevitably from the positivist pretensions that underlie modern social science in general and modern mainstream economics in particular.

The drive toward reduction takes several forms. First, analysts strive to reduce empirical reality to *one measure* of the explicandum or dependent variable. Second, they strive to reduce the theory to *one independent variable* that can carry the entire explanatory load. Third, they strive to reduce historical and geographical diversity so that *one general explanation* applies to all times and places. In sum, the goal appears to be an equation of the form $G = f(X)$, where G is one simple measure of the size of government, X is one simple explanatory variable, and f is a fixed-coefficients functional relation connecting the values of X and G by what amounts to a law of history.

This reductive quest is nothing more than a species of scientism, the attempt to conduct the study of man with the same methods employed to study nonhuman nature. Research in political economy is being carried out as if it were research in physics or chemistry. But people are not atoms; the political economy is not a molecule; and the growth of government is not analogous to the natural growth processes analyzed in biochemistry. The prevailing reductivism, which is both positivist and historicist, founders on the reality that people are purposive, choosing actors whose actions are shaped by their (changeable) beliefs and values and whose personal and societal histories are marked by contingencies with significant consequences, including path dependencies (Mises 1957; 1966; 1978; Rothbard 1979; Higgs 1987a).

Strange to say, one can describe a large part of the recent research on the growth of government as attempts by researchers who neither know nor care much about history to discover laws of history. Small wonder that black boxes litter the field. But here, as in other areas of serious empirical research, there is no good substitute for knowing, quite literally, what we are talking about. One must, then, study history; one must comprehend the great variety of acting and interacting individuals whose actions compose our subject and the diverse and changing institutions that condition the actors' choices.

To this recommendation, a positivist might respond: If there are no laws of history to be discovered, what is the point of studying history? The answer is that there exists much valuable knowledge in the gap that separates unvariable law and utter chaos. Although no laws of history exist—indeed, as Mises (1957, p. 212) explained, "the notion of a law of historical change is self-contradictory"—the study of history can reveal patterns and probable relations. Mises (1957, pp. 264-84) called the search for this kind of understanding "thymology." He maintained that

> what thymology achieves is the elaboration of a catalogue of human traits. It can moreover establish the fact that certain traits appeared in the past as a rule in connection with certain other traits. But it can never know in advance with what weight the various factors will be operative in a definite future event.

So, even though one cannot rely on historical understanding to be apodictic, as one can rely on the pure logic of choice, which the Austrians call economic theory, one must, both in everyday life and in empirical research, constantly place bets. Although one cannot be certain that the relations on which one places the bets will (or did in the past) prevail, one confidently expects to come closer to the truth by taking thymological understanding into account than by closing one's eyes and throwing darts at the dartboard of all possibilities.

It is no accident that many of the leading lights of Austrian economics—Mises, Hayek, Rothbard—have taken historical understanding seriously and devoted much effort to historical research. Mises (1957, p. 293) went so far as to describe historical understanding as not only essential for practical action but worthwhile in another sense as well. "It opens the mind toward an understanding of human nature and destiny. It increases wisdom. It is the very essence of that much misinterpreted concept, a liberal education."

In view of the wide extent to which the problematic propositions criticized above have been accepted by contributors to the recent literature on the growth of government, a Misesian might well reach the following conclusion. Many of the analysts thought they were formulating and testing economic theory, but in the Austrian sense they were not. Few of them thought they were writing economic history, but in the Austrian sense they were. Unfortunately, much of this inadvertently written economic history has been deeply flawed.

References

Auster, Richard D., and Morris Silver. 1979. *The State as a Firm: Economic Forces in Political Development*. Boston: Martinus Nijhoff.

Baumol, William J. 1965. *Welfare Economics and the Theory of the State*. 2nd ed. Cambridge, Mass.: Harvard University Press.

Becker, Gary S. 1983. "A Theory of Competition among Pressure Groups for Political Influence." *Quarterly Journal of Economics* 98 (August): 371-400.

———. 1985. "Public Policies, Pressure Groups, and Dead Weight Costs." *Journal of Public Economics* 28: 329-47.

Becker, Gary S., and George J. Stigler. 1977. "De Gustibus Non Est Disputandum." *American Economic Review* 67 (March): 76-90.

Bennett, James T., and Manuel H. Johnston. 1980. *The Political Economy of Federal Government Growth: 1959-1978*. College Station, Texas: Center for Education and Research in Free Enterprise.

Benson, Bruce L., and Eric M. Engen. 1988. "The Market for Laws: An Economic Analysis of Legislation." *Southern Economic Journal* 54 (Jan.): 732-45.

Bernholz, Peter. 1986. "Growth of Government, Economic Growth and Individual Freedom." *Journal of Institutional and Theoretical Economics* 142: 661-83.

Borcherding, Thomas E. 1977. "The Sources of Growth of Public Expenditures in the United States, 1902-1970." In *Budgets and Bureaucrats: The Sources of Government Growth*. Thomas E. Borcherding, ed. Durham, N.C.: Duke University Press. Pp. 45-70.

———. 1985. "The Causes of Government Expenditure Growth: A Survey of the U.S. Evidence." *Journal of Public Economics* 28: 359-82.

Boskin, Michael J. 1987. "Follow the Money." *Regulation* 11: 60-62.

Brennan, Geoffrey, and James M. Buchanan. 1985. *The Reason of Rules: Constitutional Political Economy*. Cambridge, England: Cambridge University Press.

Buchanan, James M. 1975. "Comment on the Independent Judiciary in an Interest Group Perspective." *Journal of Law and Economics* 18 (Dec.): 903-05.

———. 1979. *What Should Economists Do?* Indianapolis, Ind.: Liberty Fund.

Buchanan, James M., and Richard E. Wagner. 1977. *Democracy in Deficit: The Political Legacy of Lord Keynes*. New York: Academic Press.

Davis, Lance E. 1986. "Comment." In *Long-Term Factors in American Economic Growth*. Stanley L. Engerman and Robert E. Gallman, eds. Chicago: University of Chicago Press. Pp. 149-61.

Davis, Michael L., and Philip K. Porter. 1989. "A Test for Pure or Apparent Ideology in Congressional Voting." *Public Choice* 60 (Feb.): 101-11.

Dougan, William R., and Michael C. Munger. 1989. "The Rationality of Ideology." *Journal of Law and Economics* 32 (April): 119-42.

Dye, Thomas R. 1990. *Who's Running America? The Bush Years*. Englewood Cliffs, N.J.: Prentice Hall.

Elster, Jon. 1989. *Nuts and Bolts for the Social Sciences*. New York: Cambridge University Press.

Fitzgerald, A. Ernest. 1989. *The Pentagonists*. Boston: Houghton Mifflin.

Fuchs, Victor R. 1979. "The Economics of Health in a Post-Industrial Society." *Public Interest* (Summer): 3-20.

Goodwin, Jacob. 1985. *Brotherhood of Arms: General Dynamics and the Business of Defending America*. New York: Times Books.

Gwartney, James D., and Richard E. Wagner, eds. 1988. *Public Choice and Constitutional Economics*. Greenwich, Conn.: JAI.

Hanrahan, John D. 1983. *Government by Contract*. New York: Norton.

Higgs, Robert. 1971. *The Transformation of the American Economy, 1865-1914: An Essay in Interpretation*. New York: Wiley.

———. 1979. "Cycles and Trends of Mortality in 18 Large American Cities, 1871-1900." *Explorations in Economic History* 16 (Oct.): 381-408.

———. 1983. "When Ideological Worlds Collide: Reflections on Kraditor's *Radical Persuasion*." *Continuity* (Fall): 99-112.

———. 1985. "Crisis, Bigger Government, and Ideological Change: Two Hypotheses on the Ratchet Phenomenon." *Explorations in Economic History* 22 (Jan.): 1-28.

———. 1987a. *Crisis and Leviathan: Critical Episodes in the Growth of American Government*. New York: Oxford University Press.

———. 1987b. "Identity and Cooperation: A Comment on Sen's Alternative Program." *Journal of Law, Economics, and Organization* 3 (Spring): 140-42.

———. 1988a. "Hard Coals Make Bad Law: Congressional Parochialism versus National Defense." *Cato Journal* 8 (Spring/Summer): 79-106.

———. 1988b. "U.S. Military Spending in the Cold War Era: Opportunity Costs, Foreign Crises, and Domestic Constraints." Cato Institute *Policy Analysis* No. 114 (Nov. 30).

———. 1989a. "Organization, Ideology and the Free Rider Problem: Comment." *Journal of Institutional and Theoretical Economics* 145 (March): 232-37.

———. 1989b. "Beware the Pork-Hawk." *Reason* 21 (June): 28-34.

———. 1989c. "*Crisis and Leviathan*: Higgs Response to Reviewers." *Continuity* (Spring/Fall): 92-105.

———. 1989d. "Do Legislators' Votes Reflect Constituency Preference? A Simple Way to Evaluate the Senate." *Public Choice* 63 (Nov.): 175-81.

———. 1990a. "Introduction: Fifty Years of Arms, Politics, and the Economy." In *Arms, Politics, and the Economy: Historical and Contemporary Perspectives*. Robert Higgs, ed. New York: Holmes & Meier. Pp. xv-xxxii.

Higgs, Robert, ed. 1990b. *Arms, Politics, and the Economy: Historical and Contemporary Perspectives*. New York: Holmes & Meier.

Hoover, Calvin B. 1959. *The Economy, Liberty, and the State*. New York: Twentieth Century Fund.

Hughes, Jonathan R.T. 1977. *The Governmental Habit: Economic Controls from Colonial Times to the Present*. New York: Basic Books.

Hummel, Jeffrey Rogers, and Don Lavoie. 1990. "National Defense and the Public-Goods Problem." In *Arms, Politics, and the Economy: Historical and Contemporary Perspectives*. Robert Higgs, ed. New York: Holmes & Meier. Pp. 37-60.

Kovacic, William E. 1990. "The Sorcerer's Apprentice: Public Regulation of the Weapons Acquisition Process." In *Arms, Politics, and the Economy: Historical and Contemporary Perspectives*. Robert Higgs, ed. New York: Holmes & Meier. Pp. 104-31.

Kozinski, Alex. n.d. "The Collision between Government Activity and Individual Rights." *Econ Update* 1, 5-9.

Landes, William M., and Richard A. Poser. 1975. "The Independent Judiciary in an Interest-Group Perspective." *Journal of Law and Economics* 18 (Dec.): 875-901.

Lee, Dwight R. 1990. "Public Goods, Politics, and Two Cheers for the Military-Industrial Complex." In *Arms, Politics, and the Economy: Historical and Contemporary Perspectives*. Robert Higgs, ed. New York: Holmes & Meier. Pp. 22-36.

Leuchtenburg, William E. 1963. *Franklin D. Roosevelt and the New Deal 1932-1940*. New York: Harper Colophon Books.

Lindbeck, Assar. 1985. "Redistribution Policy and the Expansion of the Public Sector." *Journal of Public Economics* 28: 309-28.

Lott, John R. 1987. "Political Cheating." *Public Choice* 52: 169-86.

———. 1988. "Ideological Shirking or Ideological Priors? Comments on Kalt-Zupan and Dougan-Munger." Unpubl. mans.

Lott, John R., and W. Robert Reed. 1989. "Shirking and Sorting in a Political Market with Finite-Lived Politicians." *Public Choice* 61: 75-96.

Lowery, David, and William D. Berry. 1983. "The Growth of Government in the United States: An Empirical Assessment of Competing Explanations." *American Journal of Political Science* 27 (Nov.): 665-94.

McArthur, John, and Stephen V. Marks. 1988. "Constituent Interest vs. Legislator Ideology: The Role of Political Opportunity Cost." *Economic Inquiry* 26 (July): 461-70.

Meeker, Edward. 1974. "The Social Rate of Return on Investment in Public Health, 1880-1910." *Journal of Economic History* 34 (June): 392-431.

Meltzer, Allan H., and Scott F. Richard. 1978. "Why Government Grows (and Grows) in a Democracy." *Public Choice* (Summer): 111-18.

———. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89 (Oct.): 914-27.

———. 1983. "Tests of a Rational Theory of the Size of Government." *Public Choice* 41: 403-18.

Mises, Ludwig von. 1957. *Theory and History*. New Haven: Yale University Press.

———. 1966. *Human Action*. 3rd. rev. ed. Chicago: Henry Regnery.

———. 1978. *The Ultimate Foundation of Economic Science*. Kansas City: Sheed Andrews and McMeel.

Mueller, Dennis C. 1987. "The Growth of Government: A Public Choice Perspective." *IMF Staff Papers* 34 (March): 115-49.

———. 1989. *Public Choice II*. New York: Cambridge University Press.

Musgrave, Richard A. 1985. "Excess Bias and the Nature of Budget Growth." *Journal of Public Economics* 28: 287-308.

Myhrman, Johan. 1985. "Introduction: Reflections on the Growth of Government." *Journal of Public Economics* 28: 275-85.

Nelson, Douglas, and Eugene Silberberg. 1987. "Ideology and Legislator Shirking." *Economic Inquiry* 25 (Jan.): 15-25.

Nollen, Stanley D., and Harvey J. Iglarsh. 1990. "Explanations of Protectionism in International Trade Votes." *Public Choice* 66 (August): 137-53.

North, Douglass C. 1981. *Structure and Change in Economic History*. New York: Norton.

———. 1985. "The Growth of Government in the United States: An Economic Historian's Perspective." *Journal of Public Economics* 28: 383-99.

———. 1989. "Comments 2." In *The Economic Role of the State*. Arnold Heertje, ed. Oxford: Basil Blackwell. Pp. 107-15.

North, Douglass C., and John Joseph Wallis. 1982. "American Government Expenditures: A Historical Perspective." *American Economic Review* 72 (May): 336-40.

Peltzman, Sam. 1980. "The Growth of Government." *Journal of Law and Economics* 23 (Oct.): 209-87.

———. 1984. "Constituent Interest and Congressional Voting." *Journal of Law and Economics* 27 (April): 181-210.

———. 1985. "An Economic Interpretation of the History of Congressional Voting in the Twentieth Century." *American Economic Review* 75 (Sept.): 656-75.

Peters, Guy, and Martin O. Heisler. 1983. "Thinking about Public Sector Growth: Conceptual, Operational, Theoretical, and Policy Considerations." In *Why Governments Grow: Measuring Public Sector Size*. Charles Lewis Taylor, ed. Beverly Hills, Calif.: Sage. Pp. 177-97.

Rasler, Karen A., and William R. Thompson. 1985. "War Making and State Making: Governmental Expenditures, Tax Revenues, and Global Wars." *American Political Science Review* 79 (June): 491-507.

Richardson, Lilliard E., Jr., and Michael C. Munger. 1990. "Shirking, Representation, and Congressional Behavior: Voting on the 1983 Amendments to the Social Security Act." *Public Choice*. Forthcoming.

Rose, Richard. 1983. "The Programme Approach to the Growth of Government." *Studies in Public Policy* 120. Glasgow: Center for the Study of Public Policy, University of Strathclyde.

———. 1984. "Are Laws a Cause, a Constraint or Irrelevant to the Growth of Government?" *Studies in Public Policy* 124. Glasgow: Center for the Study of Public Policy, University of Strathclyde.

Ross, Davis R.B. 1969. *Preparing for Ulysses: Politics and Veterans During World War II*. New York: Columbia University Press.

Rothbard, Murray N. 1979. *Individualism and the Philosophy of the Social Sciences*. San Francisco: Cato Institute.

Samuels, Warren J. 1975. "Comment on the Independent Judiciary in an Interest Group Perspective." *Journal of Law and Economics* 18 (Dec.): 907-11.

Schumpeter, Joseph. A. 1954. *History of Economic Analysis*. New York: Oxford University Press.

Scully, Gerald W. 1989. "Liberty and Human Progress." Prepared for the Liberty Fund Conference on Liberty and Human Progress. Seattle. April 6-8, 1990.

Siegenthaler, Hansjorg. 1989. "Organization, Ideology and the Free Rider Problem." *Journal of Institutional and Theoretical Economics* 145 (March): 215-31.

Smith, Tom W. 1987. "The Polls—A Report. The Welfare State in Cross-National Perspective." *Public Opinion Quarterly* 51 (Fall): 413-20.

Stein, Herbert. 1969. *The Fiscal Revolution in America*. Chicago: University of Chicago Press.

———. 1984. *Presidential Economics: The Making of Economic Policy from Roosevelt to Reagan*. New York: Simon & Schuster.

Stiglitz, Joseph E. 1989. "On the Economic Role of the State." In *The Economic Role of the State*. Arnold Heertje, ed. Oxford: Basil Blackwell. Pp. 9-85.

Stubbing, Richard. 1985. *The Defense Game*. New York: Harper & Row.

U.S. Council of Economic Advisers. 1989. *Annual Report*. Washington, D.C.: Government Printing Office.

U.S. Office of Management and Budget. 1989. *Historical Tables: Budget of the United States Government, Fiscal Year 1990*. Washington, D.C.: Government Printing Office.

Wagner, Richard E. 1989. *To Promote the General Welfare: Market Processes vs. Political Transfers*. San Francisco: Pacific Research Institute for Public Policy.

Wallis, John Joseph. 1985. "Why 1933? The Origins and Timing of National Government Growth, 1933-1940." In *Emergence of the Modern Political Economy*. Robert Higgs, ed. Greenwich: Conn.: JAI. Pp. 1-51.

Wallis, John Joseph, and Douglass C. North. 1986. "Measuring the Transaction Sector in the American Economy, 1870-1970." In *Long-Term*

Factors in American Economic Growth. Stanley L. Engerman and Robert E. Gallman, eds. Chicago: University of Chicago Press. Pp. 95-148.

Weaver, Carolyn L. 1983. "On the Lack of a Political Market for Compulsory Old-Age Insurance Prior to the Great Depression: Insights from Economic Theories of Government." *Explorations in Economic History* 20 (July): 294-328.

Weaver, Paul H. 1978. "Regulation, Social Policy, and Class Conflict." *Public Interest* (Winter): 45-63.

Wittman, Donald. 1989. "Why Democracies Produce Efficient Results." *Journal of Political Economy* 97 (Dec.): 1395-1424.

Yeager, Leland B. 1983. "Is There a Bias Toward Overregulation?" In *Rights and Regulation: Ethical, Political, and Economic Issues*. Tibor R. Machan and M. Bruce Johnson, eds. Cambridge, Mass.: Ballinger. Pp. 99-126.

Zupan, Mark A. 1990. "The Last Period Problem in Politics: Do Congressional Representatives Not Subject to a Reelection Constraint Alter Their Voting Behavior?" *Public Choice* 65 (May): 167-180.

An Evolutionary Contractarian View of Primitive Law: The Institutions and Incentives Arising Under Customary Indian Law

Bruce L. Benson*

The European conquest and absorption of native American Indian groups obviously produced tremendous changes in the way Indians live and interact with one another. One very important source of change in Indian life was the changes in the rules and institutions of Indian law. Few Indian groups had any sort of strong central legal authority before Europeans began to exert various types of influence on the evolution of Indian law. This does not mean that there was no law, however. Evolving unwritten social contracts among Indian groups had produced well-developed legal systems based on customary rules of conduct which emphasized individual rights and private property. Adjudication procedures were in place to solve disputes without violence. No state-like centralized authority applied sanctions, but sanctions were applied, primarily in the form of economic restitution. These sanctions were enforceable because of reciprocal arrangements between individuals for recognition of law, support of judgments, and community wide ostracism.[1] Such characteristics of primitive American Indian legal systems have been discovered through extensive study by anthropologists.

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[1]As E. Adamson Hoebel (1954, p. 294), who is responsible for some of the most important anthropological studies of American Indian law, explained, in virtually all primitive groups:

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What can an economist add to the understanding of Indian law that has not already been said by anthropologists? Economic theory predicts human behavior by considering how individuals react to incentives and constraints in the context of rational choice models. In contrast, most anthropologists adopt an "empirical" approach to law: behavior is not predicted from a theoretical model, but rather observation presumably allows the anthropologist to discern behavior (Hoebel 1954, p. 5). Thus, the following examination will emphasize the institutions and incentives which influence the provision of law and its enforcement, in order to see if anthropologists' observations support economic theory's predictions. In particular, predictions, based on economic theory, will be made as to (1) how a legal system could induce recognition of rules of conduct without strong centralized authority, (2) how institutions and procedures for adjudication and legal change could be voluntarily established, (3) and why a non-centralized legal system dominated by voluntarily established institutions and procedures should emphasize individual rights and private property. In other words, predictions about the characteristics of the implicit evolving social contract which underlies a customary law system will be made based on economic theory, so that a *generalizable characterization* of such legal systems can be developed. Examples of Indian legal systems as they have been reported by anthropologists will then be examined in light of the theoretical predictions.[2]

> The community group, although it may be ethnologically a segment of a tribe is autonomous and politically independent. There is no tribal state. Leadership resides in family or local group headmen who have little coercive authority and are hence lacking in both the means to exploit and the means to judge. They are not explicitly elected to office; rather, they lead by the tacit consent of their followers, and they lose their leadership when their people begin no longer to accept their suggestions . . . As it is, their leadership is confined to action in routine matters. The patriarchal tyrant of the primitive horde is nothing but a figment of nineteenth-century speculation . . . But primitive anarchy does not mean disorder. Anarchy as synonymous with disorder occurs only temporarily in complex societies when in a social cataclysm the regulating restraints of government and law are suddenly and disastrously removed.

[2]This is not the first time that primitive Indian legal systems have been analyzed from an economic perspective. Baden, Stroup and Thurman (1981) examined the resource management incentives of various American Indian tribes, for example, while Demsetz (1967) explained the incentives to establish property rights and applied his analysis with examples from American Indian history, and Johnsen (1986) explored the formation and protection of property rights among the Kwakiutl Indians. The presentation below follows the lead of these studies, but goes beyond the emphasis on incentives for and the process of property right formation to discuss the *legal institutions* formed for the enforcement of rights, adjudication of disputes, and legal change.

Customary Law as a Social Contract

If law is simply represented by any system of rules, as some have suggested,[3] then "morality" and law would appear to be synonymous. However, Lon Fuller (1964, p.30) contended that "law," when more appropriately "viewed as a direction of purposive human effort, consists in the enterprise of subjecting human conduct to the governance of rules."[4] Law and morality are not synonymous. Indeed, law as a purposive human effort can facilitate efficiency-enhancing interaction by reducing uncertainty, as explained below, and therefore it consists of both rules of conduct and the mechanisms or process for applying those rules. Individuals must have incentives to recognize rules of conduct, for example, or the rules tend to become irrelevant, so institutions for enforcement are a necessary component of the enterprise of law. Similarly, when a situation arises in which the implications of existing rules are unclear, a dispute becomes likely, so dispute resolution institutions will be required. Furthermore, as conditions change new rules may be needed, and mechanisms for development of new rules and changes in old rules must exist. Thus, legal systems include mechanisms to induce recognition and acceptance of rules, as well as procedures for dispute resolution and legal change, and consequently, they tend to evolve to display very similar structural characteristics (Fuller 1964, pp. 150-51). Fuller's definition of law is accepted here, in part because it allows the analysis of law to focus on the institutions involved in the production and enforcement of legal rules, and on the incentives which both lead to the development of and arise as a consequence of those institutions. That is, it lends itself to an economic analysis of law.[5]

[3]For an example from the anthropological literature, see Malinowski (1926).

[4]This is but one definition or "theory" of law, however. For example, Friedman (1951, p. 281) proposed that "the rule of law simply means the 'existence of public order.' It means *organized government*, operating through the various instruments and channels of *legal command*" (emphasis added). Friedman's perception of the law falls under the legal positivist (or "New Analytical Juristo") umbrella which typically identifies law with the legal institutions that are observed: generally the state (see Hart [1961] for a forceful modern exposition of the legal positivist view in the tradition of Hobbes and Austin). Fuller, on the other hand, held an evolutionary (or "natural law") perspective. One question emphasized below, of course, is whether state-like coercive power is required for effective law. Thus, one purpose of the following analysis is to support a natural law theory and reject legal positivist definitions of law which assume such a requirement.

[5]There are other reasons for adopting this definition as well. See note 4 above, for example, and Benson (1990) for more details.

Customary law

Individuals can be forced to recognize law, or they can be persuaded, thus voluntarily avoiding the proscribed behavior in recognition of personal benefits. Hayek (1973, pp. 96-97) explained that many issues of law are not "whether the parties have abused anybody's will, but whether their actions have conformed to expectations which other parties had reasonably formed because they corresponded to the practices on which the everyday conduct of the members of the group was based. The significance of customs here is that they give rise to expectations that guide people's actions, and what will be regarded as binding will therefore be those practices that everybody counts on being observed and which thereby condition the success of most activities." Customary law is recognized, not because it is backed by the power of some strong individual or institution, but because each individual recognizes the benefits of behaving in accordance with other individuals' expectations, *given* that others also behave as he expects. Alternatively, law can be coercively imposed from above by a minority.[6] Of course, such law will require much more force to maintain social order than is required when law develops from the bottom through mutual recognition and acceptance.

Reciprocities are the basic source both of the recognition of duty to obey law and of law enforcement in a customary law system. That is, individuals must "exchange" recognition of certain behavioral rules with one another for their mutual benefit. Individual *A* must agree (perhaps explicitly as through a contract, or perhaps implicitly through behavioral patterns that establish expectations) to act in a certain way in his relationship with *B* in exchange for *B* acting in a certain way in his relationships with *A*. Fuller (1964, pp. 23-24) suggested three conditions which make a duty clear and acceptable to those affected: First, the relationship between the parties immediately affected must be voluntary; second, both parties must gain from the exchange; and third the parties must expect to interact fairly regularly so that the resulting duty can be reversible in the sense that what one individual is required to do at a particular time can be required of another at a different time.

Since the source of recognition of customary law is reciprocity, private property rights and the rights of individuals are likely to constitute the most important primary rules of conduct in such legal systems (Benson 1989a; 1990). After all, voluntarily recognition of

[6]For more detailed discussion of the differences between customary and authoritarian law, see Benson (1990).

laws and participation in their enforcement is likely to arise *only when substantial benefits from doing so can be internalized by each individual.* Individuals require incentives to become involved in any legal process, of course, and incentives can take the form of rewards (personal benefits) or punishments. Punishment is frequently the threat which induces recognition of law imposed from above, but when customary law prevails, incentives must be largely positive. Individuals must expect to gain as much or more than the costs they bear from voluntary involvement in the legal system. Protection of personal property and individual rights is a very attractive benefit.[7]

Under customary law, offenses are treated as torts (private wrongs or injuries) rather than crimes (offenses against the state, the tribe, or the "society" at large). This is inevitable since interaction between individuals is required for something to become an issue of law. Thus, a potential action by one person has to impact someone else before any question of legality can arise. Any action which is not clearly of this kind, such as what a person does alone, or in voluntary cooperation with someone else but in a manner which clearly harms no one, is not likely to become the subject of a rule of conduct under customary law. Indeed, Fuller (1981, p. 213) proposed that "customary law" might best be described as a "language of interaction." This function of facilitating interaction can only be accomplished with recognition of clear (although not necessarily written) codes of conduct enforced through reciprocally acceptable, well established adjudication arrangements accompanied by effective legal sanctions.

Customary law as an unwritten constitution

James Buchanan (1972a, p. 37) posed the following question: if government is dismantled, "how do rights re-emerge and come to

[7]Private property is not a European or capitalist invention, nor is it exclusive to free market economic systems. It is a key characteristic of all societies wherein custom is the primary source of law and reciprocity is the primary impetus for recognition. Thus, for example, private property has been a central component of primitive legal systems, at least until authority begins to be centralized and backed by organized coercive power that can be used to attenuate and transfer such rights (Benson 1989a; 1990). As Hayek (1973, p. 108) explained, it is an

> erroneous idea that property had at some late stage been 'invented' and that before that there had existed an earlier state of primitive communism. This myth has been completely refuted by anthropological research. There can be no question now that the recognition of property preceded the rise of even the most primitive cultures, and that certainly all that we call civilization has grown up on the basis of that spontaneous order of actions which is made possible by the delimitation of protected domains of individuals and groups.

command respect?" How do "laws" emerge that carry with them general respect for their "legitimacy?" He contended that collective action would be necessary to devise a "social contract" or "constitution" designed to define the rights of the people in the first place and to establish the institutions to enforce those rights (1972a; 1972b). However, collective action for the production of law can be achieved through the process of individual agreements, with the resulting rules spreading to other members of a group if they are useful rules. For instance, Demsetz (1967) explained that property rights will be defined when the benefits of doing so cover the costs of defining and enforcing such rights. Such benefits may become evident because a dispute arises, for example, perhaps implying that existing rules do not adequately cover some new situation. The parties involved must expect the benefits from resolving the dispute (e.g., avoiding a violent confrontation), and of establishing a new rule, to outweigh the cost of resolving the dispute and enforcing the resulting judgment, or they would not take it to the adjudication system.

Dispute resolution actually can be a major source of legal change since in most types of interaction, situations arise wherein uncertainty exists as to what expectations are legitimate. Consequently, it becomes necessary to appeal to an arbitrator or mediator (the development of such institutions is discussed below) if violence is to be prevented. Such an adjudicator will often have to make more precise those rules about which differences of opinion exist, and at times even to supply new rules because no generally recognized rules exist to cover a new situation (Hayek 1973, p. 99). If the relevant group accepts the ruling it will affect other individuals' behavior as well: "Even in the absence of any formalized doctrine of stare decisis or res judicata, an adjudicative determination will normally enter in some degree into the litigants' future relations and into the future relations of other parties who see themselves as possible litigants before the same tribunal. Even if there is no statement by the tribunal of the reasons for its decision, some reason will be perceived or guessed at, and the parties will tend to govern their conduct accordingly" (Fuller 1981, p. 90).

An adjudicated decision becomes part of customary law only if it is seen as a desirable rule by all affected parties, however. It is not coercively imposed on a group by some authority backing the court. Thus, good rules which facilitate interaction tend to be selected over time, while bad decisions are ignored (Benson 1988). For new rules to be accepted by the members of an affected group, they generally must build upon, and indeed, extend existing rules. That is, the fundamental principles of customary law (e.g., private property and

individual rights) do not change.[8] They are simply extended to cover new situations. As Fuller emphasized, "Tradition is not something constant but the product of a process guided . . . by success" (1964, p. 90). Fuller's characterization of customary law is therefore quite consistent with Hayek's (1973) view of an evolving social contract.[9]

Dispute resolution is not the only source of legal evolution under customary law. Rules of conduct evolve in many ways as individuals interact with one another. Individuals may simply observe that others are behaving in a particular way in light of a new situation, and adopt similar behavior themselves, recognizing the benefit of avoid-

[8]As Epstein (1980, p. 266) explained, for example:

> the merits of freedom of contract in no way depend upon the accidents of time and place. Acceptance of that basic principle will not however put an end to all contractual disputes. It remains to discover the terms of given contracts, usually gathered from language itself, and the circumstances of its formation and performance. Even with these aids, many contractual gaps will remain, and the courts will be obliged, especially with partially executed contracts, to fashion the terms which the parties have not fashioned themselves. To fill the gaps, the courts have looked often to the custom or industry practice. The judicial practice makes good sense and for our purposes introduces an element of dynamism into the system . . . But it by no means follows that conduct in conformity with the custom of one generation is acceptable conduct in the next. The principles for the implication of terms, I believe, remain constant over generations. Yet the specific rules of conduct so implied will vary with time and with place.

The basic rules of private property and freedom of contract characterize customary law systems. As such systems evolve, the need for extensions of these basic principles to cover unanticipated circumstances always arise, however, and the customary law adapts through spontaneous collaboration, building on the existing base of substantive principles.

[9]Buchanan has been critical of some evolutionist analysis of the development of legal constraints, of course. For example, (Buchanan 1989, p. 44):

> A generalization of the evolutionist paradigm may suggest that, although institutions of social interaction do change through time, these changes can only emerge through the long process of cultural evolution. According to this perception, it is not legitimate to infer that basic institutions of social order, basic rules for the socio-economic-legal-political "game," can be "chosen" in any manner analogous to the choices of options that are available to persons, in a collective decision process, within an existing set of institutional rules.

However, in the case of customary legal systems which spontaneously evolve, all changes in the institutions and rules reflect individual choices. Rules and institutions can be "deliberately chosen" (see Benson [1988] for an example of a deliberately induced change in customary law) in a manner which is very analogous to one particular type of collective decision—Wicksell's unanimity or consensus rule. If a new rule or institutional arrangement is acceptable by all the affected parties it becomes part of customary law. The outcome of this process of constitutional choice is not "government" as popularly conceived, perhaps even by those who advocate a constitutionally limited government such as Buchanan, but individuals still end up being "governed" by a set of enforceable rules of conduct.

ing a confrontation by trying to establish a different type of behavior. As a consequence of adopting such behavior, the individuals create an obligation to one another to continue the behavioral pattern, and a new rule of customary law has been created. Fuller (1981, pp. 227-28) explained:

> Where customary law does in fact spread we must not be mislead as to the process by which this extension takes place. It has sometimes been thought of as if it involved a kind of inarticulate expression of group will. . . . This kind of explanation abstracts from the interactional process underlying customary law and ignores their ever-present communicative aspect.

Thus, customary law evolves as the benefits of adopting new practices and customs are recognized by individuals.

Institutions for enforcement similarly evolve due to recognition of reciprocal benefits. Consequently, customary law is appropriately viewed (Fuller 1964, pp. 128-29) as:

> a branch of constitutional law, largely and properly developed outside the framework of our written constitutions. It is constitutional law in that it involves the allocation among various institutions . . . of legal power, that is, the authority to enact rules and to reach decisions that will be regarded as properly binding on those affected by them.

Consider the development of dispute resolution procedures. No state-like coercive authority exists in a customary system to force disputants into a court, so some other means of inducing disputants to peacefully resolve their disagreement must evolve. Since rules of obligation under customary law are in the nature of torts it is up to the aggrieved party to pursue prosecution. Consequently, individuals have strong reciprocal incentives to join with others to form mutual support groups for legal matters.[10] The resulting group contract makes group members obligated to aid any other member in a valid dispute, given that member has fulfilled his obligations to the group in the past. Thus, ability to obtain support in a dispute depends upon an exchange of reciprocal loyalty.

[10]The makeup of such groups may reflect family (as it frequently was in primitive societies [Hoebel 1954; Barton 1967; Benson 1989a]), religion (as in some primitive groups [Goldsmidt 1951]), geographic proximity (e.g., as in Anglo-Saxon England [Benson 1990]), functional similarity (as with commercial law [Trakman 1983; Berman 1983; Benson 1989b]), contractual arrangements (e.g., as in medieval Ireland, and in medieval Iceland [Peden 1977; Friedman 1979], and see Anderson and Hill [1979], Umbeck [1981a] and Benson [1989c] for examples from American history, such as mining camps, land clubs, and wagon trains of the eighteenth-century West), or some combination of the these sources of recognition and trust.

Reciprocal support groups give individuals a position of strength should a dispute arise. This does not mean that disputes are settled by warfare between groups, however. Violence is a potential means of solving a dispute, but it is a very costly one. After all, if the accuser and his support group attacks the accused, members of the accused's group are obliged to avenge the attack. Thus, group members (as well as non-group residents in the vicinity of those directly involved) are generally very anxious for a peaceful settlement in order to avoid an extended violent confrontation.[11] Consequently, arrangements and procedures for non-violent dispute resolution should evolve very quickly in customary law systems.

The impetus for accepting adjudication to settle a dispute in a customary legal system (as well as an authoritarian system[12]) is the ever present threat of force, but use of such force is certainly not likely to be the norm. Rather, an agreement between the parties must be negotiated. Frequently, a mutually acceptable arbitrator or mediator is chosen to consider the dispute. This individual (or group of individuals) will have no vested authority to impose a solution on disputants, however. The ruling, therefore must be acceptable to the groups to which both parties in the dispute belong. An arbitrator or mediator's only real power under such a system is that of persuasion.[13]

Since customary law is in the nature of tort law rather than criminal law, if the accused offender is determined to be guilty, the "punishment" tends to be economic in nature: restitution in the form of a fine or indemnity to be paid to the plaintiff by the offender. Other forms of punishment (e.g., imprisonment) are inefficient, after all, in that they are costly for the group to administer and do not generate sufficient benefits to restore a victim. Liability, intent, the value of the damages, and the status of the offended person all may be considered in determining the indemnity. Every invasion of person or property is generally valued in terms of property.

A judgment under customary law that is acceptable to individuals

[11]In fact, under customary law a great number of rules of adjudication typically prevent a direct physical confrontation between the two parties in a dispute as long as some other means of working towards a settlement is available (e.g., see Barton 1967; Pospisil 1971; or Benson 1989a).

[12]The threat of violence is ultimately what backs any system of property rights (Umbeck 1981a; 1981b).

[13]In this light, Fuller (1981, p. 134) observed that "A serious study of mediation can serve . . . to offset the tendency of modern thought to assume that all social order must be imposed by some kind of 'authority.' When we perceive how a mediator, claiming no 'authority,' can help the parties give order and coherence to their relationship, we may in the process come to realize . . . that social order can often arise directly out of the interactions it seems to govern and direct."

in all the affected groups is typically enforceable because of an effective threat of total ostracism by the members of the entire community. Reciprocities between the groups, recognizing the high cost of refusal to accept good judgments, takes any individual who refuses such a judgement outside his support group, and he becomes an outcast, or outlaw. Fear of this severe boycott sanction means that the adjudicated solutions tend to be accepted, of course. Once again, the threat of violence does not, in itself, imply that violence must be the norm. Indeed, the threat of violent punishment is a significant deterrent to illegal behavior in every legal system, but as stressed above, customary legal systems have as one of their basic impetuses the desire by individuals to avoid violence.

We are now in a position to examine examples of customary law systems among American Indians. One group which remained relatively isolated from European influence at least until the second half of the nineteenth century was the Yurok Indians and their Northern California neighbors.

Yurok Law

The Yurok Indians of the nineteenth century lived along the lower reaches of the Klamath River and the nearby Pacific Coast (Kroeber 1925). Fishing and food gathering were major sources of subsistence, but sufficient production occured to allow for a considerable amount of trade, relative to many other American Indian groups of the period (exchange was facilitated by a monetary system). In order to facilitate interaction, including trade, these Indians had "a welter of legal relationships in the realm of personal law" (Hoebel 1954, p. 52). In particular, as Goldsmidt (1951, p. 506) found, after studying the Yurok, Hupa, Karok and some of their Northern California neighbors, property was universally held in individual private ownership. Indeed, property was extremely important for the maintenance of personal status and prestige (Hoebel 1954, p. 52). Thus, private property rights were sharply defined with regard to both privileges and liabilities. Title considerations, for instance, included: (1) separation of title to different types of products; (2) ownership rights within the territory of an alien group (e.g., Hupas owned property inside Yurok territory, etc.); and (3) the division of title between persons. Ownership was complete and transferable.

Consider an example. A canoe owner had exclusive rights of use of the canoe. If someone used a canoe without permission, or in some way misused or harmed the canoe, the owner could collect damages. In addition the owner could transfer the property rights to another through sale or as a gift. However, there were also well recognized

duties or obligations which went with canoe ownership (Hoebel 1954, p. 57). For instance, a canoe owner was obliged to ferry a traveler across the river if it was requested. Refusal resulted in restitution to the traveler. In this regard, however, the traveler was liable for any damages suffered by the canoe owner as a consequence of ferrying. For instance, if the canoe owner's house burned down while he was ferrying a traveler, the traveler was liable for full damages. Property rights clearly could be quite complex.

Similarly, for instance, the owner of a fishing spot on the banks of the Klamath had exclusive use of the site. However, he could sell a temporary right of use to a second party if he wished. Extension of such a right carried with it a liability as well (Hoebel 1954, p. 55). The owner was responsible for seeing that the user was not injured while fishing. If a user slipped on a rock, for example, and suffered an injury, the owner had to pay damages. Ownership rights for a fishing spot could also be permanently divided in the sense that several individuals could hold limited ownership rights to the same spot, with each having exclusive rights (including liability) to its use during certain specified times.

In addition to rules of conduct, the Yurok and their neighbors also developed an enterprise of law. Socially, these Indians were organized in households and villages. There were no class or other inalienable group affiliations, and no vested authoritarian position—that is, *no state-like tribal government* with coercive power (Goldsmidt 1951, p. 511):

> We may dismiss the village and tribe with a word. Though persons were identified by their village of residence and their tribe of origin, neither of these groups had any direct claim upon the action of the individual, there was no village nor national government, no village or tribal action in wars. Significantly, the affiliation could effectively be broken by moving to a distance or to one of the other tribes within the orbit of the culture.

These Indians, nonetheless, had a well-developed system of private judging (Hoebel 1954, pp. 52-53; Landes and Posner 1979, p. 243). Each man in these tribes was a member of a "sweathouse group"—a clique of the men from three or more neighboring houses who shared a sudatoria (Goldsmidt 1951, p. 512). These groups often consisted of members of the same family, but family relationships were not necessary. An individual was free to join any group as long as others in the group agreed. The groups were more than just social organizations, however. They carried out religious rituals *and* they acted in mutual support in the case of a dispute. Each member had

strong incentives to provide such support because at some point in the future he might find himself in a dispute and require the current disputant to reciprocate (the Yurok also believed that religious or supernatural benefits were achieved by joining such groups, and of course, other personal benefits were also associated with socializing with neighbors).

Fuller's three conditions for reciprocal recognition of a legal duty were clearly met within in the Yurok sweathouse groups. The arrangements were voluntarily entered into. An individual exchanged a commitment to support others in the case of a legal dispute, for the equivalent commitment from those other individuals for the same support should he find himself in such a dispute. And finally, the arrangement was symmetrical in the sense that each individual had strong incentives to support a victim in the event of a dispute, because he realized that he might require the same kind of backing in the future. The fact that men voluntarily entered into such reciprocal arrangements implies that the accompanying duties were clearly spelled out and generally fulfilled when a dispute arose.

It was up to the victim or his support group to institute proceedings against an offender, but formal procedures had to be followed. Victims did not have the right to seek revenge or collect damages directly. Rather, if a Yurok wanted to process a legal claim he would hire two, three or four "crossers"—non-relatives from a community other than his own. The defendant in the claim would also hire crossers and the entire group hired by both parties would act as go betweens, ascertaining claims and defenses and gathering evidence. The crossers would render a judgment for damages after hearing all the evidence. Note that crossers were similar to modern arbitrators or mediators rather than public sector judges, because their judgments were not backed by the police powers of a centralized authority.

A large range of offenses were recognized by these Northern California tribes, ranging from murder to adultery, theft and poaching, to curses and minor insults (Goldsmidt 1951, p. 512). All offenses were against the person since there was no formalized social unit. Yurok law contained a clearly indicated fine or indemnity to be paid to the plaintiff by the offender, given the crossers' judgment was that the defendant was guilty. Liability, intent, the value of the damages and the status of the offended person were all considered in determining the indemnity. Every invasion of person or property could be valued in terms of property, however, and each required exact compensation. Again, law was clearly in the nature of modern tort law rather than criminal law.

The crossers' judgment was enforceable because there was an effective threat of total ostracism by the entire community of tribes. In the case of this Northern California society, if someone failed to pay the fine he automatically became the plaintiff's wage slave. If he refused to submit to this he became an outlaw which meant that anyone could kill him without any liability for the killing. In particular, if an offender became an outlaw, the offended individual's sweathouse group would back his effort for physical retribution. The rest of the "community" would not interfere, again through reciprocal recognition that any member of the society might at some time require such community support in ostracizing a law breaker. Fear of this severe boycott sanction meant that the crossers' judgment tended to be accepted, of course. As in other societies, then, obeying the Yurok's laws led to relatively predictable consequences. Disobeying, and the resulting ostracism by the community, meant living outside the social order, and the added uncertainty that entailed provided strong incentives to obey the laws, or yield to whatever punishment the crossers' proposed in the case of a violation. Recognition of the authority of Yurok law and support of the adjudication procedure that they developed was, therefore at least in part, a consequence of the reduced uncertainty that legal system provided.

If a victim chose not to follow the formal adjudicative procedures, then he violated the law and was liable for damages. Consider an example involving ownership rights to a beach. Owners had to allow seal hunters access to the water, but in exchange the land owner was to receive the flippers of all sea lions caught on his beach. A case which took place during the 1860s involved a wealthy and powerful individual who owned about four miles of beach around his village (see Hoebel 1954, pp. 54-55; or Spott and Kroeber 1943, pp. 182-99). A particular seal hunter disregarded the owner's property rights on several occasions by failing to give him the sea lion flippers he had a right to, but rather than follow the formal procedures of law, the beach owner took revenge by assaulting the hunter's father and wounding him. The hunter's support group, consisting of members of his family in this case, then instituted a suit against the beach owner for damages. The crossers ruled that the assault damages were slightly less than the original damages that the beach owner could have claimed against the hunter, but under the circumstances both legal claims were nullified. Nonetheless, the hunter remained antagonistic against the beach owner, and two days later he cursed the beach owner. This was a violation of Yurok law, and the beach owner entered a legal claim. While the crossers were at work, however, a

relative of the beach owner assaulted the hunter and killed him. Thus, a member of the beach owner's support group simultaneously disregarded due process while adjudication was under way, and took the life of a member of the society—both were very serious violations of Yurok law. At this point a blood feud might have broken out. However, the incentives to avoid such a costly action were strong, and the slain hunter's mother entered a legal claim for restitution. Specifically, she maintained that the beach owner's property rights to the flippers of sea lions killed on his beach should be transferred to her family. She won the award, and was backed by the community at large. Further violence was avoided. This case illustrates that even the very powerful and wealthy were subject to the law. Of course, it also illustrates that individuals broke the law and resorted to violence on occasion. But the same is true of any legal system. Members of urban gangs regularly kill members of rival gangs today, and public police kill hundreds of individuals annually who refuse to yield to the criminal justice system. The Yurok system did stop the violence from escalating further and endangering the social order of the community.

Naturally, it is difficult to judge the actual degree of certainty and efficiency of this primitive legal system. However, there is some indirect evidence. For one thing, these California Indians were ". . . a busy and creative people . . . [and] poverty was not found here" (Goldsmidt 1951, pp. 513-14). If incentives were in place to induce "busy and creative" behavior it is likely that individuals and their private property rights were quite well protected. In fact, the very existence of the relatively complex customary system of private property indicates that the legal system was relatively efficient as compared to what it evolved from. As Hayek explained, individuals adopt and follow rules of conduct "because actions in accordance with them have proved more successful than those of competing individuals or groups" (1973, p. 18).[14]

[14]Actual examples of changes in Yurok law are not documented. This is, unfortunately, true of much of the anthropology literature, although not all of it (Benson 1988). As Pospisil explained, "Since many societies have been studied for a relatively brief period (one or two consecutive years), and since many investigators have been heavily influenced by the early sociological dogma that divorces the individual from the 'social process,' it follows that there are very few accounts of volitional innovations [in primitive law]" (1971, p. 215). Nonetheless, crossers, in the process of settling disputes, were likely to, on occasion, make new rules.

There is, in fact, a more fundamental reason to expect that the laws of the Yurok could and did change. After all, those laws were not imposed on this society by some sovereign. They *developed* or *evolved* internally. Clearly the Indians of Northern California were a very homogeneous group by the time their laws and legal procedures

In this regard, it should be stressed, however, that the success of one group over competing groups does not imply conquest through warfare. In the case of the Yurok, for instance, the earliest sweathouse groups probably proved to be an effective social arrangement for internalizing reciprocal legal and religious benefits, *relative* to previously existing arrangements. Others saw those benefits and either joined existing groups or copied their successful characteristics and formed new groups. In the process the arrangements may have been improved upon, become more formal (almost contractual) and effective. It is perfectly conceivable that neither members of the earliest groups nor those which followed even understood what particular aspect of the contract actually facilitated interactions that led to an improved social order—they may have viewed the religious function to be their main purpose and paid little attention to the consequence of their legal functions, for instance. Customary law and society develop spontaneously and conterminously. Those customs and associated legal institutions that survive are relatively efficient because the evolutionary process is one of voluntary "natural selection" where laws or procedures that serve social interaction relatively poorly are ultimately replaced by improved laws and procedures.

The discussion of the Yurok legal system has introduced several general features that probably characterized virtually all primitive Indian legal systems at some point prior to the pressures put on these legal systems by the arrival and continual westward movement of Europeans (the Yuroks were simply one of the last Indian groups to feel this pressure). Naturally, many of these legal systems have not and cannot be studied, so it cannot be said with certainty that all such systems displayed these features at some point in their development. Nonetheless, there are theoretical reasons to expect that they did and anthropological studies of many primitive systems support these expectations.[15] These features are: (1) rules of conduct which emphasized a predominant concern for *individual rights and private property*; (2) the responsibility of law enforcement falling to the victim backed *by reciprocal arrangements for protection and support when*

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evolved to the level described above, but this homogeneity had to develop in conjunction with an evolving process of interaction and reciprocity facilitated by customary law.

[15]Legal systems all over the world have, at one time or another, been characterizable in the same way that the Indian systems discussed above were characterized. Some anthropologists and legal scholars distinguish between "stages" of legal development, for instance, and would put such customary systems in one or more of the stages occurring before centralization of political power and formal institutions of government arise (e.g., Malinowski 1926; Diamond 1950). Also see note 14 above in this regard, as well as Benson (1988; 1989a).

a dispute arose; (3) standard *adjudicative procedures* established in order *to avoid violent forms of dispute resolution*; (4) offenses treated as torts punishable by *economic payments in restitution*; (5) strong *incentives to yield to prescribed punishment* when guilty of an offense due to the reciprocally established *threat of social ostracism* which led to physical retribution; and (6) legal change arising through an *evolutionary process of developing customs and norms*. Let us turn to another example (among many) of the primitive Indian systems that anthropologists have studied—the Comanche.[16] We shall find that the same characteristics listed here apply, even though the actual institutions and procedures differed in some ways.

Nineteenth-Century Comanche Law

By the nineteenth century tremendous changes had already occurred in the life of the plains Indians, as a direct result of the movement of Europeans into America (Hoebel 1954, pp. 126-27). Before the arrival of the Spanish, for instance, these Indians were largely river bound, and rarely traveled over the plains. Thus, their lives were probably similar to the Yuroks in many ways. The introduction of horses by the Spanish allowed the plains Indians to significantly expand their hunting territories. Many became nomadic tepee-dwelling buffalo hunters as a consequence of this and other factors set in motion by the arrival of Europeans. One of those factors was British and French settlement of the eastern part of the continent which began to displace many of the Eastern woodland Indians. As these Indians moved west, conflicts between tribes began to occur. Previously peaceful Indians were forced to become warriors in an effort to protect their homes, property, and hunting territories. On top of this, the fur trade created an additional reason for this conflict. British companies gave guns to certain tribes and encouraged them to drive off tribes which traded with the French. The French responded in kind. Tribes with relatively poor arms were driven westward, and more new tribes entered the plains. Tribes native to the plains were displaced as a consequence. One of these tribes was the Comanche.

In the sixteenth century the Comanche were part of the Shoshonean group of tribes occupying the headwaters of the Missouri and Yellowstone Rivers. They were not at all warlike (Hoebel 1954, p. 129). The Shoshonean lived in isolated family bands that were economically self-sufficient. By the eighteenth century, the Com-

[16]Hoebel explained that the Comanche provides only one example of many such primitive societies where law existed without a political state (1967, p. 188).

anche had split from the rest of the Shoshonean as they were pushed to the southern plains while the Shoshones were driven over the Rocky Mountains by tribes coming in from the east. This led to a tremendous change in the Comanche way of life, in part because the Comanche were one of the first Indian groups to acquire horses. Their numbers grew, and they became very militant as they strove to defend their newly claimed territory and wealth from other Indians and from the advancing Europeans. Military prowess became a source of considerable pride and prestige for the individual Comanche.

The Comanche population of the nineteenth century was distributed among a large number of loosely organized, autonomous bands. "The tribe was no more than a congerie of bands held together as a peace group by the bonds of common tongue and culture. There appears to have been no machinery for institutionalized political action on a tribal scale" (Hoebel 1967, p. 184). Beyond that, there was no clan organization and even kinship principles were weak. There was not even a formal organization for warfare. "War chiefs" were simply outstanding fighters with long records of accomplishments against enemies. Anyone was free to organize a war party *if* he could convince others to follow him, but such individuals had leadership roles only when others voluntarily followed, and only for the period of the raid (Hoebel 1954, p. 132). They had no authority in internal tribal matters such as law. There were also band headmen or "peace chiefs," but they too had no formal authority. They were typically well-respected wise men of the band who made certain routine decisions regarding the day to day operation of the band, such as when and where to move the camp. However, "Anyone who did not like his decision simply ignored it. If in time a good many people ignored his announcements and preferred to stay behind with some other man of influence, or perhaps to move in another direction with other men, the chief had lost his following. He was no longer chief, and another had quietly superseded him" (Hoebel 1954, p. 132). A respected peace chief might have relatively more influence in important decisions of the band as well, because he was typically a wise man with considerable experience—people respected his opinion. However, he had no special authority in such decisions, and all men of the band were free to have their say. In particular, he had no "law-speaking or law-enforcing authority" (Hoebel 1954, p. 133). Yet there was an implicit social contract establishing an enterprise of law.

In this apparently very unorganized society there was a very clear, widely held set of rules of conduct. These rules reflected individual rights to private property. Indeed, among the Comanche, "the individual is supreme in all things" (Hoebel 1954, p. 131). Some have

suggested that the plains Indians did not recognize private property because private land holdings by individuals were not recognized. However, property rights are developed only after the benefits of doing so outweigh the costs (Demsetz 1967), and the nomadic hunting and gathering lifestyle of the plains Indians, particularly after the introduction of horses, meant that individual's rights to specific tracks of land would be worth very little. Furthermore, prior to settlement of the region by white men, land was still very abundant within the range of most of the plains tribes, so private property rights to land were largely unnecessary (groups of individuals, such as bands and clans claimed certain hunting territories, of course). Other goods (e.g., horses, weapons, food, etc.) were privately held.

Reciprocally recognized ostracism in the society provided the incentives which backed the rules regarding individual rights, just as with the Yurok. In fact, among the Comanche, a male who suffered a legal wrong had to take action against the offender or face social disgrace as a coward, so a form of social ostracism played a significant role in inducing victims to bring suit. For example, adultery and the taking of another's wife were considered as direct attacks against the husband. The husband had to respond to such an attack in order to maintain his reputation. "Ridicule was the weapon used by society to cause a man to proceed after the cause for action had become public" (Hoebel 1967, p. 189). Thus, the aggrieved could either confront the accused directly and publicly by stating the offense and demanding what he considered appropriate compensation for damages, or send a representative to prosecute the claim, implying the matter was not worth his personal attention, or form a group to prosecute. However, if an individual lacked self confidence and/or had insufficient status to gather a prosecuting group, Comanche "legal procedure" allowed for two options. First, the plaintiff could ask a war chief—or "champion-at-law"—to act for him, and if this warrior agreed he would then be obliged to see the process through to the end (see further discussion below). Or second, an old woman could be sent to prosecute, ". . . hoping through presenting his cause pitiably to touch the compassion of the offender and so gain larger damages than he himself would dare demand" (Hoebel 1967, p. 191).

Once the charges were made under any of the procedures noted above, the next step was bargaining. Thus, the rules of adjudication delineated a system more closely aligned with modern mediation than with arbitration. Adjudication was even less clearly associated with persons than it was under the Yurok system of crossers. Nonetheless, it existed. Widely held rules of adjudication procedure were followed. For instance, there were virtually no cases in which evi-

dence or witnesses were presented. The accuser was expected to ascertain guilt before confronting the offender so no evidence was necessary. Of course, guilt could be denied, and it is not clear what the procedure was under such circumstances. The fact is that, "Denial of guilt by an accused . . . was so uncommon that there are not cases enough to draw sound conclusions" (Hoebel 1967, p. 192). Indeed, the defendant typically recognized that he would have to pay restitution when he committed an offense (Hoebel 1954, p. 134), since the Comanche rules of obligation were well known. He simply hoped to use the adjudication process to keep the payment light, while the plaintiff naturally hoped for a large payment. The plaintiff or his representatives typically would state his demands for damages with formal politeness in front of other members of the group, but there was no judge or arbitrator to determine the compensation to be paid. And unlike the Yurok's, there was no customary code of payments relating to various offenses. Therefore, cases could only be settled by mutual agreement reached through bargaining. Previous legal decisions might serve as a guide, of course, and in this respect Comanche law was case law (Hoebel 1954, p. 135).

As Hoebel (1967, p. 193) explained, "A reputation as a doughty slayer of enemies was a handy thing," since the solution reached in the bargaining process often reflected the relative skills of the two parties in warfare. In Comanche law, as in all law, the ultimate threat was violence. If the bargaining process broke down the parties had the right to use force. Nonetheless, the obvious implication drawn from this discussion that "might makes right" is clearly inappropriate in the Comanche case. As noted above, a plaintiff need not prosecute his claim by himself. Only those who were sure of their courage relative to the defendant actually did so. If an offended individual was not confident of his bargaining strength he could gather his relatives (particularly his brothers) and perhaps other friends together to aid him in seeking compensation. This was a much less formal arrangement than the Yurok's sweathouse cliques, but a person's ability to put together a group for support still was clearly a reciprocal arrangement—friends and relatives were willing to provide support because they might need the plaintiff's support in some future dispute. Among the Comanche, however, this privilege was apparently not granted to the offender (Hoebel 1967, p. 196). Thus, the legal procedures gave added protection to the aggrieved.

Of course, this could lead to such a large show of force that the defendant could be cowed into paying unduly high restitution. One clear advantage of giving an overbalancing of force to the prosecuting side rather than the defenders side, of course, is that such a system

provides a relatively strong deterrent to illegal behavior. Nonetheless, the over-balancing was not as great a problem as it might appear (Hoebel 1967, p. 196). One constraint on the size of a plaintiff's group, and therefore on the show of force, for instance, was that any friend or relative called upon to join the group received a share of the damages paid, and group participants' claims to shares of the compensation took precedent over the plaintiff's claim. Punishment was in the form of economic restitution, but if too large a group was gathered, the offended party might end up with virtually nothing as restitution for the harm done to him. Beyond that, the need for a large show of force meant that the plaintiff lost considerable prestige within the band. Thus, he had incentives to keep the support group in any dispute to a minimum.

The strongest reciprocal linkage among the Comanche was between brothers, and this was the primary source of support in a dispute. Some individuals had no brothers, perhaps because they had died in warfare, or perhaps because the individual had initially been captured from another tribe. The Comanche were constantly recouping their loses in warfare with captives taken as children. These children acquired full rights in Comanche society and many were adopted by Comanche families, thus establishing kinship linkages (Hoebel 1954, p. 137). Some captives were not adopted, however, and while they achieved free status, they never established the reciprocal kinship ties necessary in a dispute with a strong defendant. Nonetheless, even those injured parties who could not gather a group for support had recourse, as noted earlier—"men whose status was so low that on the personal and kinship basis they were, in effect, without status were still guaranteed protection under the Comanche law . . . There was the institution of *champion-at-law*" (Hoebel 1967, p. 198). The champion-at-law was not an arbitrator or even a mediator. He served to represent a damage claim in the bargaining process and, if need be, in physical combat.

There were no payments to convince a warrior to act as a champion. He did not receive a share of the compensation paid by the offender. Threat of ridicule seems to have provided sufficient incentives, however, since any warrior who refused to serve as a champion was held to have done so because he feared the defendant. No war chief was willing to admit fear. Hoebel felt that the "institutional capitalization of these factors is an amazing piece of social engineering" (1967, p. 200). But as Fuller (1981, pp. 243-44) noted, one advantage of customary law is that it "does not limit itself to requiring or prohibiting precisely defined acts, but may also designate roles and functions, and then, when the occasion arises, hold those discharging

these roles and functions to an accounting for their performances. . . . Stable interactional expectancies can arise with reference to roles and functions as well as to specific acts; a language of interaction will contain not only a vocabulary of deeds but also a basic grammar that will organize deeds into meaningful patterns."

Procedures developed by the Comanche were clearly designed to tip the scales of relative strength in such a way as to generate a bargained settlement—that is, to *avoid a violent confrontation*. The accused was not necessarily put at a tremendous disadvantage but there appears to have been sufficient force arrayed against him to convince him that he was likely to be better off bargaining in good faith. The ". . . Comanche legal system is therefore to be viewed as a not so badly balanced mechanism, which operated without the organization of government" (Hoebel 1967, p. 200). Given the primitive, warlike nature of nineteenth-century Comanche society, their unwritten social contract produced rules and legal institutions which represent a remarkably efficient, violence-free system of internal order.

Conclusions: Amendments Imposed on the Social Contract

As pressures from European settlement mounted, the way of life of American Indians changed dramatically. They were forced into military confrontations among themselves and with the advancing white settlers. The resulting changes set the stage for amendments to implicit social contracts within some tribes, even before the American government subjugated them, suppressed their law, and put them on reservations. For example, some tribes began to organize and centralize authority, primarily for warfare, and this centralization frequently had legal ramifications. Consider the Cheyenne, for instance. Before 1600 they were a food-gathering society residing around the lakes near the headwaters of the Mississippi River (Hoebel 1954, p. 144). They were pushed westward during the seventeenth century and sought sanctuary along the Missouri river in the Dakotas, where they built earth-lodge villages and adopted corn farming. During the eighteenth century they were pushed further and became a nomadic horse tribe of the plains. Unlike the Comanche, however, the Cheyenne clearly recognized the advantages of organization for warfare. They developed a formalized military system consisting of six "soldier societies," and the beginnings of a centralized tribal government in the form of tenured chiefs in a tribal council. Law took on a tribal, or communal nature as a consequence of the growing power of the soldier societies and tribal council. Hoebel suggested that there were

"social purposes" of Cheyenne law by the nineteenth century (1954, p. 130), but this simply means that the individual and his rights were no longer paramount in all things. Indeed, individuals were considered to be subordinate to supernatural forces and spirit beings, who in turn were represented by the central tribal council; this council presumably had ultimate authority over all other elements in Cheyenne society (Hoebel 1954, pp. 142-43).[17]

Cheyenne bands scattered during the winter months, but during the summer they joined together as a tribe. Here the tribal council of 44 chiefs ruled. These chiefs were appointed for specific tenure (unlike chiefs among the Comanche, for example), and each chief, upon completion of his tenure, appointed his own successor. If a chief died his successor was appointed by the other chiefs. These council members were the individual bands' peace chiefs as well, and one duty of the chief was to act as a mediator in disputes. Thus, justice was becoming centralized. The soldier societies also developed legal functions. Initially, this was limited to the maintenance of order on communal hunts and during tribal ceremonies, but "in the dynamic flow of crisis and cultural change in which the Cheyenne were caught in the nineteenth century the military societies were steadily expanding the area of their legal powers . . . the Cheyenne military societies *assumed jurisdiction* in a large variety of dispute and misbehavior situations . . ." (Hoebel 1954, p. 155, emphasis added). They made new law and frequently enforced their decisions with physical punishment and or banishment.[18]

The Cheyenne legal system prior to the advent of this outside pressure apparently was, like most North American Indians' legal systems, characterized by a social contract which established decentralized institutions and customary law, emphasizing individual rights and private property.[19] The social contract was amended, not by mutual recognition of all affected parties arising out of reciprocity, but by the use of organized power which came about as a consequence of external forces resulting from the advancing tide of European

[17]This is very similar to the development of kingship in Europe, where kings claimed that they had legal authority because they were descendants of gods, or later under Christianity, because they had divine rights to rule (Benson 1990; Berman 1983).

[18]The importance of military power in the early development of centralized legal authority is also similar to what occurred under European kings (see note 17 above), as is the increasing use of physical punishment instead of economic restitution (Benson 1990). With the rise of coercive authority, punishment becomes more arbitrary.

[19]This cannot be stated with certainty, but see footnote 15 above and the textual discussion to which it refers.

settlement.[20] The consequences of such amendments can be seen even today. The institutions of American Indian law that have developed on reservations since the federal government began to loosen its control over reservation Indians and their property rights in the early to mid 1970s are dominated by the centralized authority of tribal governments with their tribal councils, courts and tribal police. Beyond that, many of the property rights on reservations are increasingly designated as tribal or communal, under the control of the centralized tribal governments. This is exemplified by a large increase in tribal ownership of reservation lands (see Anderson and Lueck 1989), but tribal governments are also making decisions regarding the allocation of many other economic resources on reservations for activities like large development projects. Cornell (1987, pp. 63-64) points out that many tribal councils cite a commitment to preserving Indian culture and traditions as a primary justification for not releasing control over tribal resources to individual Indians, and for not decentralizing reservation institutions. If today's Indian political leaders mean maintaining the traditions and culture inherited from the very brief period of Indian history during which external forces led to centralization and increasing emphasis on communal rights, then for the most part, they are really speaking of a culture which was already tremendously influenced by the coming of the white man. If Indian leaders truly wish to preserve Indian tradition as it was when Europeans began to influence Indian society, however, then they should be *reestablishing* private property rights and decentralizing the legal system.

[20]One weakness in a customary social contract established under a unanimity rule (see note 9 above) is an apparent inability to prevent amendments imposed by powerful minorities when they become organized enough to exert their will. Of course, it is not clear that any constitution can prevent such actions once groups organize sufficiently to become powerful. Thus, an important feature of a social contract, assuming the normative goal of preserving individual liberties, should be the establishment of institutions and constraints which limit the incentives to organize and centralize power. A customary social contract can be quite effective in that regard, in the absence of external pressures such as military invasions by other organized groups (Benson 1990).

References

Anderson, Terry, and P. J. Hill. 1979. "An American Experiment in Anarcho-Capitalism: The *Not* So Wild, Wild West." *Journal of Libertarian Studies* 3.

Anderson, Terry L., and Dean Lueck. 1989. "The Value of Alternative Land Tenure Systems: Evidence From Indian Country." Paper presented at the Political Economy Research Center's conference on "Property Rights, Constitutions, and Indian Economics."

Baden, John, Richard Stroup, and Walter Thurman. 1981. "Myths, Admonitions and Reality: The American Indian as a Resource Manager. *Economic Inquiry* 19 (Jan.): 399-427.

Barton, R. F. 1967. "Procedure Among the Ifugao." In *Law and Warfare*. Paul Bohannan, ed. Garden City, N.Y.: The Natural History Press.

Berman, Harold J. 1983. *Law and Revolution: The Formation of Western Legal Tradition*. Cambridge, Mass.: Harvard University Press.

Benson, Bruce L. 1988. "Legal Evolution in Primitive Societies." *Journal of Institutional and Theoretical Economics* 144 (Dec.): 772-88.

———. 1989a. "Enforcement of Private Property Rights in Primitive Societies: Law Without Government." *Journal of Libertarian Studies* 9 (Winter): 1-26.

———. 1989b. "The Spontaneous Evolution of Commercial Law." *Southern Economic Journal* 55 (Jan.): 644-61.

———. 1989c. "Reciprocal Exchange as the Basis for Recognition of Law: Examples from American History." Florida State University Working Paper.

———. 1990. *The Enterprise of Law: Justice Without the State*. San Francisco: Pacific Research Institute for Public Policy. Forthcoming.

Buchanan, James M. 1972a. "Before Public Choice." In *Explorations in the Theory of Anarchy*. Gordon Tullock, ed. Blacksburg, Va.: Center for the Study of Public Choice.

———. 1972b. *Freedom in Constitutional Contract*. College Station, Texas: Texas A & M University Press.

———. 1989. *Explorations into Constitutional Economics*. College Station, Texas: Texas A & M University Press.

Demsetz, Harold. 1967. "Toward a Theory of Property Rights." *American Economic Review* 57 (May): 347-59.

Cornell, Stephen. 1987. "American Indians, American Dreams, and the Meaning of Success." *American Indian Culture and Research Journal* 11.

Diamond, A. S. 1950. *Primitive Law*. 2nd ed. London: Watts.

Epstein, Richard A. 1980. "The Static Concept of the Common Law." *The Journal of Legal Studies* 9 (March).

Friedman, David. 1979. "Private Creation and Enforcement of Law: A Historical Case." *Journal of Legal Studies* 8 (March).

Friedman, Wolfgang G. 1951. *Law and Social Change in Contemporary Britain*. London: Stevens.

Fuller, Lon L. 1964. *The Morality of Law*. New Haven: Yale University Press.

———. 1981. *The Principles of Social Order: Selected Essays of Lon L. Fuller*. Kenneth I. Winston, ed. Durham, N.C.: Duke University Press.

Goldsmidt, Walter. 1951. "Ethics and the Structure of Society: An Ethnological Contribution to the Sociology of Knowledge." *American Anthropologist* 53 (Oct./Dec.).

Hart, H. L. A. 1961. *The Concept of Law*. Oxford: Clarendon Press.

Hayek, F. A. 1967. *Studies in Philosophy, Politics and Economics*. Chicago: University of Chicago Press.

———. 1973. *Law, Legislation and Liberty*. Vol. 1. Chicago: University of Chicago Press.

Hoebel, E. Adamson. 1954. *The Law of Primitive Man*. Cambridge, Mass.: Harvard University Press.

———. 1967. "Law-Ways of the Comanche Indians." In *Law and Warfare*. Paul Bohannan, ed. Garden City, N.Y.: The Natural History Press.

Johnsen, D. Bruce. 1986. "The Formation and Production of Property Rights Among the Southern Kwakiutl Indians." *Journal of Legal Studies* (Jan.): 41-67.

Kroeber, A. L. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78.

Landes, William M., and Richard A. Posner. 1979. "Adjudication as a Private Good." *Journal of Legal Studies* 8 (March).

Malinowski, Bronislaw. 1926. *Crime and Custom in Savage Society*. London: Routledge and Kegan Paul.

Peden, Joseph R. 1977. "Property Rights in Celtic Irish Law." *Journal of Libertarian Studies* 1.

Pospisil, Leopold. 1971. *Anthropology of Law: A Comparative Theory*. New York: Harper and Row.

Spott, R., and A. L. Kroeber. 1943. *Yurok Narratives*. Berkeley: University of California Publications in American Archaeology and Ethnology. Vol. 35.

Trakman. Leon E. 1983. *The Law Merchant: The Evolution of Commercial Law*. Littleton, Colo.: Fred B. Rothman.

Umbeck, John. 1981a. *A Theory of Property Rights With Application to the California Gold Rush*. Ames, Iowa: Iowa State University Press.

———. 1981b. "Might Makes Right: A Theory of the Foundation and Initial Distribution of Property Rights." *Economic Inquiry* 19 (Jan.).

Austrian Capital and Interest Theory: Wieser's Contribution and the Menger Tradition

A. M. Endres*

Doctrinal investigation has now established that fundamental theoretical points of divergence separated the founder of the Austrian economics tradition, Carl Menger, and another leading Austrian economist, Eugen von Böhm-Bawerk. Böhm-Bawerk's capital and interest theory, in particular, stressed a degree of classical materiality and adopted a level of aggregation sharply in conflict with the basis of Menger's contribution (Endres 1987). As Streissler and Weber (1973, p. 231) speculate: "Böhm-Bawerk's Menger cannot be the whole Menger." Menger's successor in the chair of economics in Vienna was Friedrich Wieser.[1] On the occasion of the centenary of one of Wieser's principal contributions to economic theory—*Natural Value* (1889)—the time seems apposite to assess whether, and to what extent, the economic-theoretic legacy of Carl Menger endured in Wieser's work.[2] Standard renditions of early Austrian economics in history of economic thought textbooks usually suggest that Wieser's work can be placed squarely in the Menger tradition.[3] Indeed, going from Wieser's (1923) biographical account of Menger and from Wieser's (1891) survey of Austrian value theory, we should not be led to suspect otherwise.[4] However, Wieser's place in furthering the tradition of economic theory begun by Menger is

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[1]For two recent general appreciations of Wieser and his work see Streissler 1986 and 1987.

[2]Wieser 1889 was an elaboration and refinement of Wieser 1884. The latter is well-known for introducing the equi-marginal principle into the theory of production and for its subjective cost theory.

[3]For example, Hutchison (1953, p. 153) argues that Wieser (1889) bears "strong family resemblances to Menger's *Grundsätze*." Rothschild (1973, p. 209) is of the view that "Wieser built on his [Menger's] foundations."

[4]See also the "Preface" in Wieser (1889, especially pp. xxxiv-xxxv).

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impugned in Streissler's revealing analysis of Menger's contribution. Streissler (1972, pp. 429, 430) suggests that Menger's followers in the Austrian tradition, including Wieser, progressively "escaped" their master over time and "assimilated other traditions" with the consequence that "much of what was genuinely Menger's tradition got lost."[5]

It has been said of Wieser that he "occupies a position of indisputable importance in the history of economics" and that he "presented one of the best theories of capital which had emerged" in his time (Stigler 1941, pp. 158, 177).[6] Yet Wieser's (1889) theory of capital and interest which is later enunciated and extended in Wieser (1891 and 1914) is mostly still unappreciated in the literature.[7] Instead, there has been extensive analysis of the putative apotheosis of "Austrian" capital and interest theory provided originally by Böhm-Bawerk in 1888 and as later refined by Wicksell (e.g., Kregel, 1976, pp. 28-33; Blaug 1978, pp. 498-569; Brems 1988). As well, Streissler (1972, pp. 434-36) concentrates exclusively on those elements in Böhm-Bawerk's capital and interest theory which possibly displeased Menger. To anticipate one of our conclusions, Streissler leaves out of account Menger's probable *sympathy* for Wieser's formulations of the capital and interest problem.[8]

Accordingly, in this article we give special consideration to Wieser's much-neglected capital and interest theory in order to assess its origins and composition, and ultimately to estimate the extent of Wieser's departure from the Menger tradition. We compare, as and where the detail of our exposition demands, Wieser's theory of capital and interest with other contemporary Austrian and non-Austrian treatments of that subject. Our attention will also be focused on the relations between Wieser's theory and the broad directions given by Menger for the construction of an adequate theory of capital and interest—a theory which, regrettably, Menger (1888 and 1950) left very much inchoate.

[5]An example, as Streissler and Weber (1973, p. 227 4n) explain, is Menger's monetary theory for which Wieser, when rewriting Menger's article on "Money" for the *Handwörterbuch der Staatswissenschaften* substituted an entirely different version.

[6]Cf. Knight (1950, p. 31), who praises Wieser's capital theory, regarding it as "sounder" than both Menger's and Böhm-Bawerk's views on the subject. Knight (1935, p. 158) also pays tribute to Wieser's theory of interest.

[7]Two exceptions in recent literature are Rothschild (1973) and Streissler (1987) which touch *tangentially* on matters of concern in this article.

[8]To be sure, Streissler and Weber (1973, p. 229) allude, all too briefly, to one crucial theoretical point of separation between Menger and Wieser: Menger's "vision of production was a time consuming multi-stage process—an approach that did not appeal to Wieser."

Wieser's Concept of Capital

The protean nature of the term "capital" in both economic theory and everyday use, necessitates extended discussion of the term in Wieser's work. Menger (1888) insists that economists should take cognizance of the popular, everyday concept of capital as a pecuniary magnitude; capital in this view is, for the *individual*, a fund of purchasing power which consists of money and productive assets calculated in terms of money.[9] Wieser (1889, p. 125 1n) complains, in deference to Menger's concept, that the popular concept is too broad because it encapsulates "all the parent wealth of an acquisitive economy existing in or calculated in money, without respect to the technical nature of the instruments of acquisition." Wieser searches for a universal capital concept applicable in a communistic state as well as in a private, acquisitive economy.[10] Thus, "to take note of those forms of capital which serve in the formation of income outside of production" as loosely implied in Menger's concept, is "too closely connect[ed] with the specific condition of the existing economic order of things" (Wieser 1889, p. 125 1n).[11] Wieser rejects identification of the subsistence fund with capital *à la* Jevons and Böhm-Bawerk. The subsistence fund exists to maintain labor whereas capital must be associated with things upon which laborers employ their labor power. Therefore, the form of capital—"natural" or "productive" capital as Wieser terms it—is confined to "perishable or . . . movable means of production," in other words, to producers' technical means of production. Computations of the value of such capital may be made in monetary units. The implication is that Menger was led astray in identifying the monetary valuation of capital as substantially identical to the enduring content of productive or natural capital as Wieser (1914, pp. 296-98) understands it. Wicksell (1893, pp. 104-05) concurs with Wieser's view and adopts Wieser's definition in his own work.[12] Hayek (1941, p. 46) also finds Wieser's definition useful (see Figure 1).

[9]On Menger's concept compared with Böhm-Bawerk's see Endres (1987).

[10]Cf. Wieser (1914, p. 62): "All references . . . to the nature of capital must be such as will meet the approval not only of the supporters of the existing order but also the most radical apostles of socialistic views. To accomplish this, it is necessary to eliminate from the current, practical concept every reference to the pecuniary form of capital and to private property."

[11]Cf. Schumpeter's (1934, pp. 120-21) remarks on Menger's concept. For Schumpeter capital includes various means of payment and other circulating media which serve to provide entrepreneurs with control over capital goods.

[12]In drawing a distinction between capital and non-capital, Wicksell (1893, p. 105) rejects Böhm-Bawerk's division between the aggregate of intermediate goods (social capital) and a national subsistence fund (national capital) in favor of Wieser's view that capital "must be more related to the 'consumability and mobility' and therefore ready availability and utilization of capital-goods in the narrower sense."

Kinds of Resources	Permanent (non-consumable)	Non-permanent (consumable)
Non-producible ("original")	a	b
Producible ("augmentable")	c	d

Figure 1
Hayek's Delineation of Alternative Types of Capital

Source: F. A. Hayek, *The Pure Theory of Capital* (Chicago: University of Chicago Press, 1941), p. 58 2n.

Chronologically speaking, as far as definitions are concerned Wieser, Wicksell, and Hayek restrict the form and content of capital to *b* and *d* in Figure 1. Restricting the capital concept to non-permanent resources enables Wieser to state, and to attempt to solve, the "capital problem" under a specific set of stationary economy conditions.

The Capital and Interest Problem in a Stationary Economy

For Wieser, "one of the most important and difficult problems of economic theory [is] . . . to explain the fact that capital yields a net return" (1889, p. 124). Three sets of economic circumstances are distinguished. First, he conjectures that there was a period in economic history where there was "almost no capital," zero property in capital and therefore "zero of return from capital." Second, and more pertinent to the economic system under consideration in *Natural Value*, there was the stationary economy case defined by a constant, positive net return to capital; a positive, "prevailing" or natural rate of interest; neutral time preference; and zero capital accumulation (1889, pp. 149-50). Third, a "progressing" or growing economy case is distinguished where there is a positive, possibly increasing, net return to capital; a positive, but fluctuating rate of interest which depends on the rate of technical change; and net capital accumulation (1889, p. 50; 1914, pp. 134, 348).[13]

[13]The stationary and progressing cases are often discussed side-by-side in Wieser's work. For example, see the discussion of capital value and interest in *Natural Value* (1889, Book 4) and in *Social Economics* (1914, pp. 29-35).

Following Hayek's terminology in Figure 1 capital for Wieser is a stock of non-permanent resources which are periodically consumed and reproduced. Capital is designated "production" or "natural" if it yields a net return. Productive capital may permit production in a progressing economy to be maintained at a permanently higher level than would be possible without it. In a stationary economy, where there is no net capital accumulation (after reproduction and maintenance), the net return of capital is transformed into consumption goods (Wieser 1914, pp. 71, 134).[14] Capital productivity may have either a physical or value basis. Both physical and value productivity relate to Wieser's concept of the net return:

> Physical productivity exists where the *amount* of goods which form the gross return is greater than the amount of capital goods destroyed . . . Value productivity exists where the value of the gross return is greater than the value of the capital consumed. (1889, p. 126, his emphasis)

Proof of physical productivity is a necessary precondition for proof of value productivity. To resolve the capital problem the economist's ultimate task is to show that capital has value productivity.

In formulating the capital problem for the stationary economy Wieser postulates (implicitly) that all capital is completely consumed in the hypothetical production interval. The production process is repetitive but *not* statical—in the sense that production takes place in a time interval and in the sense that there is not strict simultaneity between the use of inputs and the production of outputs. *All* output arrives at the *end* of the production process, that is to say, at the end of the life of the capital goods. In short, we have a point input-point output theory of production. The amount of capital in use, both in terms of volume and quality, is fixed for the purpose of simplification; there are fixed production coefficients and diminishing returns are inadmissable (Wieser 1889, pp. 125-44).[15] Output prices at the begin-

[14]In a stationary economy "capital is used only to bring forth consumption goods. In a progressing society it is also used to bring about an increase of productive commodities" (Wieser 1914, p. 71).

[15]It is as if Wieser is maintaining that the conditions of capital supply are fixed by nature. Cf. Stigler (1941, p. 174), who states rather imprecisely that "the total supply of capital" is assumed fixed in Wieser's theory. Wieser, it should be emphasized did not assume that the amounts of capital in use could be varied in a stationary economy; there was no given supply *schedule* of capital evident in Wieser's stationary economy model. Similarly, Robbins (1930, p. 208) states that Wieser was "assuming fixity of supply" by which, Robbins proceeds to explain correctly, is meant that a fixed volume and quality of capital is assumed to be in use. No allowance is made by Wieser for flexible supplies along a given capital supply schedule; instead, he reasons in terms of *single* point price-quantity relations.

ning of the production interval are expected to be constant, and in conditions of perfect certainty in the stationary economy, such expectations cannot be disappointed. One consequence of constant output prices is that physical and value productivity must be proportional. Wieser's theory of imputation is developed under these assumptions as early as 1884, and indicates that a portion of output must be assigned to capital. Following Thünen, capital is *asserted* to have a given net physical productivity, otherwise it would not be employed (Wieser 1884, pp. 139-41; 1889, pp. 126, 131).[16] Capital produces a gross physical product some of which—a physical surplus—is not consumed in production. In value terms the value of capital cannot exceed the value of the gross product. In Wieser's example, the

> materials . . . out of which . . . bread is produced, cannot possibly be worth more than the bread itself. And those things from which the materials . . . themselves are produced, and which, consequently, are the producers of bread one stage removed, have, in the prospective gross return—the perishable bread—a maximum limit of value. (1889, p. 140)

The physical or net return produced cannot wholly be absorbed by capital reproduction; thus if "from the value of 105, 5 are set aside as fruits which may be consumed without preventing the full replacement of capital, only the remainder of 100 can be reckoned as capital value" (1889, pp. 140-41).

In commenting on Wieser's 'solution' of the capital problem, Stigler (1941, p. 177) complains from a standard neoclassical equilibrium perspective that the assumption of constant output value

> eliminates the problem of the relation of physical to value productivity, and consequently ignores also the problem of effects of variations of factor supplies on their relative shares of the product.

Wieser's stationary economy is *not* formulated as a Walrasian or Marshallian-type equilibrium. He does not, in particular, envision inputs, including capital, along fixed market supply *schedules* with the stationary behavior of the amounts of the factors actively used in production emerging *pari passu* with the fixity of all the unknowns of a solution as a consequence of a determinate general equilibrium system. This point is missed in Dobb (1973, p. 195) which, in evaluating Stigler's criticism of Wieser's 'solution,' maintains that Wieser may have been aware of the possibility that "an appropriate equilibrium-condition (e.g. equality of costs and revenue) can be postulated

[16]Wieser comes dangerously close to assuming what he originally aims to prove at this point. See Böhm-Bawerk's (1914) criticisms of Wieser's procedure, also detailed in the "Wieser's Hybrid Capital and Interest Theory in Retrospect" section below.

to allow for some *mutual adjustment* of product-prices and output and prices of producers' goods *in the course of reaching equilibrium*" (emphasis added). However, no such simultaneous mutual adjustment or equilibrating process is evident in Wieser's stationary economy. Wieser's (1889, pp. 86-92) elucidation of factor pricing in the "general imputation" process (where factors have alternative uses) provides the main ground for doubting the applicability of Marshallian or Walrasian equilibrium notions to his work. He emphasizes discrete, manifold, distinguishable units of producers' goods. In the stationary economy capital goods are not always readily substitutable with other factors; they exhibit strong degrees of complementarity and indivisibility.[17] As is well known, his "general imputation" theory assumes a number of unique optimal production coefficients—a number exactly equal to the number of factors. The assumption of fixed coefficients makes no allowance for variations in factor supplies during or between production intervals. Furthermore, the exclusive determinants or 'causes' of factor costs are final demands for consumer goods. (Thus, for instance, labor supply could not vary along some given supply schedule subject to the disutility of labor).[18] Brems (1986, p. 11) wrongly characterizes Austrian imputation theory, including Wieser's as,

> dealing with static general equilibria. In such equilibria, mathematics—even the rudimentary mathematics used by Walras—would have taught them [Menger, Wieser and Böhm-Bawerk] the lesson that a variable is neither the "cause" nor the "effect" of any other. All variables are determined on an equal footing and simultaneously, and all are the effects of the only causes found in the model, i.e., its parameters.

Following Menger in spirit and workmanship, Wieser's construction of imputation theory attempts in principle to remain consistent with the underlying ultimate or generative causes of economic phenomena, that is, to isolate the simplest elements from the complexity of everything real. This Austrian philosophical position rejected any notion of *strictly mathematical determination* of variables in a static general equilibrium system. As demonstrated in the Menger-Walras correspondence:

[17]As Rothschild (1973, p. 219) observes, Wieser could be regarded as a forerunner of economists in the twentieth century who reasoned in terms of a finite number of production plans and in terms of discontinuities or "corners" in aggregate production functions (e.g., Leontief, linear activity analysts).

[18]See Edgeworth's review of *Natural Value* in Edgeworth (1925, pp. 51-52). For a more recent account see Rothschild (1973, p. 216).

> Having been taught by his father to regard universal concomitance and exact proportionality [between *raretés* and prices] as the criteria of causality, Léon Walras felt that his construction of an overall system of simultaneous equations bound together by the marginal utility principle had proved that *rareté* was the cause of value. Menger, on the other hand, thought that the object of economic research was to discover those laws governing market phenomena which can be traced back to their ultimate genetic determinants in man's . . . nature. Mathematics cannot do this. . . . (Jaffé 1976, pp. 521-22)

Wieser was also a captive of Menger's philosophic outlook. Wieser's method, like Menger's, was causal-genetic rather than mathematical-functional and causal relations were sequential for both writers.

The assumption of fixed production coefficients affects Wieser's results in the strong case, stationary economy context. It is precisely in this context that Wieser's capital and interest theory is developed. Beyond the strong case, Wieser (1889, pp. 89-90), like Menger (1950, pp. 162-63), recognizes both the diversity of possible factor combinations and the likelihood that these would outnumber the types of producers' goods available. He does not pursue the possibility of a determinate, static, general equilibrium solution which would have dealt with these complications. Stigler (1941, p, 170) therefore labels Wieser's theory of imputation "distasteful" since it is "overdeterminate" and derivation of a "stable equilibrium" solution is rendered impossible. Wieser's very recognition of heterogeneity in the sphere of production implies that equilibrium solutions for factor pricing of the kind desired by Stigler could not capture demonstrably more fluid and more concrete situations where factor combinations exhibited extreme diversity. Indeed, argues Wieser (1889, 90n),

> [a]mong all the different kinds of goods employed in production, it would be difficult to find one which . . . would always be combined with others according to the same unalterably fixed formula.

Moreover, in acknowledging that factor combinations are changing and changeable (Wieser 1889, 90n), it is implied that the problem of factor pricing may only systematically be discussed as a disequilibrating process.[19] Lastly in this connection, to suggest, following

[19]Mathematical refinement and "analytical sophistication" may well have allowed Wieser to produce a more determinate, equilibrium (even Wicksellian) solution for this imputation theory, as Rothschild (1973, pp. 220-23) demonstrates. Considering what Wieser (1914) has to offer, it is seriously to be doubted whether Wieser would have been comfortable with intellectual concentration on the stationary economy and the general imputation theory with which stationariness was associated. Wieser (1914) hardly shows unstinting devotion to equilibrium theorizing.

Stigler (1941, p. 170), that Wieser's assumption of constant output prices is equivalent in content to assuming that final demands are infinitely elastic along a determinate, continuous, demand schedule, attributes more to Wieser's work than is textually supportable. Demand *schedules* are not evident in Wieser's sketch of the stationary economy; the potential for 'stationary'-like movements along either a fixed demand or supply schedule as a consequence of an *emergent*, equilibrium solution is not contemplated by Wieser since he reduced notions of supply and demand to *single* point, price-quantity relations. The economy is already at rest; factors are already optimally arranged as far as Wieser is concerned.[20]

We turn now to the related problem of interest on capital. How does Wieser explain it? Interest on capital and 'profit' coincide in the stationary economy.[21] Interest expresses some "definite relation between capital value and net return." An interest *rate* is the percentage of net increment to capital employed in a specific production interval. In a stationary economy in a large number of "connected" cases of production *the* rate of interest is the general percentage of increment to all capital in the market (Wieser 1889, pp. 141, 144). Wieser is guarded about generalizing the rate of interest to all forms of property, perhaps heeding Menger's earlier warning (Menger 1888, p. 181). Wieser restricts his analysis of interest to producers' capital.[22] Nevertheless there are allusions in *Natural Value* to possible equalization of interest rates in the strong stationary economy case, between interest on various forms of producers' capital and on consumption loans, and, on another level, equalization between money market rates and rates ruling in markets for different types of producers' capital. Effectively, the demand and supply of money and the demand and supply of producers' capital are regarded as identical. In the stationary case, the equalized natural rate of interest is determined independently of monetary factors, and solely by the rate of return

[20]Cf. one of Dobb's (1973, p. 196) suggested interpretations of Wieser's procedure where it is conjectured that it resembled Marshallian short-period equilibrium analysis. Again, this interpretation cannot be sustained since the Marshallian short-period allowed producers' decisions to alter quantities of inputs supplied with respect to price and marginal cost (Marshall 1920, pp. 314-15, 412).

[21]In the dynamic, progressive economy, interest and profit become different income categories. See the "Capital and the Trend of Interest in a Progressing Economy" section of this paper.

[22]It is essential to recall Wieser's concept of natural capital at this point. It excluded durable consumption goods including "material possessions of service trades and goods rented for use [e.g., dwellings] and including loan-capital for lending on these goods" (Wieser 1914, p. 297).

on capital invested in producers' goods. The amount and value of capital goods is brought into strict conformity with the costs of producing them, thus regulating the interest rate (Wieser 1889, pp. 145, 155ff).

Time preference is allowed to vary between individuals but the net societal effect is to value present goods as equal to future goods of like quantity and quality. Time preference is therefore neutral and not apparently relevant in explaining *the existence* of a positive rate of interest (Wieser 1889, pp. 16-19; 1914, p. 131). Instead Wieser adopts another ground for *explaining* interest as if it were a sufficient condition for a positive rate of interest to obtain in a stationary economy as he conceives it. That is, he appeals to the inherent productivity of capital as a cause of the differences in valuation in the present and in the future.[23] Wieser's productivity theory of interest is founded upon the assumption that the net physical productivity of capital, which cannot directly be observed, has been established by imputation, supplemented if necessary by introspection if the logic of his imputation theory is not fully accepted.[24] A net physical return on capital creates a value discount on the future. For Wieser, *present* possession of capital was equivalent to having received a net return from the use of that capital in the immediately *preceding* production interval. In a stationary economy possession of capital at a *future* date (the end of the next production interval) guaranteed the same net return but at the *end* of that interval.[25] Therefore, if

> *wants are continuously to find the same satisfaction, equal amounts of return* must continuously be produced. And if equal amounts of return are continuously produced, capital must remain continuously the same in substance. But if capital is actually to remain the same

[23]That the asserted technical productivity of capital is neither a necessary nor a sufficient condition for explaining the existence of a positive rate of interest in a stationary economy (following Irving Fisher) is now very well known, and need not detain us here. For a standard textbook treatment see Blaug (1978, pp. 531-32).

[24]Wieser would not have been deterred by criticisms of his imputation theory. His case that capital yields a net return and that interest represents the net increment of capital could, he believed, be clinched by facts gleaned by the method of introspective psychology. In "testimony to . . . [the] correctness" of his capital and interest theory Wieser had merely submitted "axioms which every layman recognises," "axioms of ripened experience" (1889, pp. 143-44).

[25]Thus "capital which, in twelve months from the date of possession yields the same gross return (say 105) and the same net return (say 5), is valued at the date of possession at the same amount (say 100). It is, nevertheless, not a matter of indifference whether the capital comes into possession now or only at the end of the twelve months inasmuch as possession now guarantees a return of interest besides" (Wieser 1889, pp. 142-43).

> in substance, and so is able to yield continuously *the same returns*, this must find expression in a valuation which ascribes to capital a higher value, the *earlier* point in time it comes into our possession. For the earlier point of time, the earlier and consequently the greater, the return that may be expected. (Wieser 1889, p. 143, emphasis added)

This passage is hardly unambiguous. Indeed, Wieser might be mistakenly arraigned for introducing dynamic elements into his theory of interest which contradicts conditions outlined earlier for production in a stationary economy. The notion of 'continuous' renewal of capital substance is misleading if taken too literally. To remain consistent with his concept of stationariness we must think of discrete, hypothetical production intervals. Whatever the length of the production interval the economy "shows neither progress nor retrogression." Constant returns in *value* terms for any particular stationary economy are ultimately determined by "future need values" which do not change (Wieser 1914, pp. 71, 141). Capital in Wieser's sense is used-up completely in each interval and, from interval-to-interval, in order for production to *recur*, interest presumably exists in order to ensure reallocation of the same 'capital substance' to the same uses as in previous intervals. This is to say also, that a positive net yield on capital is required to ensure capital reproduction and therefore to keep the 'stationary' economy 'stationary' in Wieser's sense. For heuristic purposes the stationary intervals themselves may potentially have different hypothetical durations which completely depend, correspondingly, on the assumed physical productivity of capital.

We are now in a better position to comprehend the preceding passage quoted from *Natural Value* (p. 143). In that passage, Wieser is implicitly comparing recurring production processes in a stationary context; each process yields the same constant *physical* product at the *end* of each production interval, but each is characterized by different production intervals and therefore by different qualities of capital.[26] Wieser suggests, in other words, that capital employed in a shorter production interval and which yields the same physical rate of return in each recurring interval, has a higher *value* productivity than capital with the same physical productivity but which takes a longer production interval. This interpretation has two important implications. First, Wieser *presupposes* a positive interest rate; he

[26]This conclusion is in broad agreement with Wieser's theory of imputation which uses fixed coefficients. Every form of capital of better quality than another has a higher return imputed to it. In comparing qualities of capital it is the net return that decides the imputation (Wieser 1889, pp. 131-33).

does not prove that the interest rate will be positive. Second, a higher opportunity cost of waiting is entailed for the same physical returns that arrive at the end of a longer production interval. Interpreted in this way, Wieser's 'explanation' of interest in his model of the stationary economy does not admit diminishing returns. By contrast, in Böhm-Bawerk's well-known explanation of the reason for a positive rate of interest, present capital goods yield a larger physical product than an equal quantity of future capital goods at a future date applied to roundabout production because of diminishing returns from a lengthening production interval. Parenthetically, there is a "period of production" notion in Wieser's theory although *not* one which involves the *introduction* of more productive time-consuming processes. Wieser's production interval is one characterized by a given production process yielding constant physical returns.

Despite Wieser's attempt to assert neutral time preference, we cannot avoid the implication in his stationary economy that a degree of impatience is involved on the part of producers who have rights of possession (entrepreneurs or central planners as the case demands) over a given volume of capital of the same quality (as opposed to capital of lesser quality) which is merely periodically duplicated. Furthermore, it seems for Wieser that these possessors avowedly desire quicker physical returns, and thence greater value returns, over successive recurring production intervals. In respect of *consumers* in a stationary economy Wieser is more explicit but does not recognize an inconsistency with his earlier pronouncements repudiating any significant role for time preference:

> consumption goods are available only as such and are useless for anything else. However, the latter may be turned over into consumption goods *more or less slowly*. The *more rapidly they are despatched*, the sooner will the new production process have to be set on foot. (Wieser 1914, p. 132, emphasis added)

His position on the existence of interest in a stationary economy would have been more defensible if he had given time preference a more central role. Instead, the order of his 'explanation' of interest makes productivity causal and primary; time discount is merely the resultant. Capital productivity, in other words, has exclusive influence on comparison of present and future gratifications. The burden of Wieser's *explanation* of interest therefore rests precariously on the existence of a technical net productivity of capital.[27]

[27]All this relates to interest on productive capital. Interest on consumption loans cannot be *explained* by productivity as Wieser (1891, p. 116 1n) expressly recognizes. Wieser explains interest on consumption loans in *psychological* terms, comparing the needs of debtors with those of creditors.

Capital and the Trend of Interest in a Progressing Economy

In reading Wieser's work we find that the stationary and progressing economy form two separate, though not competing, stages of exposition. Fragmentary discussion of the progressing economy is evident at frequent points in *Natural Value*. It is more fully enunciated in *Social Economics*, a work recently dubbed "the definitive textbook of the Austrian School" for the early decades of the twentieth century (Streissler 1987, p. 921). In a dynamic "progressing social economy" discussed extensively in *Social Economics*, capital is both reproduced and augmented (Wieser 1914, p. 71).

In outlining the simple stationary economy in *Natural Value* and again in the early sections of *Social Economics* Wieser always appears to be ready to break out of the strong case theorizing which is required of him. First, his discussion of the physical productivity of capital shows acute awareness of the *varieties* of capital goods which complicate calculations of a return to capital *as a whole* even though such a return may be imagined in principle (Wieser 1889, p. 133). Second, competition will assist in generating movement toward a uniform, natural rate of interest across the economy, but institutional impediments often conspire against such an outcome. He exclaims, for example, that

> the individualism of our present economic order distributes production among individual undertakings . . . yet at how many points do we find great gaps; how many dislocations through excessive accumulation of means of production at the wrong places; how often things go too quickly, how often not fast enough! (1889, p. 145)

Third, in circumstances of "private ownership" the money markets and capital goods markets are not always well-synchronized; under a "communistic regime" the central planner's calculation of *a* general interest rate may be easier in the absence of a private commercial money market (1889, p. 144). Private money markets are buffeted by alternating and irregular periods of "intensive activity" and of "quiescent business" such that commercial money rates of interest can exhibit a high variance in the short period, that is, "within a year" (Wieser 1914, p. 348). Time horizons and associated contractual obligations in the market for money credit destined for more permanent productive investment are much longer and substantially different from horizons which normally obtain in the market for consumption loans. Wieser is therefore driven to doubt the applicability of his Law of the Equalization of Price, and of interest equalization in particular, in the dynamic, progressing economy. He doubts the exis-

tence of a single loan interest rate which through the action of strong equilibrating forces, is adjusted into conformity with a common market rate of interest on all forms of income generating assets, broadly conceived. In the case of money and capital markets:

> [e]ven with complete security of the loans, the *interests of the different groups are too diverse* as regards the period of the loan and a number of other conditions for a central market to form in which the law of the unity of price might prevail. (Wieser 1914, p. 304, emphasis added)

An undeniable implication here is Wieser's leaning toward the Marxian view that interest rates on money capital are determined temporarily and perhaps permanently by causes which are independent of what happens to the rate of interest on producer's capital.[28] As well, Wieser is also aware of Menger's view expounded in "Zur Theorie des Kapitals" (1888), which insists that the rate of interest on money markets, the yield on industrial capital, and the yield on other categories of income bearing assets "need separate explanation each according to its nature and its different origins. The problem of the return on property (*Vermögensertrag*) is, for practical purposes . . . in no way synonymous with the problem of interest" (Menger 1888, p. 181). Wieser's sympathy toward both the Marxian and Mengerian views places his theory of interest, especially in *Social Economics*, outside the typical marginalist tradition in economics which included Jevons and Walras and which recognized first, that money rates of interest could vary only temporarily from some natural rate, and second that the money rate was determined exclusively by the rate of return on various forms of producers' capital. *Per contra*, Wieser leaves the way open for the possibility of monetary influences on the latter. No longer can we be sure after reading relevant sections of *Social Economics* that a permanent change in the money market interest rate would affect costs of production in the same manner, and would ultimately amount to the same thing as, a permanent, equivalent change in the rate of interest (or profit) on producers' capital.[29]

Wieser's Law of the Equalization of Price (*Gesetz des Priessaus gleiches*) is certainly an important analytical device in the *Ursprung* and in *Natural Value*. Streissler (1972, p. 438) interprets the law as "rather evocative of a process leading to equilibrium, not of equilibrium itself." The fact that Wieser jettisons his Law in respect of

[28]Incidentally, Hilferding's *Das Finanzkapital* (2nd edition) is listed among Wieser's (1914, p. 238) references in the section on money and credit.

[29]On the disjunction between "interest" and "profit" (or the rate of return on producers' capital) in the history of economic thought, see Panico (1987).

pricing in money and capital markets in the progressing economy context in *Social Economics*, adds further weight to the proposition that he *not* be classified as a typical, fledgling, equilibrium economist who wished generally to *determine* equilibrium price and analyze equilibrium positions. His affinity with Menger in this connection is more striking than has been recognized hitherto.[30]

In *Natural Value* there are allusions to "solitary" instances of rises in interest on a particular form of capital input (perhaps because of a one-off invention but Wieser is not explicit), while the prevailing rate of interest remains unaltered on other capital goods. Furthermore, alterations in the prevailing rate may result from "changes in supply, in demand [and] in technique" (1889, pp. 147, 150). *Universally* adopted inventions, for example, "would cause a general rise in the net return to capital" *relative* to "those capitals which had no part in the effects of the invention" (1889, p. 150). In a progressing economy an increase in the amount of capital of the same kind as used before necessarily leads to a decline in the interest rate; a simultaneous increase in new varieties of "specific capital" will counterbalance this effect (1914, p. 140). Here Wieser is clearly aware of the fact that inventions and improvements are not introduced at one fell swoop. Wieser is noncommittal about the certainty and regularity of changes in the quality of capital; it is precisely this outlook which lends itself to an open-ended serial process analysis rather than equilibrium theorizing. Indeed, such a process comes to the fore in Wieser's distinction between interest on capital and entrepreneurial profit—the latter being positive only in the progressing economy (1914, pp. 355-56). For Wieser, profit is not to be confused with *regular* wages of management, although such wages form part of entrepreneurs' income. Economic progress requires rare skills— necessary for "a specific command of capital[;] . . . specific in its unique character or else in its magnitude." These skills return a profit so long as they have not become "common property." Entrepreneurs also secure a preferred market position of a specific character for their enterprise. In their superior leadership they were originally "pioneers of unusual ability and training, combining technical knowledge and capacity with market experience and organizing power" (1914, pp. 356, 357). Such power coupled with the "talent of economic leadership" often gets its return from capital gains on property; from audacious innovations; from promotion of joint stock companies and from various forms of "creative speculation" and arbitrage activity

[30]For an account of Menger's departure from equilibrium economics in the strict sense, see Streissler (1972), Mirowski (1984, pp. 370-72) and Vaughn (1989).

which assist in the process of price *formation* (rather than full determination in a mathematical sense) in a progressing economy (1914, pp. 357-66).

In the case of diverse types of *fixed* capital where "instead of one single future return there are several returns," Wieser maintains that in the ideal stationary economy case these returns are determined by discounting using the uniform natural rate of interest determined in respect of circulating capital. However, Wieser leaves room for expectations and uncertainty. The complications introduced by "uncertainty [as to] . . . whether the returns expected will actually be received at all" made calculation of the value of fixed capital subject to some uniform interest rate, more difficult in the progressing economy. Insurance is mentioned as one way out of the dilemma, although Wieser does not indicate that such a device could be effective in all cases where uncertainty appears (1889, p. 152). In addition, vast aggregations of indivisible items of fixed capital ("mammoth capital") in a dynamic, advanced capitalist economy tend to thwart competitive pressures making for a natural, equilibrium rate of interest on the use of such capital (Wieser 1914, pp. 209-10).

The process of new capital formation in a progressing economy where there is widespread monetary calculation and exchange is represented in Wieser's work as a complex time consuming exercise "distributed over a large number of individuals" (1914, pp. 298, 299-303). It involves distinct capitalistic and entrepreneurial activities. In the first place, a supply of new savings has to be forthcoming although the *economic* mechanism to encourage savings such as an interest rate incentive, is not given much emphasis.[31] Second, "money capitalists" advance money capital to consumers and to "speculating" capital-employing entrepreneurs. The latter, in advanced forms of capitalistic economic organization, may also assume the role of money capitalists. Entrepreneurs cannot usually employ productive capital until capital goods are purchased from capital-producing entrepreneurs, who in turn may also require money credit from money capitalists in order to make their enterprises into going concerns. In short, money and credit facilitate the accumulation of productive capital in Wieser's sense. Money and credit could also potentially prove an obstacle to capital accumulation depending on the conditions—including power relationships and state regulations—of trad-

[31]Ethical reasons for saving are instead brought to account, *viz.*, the "spirit of self denial" and "deprivation" (1914, p. 300). An interest rate factor is mentioned *en passant* much later (1914, p. 350).

ing on financial markets.[32] There are rudiments here of a monetary theory of the rate of interest (or profit) on productive capital; it is merely a glimpse made apparent by Wieser's terminology. Finally, only when capital-employing entrepreneurs actually realize a (previously prospective) net gain from the use of productive capital can capital formation be said to have taken place (Wieser 1914, p. 299).

The long-run movement of *the* interest rate on capital in the progressing economy is not well charted in Wieser's analysis. Indubitably, he follows English and German classical economists in believing that the rate of interest displays a clear, downward secular trend.[33] In *Natural Value* he argues that the interest rate "rises from the beginning" and goes on "growing so long as the economic world thrives" (1889, p. 151). This is apparently contradicted in *Social Economics* where it is insisted that "[d]uring *the entire course* of economic development the trend of the rate of productive interest is downward" (emphasis added). Despite all technical progress, continues Wieser, "the increase of capital reduces its marginal yield" (1914, p. 348).[34] Wieser's meaning is hardly straightforward; the meaning lies between as much as within the lines. Successive increases of capital of the *same* quality would, it appears, lead to diminishing returns. Is this Wieser's likely meaning, otherwise technical progress could carry on indefinitely to keep up the trend of interest rates or at least keep the interest rate from falling? Textual interpretation is not assisted by another passing statement Wieser (1914, p. 357) makes implying that there is an intrinsic limit on investment opportunities in a progressing economy—a limit approached as productive capital becomes more abundant. Nowhere, incidentally, does Wieser suggest when remarking on the likelihood of a falling rate of interest in a progressing economy, that the interest rate would eventually fall to zero, and the possibility that a zero rate may be approached asymptotically is not broached (1889, p. 151; 1914, p. 348). At least partial reconciliation of Wieser's scattered statements on this matter rest on drawing a distinction (which he often does) between isolated "specific

[32]Wieser's position is remarkably close to Menger's on this matter. Both appreciate the function of money as a mediator and potential obstacle to the trade in capital goods. See Menger (1936, p. 59). It is disappointing as Roll (1936, p. 456) correctly reports, that Menger's "description of the role of money in the capital market is . . . not as suggestive of further analysis as other parts" of Menger's work on money.

[33]Cf. Schumpeter (1934), originally published in 1911, which is not mentioned in Wieser's (1914) references (e.g., 1914, p. 30) where it might have been expected. Schumpeter, by the way, labels the classical line of the secular trend of interest as a "dogma" (1934, p. 210).

[34]Cf. also Wieser (1914, p. 350): "the rate of interest is lowered owing to the continuous increase of capital."

capital" investments incorporating particular inventions on the one hand, and "universally effective invention" or the most generally adopted technique on the other (1889, p. 150). The former are not sufficient to keep up the general interest rate, although individual entrepreneurs who first adopt a new technique would, for a while, reap the higher net profit return on specific capital investments. Wieser's distinction is probably due to his reading of Marx, to whom Wieser pays tribute in the *Ursprung* (1884). Streissler (1987, p. 921) notices that some of Wieser's "terminology" owes something to Marx; here we are suggesting that Wieser's general outlook on long run economic development presupposes a law of the falling rate of interest or profit which had classical and of course, Marxian connotations. Of these connotations Wieser was doubtless aware. He does not exaggerate the differences between his economic-theoretic innovations and those of his classical predecessors.[35] Wieser (1889, pp. 200ff) definitely aims to refute the labor theory of value and Marxian exploitation theory, although the refutation was nowhere near as successful and uncompromising as Böhm-Bawerk's well-known critique. And, of course, Wieser is a critic of Ricardian theory although it should be remembered that he uses *classical* differential theory to 'explain' returns to factors other than land in his analyses of "specific imputation" problems where factors had no alternative uses.

Wieser's Hybrid Capital and Interest Theory in Retrospect

On the occasion of the third edition of *History and Critique of Interest Theories*, Böhm-Bawerk (1914, pp. 411ff) pays obeisance to the "marked individuality" of Wieser's capital and interest theory although he is not prepared to accept its validity. Wieser (1914) appears to have remained impervious to Böhm-Bawerk's earlier criticisms, thus inciting Böhm-Bawerk (1914, p. 484 40n) to provide another critique. We have already mentioned Wieser's penchant to assume, implicitly, what he proposes to prove in attempting to *separate* a net return of capital from the net return attributable to other factors. Böhm-Bawerk (1914, p. 415) expresses this problem with Wieser's "proof" as follows:

> It is true that a *net return of production* . . . is concededly present when the total gross return yielded by all three collaborating factors exceeds the value of the capital consumed. But a *net return of capital*

[35]As Wieser (1889, p. xxxiv) admits in respect of the German classical school: "in great part, the German school long ago formulated the conceptions, leaving for us only the task of filling them out. . . ."

> is not present until the individual *aliquot share* which is attributed to capital out of the gross return exceeds the capital consumed. And the existence of the first condition, by very reason of the radical difference in the presuppositions, leaves absolutely no ground for inferring the existence of the second.

Böhm-Bawerk grants that Wieser's "general imputation" theory ascertains the portions contributed by the various factors to *gross* product. A theory of interest on capital must, by contrast, show the portion of *net* product contributed by the factor "capital." Wieser always maintains, by assumption, that capital in the stationary economy would not be employed if it did not produce net physical and value productivity. Such an assumption rests, in the final analysis, on introspective knowledge—on adequate *understanding* of producers' concrete *plans* which always include an "interest" category. Böhm-Bawerk (1914, p. 415) notices that Wieser may wish to fall back on this ground, *viz.*, the supposition that the economist "knows as a fact within our experience that the portion of the gross return attributable to capital exceeds the amount of capital consumed." On the demand side Wieser had already given much weight to the economist's casual, introspective knowledge in constructing and evaluating the theory of consumers' wants and diminishing marginal utility. However, in this connection, Böhm-Bawerk (1912, p. 430 81n) warns that Wieser appears "to go somewhat too far" in relying on the methods used by "psychological laymen." These methods, according to Böhm-Bawerk, Wieser uses as explanatory devices when the powers of pure psychology (*Wissenschaftliche*) and of pure economic theory provide a sounder basis for a proper scientific treatment. Böhm-Bawerk (1912, p. 195) had originally judged that Wieser meant only that the "training of universal experience" offered "relatively superficial facts" which economists needed to explain with *other* methods. Now he was no longer so sure of that judgment.

If Wieser's capital and interest theory cannot firmly be located in the Böhm-Bawerkian, 'Austrian' tradition then what were its doctrinal origins? An heirloom from von Thünen—a simple productivity theory of capital—is Wieser's explicit point of departure. Wieser's imputation theory, from which his theory of capital and interest is further developed, is motivated by lacunae in Menger's approach to imputation based on the "loss principle." Wieser values capital inputs assuming fixed coefficients while simultanesouly capturing important aspects of interdependence between production processes and aspects of factor complementarity. Böhm-Bawerk, on the other hand, avoids explicit analysis of interdependence between production processes, instead reducing capital inputs to dated labor quantities. In

the theory of the *stationary economy*, Wieser (a) does not give coordinate rank and mutual influence as between technical productivity and time preference; (b) he conceives of the interest problem as connected only with produced means of production as did German classical economists; and (c) he systematically formulates by way of imputation theory, the specific productivity or productive contribution of each factor input—the productivity of capital, in particular, serving to 'explain' both the amount yielded by a group of capital goods and the rate of yield calculated on the valuation of the principal or capital substance. In respect of (a) he is at one with Menger but inconsistent with Böhm-Bawerk. Wieser's orientation in both (b) and (c) earned the fervid denunciation of F. A. Fetter (1914), the Austro-American theorist and contemporary of Wieser who developed interest theory along pure time preference lines. As for (c), Wieser has many points in common with J.B. Clark (Fetter 1927, p. 272). Lastly, in considering the mixed origins and allegiances of Wieser's capital and interest theory, our study would not be complete without investigating F.H. Knight's (1950, p. 31) tribute to Wieser's theory as being far "sounder" than other Austrian theories on the subject. First, for Knight, time preference plays no role in the determination of the rate of interest—a rate which in his view always remains positive since, conceptually, a zero limit could not be reached. Second, Knight argues that the ability of capital to yield services—its productivity—becomes the basis for interest, the rate of which is defined as the "anticipated productivity ratio" (Knight 1916, p. 298). Third, Knight (1934) also conceives of production as involving a collection of highly specific, complementary capital goods. These three facets of Knight's capital and interest theory have much in common with Wieser's, so it comes as no surprise that Knight liked Wieser's theory.

It remains for us to draw attention to the place of Wieser's capital and interest theory and certain other related components of his economic thought, in the early Austrian tradition. Noteworthy is Hennings's (1986, p. 232) authoritative survey which makes out a case, first, for distinguishing Wieser and Böhm-Bawerk on the reasoning that Wieser places "less emphasis" on the temporal nature of production than Böhm-Bawerk.[36] Following our account of Wieser's theory, this interpretation deserves qualification. Hennings's claim is valid in relation to the stationary economy model; Wieser's concept of stationariness implicitly excludes consideration of the effects of

[36]Streissler and Weber (1973, p. 229) concur with Hennings insofar as they maintain that Wieser would not have liked Menger's view of production as a time consuming, multi-stage process.

temporal integration of production processes in the Böhm-Bawerkian sense. In Wieser's stationary economy the Law of the Equalization of Price prevails and the separation of monetary from real variables is complete. However, close textual study reveals Wieser's impatience with attempts at explaining and refining the logic of the stationary case. He is led perforce to consider at length production in a progressing economy where temporal issues, indeed real historical changes, are pervasive.

Hennings's (1986, p. 237) second conclusion is that "Menger, Böhm-Bawerk and to a lesser extent Wieser, were much more concerned with disequilibrium processes" than early equilibrium economists who dealt with production theory. Again, this is not an accurate portrayal of Wieser's concerns relative to Menger's and Böhm-Bawerk's, especially if his *Social Economics* is given the studious attention it deserves. It should be remembered that *Social Economics* was Wieser's "last and ripest message on pure theory" (Schumpeter 1951, p. 300). Our explanation, which includes consideration of *Social Economics*, demonstrates Wieser's concern for everchanging production plans and uncovers his suggestive hints relating to the strategic influence of monetary factors on these plans in the progressing economy. We have seen how Wieser's capital and interest theory is a special hybrid, composed in other words, of mixed doctrinal elements, although on many fundamental points his work remains closer to Menger's than Böhm-Bawerk's. Wieser's avowed intention not to overgeneralize the interest concept suggests, like Menger, uneasiness with the notion of interest as a broad macroeconomic category. Very much like Menger, Wieser justifies a return to capital from its function as a unique cooperating element in production. While process analysis in the *Ursprung* and in *Natural Value* is diffuse and subdued, Wieser nevertheless makes some portentous digressions on such matters as the diversity of factor combinations; the tendency of factor combinations to change and on the general discontinuous nature of production functions. Furthermore, Wieser is not generally inclined to reason in terms of continuous, determinate schedules of demand and supply. In *Social Economics* Wieser's more generous allowance for disequilibrium processes *à la* Menger is exemplary.

It would be misleading to draw the comparisons between Wieser and Menger too favorably such that the former might be placed squarely in the Menger tradition. Nonetheless, the existing historical record has neglected points of theoretical convergence between these two leading 'first generation' Austrians. After all, Menger was not moved to make the charge of a 'great error' in regard to Wieser's construction of a capital and interest theory, as he was to do in

Böhm-Bawerk's case (Schumpeter 1954, p. 847n). Wieser not only remained loyal to Menger's subjective theory of value; he heeded Menger's fragmentary adumbrations for developing a coherent theory of capital and interest. Wieser subsequently produced a hybrid theory which revealed certain distinguishing characteristics inherited from Menger. These characteristics were particularly discernible, although not exclusively so, in the variant of Wieser's theory which applied to a progressing economy. Wieser's break from the Menger tradition was therefore neither as fundamental nor as decisive as Böhm-Bawerk's.

References

Blaug, M. 1978. *Economic Theory in Retrospect*. 3rd ed. Cambridge: Cambridge University Press.

Böhm-Bawerk, E. [1912] 1959. "Some Psychological Considerations Supplementing Our Theory of Value." In *Positive Theory of Capital*. E. Böhm-Bawerk. Vol. 2 of *Capital and Interest*. Trans. G. D. Huncke. Spring Mills, Pa.: Libertarian Press.

———. [1914] 1959. "Recent Literature on Interest, 1884-1914." In *History and Critique of Interest Theories*. E. Böhm-Bawerk. 3rd ed. Vol. 1 of *Capital and Interest*. Trans. G. D. Huncke. Spring Mills, Pa.: Libertarian Press.

Brems, H. 1986. *Pioneering Economic Theory, 1630-1980: A Mathematical Restatement*. Baltimore: Johns Hopkins University Press.

———. 1988. "Time and Interest: Böhm-Bawerk and Äkerman-Wicksell." *History of Political Economy* 20(4): 565-81.

Dobb, M. 1973. *Theories of Value and Distribution Since Adam Smith*. Cambridge: Cambridge University Press.

Edgeworth, F.Y. 1925. *Papers Relating to Political Economy*. Vol. 3. New York: Burt Franklin.

Endres, A.M. 1987. "The Origins of Böhm-Bawerk's 'Greatest Error": Theoretical Points of Separation From Menger." *Zeitschrift für die Gesamte Staatswissenschaft* 143(2): 291-309.

———. 1991. "Menger, Wieser, Böhm-Bawerk and the Analysis of Economizing Behaviour." *History of Political Economy* 23(2). Forthcoming.

Fetter, F.A. [1914] 1977. "Interest Theories, Old and New." Reprinted in F.A. Fetter. *Capital, Interest and Rent*. M. Rothbard, ed. Kansas City: Sheed Andrews and McMeel.

———. [1927] 1977. "Interest Theory and Price Movements." Reprinted in F.A. Fetter. *Capital, Interest and Rent*. M. Rothbard, ed. Kansas City: Sheed Andrews and McMeel.

Hayek, F.A. 1941. *The Pure Theory of Capital*. Chicago: Chicago University Press.

Hennings, C. 1986. "The Exchange Paradigm and the Theory of Production and Distribution." In *Foundations of Economics: Structures of Enquiry*. M. Baranzini and P. Scazzieri. Oxford: Basil Blackwell.

Hutchison, T.W. 1953. *A Review of Economic Doctrine 1870-1929*. Oxford: Clarendon Press.

Jaffé, W. 1976. "Menger, Jevons and Walras De-homogenized." *Economic Inquiry* 14(4): 511-24.

Knight, F.H. 1916. "Neglected Factors in the Problem of Normal Interest." *Quarterly Journal of Economics* 30: 279-310.

———. 1934. "Capital, Time and the Interest Rate." *Economica* 1: 257-86.

———. 1935. *The Ethics of Competition and Other Essays*. 2nd ed. London: Allen and Unwin.

———. 1950. "Introduction." In C. Menger, *Principles of Economics*. Trans. J. Dingwall and B. Hoselitz. Glencoe, Ill.: Free Press.

Kregel, J.A. 1976. *Theory of Capital*. London: Macmillan.

Marshall, A. 1920. *Principles of Economics*. 8th ed. London: Macmillan.

Menger, C. 1888. "Zur Theorie des Kapitals." Reprinted in C. Menger, *The Collected Works of Carl Menger*. Vol. 3. F.A. Hayek, ed. London: LSE Reprints of Scarce Tracts.

———. 1936. "Geld." Reprinted in C. Menger, *The Collected Works of Carl Menger*. Vol. 3. F.A. Hayek, ed. London: LSE Reprints of Scarce Tracts.

———. 1950. *Principles of Economics*. Trans. J. Dingwall and B. Hoselitz. Glencoe, Ill.: Free Press.

Mirowski, P. 1984. "Physics and the Marginalist Revolution." *Cambridge Journal of Economics* 8(4): 361-81.

Panico, C. 1987. "Interest and Profit." In *The New Palgrave: A Dictionary of Economics*. J. Eatwell, M. Milgate and P. Newman, eds. Vol. 2. London: Macmillan.

Robbins, L. 1930. "On a Certain Ambiguity in the Concept of Stationary Equilibrium." *Economic Journal* 40 (June): 194-214.

Roll, E. 1936. "Menger on Money." *Economica* 3: 455-60.

Rothschild, K. 1973. "Distributive Aspects of the Austrian Theory." In *Carl Menger and the Austrian School of Economics*. J.R. Hicks and W. Weber, eds. Oxford: Clarendon Press.

Schumpeter, J.A. 1934. *The Theory of Economic Development*. Trans. R. Opie. Cambridge, Mass.: Harvard University Press.

———. 1951. *Ten Great Economists From Marx to Keynes*. New York: Oxford University Press.

———. 1954. *History of Economic Analysis*. Oxford: Oxford University Press.

Stigler, G.J. 1941. *Production and Distribution Theories*. New York: Macmillan.

Streissler, E. 1969. "Structural Economic Thought: The Significance of the Austrian School Today." *Zeitschrift für Nationalökonomie* 3-4: 237-66.

———. 1972. "To What Extent Was the Austrian School Marginalist?" *History of Political Economy* 4: 426-41.

———. 1986. "Arma Virumque Cano—Friedrich von Wieser, the Bard as Economist." In *Die Werner Schule der Nationalökonomie*. N. Leser, ed. Vienna: H. Böhlau.

———. 1987. "Wieser F. von." In *The New Palgrave: A Dictionary of Economics*. J. Eatwell, M. Milgate and P. Newman, eds. Vol. 4. London: Macmillan.

Streissler, E. and W. Weber. 1973. "The Menger Tradition." In *Carl Menger and the Austrian School of Economics*. E. Streissler and W. Weber, eds. Oxford: Clarendon Press.

Vaughn, K. 1989. "The Mengerian Roots of the Austrian Revival." In History of Economics Society *Proceedings*. Vol. 3. Richmond, Va.: University of Richmond.

Wicksell, K. [1893] 1954. *Value, Capital and Rent*. Trans. S.H. Frowein. London: Allen and Unwin.

Wieser, F. 1884. *Über den Ursprung und die Hauptgesetze des Wirtschaftlichen Werthes*. Vienna: Hölder.

———. [1889] 1893. *Natural Value*. Trans. C. A. Malloch. New York: Macmillan.

———. 1891. "The Austrian School and the Theory of Value." *Economic Journal* 1(1): 108-121.

———. [1914] 1927. *Social Economics*. Trans. A.F. Hinrichs. London: Allen and Unwin.

———. 1923. "Carl Menger." In *Neue Österreichische Biographie: 1815-1918*. Vol. 1. Vienna: Amalthea-Verlag.

———. 1929. *Gesammelte Abhandlungen*. Tübingen: Mohr.

New Classical and Old Austrian Economics: Equilibrium Business Cycle Theory in Perspective

Roger W. Garrison*

The recent flourishing of New Classical economics, and especially its Equilibrium Business Cycle Theory (EBCT), has given a fresh hearing to the Old—but still developing—Austrian Business Cycle Theory (ABCT). While the New and the Old differ radically in both substance and methods, they exhibit a certain formal congruency that has captured the attention of both schools. The formal similarities between EBCT and ABCT invites a point-by-point comparison, but the comparison itself dramatizes differences between the two views in a way that adds to the integrity and plausibility of the Austrian theory.

In modern macroeconomic literature, the label EBCT is applied sometimes so broadly as to include New Keynesian as well as New Classical constructions and sometimes so narrowly as to preclude the very developments within the New Classical school that are most closely related to ABCT. So-called Real Business Cycle Theory, in which cyclical movements of macroeconomic variables are characterized by both market clearing and Pareto optimality, is sometimes designated as the only true equilibrium construction. The comparison of New Classical and Old Austrian theories is best facilitated by letting EBCT refer to those theories in which (a) individuals make the best use of the information available to them and (b) an informational deficiency temporarily masks the interventions of the monetary authority. As exposited by Robert Lucas (1981), Robert Barro (1981) and others, EBCT so conceived accounts for business cycles in terms of the actions of market participants confronted with what has come to be known as a signal-extraction problem. Difficulties in

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interpreting price signals during a monetary expansion also lie at the root of ABCT as introduced by Ludwig von Mises (1953) and developed by Friedrich A. Hayek (1967).

Comparing Lucas's EBCT with Hayek's ABCT, R. W. van Zijp (1990) argues that Lucas is not a Hayekian on the grounds of the differing goals of the two theorists. Hayek sought to explain the business cycle in terms of a multitude of partially conflicting individual plans; Lucas seeks to predict the behavior of the "representative individual" during the course of the business cycle (p. 20). Kim Kyun (1988) provides an historical perspective by finding links between modern EBCT and business-cycle theories of the inter-war period. He concludes that the New Classical economists have so revolutionized the style of argument that their ability to challenge old views and deal with key issues is seriously restricted (pp. 112-14). William Butos (1985) assesses the claims that Hayek pioneered modern EBCT and finds them misleading. While Hayek took the equilibrium relationships established by price theory as the point of departure for his business-cycle theory, the technique-bound EBC theories take those same relationships to be effective constraints throughout the course of the business cycle (pp. 337 and 341). These treatments of the relationship between EBCT and ABCT are mutually reinforcing and are consistent with my own Austrian perspective on New Classicism (Garrison 1986, pp 443-45; 1989, pp. 19-23).

Substance and Method

It is possible to describe a business cycle in such general terms that the description is consistent with both EBCT and ABCT yet distinct from, say, Keynesian and Marxian theories. The common ground can most easily be identified in terms of the reactions of market participants to a price change whose origins are possibly real, possibly monetary, or possibly both. Similarities between EBCT and ABCT reveal themselves despite the fact that the particular price featured in the two theorists is the price of output (in EBCT) and the price of credit (in ABCT).[1] Points of congruency derive from the fact, emphasized in each theory, that market participants cannot easily (or costlessly) distinguish between the real and the monetary component of the change.

[1]The difference in terms of the particular price featured in the two theories accounts for an anonymous referee's observation that in EBCT the cycle is initiated by a rise in the interest rate [in the sense of a greater spread between input and output prices], while in ABCT the cycle is initiated by a fall in the interest rate [in the sense of cheaper credit].

The appropriateness of the response to the price change clearly depends upon the origin, or cause, of the change. An alteration in the underlying economic realities requires accommodation in real terms; monetary manipulation does not. Until the true nature of the price change is known, market participants will respond, at least in part, as if its causes were real. If the price change is, in fact, purely of monetary origins, then market participants will eventually readjust their activities in recognition of the actual, and pre-existing, economic realities. Thus, both EBCT and ABCT allow for a certain non-trivial and systematic non-neutrality of money during the period the economy is adjusting to an increased money supply.[2]

If EBC models could be taken at face value, the substantive differences between these models and Austrian theory would be easy to identify. In their most basic formulations (e.g., Barro 1981, pp. 80-83; and Hayek 1967, pp. 69-100), the initial response by market participants takes the form of an increase in labor services in response to high nominal output prices (in the EBC model); of an inherently unsustainable capital restructuring in response to an artificially low interest rate (in ABC theory). The subsequent response takes the form of a reversion to the initial level of labor services (in the EBC model), of a time-consuming liquidation of malinvested capital (in ABC theory). If these differences were the essential ones separating EBCT and ABCT, then the two theories could rightly be viewed as variations on a theme. And there is even some overlap in the variations as evidenced by discussions in the Austrian literature (e.g., Hayek 1967 and 1975) of the misdirection of labor and by developments within New Classicism which incorporate a capital stock variable (e.g., Lucas 1981, p. 179ff) and even "time-to-build" considerations (Kydland and Prescott [1982], as discussed by Lucas [1987]). Seemingly, EBCT and ABCT have much common ground.

But EBC models are not to be taken at face value. An EBC model is not offered as a theoretical account of some actual or possible historical episode. Rather, EBCT is only a modeling technique designed to demonstrate that a model economy can exhibit cyclical

[2]Extending the comparison to encompass Monetarism would involve too great a detour. In general, the qualifier "non-trivial" distinguishes this general description from the Monetarist view, which characteristically trivializes all short-run monetary non-neutralities with the label "first-round effects." Otherwise, the Friedman-Phelps treatment of short-run and long-run Phillips curves identifies a market process similar to the ones identified by EBCT and ABCT. This similarity is the focus of Bellante and Garrison (1988). But for an argument that the Friedman-Phelps dynamics is not an integral part of Monetarism, see Garrison (1991).

patterns in macroeconomic variables without violating the constraints imposed by general equilibrium theory. Equilibrium conditions hold for the model economy throughout the course of the cycle. In the New Classical view, the constraint imposed by the logic of general equilibrium confers theoretical respectability on the model; econometric testing as suggested by exercising the model economy and performed on extended time-series data descriptive of the real-world economy establish the model's empirical relevance.

This New Classical technique is foreign to ABCT, which treats the business cycle as an instance of systematic intertemporal *dis*equilibrium. In the Austrian formulation, the very language used to describe the course of the cycle is the language of disequilibrium: credit expansion suppresses the rate of interest below its natural level; the artificially low interest rate results in forced saving, which unduly restricts consumption; capital is malinvested; the boom is unsustainable; entrepreneurial errors are revealed in the inevitable bust. These notions cannot be described in the language of equilibrium without doing violence to their meaning.

Old and New Uses of Equilibrium

The Austrians, particularly Hayek, have made explicit but limited use of the concept of equilibrium in the exposition of their business-cycle theory. But, as van Zijp, Kim, and Butos have noted or implied, the limited use made does not qualify ABCT as a specific instance of EBCT. For the Austrians, the appropriate role for some suitable equilibrium construct is mandated by a self-evident methodological consideration: Any account of the origins of phenomena characteristic of business cycles, such as an uncoordinated capital structure, massive unemployment of labor, and other instances of widespread resource idleness, cannot assume those phenomena to exist at the beginning of the account. Theory, in short, is logically incapable of explaining what it assumes. Hayek (1948, p. 34) undoubtedly had Keynes in mind when he insisted that before we can even ask how things can go wrong, we need to understand how things could ever go right.

The very meaning of disequilibrium in the context of business-cycle theory derives from its being compared to some relevant equilibrium. That is, adopting a suitable equilibrium concept establishes the initial conditions and facilitates the analysis of an ensuing disequilibrium caused, say, by the central bank's cheap-credit policy. It allows our understanding of the particular kind of disequilibrium associated with the business cycle to be dovetailed with our understanding of the equilibrium that would have prevailed in the absence

of the monetary disturbance.

This essential but limited role for an equilibrium concept is not at all what the New Classical economists have in mind. For them (e.g., Lucas 1981, pp. 287 and *passim*), the concept of disequilibrium is of no use in understanding business cycles. The phrase "equilibrium theory" is pleonastic and means, simply, "theory"; "disequilibrium theory" is self-contradictory and can only mean "non-theory." The methodological precept that underlies EBCT is that each phase of the business cycle can be understood as an equilibrium set of prices and quantities, or it cannot be understood at all.

The all-inclusiveness of the equilibrium concept in New Classicism warns against comparisons of EBCT and ABCT that ignore the radically different methodological contexts. For instance, the inevitable bust that figures importantly in ABCT cannot easily be translated into the language of EBCT. For the Austrians, "equilibrium bust" is a term at war with itself; for the New Classicists, "disequilibrium bust" can only mean an unexplainable downturn (cf. Lucas 1981, pp. 225 and 231).

The Evenly Rotating Economy and the Fully Articulated Artificial Economy

Criticism of even the limited use of equilibrium made by the Austrian theorists can help to assess the fruitfulness of "equilibrium theorizing" in each context. Cowen and Fink (1985) find a contradiction between ABCT and the assumed initial conditions that link business-cycle theory with established price theory. They base their case on the most thorough-going concept of equilibrium in the Austrian literature, the Evenly Rotating Economy (ERE) so designated by Mises (1966, pp. 244-50). The complete coordination of all economic activities, which defines the ERE, precludes disequilibrium of any sort. The ERE allows for no uncertainty and hence has no role for the real-world institutions that help market participants deal with uncertainty. Monetary institutions and even money itself are no part of the ERE—hence the contradiction between a theory of money-induced disequilibrium grafted onto a concept of moneyless general equilibrium.

All Cowen and Fink have shown, however, is that Mises's ERE is not the appropriate equilibrium concept to serve as the initial conditions for ABCT. It is not necessary for the initial conditions to preclude *all* kinds of disequilibria but only to preclude systematic intertemporal disequilibrium—the kind of disequilibrium for which the theory itself accounts. This limited equilibrium construct complies fully with both the logic and the spirit of ABCT.

In view of the differing uses of equilibrium constructs in EBCT and in ABCT, contradictions of the sort identified by Cowen and Fink are much more telling against EBCT. The equilibrium construct that underlies both the initial conditions and all subsequent phases of the business cycle is a clear rival for the ERE in terms of its severity and other-worldliness. The cyclical variations that mimic the ups and downs in a real-world economy play themselves out in the context of a "Fully Articulated Artificial Economy" (FAAE), in which all markets continuously clear (as in Lucas 1981, pp. 271 and *passim*; and in Barro 1981, p. 81-83).

In order that full articulation be possible, the FAAE must assume away virtually all the features that give economics its subject matter. The FAAE disallows diversity among market participants in terms of knowledge and entrepreneurial ability. Output typically takes the form of a single service indistinguishable from the labor that renders it. The price system is non-existent except in the trivial sense of the ratio of output to leisure. And except in some similarly trivial sense, there is no role in the FAAE for a monetary institution or even for money itself. Yet, a monetary impulse is what triggers the cyclical variation of output and prices. Money is injected into an artificial economy that has no non-trivial use for money.[3]

Any attempt to articulate the process through which a hypothetical monetary injection affects output and prices in the artificial economy inevitably draws on our understanding of how actual monetary injections affect the real-world economy. The characteristic effects of an actual monetary injection derive largely from the nature and limitations of the price system. Broadly conceived, the price system serves as a communications network, but any individual price signal, by itself, may be ambiguous. This limitation in the ability of the price system to communicate real changes in economic conditions underlies monetary theory from Richard Cantillon to David Hume to Friedrich Hayek. Hayek's "The Use of Knowledge in Society," (in Hayek 1948) virtually redefines the economic problem as a communications problem inherent in a society in which knowledge is widely dispersed among market participants.

Specifically underlying EBCT is the fact that market participants

[3]Garrison (1989, p. 21) discusses what, in effect, is the Cowen-and-Fink contradiction in the context of Barro's back-scratching economy. Lucas (1987) attempts to "motivate the use of money" (p. 74) by introducing the concept of "cash goods," which—for reasons plausible enough to participants in the real-world economy—can be purchased only with cash.

have no timely and failsafe method of distinguishing between real and monetary components of a price change. But a FAAE in which there is no dispersion of knowledge and only one output has little need for communications and even less scope for ambiguity. The communications network exists, if at all, in its most degenerate form.

Scope for ambiguity of a price change is incorporated into EBC models by a technique originated by Edmund Phelps (1970, pp. 6-7). A global economy consists of numerous local, or island, economies, such that inter-island communication lags intra-island communication. Such models allow economic agents to observe price changes on their own island instantly and price changes on other islands belatedly. Ambiguity about the true meaning of price changes characterizes the period marked by the instantly perceived and the belatedly received price information.

Economic agents would react one way if a particular price change is attributable to monetary expansion, which is presumed to affect all islands equally, and another way if the change is attributable to underlying economic conditions, which is presumed to affect only the one island. But during the wait for the inter-island information, which will clarify the meaning of the local price change, economic agents must react in *some* way. Possible reactions during the period of partial information is constrained by the assumptions of optimizing behavior and continuous market clearing. The supposed behavior of the model's agents, however, depends upon whether the implicit reasoning has a supply or a demand orientation (Friedman 1978, p.76). That is, a supply-side adjustment plus assumed market clearing and a demand-side adjustment plus assumed market clearing imply different behavior and different outcomes. While the virtue of the FAAE is believed to lie in its being fully articulated, the behavior of its inhabitants varies substantially from one model to another and invariably leaves much to the imagination.

Difficulties in understanding why agents in the FAAE would use money at all are transformed into difficulties in understanding how (or why) these agents would react to monetary expansion. Accounts of their supposed behavior derive their plausibility from—rather than confer their plausibility upon—our understanding of the effects of monetary expansion in real-world economies. The FAAE, then, which contains just the sort of contradiction identified by Cowen and Fink, cannot help us understand the real world. Rather, it is the implicit and intuitive understanding of the effects of actual monetary expansions that has concealed the contradictory construction of the EBC models.

The Wicksell Connection

Except for Marxian theories, nearly all modern theories of the business cycle have essential elements that trace back to Knut Wicksell's turn-of-the-century writings on interest and prices. Austrians, New Classicists, Monetarists, and even Keynesians can legitimately claim a kinship on this basis. Accordingly, the recognition that both the Austrians and the New Classicists have a Swedish ancestry does not translate into a meaningful claim that the two schools are essentially similar. To the contrary, identifying their particular relationships to Wicksellian ideas, like comparing the two formally similar business-cycle theories themselves, reveals more differences than similarities.

Central to Wicksell's treatment of the relationship between prices and interest was the distinction between the natural rate of interest and bank rate of interest and the recognition that the bank rate can diverge from the natural rate. These are the ideas that directly influenced Mises and subsequent Austrian theorists. The institutional setting in which the interest rate reflects both the intertemporal preferences of market participants and the actions of policy makers, then, figures importantly in the Austrian account of the artificial boom and inevitable bust. Fritz Machlup (1976, p. 23) accurately summarized the Austrian view with the statement that "*monetary* factors *cause* the cycle but *real* phenomena *constitute* it." But to establish the essential difference between the Austrians and the New Classicists, it needs to be added that the focus of the Austrian theory is on the actual market process that translates the monetary cause into the real phenomena and hence on the institutional setting in which this process plays itself out.

The New Classicists deliberately abstract from institutional considerations and specifically deny, on the basis of empirical evidence, that the interest rate plays a significant role in cyclical fluctuations (Lucas 1981, p. 237 15n). Thus, Wicksell's *Interest and Prices* is at best only half relevant to EBCT. More relevant, in establishing the Wicksell connection, is Ragnar Frisch's (1933) work on "impulse and propagation." This separation of issues in Frisch's writing formally parallels Machlup's characterization of the Austrian view, but the difference in the extent of the separation translates into a fundamental difference between EBCT and ABCT.

Frisch (1933, p. 198) took as his inspiration a metaphor that he attributed to Wicksell. Cyclical fluctuations in economic activity is mimicked by the motion of a child's rocking horse. The metaphor is intended to suggest that understanding the horse's rocking, or even

its propensity to rock, requires an analysis of its structure. Further, the questions "What sets the horse to rocking?" and "What are the structural parameters that underlie its rocking motion?" are completely separate. The impulse that causes the motion need not have any particular relationship to the activated propagation mechanism that constitutes the motion. Taking the Wicksellian metaphor as their cue, the New Classicists are led away from the pre-eminent Austrian concern about the actual market process that transforms cause into effect and towards the belief that a full specification of the economy's structure, which is possible only in the context of an artificial economy, can shed light on an effect whose nature is fundamentally independent of the cause.[4]

Dichotomizing the analysis as it relates either to questions about the impulse that initiates cyclical movements or to questions about the economic structure in which cyclical movements can occur has allowed for developments within New Classicism that transcend the traditional categories of business cycle theories. Theories traditionally categorized as "monetary" and "non-monetary" can now belong to the same category. Within the context of New Classicism, Real Business-Cycle Theory (RBCT) is distinguished mainly in terms of the nature of the impulse that is thought to set the economic structure into its cyclical motion. In RBCT, business cycles are initiated by real supply shocks rather than by monetary shocks. And while the hard-drawn version of RBCT's propagation mechanism (Long and Plosser 1983), assigns no role at all to money, more accommodating accounts (King and Plosser 1984) allow for money and credit to become involved through "reverse causation."

Dispute or agnosticism about the true nature of the impulse has only a minimal effect on the empirical research inspired by the monetary EBCT or the non-monetary RBCT. Lucas (1987, p. 70-71), for instance, favors the former over the latter on the basis of the comparison of the amplitude of cyclical fluctuations with the magnitude of nineteenth- and twentieth-century supply shocks. The fact that monetary considerations can be ruled in or ruled out on such grounds suggests that money and monetary institutions are not nearly so central to New Classical theory as they are to Wicksellian and Old Austrian theories.

[4]In his historical perspective Kim (1988) gives some play to Frisch and the rocking horse as a link between Wicksell and EBCT and argues that EBCT is a "child of the Cowles Commission method," which was the method pioneered by Frisch.

Broadly Historical or Narrowly Empirical Analysis

Fundamental differences between the process analysis of ABCT and the structural analysis of EBCT imply corresponding differences in the respective historical, or empirical, treatments of cyclical fluctuations. The Austrian theory finds empirical expression in actual historical episodes in which a credit-driven boom is followed by an economywide bust. The policies of the Federal Reserve System during the 1920s in the light of the subsequent crash in 1929, for example, provide primary raw materials for an historical study. The theory establishes the causal connection between the boom and the bust and explains many of the features of both, such as the movements of capital-goods prices relative to consumer-goods prices during the boom, the high real interest rate immediately preceding the bust, and the disproportionately low value of long-term capital goods during the depression.

In the spirit of Mises (1969), theory and history are shown to yield complementary accounts of a particular instance of boom and bust, an instance that is understood to have occurred independent of our theoretical understanding of it. And the process analysis that provides the theoretical understanding requires, as its empirical complement, an economic history that gives full play to monetary institutions, policy goals, and beliefs held by opinion makers, public officials and key Federal Reserve operatives, as well as to the more narrowly conceived macroeconomic data.

The structural approach of EBCT leads to a fundamentally different kind of empirical research. Wicksell's rocking horse can help to explain. The motion of the rocking horse can be understood and predicted exclusively on the basis of knowledge of its structure. And in principle, as applied literally to a rocking horse, knowledge of the structure can be acquired without the horse rocking at all. Values of a few structural parameters, such as weight, center of gravity, and curvature of the runners, are enough to fully specify the parameters of the horse's motion.

Structural properties of the economy, however, cannot be measured independently of relative movements of economic variables. But the relative movements needed for the identification of the economic structure need not be movements that any contemporary historian has identified as a boom-bust cycle in the sense of ABCT. All that is required is that there be enough variation in the independent variables to allow for statistically significant estimates of the system's parametric values. In other words, the metaphorical rocking

horse cannot be observed directly by econometricians. Available data consist only of the points of contact between runners and floor. Thus, inferring the structure from the data requires that there be some movement in these points of contact.

Since the needed variation in the independent variables falls as the sample size increases, the prospects for identifying the economic structure increase with the length of the period that serves as the basis for the empirical research. The typical data base used is the time series of macroeconomic variables from the end of World War II to the latest quarter for which data are available. Parameter estimates, then, are based upon data for the entire period whether or not the constituent sub-periods were part of a noticeable or a not-so-noticeable cyclical episode. Revealingly, the most noticeable of all cyclical episodes, the Great Depression, is viewed by New Classicists as an outlier that defies explanation by existing economic analysis (Lucas 1981, p. 284).

Contrasting examples of Austrian-based historical research and New Classicist-based empirical research are easily identified. Lionel Robbins's *The Great Depression* (1934) and Murray Rothbard's *America's Great Depression* (1975) clearly exemplify the analysis of a particular historical episode as the empirical counterpart of ABCT. The econometric testing of hypotheses consistent with EBCT is exemplified by Robert Barro's "Unanticipated Money Growth and Economic Activity in the United States" (in Barro 1981) and Thomas Sargent's "A Classical Model for the United States" (1976), both of which test an extended time series for relative movements in macroeconomic variables thought to be characteristic of cyclical activity. An interesting hybrid is Charles Wainhouse's "Empirical Evidence for Hayek's Theory of Economic Fluctuations," in which a number of hypotheses derived from ABCT are tested on the basis of monthly data for the period January 1959 through June 1981. There seems to be no hybrid of the other sort, in which EBCT is shown to illuminate some historical account of a particular cyclical episode.

Concluding Remarks

EBCT in its Lucas and Barro formulations and ABCT as spelled out by Mises and Hayek have a certain formal similarity. The two theories both owe something—though something different—to Knut Wicksell. Policy implications of the two theories, not discussed in this article, are clearly similar. Yet, in terms of the well recognized methodological distinctions that separate the Austrian school from the modern orthodoxy, EBCT and ABCT are worlds apart. Theorists who are more at home with ABCT than with EBCT will do well, though, to monitor

developments of EBCT. These New Classical models continue to provide a forum for Old Austrian ideas.

References

Barro, Robert J. 1981. *Money, Expectations and Business Cycles*. New York: Academic Press.

Bellante, Don, and Roger W. Garrison. 1988. "Phillips Curves and Hayekian Triangles: Two Perspectives on Monetary Dynamics." *History of Political Economy* 20 no. 2 (Summer).

Butos, William. 1985. "Hayek and General Equilibrium Analysis." *Southern Economic Journal* 52, no. 2 (Oct.): 332-43.

Cowen, Tyler, and Richard Fink. 1985. "Inconsistent Equilibrium Constructs: The Evenly Rotating Economy of Mises and Rothbard." *American Economic Review* 75, no. 4 (Sept.): 866-69.

Friedman, Benjamin M. 1978. "Discussion" [of Robert E. Lucas and Thomas J. Sargent, "After Keynesian Macroeconomics"]. In *After the Phillips Curve: Persistence of High Inflation and High Unemployment*. Conference Series No. 9, Federal Reserve Bank of Boston. Pp. 73-80.

Frisch, Ragnar. 1933. "Propagation Problems and Impulse Problems in Dynamic Economics." *Economic Essays in Honour of Gustav Cassel*. London: Allen and Urwin. Pp. 171-205.

Garrison, Roger W. 1986. "Hayekian Trade Cycle Theory: A Reappraisal." *Cato Journal* 6, no. 2 (Fall): 437-53.

———. 1989. "The Austrian Theory of The Business Cycle in the Light of Modern Macroeconomics." *Review of Austrian Economics* 3: 3-29.

———. 1991. "Is Milton Friedman a Keynesian?" In *Dissent on Keynes*. Mark Skousen, ed. New York: Praeger Publishers. Forthcoming.

Hayek, Friedrich A. 1948. *Individualism and Economic Order*. Chicago: University of Chicago Press.

———. [1935] 1967. *Prices and Production*. 2nd ed. New York: Augustus M. Kelley.

———. 1975. *Full Employment at Any Price*? Occasional Paper 45, London: Institute of Economic Affairs.

Kim, Kyun. 1988. *Equilibrium Business Cycle Theory in Historical Perspective*. Cambridge: Cambridge University Press.

King, Robert G., and Charles I. Plosser. 1984. "Money, Credit, and Prices in a Real Business Cycle." *American Economic Review* 78, no. 3 (June): 363-80.

Kydland, Finn E., and Edward C. Prescott. 1982. "Time to Build and Aggregate Fluctuations." *Econometrica* 50, no. 6 (Nov.): 1345-70.

Lucas, Robert E. Jr. 1981. *Studies in Business Cycle Theory*. Cambridge, Mass.: M.I.T. Press.

———. 1987. *Models of Business Cycles.* Oxford: Basil Blackwell.

Long, John B., and Charles I. Plosser. 1983. "Real Business Cycles." *Journal of Political Economy* 91 (1): 39-69.

Machlup, Fritz. 1976. "Hayek's Contribution to Economics." In *Essays on Hayek.* Fritz Machlup, ed. Hillsdale, Mich.: Hillsdale College Press. Pp. 13-59.

Mises, Ludwig von. 1966. *Human Action: A Treatise on Economics.* 3rd rev. ed. Chicago: Henry Regnery.

———. 1969. *Theory and History: An Interpretation of Social and Economic Evolution.* New Rochelle, N.Y.: Arlington House.

Phelps, Edmund S. 1970. "The New Microeconomics in Employment and Inflation Theory." In *Microeconomic Foundations of Employment and Inflation Theory.* New York: Norton. Pp. 1-23.

Robbins, Lionel. 1934. *The Great Depression.* London:MacMillan.

Rothbard, Murray N. [1936] 1975. *America's Great Depression.* Kansas City: Sheed and Ward.

Sargent, Thomas J. 1976. "A Classical Macroeconomic Model for the United States". *Journal of Political Economy* 84 (2): 207-37.

Wainhouse, Charles E. 1984. "Empirical Evidence for Hayek's Theory of Economic Fluctuations." In *Money in Crisis: the Federal Reserve, the Economy, and Monetary Reform.* Barry N. Siegel, ed. Cambridge, Mass.: Ballinger Publishing. Pp. 37-71.

Wicksell, Knut. [1898] 1936. *Interest and Prices.* New York: Macmillan.

Zijp, R. W. van. 1990. "Why Lucas is not a Hayekian." Research Memorandum Series. No. 33. Tinbergen Instituut.

Review Essay

Marxism, Capitalism and Mercantilism

David Osterfeld*

Traders Versus the State: Anthropological Approaches to Unofficial Economics, by Gracia Clark (Boulder, Colo.: Westview Press, 1988).

Traders Versus the State: Anthropological Approaches to Unofficial Economics is at once both a frustrating book to read and a fascinating book to review. One might suppose from its title that the book deals with conflict between government officials on the one hand and those engaged in trading or merchandising on the other. And one might suppose from reading the subtitle that the book focuses on the activities of those in the "black" or "informal" markets. The book, however, does not deal with trade or traders, as such, but with the activities of the small-scale street vendor. Nor is its focus solely on the "illegal" or "black market" or "informal sector" activities. Several of the articles deal specifically with the activities of "licensed street vendors." The meaning of "unofficial" is made clear in the introductory chapter by Gracia Clark.

The purpose of the book is to analyze the "petty commodity mode of production." The term "traders" is restricted to those engaged in small-scale production and commerce, in particular the street vendors; the term "unofficial" means those economic activities that pose a threat to the position of the more established, capital-intensive middle- and upper-class merchants. The activities of the "petty commodity traders" jeopardize the established positions of the "capitalists" or "bourgeoisie." Since the latter tend to control the state, they are able not only to defend their own position by using the coercive arm of the state to regulate and control the activities of the petty traders but, according to Johanna Lessinger (p. 141), they are even

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able to enhance their positions by using the state to "appropriate the often sizeable patches of real estate on which existing markets are located," thereby facilitating "the process of capitalist development." Thus, she concludes, "the process of capitalist development has a very direct role in accentuating class differences," as the bourgeoisie continually solidify and improve their positions at the expense of the poor, whose position deteriorates over time. The origins and growth of "petty commerce" is traceable, according to Florence Babb (p. 30), "to the contradictory, and uneven development of capitalism. . . ." In short, the real enemies of the "traders," who are actually small scale street vendors, is not so much the state but the "bourgeoisie" who control the state and use it for their own purposes. *Traders Versus the State* would be more accurately entitled: *Street Vendors Versus the Middle Class Merchants*. A more appropriate subtitle would be: *A Marxist Viewpoint*.

The lengths to which one can go in order to blame all evils on "capitalism" is illustrated in the article on the "Informal Trade Sector in Tanzania" by Donna Kerner. Kerner notes that President Julius Nyerere committed Tanzania to a policy of "socialist development" as early as 1967, required peasants to market their food crops through "parastatal crop authorities," i.e., state-run marketing boards; introduced a policy of massive price controls; and nationalized the banks and nearly all businesses and labor unions. These policies resulted in massive shortages and extensive black market activities.

The government responded to the economic crisis by mandating that "every able-bodied citizen" be "engaged in productive labor," and defining "labor" so as to exclude traders or "intermediaries." It then began a massive campaign of arresting "jobless loiterers" and sending them to work on government-owned plantations. Within three months well over 15,000 "random arrests" had been made. This only aggravated the shortages, making the economic crisis more severe.

The government responded to the extensive black-market activities by introducing a program known as "The War Against Economic Sabotage." The program mobilized the police and military to arrest nearly everyone engaged in trade as an "enemy of socialism." Eventually, with economic output below 50%, many essential items completely disappearing, and the country on the brink of massive starvation, Tanzania, under pressure from the World Bank and the IMF, abandoned many of its interventionist policies. The result, according to Kerner, is that "recent reports indicate that imported and local goods now flood the government stores." Yet, astonishingly, the Tanzanian tragedy is blamed not on Nyerere's commitment to socialism; nor is it blamed on the interventionist measures designed to elimi-

nate private trading. It is blamed on *capitalism*! Tanzania exists on "the periphery of international capitalism," she says, and what took place in that country represents "a distorted form of capitalism."

The Marxist jargon that permeates most of the articles in *Traders Versus the State* is irritating, as is the Leninist penchant for referring to any multinational corporation such as Purina or Nestle as a "monopoly." (Although the two notable exceptions are the superb articles on the economics and strategies of street hawking in Hong Kong by Josephine and Alan Smart. The articles deal with such things as the use of roof-top spotters, armed with walkie-talkies, to provide hawkers with a sort of early-warning system when the police are approaching. The articles, it should be noted, are devoid of ideological terminology.) But in order to understand the book's significance it is first necessary to clarify two distinct approaches or "paradigms" to political economy: the Marxist and the classical liberal.

Marxism, Liberalism and Power

Nearly all the articles in *Traders Versus the State* are based on the Marxist paradigm. There are numerous references to class conflict and the contradictions of capitalism. Economics is viewed as a system of power relations, or as a zero-sum game, in which one person's gain is offset by another's loss. Since both the market and the state are tools which are used by the wealthy elite to protect and enhance their own privileged positions by oppressing and exploiting the poorer, working class, there is no need to distinguish between them. The market no less than the state is an institution infused with power relationships.

This, of course, is in direct contrast to the liberal paradigm in which power relations simply do not exist on the market. The market is nothing more than the nexus of voluntary exchange. And precisely because it is voluntary, any exchange must therefore be to the mutual benefit of all parties concerned; if this were not the case, then the exchange would not be consummated. Thus, for the liberal, exchange is a positive-sum process.

Capitalism and Mercantilism

But these two outlooks are not as incompatible as they may appear at first. For the liberal free trade is positive-sum, but coerced trade is not. While the market is a purely voluntary institution, it is in the state—the apparatus of compulsion and control—that power is concentrated. This means that the distinction between the market and the state, far from being meaningless as it is for the Marxist, is, for the liberal, fundamental. Since the Marxist views both the market

and the state as nothing more than alternative methods by which the ruling class is able to dominate and exploit the rest of society, he is unable to distinguish between the market process itself, and the effect of government restrictions on the market. And this, in turn, means that the Marxist cannot distinguish between what is commonly referred to as capitalism, or a system of free trade, and mercantilism, or a system in which the operation of the market is impeded by extensive government restrictions for the benefit of the ruling group. It is important to realize that it is not simply that the Marxist does not distinguish between capitalism and mercantilism. It is that the Marxist paradigm quite literally renders him *incapable* of making such a distinction. As Robert Schenk (1986, p. 676) has put it:

> At the center of neoclassical analysis is mutually advantageous exchange. At the center of radical [Marxist] analysis are power relationships in the form of class conflicts. Any framework or paradigm focuses attention on certain features of the subject under investigation. Imperialism, exploitation and alienation flow readily from a framework emphasizing power. . . . To extend the framework of power relationships into socialism would deny the essence of what radicals want to achieve with socialism—a society without power relationships. . . . [But] if a theory of socialism is based on a framework other than power relations, another problem will arise. Trying to integrate such a theory with the core of radical analysis could force changes in the original paradigm. For example, the radical literature has rejected theories of market socialism because they need the concept of voluntary exchange, and voluntary exchange does not fit well with radical analysis.

In contrast, the strength of the liberal paradigm lies in precisely its ability to provide an analytical distinction between voluntarism and power, market, and government. This distinction has been at the center of liberal thought from its very inception. Adam Smith, for example, wrote his massive *Wealth of Nations* specifically to refute the doctrine of mercantilism. Smith argues that under mercantilism monopolistic privileges were granted to a few favored firms, permitting them to sell at exorbitant prices, while tariffs were enacted to keep out foreign competitors. But if a nation were to eliminate imports it would need to have its own exclusive colonies in order to obtain raw materials. The power of the state, of course, was ideally suited to carve out and police the resulting colonial system. Smith charged that the mercantilist system not only hurt those in the colonies but the workers in the mother country as well. Its only beneficiaries, he says, were "the rich and powerful." Permitting the

colonists to buy only from merchants in the mother country enabled those merchants to sell at monopoly prices in the colonies. The colonists, therefore, were unable to pay for the administration of colonial government as well, so the workers in the home-country were heavily taxed to defray this cost, thereby perpetuating the profits of the state-favored merchants. The effect of mercantilism, said Smith, was that "the interest of one little order of men in one country" was promoted at the expense of "the interests of all other orders of men in that country and of all other orders of men in all other countries" (Smith 1776, p. 578). What Smith urged was the replacement of mercantilism by free trade. This, of course, would logically entail the abandonment of the entire colonial empire and Smith did not shrink from drawing that conclusion.

One finds similar statements in the writings of other early liberal thinkers including J. B. Say, Charles Comte, and Charles Donoyer in France (Weinberg 1978; Liggio 1977), John Trenchard and Thomas Gordon (1965; this is the first reprinting of the *Cato Papers* since 1755), and Richard Cobden and John Bright (Read 1968) in England, and William Leggett and the Locofocos (Leggett 1984; Dorfman 1946, pp. 652-61; Hofstadter 1948, pp. 45-62) as well as the quasi-liberal, John C. Calhoun (1953; see also Hofstadter 1948, pp. 68-92) in America, to name but a few. Moreover, the distinction between market and government, between voluntarism and power, has remained at the core of liberal thought down to the present. For example, Ludwig von Mises has written (1978, pp. 3-4) that:

> Our age is full of serious conflicts of economic interests. But these conflicts are not inherent in the operation of the unhampered capitalist economy. They are the necessary outcome of government policies interfering with the operation of the market . . . They are brought about by the fact that mankind has gone back to group privileges and thereby to a new caste system.

While Mises sees peace as the necessary precondition for free trade, mercantilism, he says tersely, is "the philosophy of war." Similarly, Murray Rothbard (1970, pp. 194-96) draws a sharp contrast between the market principle, personified by individual freedom, mutual harmony and peace, and the state, or "the hegemonic principle," characterized by "coercion," the "benefit of one group at the expense of another," "caste conflict," and "war." Similarly, Milton Friedman is fond of drawing attention to the fact that while such policies as tariffs are "pro-business," they are "anti-free trade."

The inability of the Marxist paradigm to distinguish between capitalism and mercantilism has resulted in an unfortunate termino-

logical confusion which has meant that classical liberals and Marxists have often talked past one another when they were, in fact, in substantial agreement, at least on certain key issues regarding the state, such as its role in generating class conflict and turning trade into a situation in which one group benefits at the expense of another. This is precisely the case with *Traders Versus the State*. What the authors of *Traders Versus the State* condemn as "capitalism" is nearly identical to what liberals criticize as "mercantilism."

Interventionism and Social Conflict

The problem, so graphically underscored in *Traders Versus the State*, is that in today's world, trade, especially in the Third World, is seldom free. The significance of *Traders Versus the State* is to show that in those societies in which the economy is highly politicized, where what one gets is determined largely if not solely by the state, one cannot say that "I am going to live my life in this way and allow others to live their lives in their own way." Rather, one must say that "In order to live my life in this way I must first get control of the state and impose my lifestyle on everyone else." As a result, control of the state becomes a prerequisite for obtaining any of one's goals. The result is that what would otherwise be handled by peaceful cooperation between individuals is transformed into bitter conflict between groups for control of the state. What would otherwise be handled through the mechanism of voluntary exchange for mutual benefit is turned into coerced exchange in which one individual or group benefits itself at the expense of everyone else.

A vital question is who is likely to get control of the state? As the articles by Florence Babb on Peru and Barbara Lessinger on India make clear, it is the wealthy merchants, or "capitalists," who are often in a position to use their wealth to gain control of the state. But it is here that the distinction between capitalism as an economic system and the actions of the so-called "capitalists" is fundamental. The "capitalists" have little interest in free trade, as such; their goal is to make money. In fact, it is because the never-ending threat of competition on the free market renders their position perpetually insecure that the "capitalists" strive to control the state. Put differently, far from the market being an institution of power on a par with the state, as the Marxists believe, the only reason the "capitalists" seek to control the state is precisely because the vaunted notion of "market power" or "economic domination" simply does not exist on the unhampered market. Thus, it is only through control of the state that the "capitalists" are able to control access to the market, thereby institutionalizing their economic positions.

But, perhaps ironically, *Traders Versus the State* also shows that the state may, and has, been dominated by a very different group. This group despises trading not for pragmatic but for ideological reasons, viz., because of its commitment to socialism or communism. Traders are seen as useless intermediaries and trade as exploitation which must be stamped out. The extent to which the war against trading will be taken by its ideological enemies—including the demolition of markets and the beating and even killing of the traders—is graphically documented in the articles by Donna Kerner on Tanzania and Gracia Clark on Ghana.

Conclusion

Two things come through crystal clear in *Traders Versus the State*. The first is that regardless of whether the state is controlled by the wealthy capitalists or the ideological socialists, the result of government economic intervention is the same: massive shortages, extensive black-market activities and social conflict. As Clark says of the situation in Ghana, "price controls brought chaos" (p. 63). The second is that when the controls are lifted all three of the problems are reduced in intensity or even relieved altogether. As Babb has observed, with "the elimination of many price controls" in Tanzania, "goods now flood the government shops" (p. 51). These are certainly astonishing conclusions for a book written largely from a Marxist perspective.

In the final analysis, the authors' candid acknowledgement of the indispensable role of the free market says far more about the intellectual bankruptcy of Marxian economics than a dozen books on that topic.

References

Calhoun, John C. [1851] 1953. *A Disquisition on Government*. Indianapolis: Bobbs-Merrill.

Dorfman, Joseph. 1946. *The Economic Mind in American Civilization, 1606-1865*. Vol 2. New York: Viking Press.

Hofstadter, Richard. 1948. *The American Political Tradition*. New York: Vintage.

Leggett, William. 1984. *Democratic Editorials, Essays in Jacksonian Political Economy*. Indianapolis: Liberty Press.

Liggio, Leonard. 1977. "Charles Donoyer and French Classical Liberalism." *Journal of Libertarian Studies* (Summer): 153-78.

Mises, Ludwig von. 1978. *The Clash of Group Interests and Other Essays*. New York: Center for Libertarian Studies.

Read, Donald. 1968. *Cobden and Bright*. New York: St. Martin's Press.

Rothbard, Murray N. 1970. *Power and Market: Government and the Economy*. Menlo Park, Calif.: Institute for Humane Studies.

Schenk, Robert. 1986. "Communication: Keith Griffin and John Gurley, 'Radical Analyses of Imperialism, the Third World, and the Transition to Socialism: A Survey Article'." *Journal of Economic Literature* (June): 676.

Smith, Adam. [1776] 1937. *The Wealth of Nations*. Edwin Cannan, ed. New York: Modern Library.

Trenchard, John, and Gordon, Thomas. [1755] 1965. *The English Libertarian Heritage*. Indianapolis: Bobbs-Merrill.

Weinberg, Mark. 1978. "The Social Analysis of Three Early 19th Century French Liberals: Say, Comte, and Donoyer." *Journal of Libertarian Studies* (Winter): 45-63.

Book Reviews

Discovery, Capitalism, and Distributive Justice. By Israel M. Kirzner. New York: Basil Blackwell, 1989.

Israel Kirzner is a name familiar to all readers of the *Review of Austrian Economics*. Kirzner's association with Austrian economics began with the inception of his long and distinguished career. He attended Ludwig von Mises's seminar at New York University for many years and received his doctorate under the aegis of the great Austrian. His thesis concerns the history of doctrine, and another of his works is a textbook on price theory. But the bulk of Kirzner's career has centered around entrepreneurship. His books and articles on the entrepreneur have secured his standing as the leading Austrian authority in this area.

A dominant theme runs through Kirzner's many contributions on his chosen topic. The entrepreneur, as Kirzner sees matters, is engaged in a process of discovery. He does not combine resources that already exist to produce goods whose patterns everyone knows. If he did, the existence of profit would be mysterious. Instead, he brings new resources into existence. Further, the class of entrepreneurs must not be confined to a relatively narrow group of businessmen. Kirzner regards the need for entrepreneurship as universal. Everyone must constantly adjust to unpredictable circumstances in an ever-changing world.

With the details of Kirzner's view of the entrepreneur, and his account of the market as a selective agent, we are not primarily concerned here. Though much of *Discovery, Capitalism, and Distributive Justice* is devoted to an account of precisely the topics just mentioned, the book's key theme (discovery?) lies elsewhere. Kirzner believes that his approach to entrepreneurship can be used to help resolve the much-debated issue of distributive justice.

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Kirzner advocates what he terms the "finders-keepers" principle. If someone picks up an unowned sea shell at the beach, does he not become its owner (p.69)? After all, he found it: even if other people admire the shell and wish it were theirs, the discoverer has been first in the field.

One might initially object to Kirzner that "finders-keepers" covers only the exceptional case—does it apply to anything besides small objects that stand ripe for the picking? Kirzner emphatically disagrees, and it is here that his view of the entrepreneur enters the scene. Someone who devises a new use for a good or service has in effect brought that good into existence. Kirzner of course does not ascribe to human beings the divine prerogative of creating matter out of nothing. Rather, he holds that someone who discovers a new use for a resource has brought the resource (not the matter of which it is composed) into being. Until someone realized that oil can be used as fuel, it had not begun to exist. The fact that it lay in the ground for untold thousands of years before its economic "creation" counts for nothing.

Kirzner uses this view of economic creation to extend the finders-keepers rule. Far from applying only to the odd object that someone picks up, the principle has near universal application. Whenever someone thinks of a new use for something, he has created an economic good. Finders-keepers applies and he owns what he has made.

Kirzner does not claim that his extension of finders-keepers suffices for a complete account of property rights. Quite the contrary, he thinks of it as a supplement to property rights accounts based on self-ownership, such as the theories of Murray Rothbard and Robert Nozick. It is, however, a supplement that threatens to devour the views it has been devised to aid.

Before turning to Kirzner's application of finders-keepers to natural rights, a preliminary task of analysis confronts us. How strong is the case for Kirzner's principle? To begin with the ordinary version of finders-keepers, before Kirzner extends it through his doctrine of resource creation, a crucial ambiguity lies at hand.

Someone who first picks up a stray object usually is recognized as its owner: so far, so good. But is this just a rule-of-thumb that applies only within a theory of property which has been constructed on other grounds, or does it apply whenever an unowned object is discovered? On the first alternative, finders-keepers is simply a summary of certain rules within a legal code. A rule might, for example, provide that if one discovers a wallet whose owner cannot be identified, one must first report the incident to the police. If no one claims it within a month's time, the finder owns it. This procedure is

simply an artifact of a particular legal system. Other legal codes might well handle the situation in a different way, e.g., by using lost property to reduce the tax burden.

On the second alternative, which Kirzner clearly favors, matters look different. Here, any object that someone first acquires becomes his. Finders-keepers is here not a mere addendum to a legal system but the sum and substance of the law code. If this is what Kirzner has in mind, in what sense has he arrived at an alternative to the standard Lockean account? As contemporary Lockean theories conceive of things, land and natural resources start unowned: the first person to meet the requirement of the principle of initial acquisition becomes the owner of what he has taken. Kirzner's finders-keepers doctrine, taken this way, just is a version of Lockean property rights.

I do not regard this as an objection to Kirzner, since the Lockean account seems to me correct. But Kirzner presents finders-keepers as an important supplement to the Lockean account, not a restatement of it. Although himself attracted to the Lockean view, he thinks that many people have moral intuitions that prevent them from fully accepting this doctrine. He notes, for example, that some people will refuse to accept exchanges based on wrong information as fully voluntary. People who take this position will reject the moral Nozick draws from his Wilt Chamberlain example. They will not agree that all bargains that begin from a just starting point preserve justice. They will instead wish to impose much more rigid requirements for voluntary exchange than libertarians have in mind.

Kirzner believes that finders-keepers enables advocates of a libertarian system to avoid a direct confrontation with these non-libertarian intuitions. Since nearly everyone accepts the finders-keepers rule, no direct challenge to moral intuitions need take place.

But this requires that finders-keepers be a different principle from a Lockean rule of acquisition. Otherwise, he would have no other reply than garden-variety Lockeans do to the moral intuitions he wishes to circumvent. What then is the difference between finders-keepers and other Lockean accounts? If finders-keepers is taken in a way sufficiently broad to have critical bite, I cannot see that it counts as anything but a variant of Lockean property-rights theory. Kirzner's obvious reply is to move between the horns of my dilemma. He might claim that finders-keepers has moral force independent of particular legal systems. At the same time, the principle is not a full-fledged theory of justice. I shall address this reply at a later point.

Kirzner might also reply that this objection misses the crucial

point. On his view, the creator of a new use for a resource brings the good into existence. This position does not feature in the standard Lockean presentations. Here lies the key to the mystery: once the creativity of the entrepreneurial discover is taken to heart, the true power of finders-keepers stands apparent. The structure of Kirzner's argument can be set out like this: (1) practically everyone acknowledges the finders-keepers rule; (2) the scope of the rule is far-reaching, because the discoverer of a new use for a resource creates the resource; (3) the finders-keepers rule resolves issues of distributive justice in a way Lockeans will favor, but without relying on controversial moral assumptions. The sketch of the argument I have just presented does not purport to be a rigorous deduction. I have devised numbered premises simply for convenience.

This argument is less than fully convincing, although its force cannot be dismissed. If people come to realize that finders-keepers has much greater scope than they at first imagined, it does not follow that they will accept the new, extended finders-keepers rule. They may instead think that the principle calls for a more precise and limited statement than they had initially thought necessary. Kirzner appears to think that someone who has non-libertarian intuitions will reason in this way: "Market exchanges are often not fully voluntary. How can Nozick and his friends fail to see so obvious a point? But what's this? There are Kirznerian entrepreneurs present in every exchange. Finders-keepers! Now my non-libertarian intuitions have been shown up as the illusions they are."

Perhaps some people will reason in this way; but it is not apparent why they must. If some people's non-libertarian views about voluntary exchange override the strength of ordinary Lockean property rights, why will bringing in finders-keepers change matters? These people may still hold to their original opposition to the free market.

Kirzner's argument is however not without merit. Non-libertarians who feel the force of his finders-keepers rule will face a challenge to their views. It is because Kirzner believes that his principle has overwhelming intuitive plausibility that he believes that its acknowledgement will overcome anticapitalist qualms. The crucial question then becomes: exactly how plausible is Kirzner's principle?

As I have already suggested, analysis of finders-keepers should follow a twofold path. First, the ordinary-language sense of finders-keepers is just a rule-of-thumb about how to handle lost objects. Though here I have little to oppose to Kirzner's intuitions than my own contrary ones, finders-keepers as usually taken seems no great shakes. If a dime drops out of someone's pocket without his noticing it, perhaps the person who finds it becomes its new owner (p. 151).

But suppose a wallet containing $10,000 and a number of credit cards falls from the same pocket. Will most people say that anyone who finds it becomes its new owner? I hardly think so. And in cases where people do accept finders-keepers, how do we know that it has moral force independent of particular legal systems? If a legal system used other rules for dealing with lost objects, is it obvious that we would think these morally wrong?

But once more I may be accused of failing to grasp the essence of Kirzner's case. It is not just ordinary-language finders-keepers that he favors, but finders-keepers combined with his view of the discoverer as creator. Exactly at this point, I fear, lies one of my two most radical dissents from Kirzner's provocative analysis. It is not at all evident to me that someone who thinks of a new use for a resource does in fact own it. (I am at this point not challenging Kirzner's position that the entrepreneur creates new resources: I am instead questioning the implications about ownership which he draws from his view.) Does the first person who thought of commercial television own all subsequent television sets? How much money is the fortunate heir of the inventor of the wheel entitled to receive? If Kirzner protests that he wishes his principle of creativity to be more directly tied to physical production than my examples presuppose, what in his finders-keepers principle justifies this restriction?

Suppose however that we place to one side any unusual examples. Let us assume that Kirzner's theory resembles other libertarian accounts of the items it picks out as subject to ownership. Kirzner states: "I do not really wish to say that the first discoverer of a resource should be declared its just owner even if he did not raise a finger to take possession of what he has found or discovered" (p. 172). Regardless, then, of whether Kirzner's discovery principle justifies this restriction, no further cases will be presented that ignore it.

We are at last in a position to treat the decisive point. Is it in fact obvious that creators ought to own what they have made? In Kirzner's doctrine, an inventor seems, if anyone is, to be entitled to own what his ingenuity has devised (see pp. 158-59). But do people regard it as morally outrageous that inventors receive only limited patents? In point of fact, this issue of inventors' rights is a much-disputed one. Though I find plausible Rothbard's opposition to patents, the point here is not whether Rothbard, Kirzner, or some other scholar holds the correct view of the issue. Rather, the existence of moral dispute is what to my mind Kirzner has neglected. He thinks that once people realize the creativity of the entrepreneur, they will accept his finders-keepers principle. They will do so even if they have certain moral

intuitions of an anti-libertarian sort. But it is just false that everyone recognizes the intuitive force of Kirzner's principle. Even if he is right, he is not obviously right.

There is a connected issue where I find myself at odds with Kirzner. He seems entirely right to emphasize that without creative persons, little or no production can occur. How does it follow from this, though, that the entrepreneur brings into existence the use of a resource? Kirzner's argument confuses a necessary with a sufficient condition. Until someone had the idea of using oil for fuel, oil did not exist as fuel: equally, however, the idea without its physical embodiment does not suffice. Both are necessary. Kirzner's fallacy is analogous to the Marxist claim that labor is the source of value, since labor is almost always needed to create an economic good.

If this point is correct, then the extension Kirzner wishes to make from ordinary-language finders-keepers to his own comprehensive version lacks a basis. Even if Kirzner is right that first finders of objects acquire them, finders-keepers will not directly apply to those who devise new uses for things. These people have not brought anything besides their own ideas into existence: they cannot then claim to own physical assets on the ground that they have created them.

The objections raised above do not, if successful, throw finders-keepers entirely out of court. To the extent one finds the principle intuitively plausible, it can provide a useful supplement to Lockean theories of property. Kirzner has in my view radically overestimated the scope and power of finders-keepers; but his insightful and provocative analysis is an important contribution to the theory of distributive justice.

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More Heat Than Light: Economics as Social Physics, Physics as Nature's Economics. By Philip Mirowski. Cambridge: Cambridge University Press, 1989.

Few books on the history of economics begin with a discussion of physics, but Mirowski's brilliant work is no ordinary book. He contends that economics, culminating in the currently dominant neoclassical school, has throughout its history been controlled by a metaphor. Most economists regard their discipline as a science; since, in the common understanding, physics is the best developed of the sciences, economics ought to be modeled on physics. Mirowski's radical thesis is that the model of physics has determined in detail the sum and substance of economic theory from the Physiocrats down to the present.

Mirowski has an even more ambitious goal than the presentation of his revolutionary view of economics. He writes not as a detached observer but as a vigorous partisan. He strongly opposes the control of economics by physics. Economists, in pursuit of their futile ideal of rigor, have misunderstood physics and generated "science, falsely so-called." Mirowski himself has enlisted in the institutionalist camp, but his own views of correct theory do not receive much discussion in *More Heat Than Light*.[1] He comes not to praise neoclassicism, but to bury it.

Mirowski contends that conservation principles are the *leitmotif* in the growth of modern physics. Very roughly, a conservation principle requires that some quantity, e.g., mass or energy, be kept constant in a given system. To take a case often used by nineteenth-century physicists, a perpetual motion machine disobeys the law of

[1]His institutionalism is discussed in more detail in his *Against Mechanism: Protecting Economics from Science* (Tottowa: Rowman & Littlefield, 1988), esp. pp. 57-93, 106-33, and 191-232.

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energy conservation since it requires new energy to be generated out of nothing.

Mirowski once more writes not as a mere observer of the scene. He thinks that physics has placed undue reliance on conservation laws. They cannot be exactly stated; and the proofs of the laws, e.g., the impossibility of perpetual motion, rest more on assertion than argument. Even more importantly, a look at the history of physics shows that conservation principles have died "the death of a thousand qualifications."[2]

The sad tale begins with Descartes, who according to Mirowski made the conservation of mass basic to his program of reducing the physical world to matter in motion. I am inclined to think that Mirowski overemphasizes Descartes' philosophical adherence to conservation of mass. He did not believe that minds were physical. One of the minds, namely God, creates the physical world and constantly upholds it. Further, even within physics itself, Descartes's "extension" bears closer resemblance than Mirowski allows to the field concept that in his view emerged only in the nineteenth century.[3]

Oddly, Newton plays no role in our author's version of the story of physics, on the ground that he did not explicitly use conservation principles (p. 404). But readers inclined to complain that physics without Newton is like *Hamlet* without the Danish prince, will be surprised at the coherence and complexity of Mirowski's account. The importance of conservation laws lies principally in the fact that they allow the use of certain mathematical techniques, such as variational principles.

The fly-in-the-ointment is that the conservation laws had to be constantly modified and restricted, since otherwise they fail to work. Instead of operating with physical substance, physics in the nineteenth century turned to the impalpable notion of the field. The use of the field concept made possible the employment of powerful mathematical tools, such as Hamiltonians and Lagrange equations, at the cost of considerable difficulty in the statement of exactly what was supposed to be conserved.

Other developments, such as the rise of entropy, required further restrictions on conservation. Physicists at the beginning of the twentieth century could no longer readily console themselves over the surrender of conservation with their ever-refined formalism. Henri Poincarè showed that only under certain very limited conditions can

[2]This is a phrase used by the philosopher Antony Flew.

[3]A minority view, favored by Hiram Caton, does take Descartes to be a materialist, but Mirowski does not refer to this interpretation.

the mathematical methods cited above be used. As the reader will by now expect, the rise of special and general relativity and quantum mechanics in the present century has further complicated the story and altered the meaning of conservation laws. Mirowski goes so far as to suggest that physicists have really abandoned conservation but cling to an outworn metaphor.

All very interesting, no doubt; but what has this to do with economics? Mirowski's answer is practically everything. Economists have directly translated the models of physics in use in their time into economic categories. (Incidentally, this does not exclude the influence of economic concepts in physics.) Why, e.g., did Adam Smith define wealth as stock (p. 166)? Not because this definition was dictated to him by his observation of the economy. Quite the contrary, he was influenced by Cartesian physics, and stock, in Smith's view the substance of value, corresponds to the mass that is conserved in Cartesian physics.

Is Mirowski correct? I find it hard to decide. Smith does not say that he was transferring a physical concept to economic theory; and, even if he did, it does not follow that Smith's description of the economy is inaccurate. Mirowski emphatically dissents; in his view, the actual economical world plays only a limited role in economic theorizing. On Mirowski's behalf, however much one may think him mistaken about a particular economist, his piling up of case after case of parallelism between physics and economics will impress even the most skeptical reader.

Smith, as briefly suggested, believed that economic value was a substance. This notion dominated classical economics. Although Mirowski thinks extremely highly of Marx, calling him "an epoch-making economist" (p. 179), he shows very effectively that resort to value as substance proved Marx's undoing.

Once more the question arises: did Marx use this notion of value because he was consciously seeking a model of the economy based on the physical sciences? The case seems to me suggestive but unproven. Mirowski stands on much firmer ground, however, in his treatment of the neoclassicals.

When the field concept came to dominate physics, many scientists in a flush of enthusiasm thought that a new discipline, energetics, would prove capable of unifying both the physical and the social sciences. As the name suggests, energy was the key to the mystery; and here the application to economics is clear and straightforward. Utility, the basic concept of neoclassical theory, is identical with energy.

Mirowski's claim is startling, but he documents to the hilt that

Léon Walras and William Stanley Jevons, both of whom had scientific backgrounds, directly intended to use the physics of their day to transform economics into an exact science. Even more clearly, Irving Fisher, whose 1892 doctoral dissertation at Yale remains, if the reader will forgive me, a classic of neoclassicism, made crystal clear his goal. Fisher himself drew detailed parallels between mechanics and economics. His thesis was written, not under the supervision of an economist, but with J. Willard Gibbs, one of the greatest of all American physicists, as its director.

In the neoclassical view, utility is a vector-field corresponding to energy. Mirowski ably shows how the entire neoclassical edifice falls into place once one grasps this basic idea. But this does not vindicate neoclassicism: far from it. Utility has to be regarded as an entity separate from the goods and services people consume, in a way that defies common sense. Such eminent neoclassicals as Milton Friedman were at one time skeptical about the validity of this notion of utility (p. 366).

An obvious neoclassical rejoinder is that whatever the intuitive implausibility of utility as a field concept, the system works. Mirowski dissents and challenges the school at its point of greatest pride, its use of advanced mathematics. He finds in the neoclassical system a profusion of incorrect assumptions and arbitrary errors. I cannot present at length the technical details of Mirowski's case but can indicate only a few of its highlights. The system is unable to explain production: it is goods and services that are produced, not energy or utility. Neoclassicals have been unable effectively to account for production through their field concept. Further, the system wrongly assumes that utility must have certain features needed to make mathematical manipulation easier. Unless these features are present, the powerful Hamiltonian techniques mentioned earlier cannot be used. But the assumption that utility has these features is without basis. Further, the system depends on the law of one price, another assumption Mirowski considers arbitrary. Hermann Laurent, a noted mathematician, pointed out some of these errors to Walras; but Walras could not grasp the points at issue.

Mirowski's criticisms appear penetrating and will give neoclassicals a difficult time. I am not entirely convinced, however, by his objections to the law of one price. This law states that a single price for each commodity tends to prevail on the market. Mirowski seems right that the law is, from the point of view of mathematics, arbitrary. But he too readily dismisses the "common-sense" point that competition among traders will eliminate differences in prices. For once one

can retort to Mirowski that his vague references to strategic considerations and game theory (p. 236) are no substitute for a rigorous refutation of the law.

Of course, common-sense arguments have no place in a system that purports to be completely mathematical, and to the extent that neoclassicism has this goal, Mirowski's challenge to the law of single price is perfectly justified. But does contemporary economics altogether eschew arguments not based on physics? It will hardly do to dismiss the use of such arguments just because they do not conform to Mirowski's own picture of neoclassicism.

Regardless of this and other details, Mirowski's case is formidable. How can economics escape its longstanding bewitchment by physics? Readers familiar with Austrian economics cannot fail to note that the Austrian school avoids all of the errors that Mirowski finds in both classical substance accounts of value and neoclassical energetic theories of utility. Mirowski rightly notes that Carl Menger "cannot be considered a neoclassical economist" (p. 261), since he repudiated the imitation of physical science. But evidently viewing Menger's path as leading nowhere, he does not give a detailed analysis of the Austrian system. (Elsewhere, he refers briefly to Hayek but never to Mises.) Had Mirowski done so, he would have found the answer to his difficulties. In the Austrian view, exchange takes place only where each party values the good he gains more than the good he surrenders. By repudiating the spurious principle that exchange is an equality, the problem of conservation of utility disappears. Further, the best developed version of Austrianism, that of Mises and Murray Rothbard, views utility as simply a ranking of goods. It is not a mysterious substance or field; and there is no problem of integrating production and distribution. The theory always operates with preferences for concrete goods and services, not the quintessence "utility" to which Mirowski objects. With this school, I suggest, not with the institutionalism Mirowski favors, lies the future of economics.

There is much else in this outstanding work that merits discussion. Influenced by the anthropologist Mary Douglas, Mirowski believes that both economics and physics take many of their concepts from the human body; and he presents an elaborate scheme of the evolution of these concepts. Further, he views theories as metaphors that are imposed on reality. Like Donald McCloskey and Richard Rorty, he rejects a realistic theory of knowledge. I do not think this is the place to discuss these views at length, and any attempt to do so is handicapped by the failure of our author to define "metaphor." One question that does come to mind, however, is this: is not

Mirowski's continual claim that precisely the same conservation laws are present in both physics and economics itself an instance of just the sort of domination by the metaphor of conservation he complains of in others? For Mirowski, it is apparently the conservation laws that must be conserved.

The book is immensely stimulating and suggestive. It is must reading for all economists and intellectual historians.

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The Myth of Scientific Public Policy. By Robert Formaini. New Brunswick, N. J.: Transaction Books, 1990.

Robert Formaini's illuminating work throws into question a key doctrine of social planners not satisfied with the free market. A common argument for the market emphasizes consumer sovereignty: the goods and services produced in a free economy will be those demanded by consumers, since profit-making entrepreneurs have every incentive to produce what consumers wish. Those who will not or cannot do so find themselves rapidly replaced by those more alive to the market's signals.

Against this, many supporters of government planning claim that the free market does not stand alone in its ability to give rise to desirable programs. Quite the contrary, scientific measures of analysis permit objective scientists to determine which programs best promote social welfare. Among the most important of the methods that are alleged to achieve these wondrous results, risk evaluation and cost-benefit analysis rank foremost. Formaini exposes the pretensions of these pseudo-scientific techniques with withering criticism.

Risk evaluation can be used either by itself or as part of cost-benefit analysis. It attempts to answer questions such as: what are the chances there will be a meltdown at a nuclear plant? or, how likely is an epidemic of influenza? Unless problems of this sort can be solved, scientific analysis of public projects cannot succeed. If the designers of a nuclear plant do not know the likelihood of a meltdown, they will be unable to assess the costs of building the plant. Formaini raises a far-reaching difficulty for all such attempts: no consensus exists on the nature of probability.

To some, probability is an objective matter. The chance, e.g., of

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drawing a particular card out of a well-shuffled deck is 1 out of 52, no more and no less. The figure has not been arrived at by empirical testing: instead, it follows from the mathematical theory of chances, whose axioms are *a priori*. Formaini, unsympathetic to this approach, raises two problems for it. First, it depends upon the existence of complete information: in the example just given, one must know that there are 52 equally likely possibilities. In cases that risk evaluators commonly deal with, however, full information cannot be obtained. Second, any actual results are consistent with the theory. If a very improbable event occurs, the theory has not ruled it out. Since the rules of probability are "true by definition," the theory cannot be falsified.

The first of Formaini's points is well put, but I am not quite sure that I grasp what he has in mind in the second objection. Why is it a difficulty in the theory that it cannot be falsified? Incidentally, it is not quite right to say that the theory is made true by definition. (How incidentally *can* something be made true by definition?—a famous question posed by Quine.) The theory is based on certain axioms, which, though knowable *a priori*, are not definitions: of course, Formaini is right that definitions are also needed. I may well have misunderstood Formaini's point: he might mean that the question of the theory's application to "real world" cases is not settled by the theory itself. If so, he is perfectly correct.[1]

But these are mere quibbles. The view just discussed by no means stands alone in the field. The Bayesian approach, toward which Formaini is more sympathetic, regards probability as dependent on subjective estimates. It does not operate from an *a priori* basis but instead looks to the facts of a particular case. If a Bayesian claims that the chance of getting heads on the toss of a coin is 1-in-2, he will base his assertion on the evidence of past tosses of that coin. His estimates are always subject to revision as further information comes to light.

The dispute between the two views is not a theoretical issue with no practical relevance. As Formaini shows, the two variant approaches sometimes arrive at different estimates of probability for the same case. If so, the scientific pretensions of non-market decision makers already seem shaky. If no consensus exists on the way to estimate probability, how can it be claimed that there is a scientifically objective way of calculating benefits and costs?

The main thrust of Formaini's argument strikes to the essence. Furthermore, the theories must confront additional objections be-

[1]The passage that I have difficulty interpreting is on page 22.

sides the ones our author has effectively urged against them. Ludwig von Mises contended that the calculus of probability, which he termed class probability, does not apply to individual events at all. To revert to our instance of the deck of cards, Mises would contend that one can properly speak only about the mathematical chances of classes of events. Nothing about an individual event, the drawing of a particular card, follows from class probability.

Even if one does not accept Mises's characteristically radical and incisive proposal, another severe problem faces the theory. This point is especially prominent in the work of a writer of quite another stripe than Mises: John Maynard Keynes. In the *Treatise on Probability*, Keynes shows that the application of the theory to single events depends on a controversial and seemingly arbitrary assumption, the principle of insufficient reason.

And what about the Bayesian approach? Here I think that more might have been made of the fact that Bayes's theorem requires that one assign a prior probability. The choice of this figure can radically affect one's results, but it can be picked only on an arbitrary basis.

Formaini also proposes an improvement in the way probability estimates are applied. He suggests that the analyst modify his estimate by the degree of confidence he has in his calculation. "A simple formula can be added to probability calculations to allow for uncertainty attaching either to the data or the theory through which the data is [sic] manipulated" (p. 21). If one uses the Bayesian approach, has not uncertainty in the data already been considered in the calculation? So far as uncertainty about the theory one uses is concerned, Formaini's suggestion threatens to produce a regress. How is one to estimate one's certainty? How certain, again, is this calculation? Must we discount yet again for uncertainty? This problem was raised long ago by David Hume.

Formaini goes on to suggest that if a good event is expected, one should discount the likelihood of the event's occurrence; if one predicts something bad, the likelihood should be increased. Once again, I fear that I have misunderstood. It is not apparent why certainty about one's calculation should vary directly with the badness of an event, and inversely with the goodness; and in any case one cannot be more certain than $p = 1$, which will result in the original sum calculated, not an increase. But more likely Formaini intends the discount for the nature of the predicted event as another step in the calculation, not as a consequence of the certainty estimate. If so, he gives no justification for this additional step.

An objection that might be raised to Formaini is that his case is in a sense too good. If probability calculations lack a firm basis, why does this count against non-market methods of decisions alone? Is it not necessary for entrepreneurs in the market to calculate risk? Will not precisely the same problems of estimation confront private decision makers? Although the book does not directly address this problem, Formaini has the resources adequately to deal with it.

The response in fact emerges in the third chapter. Before this, however, Formaini briefly sets forward the method of the Austrian School. His second chapter accomplishes a great deal, covering in a succinct and accurate way the foundation of the Austrian School; its conflict with the German Historical School; the Austrian deductive method; the use of *verstehen*; and the development of Austrian economics in the twentieth century. (Incidentially, it was not the German Historical School, as Formaini thinks, who proclaimed themselves "intellectual bodyguards of the House of Hohenzollern." Though its members would have enthusiastically assented, the statement comes from Emil DuBois-Reymond. Also, Hayek did not leave Austria owing to the Nazis (p. 27); he was named to a chair at the London School of Economics in 1931. In addition, Karl Popper does not think that the inductive methods of science can falsify a theory, nor does he claim that a well-corroborated theory is true [p. 33]. His best-known doctrine is the utter rejection of induction.)

The book's third chapter, "A Subjectivist Evaluation of Cost-Benefit Analysis," is the best in the book. In painstaking detail, Formaini shows the numerous problems that confront cost-benefit analysis in the vain efforts of its proponents to elevate it to the rank of objective science. For one thing, a social discount rate must be estimated. This rate determines how much future benefits are to be lowered when conducting a cost-benefit analysis. If, e.g., someone proposes that a subway be constructed that will be able to carry passengers for 50 years, one cannot simply add together the benefits from travel 50 years' worth of passengers will receive. Future benefits are not worth as much as present gains: but how much less? As Formaini shows, there is no good way of telling.

Further, cost-benefit analysis usually rests on the assumption that perfect competition is a welfare ideal. In the Austrian view, this assumption is without basis. Why is a particular market structure more desirable than whatever is actually to be found on the free market?

To this the neoclassicals have a ready answer. They claim that monopoly results in a welfare loss; further, any deviation from perfect competition imposes at least a degree of monopoly.

Formaini's response is forthright. The "welfare loss" in question depends on hypothetical preferences that are ascribed to people. The Austrians refuse to adopt this conception of preference, which they regard as arbitrary. The only acceptable conception of preference, as Austrians see matters, is demonstrated preference. If an actor does something, one can say that at the moment he preferred the choice he made to any alternative available to him. On this view of preference, the claim that a welfare loss is caused by monopoly cannot get off the ground. Neither can alleged benefits from public goods expenditures be demonstrated. Of course, paying taxes that are used for public projects does not demonstrate a preference for these projects, since these subventions are exacted by coercion. The powerful tool of demonstrated preference enables the Austrian approach to respond to the objection I raised earlier. There is no special free market way of calculating probability, and the establishment of a free economy does not resolve the difficulties of probability discussed earlier. But we can say that if people on the market engage in a project, they have demonstrated a willingness to assume whatever risks are involved in that project.

The problems inherent in cost-benefit analysis are many and various. The welfare criteria that cost-benefit analysis analysts use are either ineffective or questionable. The Pareto criterion, according to which a project can be undertaken if at least one person is made better off and no one worse off, rules out almost all state activity. Thus resort is frequently made to the Kaldor-Hicks principle, which allows changes if the gainers from a project are able to compensate the losers. The criterion does not mandate actual compensation: it thus sacrifices the welfare of the losers to the winners. Formaini notes that sometimes planners attempt to add up total benefits and total costs: a project will go forward if benefits exceed costs to a greater extent than for any alternative. This procedure is not a "watered-down" version of Kaldor-Hicks, as the author claims (p. 55), since application of the latter criterion need not maximize welfare.

In a final chapter, Formaini gives a detailed account of the swine-flu vaccination program, a major debacle of 1976. The constant errors of the bureaucrats responsible for this program cast a grim light of humor over the pretensions of cost-benefit analysis to be scientific. The government medical establishment conjured up a swine-flu epidemic out of a handful of flu cases. Their prevention measures for the non-existent epidemic cost hundreds of people their lives.

In a brief postscript, the author sums up the lessons of his outstanding study. Ethics provides a much more solid basis for decision

on whether public projects should be built than the supposed objective discipline of cost-benefit analysis. I wish that Formaini had explained in detail his reasons for thinking that *Brown v. Board of Education* was decided in a morally correct way (p. 95). Common sense is a better guide than dubious expert assessments.

I have sometimes, I fear, been unjust to Formaini in the preceding remarks. For reasons of temperament, I tend to emphasize points of disagreement. But my overall reaction to this excellent book is one of wholehearted assent.

David Gordon
The Ludwig von Mises Institute

Foundations of Economic Justice. By Morris Silver. Oxford: Basil Blackwell, 1989.

I would like very much to be able to give this book a favorable review, but I find myself unable to do so. Silver defends the following rights principle: "Individuals ought to hold the objects they have produced; they ought not to be forcibly deprived of these objects" (p. 123). Not even the most resolute libertarian could find fault with the way he interprets this principle. Further, Silver cogently criticizes utilitarianism and Rawls's theory of justice. The author shows a remarkable acquaintance with the literature of economics, philosophy, history, biology, and anthropology.

What then is the problem? I am sorry to say that Silver's approach to economic justice seems to me unmitigated nonsense. He rightly points out that people strongly resent others' taking their property from them. This feeling of indignation he contends has been built into us by evolution. It forms the basis of morality. The good, at least so far as economic justice is concerned, is constituted by this feeling. Thus, redistributionist programs clearly violate justice, since people resent having to surrender their money for such programs. People are, of course, free to agree to transfer their money to the poor on a voluntary basis, but the agreement must be genuinely voluntary. Otherwise, resentment, the sure sign of immorality, will ensue.

People do indeed resent having their property stolen. But Silver has not shown that those feelings of resentment always express commitment to the natural rights system he favors. Suppose that someone is a member of a socialist cooperative, the owners of which are supposed to distribute revenues on an equal basis. Someone who does not receive his equal share will probably resent it. Why will his resentment be limited to cases in which he was also entitled to the share he has been deprived of by Silver's natural rights criterion?

Also, thieves will tend to feel resentful if people take from them what they have stolen. Criminals often have a very firm sense of their

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rights: they simply fail to apply the restrictions they wish to impose on others to their own behavior. Once more, resentment over property taken has no direct relation with the system of natural rights that Silver defends.

One might reply to this that criminals will object only to someone's depriving them of their ill-gotten gains. They will not care about other thieves, or about anyone else, for that matter. But this objection serves to point up another weakness in Silver's argument. People generally resent injuries to themselves and those close to them: violations of other people's rights will hardly elicit the same degree of indignation. Will it bother me very much if a neighbor I dislike has his car radio stolen?

For the sake of argument, however, let us grant that people do feel resentment in exactly the cases Silver thinks they do, i.e., violations of his natural rights system. His argument still does not succeed. People feel resentment over all sorts of things—losing a job to a rival, being rejected by the person one wishes to marry, failing to get sufficient admiration from others, receiving criticism, etc. Many of these reactions have nothing to do with morality: if I resent the success of someone who has achieved more than I, this hardly qualifies as moral indignation. Silver needs to show what is supposed to be moral about his favored sort of resentment, in a way that distinguishes it from other instances of that feeling.

One way *not* to do this is to say that resentment in the natural rights case is moral indignation because taking the property of others is unjust. Exactly what Silver claims to be doing is to show by appeal to resentment what behavior is unjust. To distinguish some instances of resentment from others by references to a view of justice would be a blatant circularity. This argument can be generalized to any theory that attempts to reduce morality to feelings. Why are some feelings moral, when others, phenomenologically similar, are not? It is exactly this point that Charles Fried raises in a passage quoted by Silver (p. 113). Silver's comment on this argument must be read to be believed: he has utterly failed to grasp the point at issue.

Once more, though, let us assume that Silver has overcome this difficulty. In addition to resentment, people have all sorts of other feelings. Some people, e.g., feel strongly that poor people deserve aid, even if resources must be taken from others to support them. These people will of course resent it if their property is taken from them without their consent. But by hypothesis, they *do* consent. Why should their redistributionist feelings be outweighed by whatever resentment they feel at others' having their property taken? Or is the argument not that one feeling is stronger than the other, but that one

is morally right while the other is not? If so, what is the basis for the distinction? It cannot *just* lie in the fact that one is a strong feeling. Actually, I think that the first construal is correct. Silver thinks that resentment over lost property will tend to dominate other feelings: so far as I can see, he offers no argument. He does present evidence that people will fight to defend their property, but this hardly shows that no other feeling is as strong.

Am I unable to say anything favorable about this book? Not at all. Silver has very good objections to Richard Posner's wealth-maximization view of justice. As he notes, on Posner's theory people might end up not owning the services of their own bodies (p. 150). Another good point is the distinction he makes between von Neumann-Morgenstern utility and utility as a measure of the satisfaction of desire (p. 147). In these instances, Silver's wide knowledge of the literature emerges to best effect: he has correctly reported arguments that strike to the heart of the issues he addresses.

Too often, though, Silver is in over his head. A last instance must suffice. He draws a parallel between the view of morality he favors and a view about secondary qualities popular in recent philosophy. Silver thinks that "the ultimate criterion of the goodness of an action is how it feels to perceivers. The presence of the feeling of approval is *constitutive* . . . (p. 123, emphasis in original). He draws a parallel with philosophical views that explain "red" in terms of "looking red." Neither of the two accounts Silver cites displays the parallel with his own theory which he thinks is present. The first of the passages he quotes, by John Pollock, claims that there are no entailments between "red" and "looking red" (p. 122). Just the point of Silver's theory is that "feeling good" *does* entail "being good": the first constitutes the second, on his view. Oddly, after the passage about the criterion of goodness I have previously quoted, Silver states that "there are no entailments relating good and feeling good" (p. 123). Is he *this* incapable of grasping his own theory? The second passage (pp. 122-23) by Colin McGinn, contends that an experience of red must represent the world as being red. Silver's account, by contrast, reduces the good to feelings. A view in which feelings refer to the good as an intentional object is just what Silver does not want, since it introduces into the analysis a term he wishes to reduce to something else. I shall leave it to the interested reader to locate the remaining few valuable points in the morass of confusion that constitutes Silver's book. My advice is not to bother.

David Gordon
The Ludwig von Mises Institute

The Review of Austrian Economics

Volume 5, No. 2

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Dedication

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Articles

The Great Depression of 1946

Richard K. Vedder and Lowell Gallaway*

It seems inevitable that some Ph.D. student in economics some time soon will pick up a recent copy of the *Economic Report of the President* looking for a dissertation topic and learn that there was a Great Depression in 1946, a topic which he or she will then analyze using all the tools of modern economic analysis. The student will read that real gross national product in 1946 fell 19 percent, the largest single decrease in annual output in the century of recorded annual GNP data.[1] He or she will also learn quickly that from 1944 to 1947, real output fell by 22.7 percent. Looking up population figures, the student will observe that per capita output actually declined by more than one-fourth in real terms over the three years of conversion from war to peace, and did not regain the pre-depression (1944) level until 1964.[2]

From all of this the student will no doubt conclude that the heretofore neglected Great Depression of 1946 was the worst cyclical downturn in modern American economic history, and that by some measures it had a greater disruptive impact on the American economy than the earlier, more celebrated Great Depression of 1929–41. For example, in the earlier downturn, real per capita GNP surpassed the 1929 peak levels within 12 years, compared with 20 years it took to surpass the 1944 peak after the 1946 depression. Moreover, while the 1929–33 downturn was quantitatively a bit larger (30 percent vs. 23 percent), no single year exhibited a decline of the magnitude of that witnessed in 1946.

If the student is typical of most economics students today, he or

*Richard K. Vedder and Lowell Gallaway are distinguished professors of economics and faculty associates of the Contemporary History Institute at Ohio University. Some material is adapted with permission from the forthcoming book *Unemployment and the State* by Lowell Gallaway and Richard Vedder to be published by the Independent Institute, Oakland, California.

[1]See, for example, the 1990 *Economic Report of the President* (Washington, D.C.: Government Printing Office, 1990), pp. 296, 301.

[2]In 1982 dollars, the decline is from $9,976 in 1944 to $7,401 in 1947. Population data used in this calculation are from U. S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970* (Washington, D.C.: Government Printing Office, 1975).

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she will lack a historical perspective. Therefore, that individual no doubt will fail to observe that the Great Depression of 1946 has been worsening every decade. In 1960, when *Historical Statistics of the United States, Colonial Times to 1957* was published, the reported decline in real GNP in 1946 was but 7.8 percent, and for the three years 1944–47 just 9.8 percent, hardly a great depression.[3] When the next edition of *Historical Statistics* was published in 1975, however, the 1946 decline was a more robust 12 percent, and the total business cycle downturn (1944–47) saw a drop in real output of 14.2 percent.[4]

By 1981, when the Department of Commerce reported revised national income data, the 1946 drop had reached a truly "depressing" 14.7 percent, with the episodic decline reaching 17.4 percent.[5] Five years later, in 1986, the 1946 depression truly earned the label of "great" when the latest revisions in statistics revealed the 19 percent drop discussed above. *The Great Depression of 1946 seems to be getting constantly worse, and if current trends continue should soon pass the 1929 depression in magnitude by any criteria.*

If our mythical student looks further in the *Economic Report of the President*, he or she will get even more puzzled and, perhaps, excited. The student will learn that the sharp decline in GNP occurred with unemployment rates below four percent, far below the normal peacetime rate in the twentieth century, either before or after the 1946 "depression."

He or she will also learn that this relatively full employment was achieved despite an extraordinarily contractionary fiscal policy. The federal budget deficit on a national income accounts basis in 1944 was some $54.5 billion, equal to 25.8 percent of GNP. That would be the equivalent in 1990 (in relation to GNP) of a deficit of about $1,400 billion. By 1947, the federal budget was in *surplus* by $13.4 billion, or 5.7 percent of GNP. The equivalent today (in relation to GNP) would be well over a $300 billion surplus. Among other things, the government in pursuing this extraordinarily contractionary fiscal policy fired (or "released from employment") roughly 20 percent of the total labor force. All of this had little impact on unemployment.

We know of no episode in American economic history that more

[3]See *Historical Statistics of the United States, Colonial Times to 1957* (Washington, D.C.: Government Printing Office, 1960), p. 139.

[4]Ibid., p. 224.

[5]U.S. Department of Commerce, Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929–1976: Statistical Tables* (Washington, D.C.: Government Printing Office, 1981), p. 6.

keenly illustrates several insights from Austrian economics than the 1944–47 business-cycle experience. The ultimate irony is that the modern historical interpretation of that era suggests that it was a period that demonstrated the superiority of Keynesian economic doctrines. It was in this period that the death knell came to residual sentiments among the American economics profession that market coordination is the most appropriate and efficient means to assure reasonably "full" employment of productive resources. Politically, it was during this period that the federal government institutionalized Keynesian-style macroeconomic intervention with the Employment Act of 1946.

Despite the statistics cited above, conventional modern wisdom is that the transition from war to peace proceeded without a major downturn after World War II, and certainly there was no "depression."[6] Our subsequent discussion will show that interpretation is essentially correct. However, it is generally accepted that the smooth economic conversion resulted from "pent up" demand for consumer goods offsetting the reduction in defense spending. In other words, the Keynesian prescription that "demand creates its own supply" worked after World War II.

After studying this historical episode, we conclude the following:

(1) Conventional wisdom is correct on one thing: there was no depression in 1946, or anything resembling one.

(2) Accordingly, aggregate economic statistics need to be viewed with a skeptical eye, particularly in periods such as this where there are pronounced governmental interventions in markets.

(3) The failure of the nation to enter a depression after 1944, however, reflected not pent-up consumer demand so much as the dramatically ameliorative effects of changing relative prices on the macroeconomy.

(4) The smooth transition to peace was accomplished despite the existence of a fiscal policy that was the very antithesis of Keynesian economic prescriptions to deal with falling aggregate demand. The most dramatically contractionary fiscal policy in modern American history failed to materially alter the pace of economic activity.

(5) Keynesian economics triumphed in politics and among academic economists at the very time that empirical evidence was clearly exposing its explanatory weaknesses. The very empiricist-

[6]This is not to deny, however, that there was a fair amount of economic discontent in the period. Because of continuing price controls into 1946, there were shortages of many consumer goods; labor strife ran high, with days missed because of work stoppages reaching a new peak.

quantitative economists who rhetorically were selling the new economics of Keynes on the grounds that the evidence of the 1929–41 downturn showed the empirical bankruptcy of market-oriented economic doctrines were ignoring, perhaps deliberately, the 1944–47 empirical evidence that was devastating to the Keynesian paradigm.

(6) A market-Austrian intrepretation of this historical episode is very much more in keeping with the evidence.

Statistics *Do* Lie

Some official Department of Commerce statistics on this historical episode as they were published in 1960, and as they were published in 1990, are included in table 1. Note that every single series has somewhat different numbers in 1990 than in 1960. Changes are comparatively minor for money GNP, the civilian unemployment rate, and civilian unemployment, but they are substantial for price changes as measured by the GNP price deflator and, as a consequence, for real GNP. Table 2 summarizes the percent change in the five statistics over the 1944–47 period.

Between 1960 and 1990, government economists approximately doubled their estimate of the inflation occuring from 1944 to 1947, thereby causing the estimated real GNP decline to more than double.

Table 1
Some Key Economic Indicators
as Reported in 1960 and in 1990

Indicator	*Data Reported in 1960*		*Data Reported in 1990*	
	1944	*1947*	*1944*	*1947*
Civilian Unemployment Rate	1.2%	3.6%	1.2%	3.9%
Civilian Unemployment	670[a]	2,142[a]	670[a]	2,311[a]
GNP Price Deflator	115[b]	141[b]	15.3[c]	22.1[c]
Money GNP	$211.4[d]	$234.9[d]	$211.4[d]	$235.3[d]
Real GNP	$183.6[b,d]	$165.6[b,d]	$1,380.6[c,d]	$1,066.7[c,d]

[a]In thousands
[b]1929 dollars
[c]1982 dollars
[d]In billions

Sources: 1960 Data: *Historical Statistics of the United States, Colonial Times to 1957*; 1990 Data: *Economic Report of the President, 1990.*

Table 2
Percent Changes in Key U. S. Economic Indicators, 1944–1947

Indicator	*1960 Data*	*1990 Data*
Civilian Unemployment Rate	+200.0%	+225.0%
Civilian Unemployment (No.)	+219.7%	+244.9%
GNP Price Deflator	22.6%	44.4%
Money GNP	11.1%	11.3%
Real GNP	–9.0%	–22.7%

Source: Calculated from data found in table 1 above.

Substantial price controls were in effect in 1944, but were essentially abandoned by 1947. Thus official statistics based on controlled prices should tend to understate true equilibrium prices in 1944, and overstate the true inflation at market-clearing prices observed between 1944 and 1947. Yet the statistical revisions have tended to *increase* the reported inflation from 1944 to 1947, not decrease it. Following from that, the revisions in statistics over time have reduced the reported inflation during World World II. For example, reading the 1990 *Economic Report of the President*, one learns that the GNP price deflator rose a modest 13.8 percent in the four years 1941 to 1945, a lower annual rate of inflation than prevalent in the past two decades.[7] Yet if one looks at, say, the 1978 *Economic Report*, the reported 1941–45 inflation is 20.3 percent.[8] A few years earlier, in the 1975 edition of *Historical Statistics*, the wartime inflation was 26.5 percent.[9] Picking up the 1960 version of *Historical Statistics*, however, the increase in prices was reported to be 29.7 percent.[10] As time passes, it looks like the government was increasingly successful in curtailing inflation in World War II, and increasingly unsuccessful in containing it in the postwar era.

To this point, the various data revisions certainly seem to give justification to a common Austrian suspicion of over-reliance on aggregate economic statistics, particularly price indices, in evaluating

[7] 1990 *Economic Report to the President*, p. 298.
[8] 1978 *Economic Report*, p. 260.
[9] *Historical Statistics*, p. 224.
[10] *Historical Statistics*, p. 139.

the economy. Beyond that, the revisions serve to increase reported economic growth during the command economy era of World War II, and reduce it during the era in which there was a return to increased reliance on market forces in resource allocation, a conclusion that Austrians find hard to accept with equanimity.

Despite our suspicions to the contrary, we must concede, however, that it is possible that the earlier statistics were flawed, and that the revisions have served to paint a more accurate portrayal of the economic history of the period. Perhaps even there really was a major depression in 1946 that no one was perceptive enough to recognize at the time.

One way to evaluate that possibility is to try to ascertain what prices would have been in the 1942–48 period if various historical relationships observed earlier held. Using those forecasted or predicted prices, we can then estimate trends in real GNP using the money GNP statistics on which there has been virtually no data revision and little dispute (see, however, below).

We developed a model to predict the GNP price deflator for the period 1916 to 1941, the era immediately before the World War II experience where price controls were imposed. The years chosen were dictated largely by data considerations. Four independent variables were chosen, two financial in nature and two proxying for real output. The financial variables were *M2* and the interest rate on four- to six-month commercial paper; the "real variables" were ton-miles of class A railroad volume and the total number of employed workers.[11]

Ordinary least squares regression procedures were used to estimate the GNP price deflator during the 1916–41 period. Actual values for the four independent variables were used with the estimated regression coefficients and constant term to calculate a forecasted value of the GNP price deflator for 1942 to 1948. The forecasting was aided by the fact that the estimated regression had a relatively good statistical fit (R^2 = .822), with actual and estimated values being rather close for the years immediately preceeding the war. (See the appendix for more details.)

Taking the estimated GNP price deflator numbers for 1942–48, along with the accepted money GNP numbers, we calculated real GNP by year. In table 3, we present our estimates, along with the official estimates as they were reported in 1960 and 1990. Turning first to prices, we estimated that true equilibrium prices rose far more during World War II than any of the official estimates. Our estimate

[11]All statistics were gathered from the 1975 version of *Historical Statistics of the United States, Colonial Times to 1957.*

Table 3
U.S. Price and Real Output Trends, 1941–48:
Three Interpretations

	*Real GNP**			*GNP Price Deflator*		
Year	*1960 Data*	*1990 Data*	*Authors' Estimates*	*1960 Data*	*1990 Data*	*Authors' Estimates*
1941	100.0	100.0	100.0	100.0	100.0	100.0
1942	111.5	118.8	117.1	113.2	106.5	108.0
1943	122.7	140.3	128.0	124.2	109.4	119.7
1944	132.4	151.8	127.6	126.4	110.9	131.7
1945	130.4	149.0	116.1	129.7	113.8	146.1
1946	120.3	120.6	108.5	141.8	140.6	155.6
1947	119.4	117.3	115.7	154.9	160.1	161.6
1948	125.7	121.9	125.6	163.7	171.0	165.6

* Numbers are indexed, with 1941 = 100.
Source: see text.

is that prices rose 46 percent from 1941 to 1945, compared with official estimates varying, over time, between 24 and 30 percent. The historical experience from which our calculations were extrapolated was an era largely (although not completely) free of price controls. Our estimated price index thus incorporates the disguised inflation hidden by the existence of controls that was manifested in shortages, black markets, shoddy quality of goods or services, etc.[12]

By contrast, we estimate that while inflation continued after the war (imprudently, we might editorially add), in a meaningful sense it was far less than what has been reported, since repressed, disguised inflation came out in the open. We estimate prices rose about 13 percent from 1945 to 1948, a rather substantial inflation rate, but far less than observed during the war or reported by governmental officials (26 to 50 percent, depending on the date of the statistics).

Our estimates of price trends are very similar to estimates for the net national product price deflator derived by Milton Friedman and

[12]For a discussion of the history of the World War II controls, plus some of the difficulties that controls brought about, see U. S. Department of Labor, *The General Maximum Price Regulation*, Bulletin No. 879 (Washington, D.C.: Government Printing Office, 1946).

Anna Schwartz.[13] They estimate price increases of nearly 44 percent for 1941–45, much closer to our 46 percent estimate than to the official estimates of 24–30 percent. Similarly, they obtain a 16 percent increase for the 1945–48 period, only moderately larger than our 13 percent figure. By contrast, our estimated wartime inflation is considerably higher than that estimated by Mills and Rockoff, which we believe is implausibly low.[14]

Dividing money GNP by the estimated deflator to get estimated real GNP, we get a rather different historical interpretation than what the government statistics, particularly the recent ones, suggest. Our scenario suggests output grew substantially during World War II, but far less than the recent government revisions would suggest (and moderately less than the earlier governmental data suggested). Moreover, our results suggest output peaked in 1943, then held steady in 1944. The official versions have output rising noticeably in 1944.

Our estimates suggest a peak-to-trough decline in real output of slightly over 15 percent, compared with nearly 23 percent with the current official government numbers. Not only is our estimate of the decline about one-third smaller than what the current numbers suggest, but it also suggests that much of the decline occurred in the latter part of the war itself. The estimated 1946 output drop was only 6.5 percent, less than that for 1945. Moreover, we estimate output rose in 1947, rather than fell. Since we calculated that the 1947 output increase almost offset the 1946 decline, we suggest there was virtually no decline in output from 1945 to 1947, compared with the current statistical data's suggestion of a decline of 21 percent (the 1960 data revealed a fall in output of slightly over eight percent).

Certainly our estimates are more consistent with the written commentary of the period, which emphasized the comparative smoothness of the transition from war to peace. They also are about what one would expect if one accepts the premise that wartime inflation was understated because of price controls, and consequently postwar inflation, while real, was overstated. Our estimates would seem consistent with the 1960 Department of Commerce data modified to take account of price interventions by the federal government.

[13]Milton Friedman and Anna J. Schwartz, *Monetary Trends in the United States and the United Kingdom* (Chicago: University of Chicago Press for the National Bureau of Economic Research, 1982).

[14]Geofrey Mills and Hugh Rockoff, "Compliance with Price Controls in the United States and the United Kingdom during World War II," *Journal of Economic History* 47 (March 1987).

Whether our estimates are correct or not, it is clear that the aggregate government statistics on output, prices, etc., must be used with extreme caution, and that data "revisions" do not always bring about improved insight into historical phenomena.

Why the Error in the Government's Revised Statistics?

Why is it that the official GNP statistics for the reconversion period become continually worse over time? Examination of the calculation procedures used reveals that the recent estimates are a complete statistical artifact.

The aggregate GNP price deflator is the weighted sum of several component price indices, such as the personal consumption expenditures index (which, in turn, has several components), the index for exports, imports, government purchases of goods and services, and private investment. Numbers are indexed around a base year, currently 1982. Over time, the price index for the government purchases of goods and services has risen significantly more than for other components. For example, in 1982 it is estimated that the aggregate price of government goods and services averaged 8.13 times the 1946 level, compared with "only" a 4.55-fold increase in the price of consumer goods. Since 1982 is set equal to 100, that means the 1946 index number for the government goods and services price deflator is 12.3 (100 divided by 8.13); the figure for the personal consumption expenditure deflator is 22.0.

As reconversion proceeded, the weights used to measure consumption's contribution to the aggregate price index dramatically increased, while the weights used to measure government purchases contribution dramatically decreased.[15] Since the consumption index had

[15]A numerical example, suggested by an anonymous referee, might help the reader see the point.

	1946 as base year		*1949 as base year*	
Year	*Consumption Deflator*	*Government Deflator*	*Consumption Deflator*	*Government Deflator*
1946	100	100	40	25
1947	105	200	60	50
1948	200	300	80	75
1949	250	400	100	100

If the weights of the consumption and the government expenditures components of the GNP deflator in this hypothetical example were 60% and 40%, respectively, in 1947,

a bigger number (22 in 1946) than the government purchases index (only 12.3), the calculated aggregate GNP deflator rose in part merely from the shift from government spending to consumer spending.

The 1990 data show the total GNP price deflator rose from 15.7 to 19.4 from 1945 to 1946, an increase of 23.6 percent. Yet the subcomponents of the index are all reported to have increased less—consumption by less than nine percent, investment by about 15 percent, government purchases by four percent, etc. Only by changing the weights and by arbitrarily giving higher numbers to the non-government purchases component of the index do you get this type of result, which is then used with nominal GNP data in calculating equally artificial real GNP. Had prices of governmental purchases risen exactly the same as other components in the index over time, the distortion would not have been observed. In earlier years, the distortion was smaller because the disparity between the government purchases price index and the other index components was much smaller than observed now (since the series have diverged more over time because of consistently faster rising prices of governmental goods and services).

Reevaluating Governmental Expenditures

It can be argued that even our estimates above *understate* the robustness of the postwar economy, and overstate wartime growth, because of a second flaw in the data. While transactions in the private market economy are appropriately valued for GNP calculations by using equilibrium prices, governmental purchases of goods and services may be overvalued, since they are not generally sold in a truly competitive market environment.[16]

Looking at it from the demand side, many consumers of governmental services are forced to "purchase" those services at a cost (reflected in taxes, inflation, or higher interest rates) above what the consumer would be willing to pay if permitted to buy the services on a non-coercive basis. Typically there is a "deadweight loss" as opposed to the consumer surplus typical in non-coercive market transactions. From the supply perspective, monopolistic governmental bureaucrats lack the incentive to minimize resource use, and thus services

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and 80% and 20% in 1948, then the deflator would have risen by 29.4 percent (from 170 to 220) between 1947 and 1948 using 1946 as the base year. If one uses 1949 as the base year, however, we would have calculated an increase of 41.1 percent (from 56 to 79) for the same period.

[16]For a study that carries the argument here much further than we have chosen to take it, see Robert Batemarco, "GNP, PPR, and the Standard of Living," *Review of Austrian Economics* 1 (1987): 181–86. See also Murray Rothbard, *America's Great Depression* (Kansas City: Sheed and Ward, 1963).

are provided less efficiently than if sold competitively in the private market economy. This is probably why, for example, governmental purchase prices have risen more than private sector prices over time.

Suppose that during the 1941–48 period, governmental purchases of goods and services had a true value equal to 75 percent of the stated value used in calculating GNP. Suppose also the true GNP price deflator is as we have estimated it in table 3. Under these assumptions, real output rises but 18.8 percent from 1941 to 1943, falls very slightly in 1944 and by a bit over seven percent in 1945. The 1946 decline in real GNP is a paltry 1.1 percent. Output by 1947 is less than two percent below 1944 levels, and by 1948 output exceeded the wartime peak by about six percent (compared to a 19 percent decline using data in the 1990 *Economic Report of the President*).

We calculated the numbers in the previous paragraph to illustrate the importance of the assumption that government purchases of goods and services are valued at the amount of government expenditures. The 75 percent valuation chosen was arbitrary. For example, had 50 percent been used, there would have been a calculated *growth* in real GNP in 1946, and a noticeable decline in output in the late war years. What the true figure should be is debatable. Nonetheless, it seems highly likely to us that the true GNP growth during World War II tends to be seriously overstated because of the increasing relative importance of governmental expenditures, and tends to be understated in the postwar years because of the reverse phenomenon.

Simultaneous with our work, Robert Higgs has examined the real output question for the 1940s.[17] His conclusions are similar to ours; indeed Higgs goes further. Carefully examining the pioneering work of Simon Kuznets, the contributions of William Nordhaus and James Tobin, as well as others, Higgs believes World War II was not a period of prosperous growth that is typically depicted, and, more relevant to this paper, that there was prosperity and no downturn in the postwar reconversion period.[18] He believes, correctly in our judgment, that the military command economy of the war tended to lead to exessive output valuations that have led to fundamentally flawed national income statistics.

[17]Robert Higgs, "Wartime Prosperity? A Reassessment of the U. S. Economy in the 1940s," paper presented to the Cliometric Society meetings, Washington, D.C., December 1990.

[18]See, for example, Simon Kuznets, *National Product in Wartime* (New York: National Bureau of Economic Research, 1945); see also William Nordhaus and James Tobin, "Is Growth Obsolete?" in *Economic Growth*, NBER General Series 96 (New York: National Bureau of Economic Research, 1972).

Economic Interpretations of the Postwar Reconversion

It was widely believed during the latter part of World War II that substantial unemployment would develop after the war. A review of forecasts by Michael Sapir confirms the fact that many economists believed a severe recession or depression was coming.[19] That view was held by most federal officials as well; as one well-known writer on the subject put it, "In the summer of 1945 the belief was fairly widely held in Washington that unemployment would be a serious problem during the winter of 1945–46 and a strong deflationary tendency was predicted."[20]

In part, the prediction of depression reflected the influence of the secular stagnationists, led by leading Keynesian disciple Alvin Hansen, who argued that the investment boom that had stimulated American economic growth had stalled after the closing of the frontier and the slowdown in population growth.[21] In part, it reflected a more short-term Keynesian concern with falling aggregate demand in the face of decreased government expenditures. The thought of a rapid reduction in government military spending provided nightmares to some Keynesians. Hansen, writing in 1943, said: "When the war is over, the government cannot just disband the Army, close down munitions factories, stop building ships, and remove all economic controls."[22] Yet that is precisely what the government did (although it took a year to remove most controls).

Politicians took the dire predictions of economists seriously. Speaking to the Congress a few days after the Japanese surrender, President Truman said of reconversion, "Obviously during the process there will be a great deal of inevitable unemployment."[23] Truman was concerned that a fall in purchasing power would retard recovery. In calling for an increase in the minimum wage and extended

[19]Michael Sapir, "Review of Economic Forecasts for the Transition Period," National Bureau of Economic Research, *Studies in Income and Wealth* 9 (March 1949): 275–351. One forecaster who correctly foresaw the low postwar unemployment was W. S. Woytinsky. See his "What Was Wrong in Forecasts of Postwar Depression?" *Journal of Political Economy* 55 (April 1947): 142–51. See especially his comment on page 143; see also Lawrence Klein's comment in Sapir, op. cit., pp. 352–57.

[20]Robert A. Gordon, *Business Fluctuations*, 2nd ed. (New York: Harper and Row, 1961), p. 464. Everett Hagen's forecast, for example, predicted an unemployment rate of 14.8 percent for the first quarter of 1946. See Sapir, op. cit., p. 332.

[21]Alvin Hansen, "Economic Progress and Declining Population Growth," *American Economic Review* 29 (March 1939): 1–15.

[22]In a publication for the National Resources Planning Board, *After the War, Full Employment*, quoted in Hugh S. Norton, *The Employment Act and the Council of Economic Advisers, 1946–1976* (Columbia, S.C.: University of South Carolina Press, 1977).

[23]*New York Times*, September 7, 1945, p. 16, col. 3.

coverage, Truman said "the existence of substandard wage levels sharply curtails the national purchasing power and narrows the markets for the products of our firms and factories."[24]

A few days earlier, the prestigious Committee for Economic Development, representing 2,900 businessmen and headed by prominent industrialist Paul G. Hoffman (Chairman of the Studebaker Corporation) called for federal aid to assist the newly created jobless to move to areas where jobs were created.[25]

At the same time, however, the use of two conventional Keynesian unemployment remedies, tax cuts and public works projects, was largely rejected. Truman did call for the passage of a Full Employment Act, but proposed little in the way of new public works spending or tax relief to stimulate aggregate demand.[26] Indeed, prominent Republicans were more vehement in calling for income tax cuts than the Democrats, with the ranking Republican member of the House Ways and Means Committee calling for a 20 percent income tax cut.[27] The *New York Times*, summarizing Congressional feelings on public works spending, concluded:[28]

> Only a short time ago, the tendency at the nation's capital was to think in terms of public works as a major factor. It now seems to be agreed that they should be regarded only as a part of a broad program, or as a last resort in an emergency, and that private enterprise must be relied upon to provide the large-scale employment necessary.

Despite the pessimistic concerns of economists and politicians, most of the news around the time of the Japanese surrender was upbeat with regards to the reconversion process. Within three days of V-J Day, one reporter wrote "reports indicate that industry is reconverting its plants from war to peace much more quickly and early, and that reconversion unemployment is much smaller than anticipated."[29]

This did not stop the economic forecasters from predicting massive unemployment. Indeed, the faster-than-expected discharge of

[24]Ibid.

[25]*New York Times*, August 28, 1945, p. 38, col. 4.

[26]*New York Times*, September 7, 1945, p. 16, col. 1. The original proposed full employment legislation, however, would have mandated counter-cyclical fiscal policy measures if necessary to obtain full employment. We are indebted to our colleague and Truman scholar Alonzo Hamby for this insight.

[27]*New York Times*, August 28, 1945, p. 1, col. 2. Rep. Harold Knutson repeated his call for a 20 percent individual income tax reduction plus an end to the corporate excess profits tax in late September, to no avail.

[28]*New York Times*, September 2, 1945, p. 10, col. 1.

[29]*New York Times*, September 2, 1945, p. 1, col. 2.

soldiers led some of them to revise their estimates of unemployment *upward*. For example, on September 1 *Business Week* predicted GNP in 1946 would be 20 percent below the 1944 levels and that unemployment would peak "closer to 9,000,000 than 8,000,000."[30] The 9,000,000 figure represented about 14 percent of the projected civilian labor force.

Businessmen and Wall Street did not listen to the economists. The Standard and Poor Industrial stock index rose more than 30 percent from the fall of 1945 to the fall of 1946. As one commentary put it, "the simple fact is that the transition from war to peace production isn't proving too rough."[31] As early as September 1945, *Business Week* was revising its estimate of unemployment for the end of 1945 down to 4.0 to 4.5 million from 6.0 million.[32] A CED survey of top businessmen predicted relatively high employment levels, with the number of jobs to rise 24 percent above the 1940 level and only 12 percent below the wartime peak.[33]

Still, even in December 1945 economists were predicting that "depression is just around the corner." Robert Nathan predicted six million unemployed by the spring of 1946, implying an unemployment rate of 10 percent.[34] Veteran Department of Labor economist Isidore Lubin decided, in *Business Week*'s opinion, to "play in safe," predicting a wide range; six to nine million unemployed.[35] Even the minimum estimate turned out overly pessimistic by nearly a factor of three.

The Revised Keynesian Interpretation of Reconversion

Yet within a year of the war's end, it was clear that the pessimistic predictions were spectacularly wrong. Accordingly, economists rushed to put a new interpretation on events consistent with the new Keynesian theology that became deeply instilled in many of them. The postwar prosperity (they did not have the benefit of the statistics in the 1990 *Economic Report of the President*) was attributed to pent-up demand. In December 1946, the first report of the newly created Council of Economic Advisers, drafted primarily by Edwin Nourse, was representative of the new interpretation: "We have a postponed consumer demand, enterpriser ambitions, and purchasing

[30]*Business Week*, September 1, 1945, p. 9.
[31]*Business Week*, September 15, 1945, p. 9.
[32]*Business Week*, September 29, 1945, p. 9.
[33]*New York Times*, September 10, 1945, p. 32, col.3 .
[34]*Business Week*, December 27, 1945, p. 10.
[35]Ibid.

power which hold the potential of some years of great activity . . ."[36]

The view expressed by the Council quickly became enshrined in many cited works published in this period. One of the nation's foremost experts on business cycles, Robert A. Gordon, wrote:

> Even with the decline in government spending, aggregate demand was sufficient to maintain full employment. . . . Consumption increased rapidly in the face of a decline in GNP. Here lies the main part of the answer to the mildness of the reconversion recession.[37]

Alvin Hansen said much the same thing:

> The country came out of the war rich in monetary assets and monetary savings and desperately short of consumers' durables, houses, business plant and equipment. This laid the ground work for a vast postwar prosperity. . . .[38]

The Hansen-Gordon interpretation quickly found itself a part of the standard surveys of American economic history published in the 1950s and later. In the popular second edition of the Harold Williamson-edited textbook on American economic history, Harold Somers noted:

> A striking aspect of the postwar economy was the failure of predictions of postwar depression made by most economists. In general, the effect of deferred demand, financed by accumulated liquid holdings, was underestimated.[39]

The author of the leading selling textbook for many years, Harold Faulkner, echoed this theme, somewhat perceptively, however, giving a bit more emphasis to the investment and export demand dimensions of aggregate demand:

> The "temporary props" for this prosperity were mainly three: business expenditures for reconversion and for new construction and equipment; heavy consumer spending, much of it for commodities unobtainable during the war, and heavy export of goods and services . . .[40]

While modern textbook authors, perhaps bewildered by the contemporary statistics for that era, now play down the postwar recon-

[36]Council of Economic Advisers, *First Annual Report to the President*, 1946, p. 18.

[37]Gordon, *Business Fluctuations*, pp. 465, 467.

[38]*The Postwar American Economy Performance and Problems* (New York: W. W. Norton, 1967), p. 5.

[39]"The Performance of the American Economy Since 1919," in Harold F. Williamson, ed., *The Growth of the American Economy* (Englewood Cliffs, N. J.: Prentice-Hall, 1954), p. 713.

[40]Harold U. Faulkner, *American Economic History*, 7th ed. (New York: Harper, 1954), p. 713.

version experience, there still seems to be acceptance of the notion that consumers spent America into prosperity. Jonathan Hughes, who sensibly still uses the less-biased 1960 data in analyzing the period, says "consumers now could find something to own: new cars, refrigerators, soft goods. The country went off on a well-earned spending binge."[41] We could find no textbook that explicitly rejected the Hansen-Gordon interpretation.[42]

Thus within a few years of the end of World War II, the orthodox Keynesian demand explanation for the low unemployment during the postwar transition had become enshrined in the literature and in the training of more than a whole generation of economic historians. The postwar experience was cited as further evidence of the efficacy of demand management macroeconomic policies, when in reality overwhelming empirical evidence refuted that very conclusion.[43]

Assessing the Keynesian Interpretation

There are two empirical problems with the "pent-up demand" explanation of the postwar reconversion: timing and magnitude. It is alleged that consumption and investment spending rose dramatically to offset declining government spending, so that aggregate demand was maintained, thereby permitting essentially full employment. Table 4 gives data on some key economic indicators by quarters for the 1945–47 period. By most indicators, the economic decline associated with the postwar reconversion reached its trough no later than the first quarter of 1946. In that quarter, the civilian unemployment rate peaked, while industrial production and nominal GNP reached their lows for the business cycle.

[41]Jonathan R. T. Hughes, *American Economic History*, 3rd ed. (Glenview, Ill: Scott Foresman, 1990), p. 522.

[42]Robert C. Puth, however, shows some skepticism with the data. Using the modern data developed in the mid-1980s, Puth says the 1945 GNP figures "may have substantially overstated the level of economic welfare." See his *American Economic History*, 2nd ed. (Chicago: The Dryden Press, 1988), p. 537. We would also concede that had consumer goods been more readily available in 1946, consumption spending would have been greater, so the demand-side story could have been more factually accurate. The fact remains, however, that high-level consumption spending did not occur, even if the public was willing for it to do so.

[43]As an anonymous referee perceptively pointed out, the adoption of the pent-up demand line of defense meant a theoretical retreat for Keynesians. Previously, the view was that increases in aggregate demand could lead to almost infinite increases in total output (implying a positively sloped aggregate supply curve at all price levels). Implicitly, Keyensians were now accepting the view that consumption spending during World War II had been "crowded out" by increased government spending, and that reduced government spending after 1945 led to a reversal of this process. Of course, proponents of the Keynesian perspective never pointed out this theoretical weakness.

Keynesian analysis argues that changes in aggregate demand determine the level of both nominal and real economic activity. Using armed forces employment as our measure, military activity peaked in the second quarter of 1945. From that time to the trough of the mild downturn in the first quarter of 1946, government purchases of goods and services fell an extraordinary 67.5 percent, or $65.7 billion.

Table 4
Eight Key American Economic Indicators, Quarterly Data, 1945 I to 1947 IV

Quarter	*Money GNP*[a]	*Unemp. Rate*[b]	*Corp. Profits*[c]	*Ind. Prod.*[d]	*Layoff Rates*[e]	*Average Workwk Manuf.*[f]	*Govt. Purch.*[g]	*Housing Starts*[h]
1945 I	$217.6	1.10%	$10.2	123	0.67	45.4	$98.6	123
II	219.2	1.17	9.6	117	1.23	44.6	97.3	156
III	210.4	2.11	6.9	98	5.57	42.0	80.2	191
IV	206.8	3.66	6.5	86	1.77	41.4	55.2	393
1946 I	197.7	4.14	8.8	84	1.77	40.7	31.6	718
II	205.3	4.02	11.5	87	1.37	40.1	26.2	685
III	215.6	3.66	15.5	93	0.77	40.2	25.5	630
IV	220.7	4.07	18.0	96	0.90	40.5	26.9	625
1947 I	225.1	3.81	18.4	98	0.87	40.5	24.6	702
II	229.3	4.08	17.6	98	1.17	40.2	25.4	747
III	233.6	4.06	17.6	99	0.90	40.1	25.5	912
IV	244.0	3.72	19.3	101	0.87	40.8	26.1	1,007

[a]Seasonally adjusted, in billions.
[b]Civilian unemployment rate, seasonally adjusted.
[c]After-tax corporate profits, in billions, seasonally adjusted.
[d]Industrial production, seasonally adjusted. 1947–1949 = 100.
[e]Layoff rates per 100 workers in manufacturing, not seasonally adjusted.
[f]Average hours worked per week, manufacturing, not seasonally adjusted.
[g]Government purchases of goods and services, not seasonally adjusted, in billions.
[h]Housing starts, in thousands, seasonally adjusted.

Sources: Geoffrey H. Moore, ed., *Business Cycle Indicators* (Princeton: Princeton University Press for the NBER, 1961); GNP: Department of Commerce, *National Income & Product Accounts of the United States* (Washington: Government Printing Office, 1981); Government Purchases: *1949 Statistical Supplement to the Survey of Current Business* (Washington, D.C.: Government Printing Office, 1950).

Over the same period, consumption spending rose but $14 billion, barely 20 percent of the fall in government spending. Whatever the merits of the "pent-up" demand argument, there was only a modest increase in consumption during the critical period of demobilization and reconversion, to be sure in part because of capacity constraints on consumer goods industries. Investment spending rose a more robust $21.6 billion, and net exports by $9.8 billion, but collectively the increases in demand fell about $20 billion short of decline in government spending, leading money GNP to fall a rather sharp 10 percent.

By the end of the first quarter of 1946, the process of reconversion was largely completed. Nearly seven million persons had left the armed forces, and government spending had fallen well over 90 percent of the way from the wartime peak to what would be the postwar low in 1947. Federal finances had moved from a massive deficit position (equal to 20 percent or more of GNP) to a budget surplus. Monetary policy also moved towards a much more contractionary stance, although monetary growth was still high by long term historical standards. Bank deposits and currency grew slightly over seven percent from the second quarter of 1945 to the first quarter of 1946, less than half the nearly 15 percent growth observed over the preceeding three quarters (the third quarter of 1944 to the second quarter of 1945). The growth in bank reserves similarly declined by about 60 percent.[44]

As the nation moved from a radically expansionary to a contractionary fiscal policy in less than a year, and as it dramatically slowed the extraordinary monetary expansion, did the nation witness what the Keynesian paradigm suggested would happen, and what virtually all economists predicted? No. Unemployment in the first quarter of 1946 averaged slightly over four percent. To be sure that was more than the rate of less than two percent existing in early 1945. Also, even our revised national income statistics would indicate there was some output decline. *Yet the rate of unemployment "peaked" at a rate low by historical norms, below the average of the prosperous 1920s, or the 1950s.* Unemployment was low, long before any "pent up demand" had an opportunity to play a role. Automobile production was still depressed in early 1946, and expenditures on other major consumer goods were still well below normal peacetime, much less abnormally high, levels.

[44]See Milton Friedman and Anna J. Schwartz, *A Monetary History of the United States, 1867–1969* (Princeton: Princeton University Press for the National Bureau of Economic Research, 1963), pp. 717–18, 741–42.

The latter point is empirically verified by the ordinary least squares estimation of simple consumption functions using three data sets for other (presumably "normal") periods, then estimating what consumption should have been for the 1945–47 period assuming the consumption-income relationships of the other periods held. Specifically, we examined annual data for 1929–1941 and for 1948–1970, and quarterly data for the first quarter of 1948 through the fourth quarter of 1959.

The findings are interesting:

(1) All three data sets show that actual consumption did not rise above predicted levels until 1947, well after reconversion was largely over and after the labor market adjustment was completed.

(2) In 1946 consumption spending was still several billion dollars below predicted ("normal") levels by all three data sets. In that connection, in the first quarter of 1946, the personal savings rate (personal savings as a percent of disposable personal income) was still nearly 11 percent, well above historical norms.[45]

(3) The quarterly data suggest that actual consumption rose above "normal" or predicted levels only in the second quarter of 1947, nearly a year after demobilization was essentially completed, a year after real GNP had started to rise, and 19 months into a postwar labor market experience in which the unemployment rate had never exceeded 4.2 percent.

An Alternative Explanation for the Smooth Postwar Conversion

Before the rise of Keynesian economics, most economists believed that what is now termed "cyclical" unemployment resulted from wages in excess of their market-clearing levels. In figure 1, unemployment exists at wage w, and is denoted by the distance between the original demand for labor curve D_1 and the supply for labor curve S_1 at wage w. The observed unemployment can be eliminated in four ways:

(1) a lowering of the money wage from w to w';

(2) an increase in the marginal physical product of labor reflecting a technological advance or other productivity-enhancing development; this would lead the demand curve to shift towards D_2, eliminating unemployment;

(3) an increase in the price of commodities, raising the nominal value of the marginal product of labor, leading to a shift in the

[45]See U. S. Department of Commerce, Bureau of Economic Analysis, *The National Income & Product Accounts of the United States*, 1929–1976, p. 76.

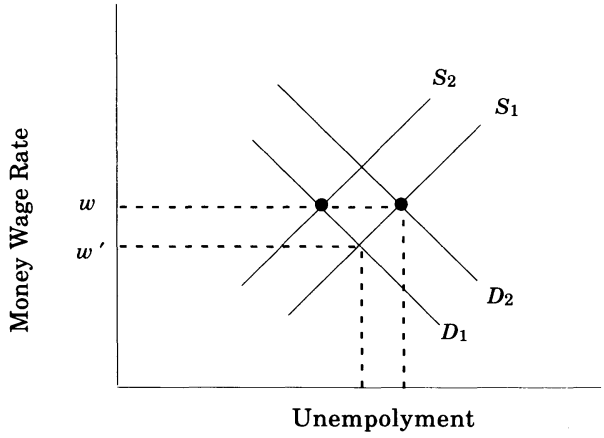

Figure 1. Wage Rates and Unemployment

demand curve; the shift in the demand curve could result from a combination of productivity advance and price increase;

(4) a reduction in labor supply to S_2.

All four of the responses mentioned above impact on equilibrium wage levels, so it is not too much of an exaggeration to state that regarding unemployment, traditional labor market analysis suggests that "wages alone matter." This is in marked contrast to the Keynesian perspective that dominated economic thinking from the 1940s through the 1960s that, with little exaggeration, said that "wages do not matter." A small band of economists, including Ludwig von Mises, F. A. Hayek, Benjamin Anderson and W. H. Hutt, never abandoned the notion that wages are critical in unemployment determination, but these voices carried no weight in the development of the consensus interpetation of why America avoided a depression after World War II.[46]

Yet the empirical evidence, which suggests that "pent up" demand played no meaningful role for nearly two years in which unemployment stabilized at low levels, is consistent with the theory espoused above. This is not to deny that consumers hungered for consumer goods. Nonetheless, in the critical reconversion period, the growth in actual consumption was modest compared with the reduction in federal defense-related spending.

[46]For more on the role of wages in unemployment from the perspective of economic theory, the history of economic thought, and empirical evidence relating to the American experience, see Lowell Gallaway and Richard Vedder, "Wages, Prices and Employment: Von Mises and the Progressives," *Review of Austrian Economics* 1 (1987): 33–80.

Table 5
Selected Characteristics of the American Labor Force, June 1945 and June 1946

Labor Force Characteristic	*June 1945*[a]	*June 1946*[a]
Non-Institutional Population[b]	105,290	106,210
Total Labor Force	67,590	62,000
Total Employment	66,700	59,430
Federal Employment	15,849	5,879
Armed Forces	12,130	3,070
Civilian	3,719	2,809
Non-Federal Employment	50,851	53,551
Civilian Employment	54,570	56,360
Male	34,710	39,650
Female	19,860	16,710
Female Civilian Employment as % of Total	36.39%	29.65%
Unemployment	890	2,570
Male	460	2,010
Female	430	560
Unemployment Rate (% of Civilian Labor Force)	1.60%	4.36%
Unemployment Rate (% of Total Labor Force)	1.32%	4.15%
Labor Force Participation Rate	64.19%	58.37%
Employment-Population Ratio	63.35%	55.96%

[a]Age 14 or over.
[b]In thousands.

Sources: *1949 Statistical Supplement: Survey of Current Business*, p. 53; *Monthly Labor Review* (August and September 1946).

To begin our look at this evidence, it is interesting to compare labor force statistics at the height of mobilization, June 1945, with statistics just exactly one year later, June 1946 (see table 5).

The total labor pool grew by nearly one million over the year, yet the labor force fell by nearly 5.6 million. The end of the war was accompanied by an enormous drop in the labor force participation rate. In particular, millions of women voluntarily decided to withdraw from the labor force and reverted to their traditional roles as mothers, wives, and housekeepers. About 56 percent of the potential unemployment created by the almost 10 million decline in federal

employment was absorbed by voluntary exit from the labor force.

The word "voluntary" in the preceeding paragraph is important. It is presumed in a free society that labor voluntarily enters into labor market decisions. Yet during World War II, millions of men were drafted and became part of the labor force; some of them may have not voluntarily been part of that labor force in the absence of conscription. Thus the wartime unemployment rates of under two percent were low, at least in part, because the normal rules of non-coercive labor market participation did not apply. Thus the postwar rise in the reported unemployment rate, modest as it was, still overstated the true recessionary conditions that existed.

Yet the sudden reversion of labor supply to more normal levels was not the only factor in the moderate postwar unemployment. Non-federal employment grew 2.7 million in this first postwar year, in a period before the major consumer goods industries had resumed full production. Indeed, factory employment in June 1946 was still more than 10 percent below the June 1945 levels (because of declining defense-related production), implying the job growth in non-manufacturing, non-federal employment was actually more than four million jobs. More than 27 percent of the problem that the release of 10 million government employees created was eliminated by increased civilian employment, most of it in the private sector. If defense industries are considered, demobilization from June 1945 to June 1946 meant the loss of over 11 million jobs, about four million of which (about 36 percent) were absorbed in the civilian economy.

Why was non-manufacturing civilian employment soaring by over 10 percent in one year, particularly when one considers that economists were widely predicting a resumption of the Great Depression of the 1930s, and when one considers that the mainline durable goods industries (which were in manufacturing in any case) were still at below normal production? How could millions of new civilian jobs be created when there was "underconsumption" by normal standards?

The answer lies, we think, in the other forms of unemployment-determining labor market adjustments discussed above: changes in money wages, prices, and the productivity of labor. The money wage divided by prices is called typically the "real wage." Real wages adjusted (by division) to take account of productivity changes can thus be called the "adjusted real wage." It is our contention that, in addition to reduced labor supply, a decline in the adjusted real wage helped absorb the more than 11 million workers released in the first year of the demobilization.

Directly calculating what happened to the adjusted real wages is

difficult for a variety of reasons. There is no accepted data series giving hourly wages for the entire labor force before 1947. Annual earnings figures are of questionable value because of a major reduction in overtime work at the conclusion of the war. Regarding prices, the deficiencies of price indices, particularly in a period when price controls are changing, are well known. Similarly, deficiencies in price indices impact on the calculation of labor productivity.

Nonetheless, we calculated the adjusted real wage for labor some 18 different ways, using three different measures of hourly wages, three different price indices, and two different estimates of changing labor productivity. Specifically, we used hourly earnings in manufacturing, retail trade, and contract construction for our money wage measure, and the consumer price index, wholesale price index, and GNP price deflator in calculating real wages, and real private gross domestic product per man-hour, and real private gross domestic product per unit of labor input as our measure of labor productivity.[47]

The calculations reveal that for 1946, some 14 of 18 estimates show a decline in the adjusted real wage from 1945 levels, with the median decline being 2.35 percent. In no case was there an estimated increase in the adjusted real wage of greater than two percent. Similarly, making calculations for 1947 reveals even more striking results. Some 17 of 18 estimates of the adjusted real wage for 1947 are below 1945 levels (the single exception showed a 0.5 percent increase), with the median estimate recording a decline of 7.15 percent. Using the median, it would appear the adjusted real wage tended to fall some in 1946, and continued to fall in 1947, perhaps explaining the continued robust growth in employment that year.

Elsewhere we have argued that New Deal "underconsumptionist" reasoning led to wage-enhancing legislation that prolonged the Great Depression of the 1930s.[48] Some dimensions of reconversion served to reduce (although not eliminate) some deleterious unemployment effects of the New Deal legislative initiatives. For example, the peacetime transition meant a fall in the average work week, as weary wartime workers sought an increase in leisure time. With a fall in the length of the average workweek came a decline, other things equal, in money wages. Suppose a worker making one dollar per hour worked a 45 hour week in early 1945. Because of the Fair Labor Standards Act of 1938, the worker received $1.50 per hour for hours worked past 40, or a total

[47]The *Historical Statistics of the United States, Colonial Times to 1975* was used in the calculations. With that source, the price distortions with respect to the GNP price deflator were modest compared with later revisions.

[48]Gallaway and Vedder, "Wages, Prices and Employment."

of $47.50 for a 45 hour week, slightly over $1.05 in average hourly pay. A reduction in hours to 40, the nominal hourly wage left unchanged, lowered the paycheck to $40 ($1.00 per hour), a decline in over 5 percent in the average hourly wage. This example was a common occurrence.

Another development, unrealized at the time, was the relative decline in the importance of labor unions in the economy. Labor union membership as a percent of civilian employment reached a peak in 1945 and declined after the war (and has continued to decline ever since). For example, in 1945, union membership equalled 26.59 percent of the civilian labor force; in 1946, the proportion had fallen fairly noticeably, to 25.03 percent, and then to 24.58 percent in 1947.[49] The decline occurred despite a rise in the proportion of workers who were male (more inclined to unionize). The decline in relative union importance reduced somewhat the pressures on wage levels that collective bargaining imposes.

At least two factors contributed to the relative decline in union strength. First, the shift in employment from the relatively union-intensive manufacturing sector to the less unionized service sector was a major factor. Even within manufacturing, however, the demise in the War Labor Board after late 1945 removed a pro-union form of governmental intervention. The WLB consistently promoted collective bargaining in war plants and the end of the war brought a close to this activity.

Because of the data problems mentioned earlier in the paper, however, we have only limited faith in the estimates of falling adjusted real wages given above. Fortunately there is an alternative way of discerning the change in adjusted real wages that avoids some of the problems associated with using price indices, etc. When the same price index is used in calculating real wages is utilized in determining what happened to labor productivity, it turns out that the adjusted real wage is simply equal to money wage payments divided by total output or, more appropriately, personal income.

Specifically, real wages are equal to hourly money wages (w) divided by some price index (P), or w/P. Similarly, labor productivity equals money output per hour (O) divided by a price index, or O/P. Assuming the same price index in both calculations, dividing w/P by O/P gives w/O. The latter variable is simply labor compensation as a proportion of GNP or, using distributive shares data, personal income.

[49]Total labor union membership in U.S. unions rose but 77,000 in 1946, even as non-agricultural employment grew by nearly 2.7 million workers. See the *Historical Statistics of the United States, Colonial Times to 1957*, pp. 126 and 178.

Table 6
Compensation as a Percent of GNP and Personal Income, 1945 to 1947

Quarter	*Employee Compensation**	*Personal Income**	*Money GNP**	*Compensation as % of:* *Personal Income*	*GNP*
1945 I	$122.5	$174.4	$222.6	70.2%	55.0%
II	121.6	174.2	225.0	69.8	54.0
III	117.4	170.7	213.0	68.8	55.1
IV	109.1	168.6	200.3	64.7	54.5
1946 I	105.1	168.5	199.1	62.4	52.8
II	109.8	173.5	206.3	63.3	53.2
III	114.0	181.4	221.1	62.8	51.6
IV	116.7	183.8	224.0	63.5	52.1
1947 I	118.5	187.8	228.2	63.1	51.9
II	119.8	187.6	233.6	63.9	51.3
III	123.1	196.6	232.4	62.6	53.0
IV	127.7	201.7	248.6	63.3	51.4

*In billions of dollars.

Sources: *1949 Statistical Supplement, Survey of Current Business* (Washington, D.C.: Government Printing Office, 1950), pp. 6, 7; authors' calculations. GNP statistics differ from those used elsewhere in the paper because of more recent revisions; data for 1945 are not available in those revisions.

Table 6 gives data on employee compensation, personal income and gross national product by quarters. Note that the ratio of employee compensation to income or output falls after the conclusion of the war. Using labor's share of personal income, the decline is from the 69–70 percent level late in the war to about 63 percent in the 1946 and 1947 quarters. Using labor's share of GNP, the decline is from 54–55 percent in the late war (first three quarters of 1945) to 51–53 percent in the 1946 and 1947 quarters. However calculated, labor's share declined, meaning the aggregate adjusted real wage tended to fall. These findings thus are consistent with the results suggested by wage, price, and productivity data. Millions of workers were hired by business despite an uncertain economic future in large part because "the price was right."

The fall in the adjusted real wage meant an increase in remuneration of capital. After-tax corporate profits, never much over $11 billion on an annualized basis during the war, rose to about $18 billion (on an annual basis) by the last quarter of 1946.[50]

Nominal interest rates remained extremely low, increasing the spread between anticipated return on invested capital and the cost of borrowed funds. For example, the average interest yield on a triple-A (Moody's) corporate bond in 1946 was 2.53 percent, the lowest of any year since that statistic has been kept.[51] A major factor in the low interest rates, despite a relative tightening in monetary policy, was the government budget surplus that developed in 1946. The federal government, in effect, moved from being a supplier rather than a demander in the loanable funds market. Perhaps the most massive move towards a contractionary (in a Keynesian perspective) fiscal policy in the nation's history helped to create conditions in capital and money markets that assisted in the transition. The postwar era was a classic case of "reverse crowding out." Rising profits, and the anticipation of future increases, stimulated investment spending (the only truly robust major component of aggregate demand).

Rising profits led to rising equity values and higher net worths. Raymond Goldsmith estimates the national wealth rose far more in the two years from 1945 to 1947 (46.4 percent) than in the 16 years from 1929 to 1945 (31.1 percent).[52] Whereas the anti-capitalistic innovations of the New Deal probably caused what was in real terms a *decline* in national wealth in the 1929–45 era, the modest but real retreat from interventionism along with a fall in the adjusted real wage and the associated rise in returns to capital led to a significant growth in wealth in the demobilization period.

An excellent case can be made, indeed, that the increase in autonomous consumption in the post-war era reflected increased spending *induced by rising wealth*. About two-thirds of the shift in autonomous consumption from 1945 to 1947 can be explained by the $267 billion growth in national wealth during that period, if one accepts the Ando and Modigliani view that the marginal propensity to consume out of wealth is about .06.[53]

[50]The exact profit figure depends on whether the data are seasonally adjusted, take into account inventory evaluation adjustments, taxes, etc. See the *1949 Statistical Supplement to the Survey of Current Business* (Washington, D.C.: Government Printing Office, 1948), p. 6.

[51]*Historical Statistics of the United States, Colonial Times to 1975*, p. 1003.

[52]Ibid, p. 255.

[53]Albert Ando and Franco Modligliani, "The 'Life Cycle' Hypothesis of Savings: Aggregate Implications and Tests," *American Economic Review* 53 (March 1963): 55–84.

In short, rather than "pent-up demand" preventing a depression, the evidence is more consistent with a distinctly non-Keynesian interpretation: A downward adjustment in labor supply and real wages, accompanied by a more responsible (non-deficit) fiscal policy, served to stimulate investment and consumption spending. Relative price adjustments brought about what Keyensians perceived to be an increase in aggregate demand, rather than the other way around.

Conclusions

Modern standard statistical sources suggest there was a very severe economic downturn in 1946. The evidence does not support that conclusion, and it is clear that statistical revisions have served to distort the historical experience. Keynesian economists *ex ante* predicted a major downturn after the war, but when it did not come they *ex post* abruptly changed their tune and argued that a surge in private spending, especially consumption and investment spending, prevented a downturn.

The evidence shows that aggregate demand rose too little and too late to explain the low unemployment that prevailed in the first two years after V-J day, the period in which demobilization was completed. What did happen was that labor markets, partially constrained by non-price factors in the wartime period, were allowed to function in a manner that prevented a serious decline. Labor supply abruptly fell, but in addition real wages, adjusted for productivity change, also fell, preventing a massive rise in unemployment.

To the extent aggregate demand was stimulated at all, it was because of the relative price changes outlined above. Lower adjusted real wages meant higher profits and rates of return on investment spending. A dramatic shift in governmental demand for loanable funds, far from contracting the economy as Keynesian economics suggests, kept interest rates at historic lows. Rising wealth associated with the high returns on capital led to increased consumption that ultimately led to a durable goods explosion—but one that took place long after reconversion had occurred without any major unemployment.

Appendix

Estimating the GNP Price Deflator and Real GNP

A model was constructed using real and monetary variables that provided a close statistical fit to the real GNP price deflator for the largely non-price control years 1916 to 1941; the model was estimated by ordinary least squares regression analysis using annual data:

$$\begin{aligned}(1)\ \text{DEFLATOR} = {} & 26.895 + 0.326\ \text{M2} + 2.717\ \text{CPAPER} \\ & (1.190) \quad (1.573) \quad (3.776) \\ & - 0.000\ \text{TONMIL} - 0.000\ \text{EMPLOY} \\ & (0.093) \quad (0.012)\end{aligned}$$

$$R^2 = .822,\ \text{D-W} = 1.715,\ F = 18.521,$$

where DEFLATOR refers to the GNP price deflator, M2 to that definition of money, CPAPER to the interest rate on commercial paper, TONMIL to the ton-miles of freight hauled by class A railroads, and EMPLOY to the number of employed persons; an autoregressive term is omitted, and numbers in parentheses are *t*-values.[54] The 1942–47 deflator was estimated from (1).

Econometrically Evaluating the "Pent-Up Demand" Argument

A simple bivariate Keynesian consumption function was statistically fitted, where the dependent variable was CONSUMPTION and the independent variable DISINC, for disposable income. Annual data were obtained from *Historical Statistics* (1975 Edition) for the years 1929 to 1941, and from the same source for 1948 to 1970. In addition, quarterly data for the years 1948 through 1959 were obtained from *The National Income & Product Accounts of the United States, 1929–1976*. The obtained statistical results follow:

$$\begin{aligned}1948\text{-}70 :\ \text{CONSUMPTION} = {} & 7.570 + 0.891\ \text{DISINC}, \bar{R}^2 = .9996, \\ & (4.932) \quad (235.706) \qquad \text{D-W} = 1.983;\end{aligned}$$

$$\begin{aligned}1929\text{-}41 :\ \text{CONSUMPTION} = {} & 3.874 + 0.898\ \text{DISINC}, \bar{R}^2 = .9865, \\ & (1.882) \quad (29.602) \qquad \text{D-W} = 1.124;\end{aligned}$$

$$\begin{aligned}1948\text{-}59 :\ \text{CONSUMPTION} = {} & 9.819 + 0.880\ \text{DISINC}, \bar{R}^2 = .9963, \\ \text{Quarterly} \qquad & (4.809) \quad (112.864) \qquad \text{D-W} = 1.954.\end{aligned}$$

[54]All data were obtained from *Historical Statistics of the United States, Colonial Times to 1975.*

Actual vs. predicted values for 1945–47 using annual data (all dollar numbers in billions) were:

		Predicted Values:	
Year	*Actual Value*	*48-70 DATA*	*29-41 DATA*
1945	$119.6	$140.5	$137.9
1946	143.9	149.1	146.6
1947	161.9	158.0	155.5

Using quarterly data for 1948–59, the predicted values for 1946–47 (all dollar numbers in billions) were:

Quarter	*Actual Consumption*	*Predicted Consumption*
1946 I	$134.5	$144.5
II	139.6	147.3
III	148.4	152.2
IV	152.7	155.2
1947 I	154.0	155.8
II	159.0	154.0
III	163.5	160.3
IV	167.6	162.4

Postwar consumption did not exceed "normal" levels in relation to disposable income until well into 1947—two years after peak mobilization.

Ludwig von Mises and the Austrian School of Economics

Jeffrey M. Herbener*

> Everyone carries a part of society on his shoulders: no one is relieved of his share of responsibility by others. And no one can find a safe way for himself if society is sweeping towards destruction. Therefore everyone, in his own interests, must thrust himself vigorously into the intellectual battle. No one can stand aside with unconcern: the interests of everyone hang on the result. Whether he chooses or not, every man is drawn into the great historical struggle, the decisive battle into which our epoch has plunged us (Mises 1988, p. 169).

This is the message of Ludwig von Mises. No one has ever fought the battle more courageously than Mises, nor had a more decisive long-run effect. Murray Rothbard is correct when he says ". . . if the world is ever to get out of its miasma of statism, or, indeed, if the economics profession is ever to return to a sound and correct development of economic analysis, both will have to abandon their contemporary bog and move to that high ground that Mises developed for us" (Rothbard 1983, p. 5).

Now, as the battle appears to be turning in favor of freedom, is an appropriate time to reconsider the role of economic theory in these world-wide changes. Specifically, it is time to consider the work of Mises and the Austrian school in the development and dissemination of the economic principles of social progress. Two steps are necessary to complete this task. The first is to demonstrate the pre-eminence of the Austrian school in developing the principles of free enterprise. The second is to demonstrate that Mises is the champion of this tradition in the twentieth century.

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Method and the Austrian Tradition

Carl Menger founded the Austrian school during the marginalist revolution of the late nineteenth century in his attempt to correct the errors of the classical economists. As Menger said:

> Adam Smith and this school have neglected to reduce the complicated phenomena of human economy in general, and in particular of its social form, "national economy" to the efforts of individual economies, as would be in accordance with the real state of affairs. They have neglected to teach us to understand them theoretically as the result of individual efforts. Their endeavors have been aimed, rather, and to be sure, subconsciously for the most part, at making us understand them theoretically from the point of view of the "national economy" fiction. On the other hand, the historical school of German economists follows this erroneous conception consciously (Menger 1985, pp. 195–96).

It is the adherence to these methodological precepts of individualism and essentialism that distinguish the Austrian school from all others. Although Mises significantly refined and improved his position, Menger laid the groundwork:

> This is the ground on which I stand. In what follows I have endeavored to reduce the complex phenomena of human economic activity to the simplest elements that can still be subjected to accurate observation, to apply to these elements the measure corresponding to their nature, and constantly adhering to this measure, to investigate the manner in which the more complex economic phenomena evolve from their elements according to definite principles (Menger 1976, p. 47).

> It is now the task of the reader to judge to what results the method of investigation I have adopted has led, and whether I have been able to demonstrate successfully that the phenomena of economic life, like those of nature, are orderly strictly in accordance with definite laws (Menger 1976, p. 48).

Via this method, Menger solved the paradox of value, derived the subjective theory of value, developed a unified theory of price and reconstructed the origin of social institutions such as money, markets, property, and law. More than this, he began the process, culminating in the work of Mises, that has resulted in universally correct economic laws of social systems. As Menger stated:

> The aim of this orientation, which in the future we will call the *exact* one, an aim which research pursues in the same way in all realms of the world of phenomena, is the determination of strict laws of phenomena, of regularities in the succession of phenomena which do not present themselves to us as absolute, but which in respect to the approaches to cognition by which we attain to them simply bear within themselves the guarantee of absoluteness (Menger 1985, p. 59).

In contrast, most other schools of economic thought deny, because of their methodological positions, the existence of universal laws of economics. Most prevalent are empirically based schools such as the German historical school that Menger fought. Menger was quite clear on this:

> If, therefore, exact laws are at all attainable, it is clear that these cannot be obtained from the point of view of empirical realism, but only in this way, with theoretical research satisfying the presuppositions of the above rule of cognition.
>
> But the way by which theoretical research arrived at the above goal, a way essentially different from Bacon's empirical-realistic induction, is the following: it seeks to ascertain the *simplest elements* of everything real, elements which must be thought of as strictly typical just because they are the simplest.
>
> The specific goal of this orientation of theoretical research is the determination of regularities in the relationships of phenomena which are guaranteed to be absolute and as such to be complete.
>
> It examines, rather, how more complicated phenomena develop from the simplest, in part even unempirical elements of the real world in their (likewise unempirical) isolation from all other influences . . .
>
> Science starts out, however, with these assumptions, since it would never be able otherwise to reach the goal of exact research, the determination of strict laws. On the other hand, with the assumption of strictly typical elements, of their exact measure, and of their complete isolation from all other causative factors, it does to be sure, and indeed on the basis of the rules of cognition characterized by us above, arrive at laws of phenomena which are not only absolute, but according to our laws of thinking simply cannot be thought of in any other way but as absolute (Menger 1985, pp. 60–61).

Menger, like Mises, leaves no doubt regarding his view of the efficacy of empirically testing economic theory; providing a refutation of positivism and falsification in economics almost a century before Milton Friedman and F. A. Hayek espoused them.

> Among economists the opinion often prevails that the empirical laws, "because they are based on experience," offer better guarantees of truth than those results of exact research which are obtained, as is assumed, only deductively from a priori axioms.
>
> The error at the basis of this view is caused by the failure to recognize the nature of the exact orientation of theoretical research, of its relationship to the realistic, and by applying the points of view of the latter to the former.
>
> Nothing is so certain as that the results of the exact orientation of

> theoretical research appear insufficient and unempirical in the field of economy just as in all the other realms of the world of phenomena, when measured by the standard of realism. This is, however, self-evident, since the results of exact research, and indeed in all realms of the world of phenomena, are true only with certain presuppositions, with presuppositions which in reality do not always apply. Testing exact theory of economy by the full empirical method is simply a methodological absurdity, a failure to recognize the bases and presuppositions of exact research. At the same time it is a failure to recognize the particular aims which the exact sciences serve. To want to test the pure theory of economy by experience in its full reality is a process analogous to that of the mathematician who wants to correct the principles of geometry by measuring real objects, without reflecting that the latter are indeed not identical with the magnitudes which pure geometry presumes or that every measurement of necessity implies elements of inexactitude. Realism in theoretical research is not something higher than exact orientation, but something different.
>
> The results of realistic orientation stand in an essentially different relationship to the empirical method than those of exact research. The former are based, of course, on the observation of phenomena in their "empirical reality" and complexity, and of course the criterion of their truth is accordingly the empirical method. An empirical law lacks the guarantee of absolute validity a priori, i.e., simply according to its methodological presuppositions. It states certain regularities in the succession and coexistence of phenomena which are by no means necessarily absolute. But bearing this firmly in mind, we note that it must agree with full empirical reality, from the consideration of which it was obtained. To want to transfer this principle to the results of exact research is, however, an absurdity, a failure to recognize the important difference between exact and realistic research. To combat this is the chief task of the preceding investigations (Menger 1985, pp. 69–70).

While referring to the German historical school, Menger also refuted the modern hermeneutic economists.

> There is scarcely any need to remark that the nature and significance of the exact orientation of research is completely misunderstood in the modern literature on national economy. In German economics, at least in the historical school, the art of abstract thinking, no matter how greatly distinguished by depth and originality and no matter how broadly supported empirically—in brief, everything that in other theoretical sciences establishes the greatest fame of scholars is still considered, along with the products of compilatory diligence, as something secondary, almost as a stigma. The power of truth, however, will finally also be tested for those who, sensing their inability to solve the highest problems of the social sciences, would like to raise their own inadequacy as a standard for the value of scientific work in general (Menger 1985, p. 65).

Neither Hayek, who has come to accept the empirical method of Karl Popper, nor the modern hermeneuticians who advance the epistemology of subjective interpretation, have any grounding in Menger. Only Mises has accepted Menger's basic deductive procedure and forged ahead to refine it into praxeology. Mises is the true heir of the Austrian tradition and the person who has advanced the edifice of absolute economic laws in this century.

Hayek versus Menger

As Hayek progressively left his grounding in the praxeological method, he drifted further and further into error. This process has culminated in Hayek's latest work on socialism which he claims is based on Menger:

> But to me, at any rate, [*Investigations*'] main interest to the economist in our days seems to lie in the extraordinary insight into the nature of social phenomena which is revealed incidentally in the discussion of problems mentioned to exemplify different methods of approach . . . Discussions of somewhat obsolete views, as that of the organic or perhaps better physiological interpretation of social phenomena, gave him an opportunity for an elucidation of the origin and character of social institutions which might, with advantage, be read by present-day economists and sociologists (Hayek 1976, p. 23).

> Menger was the only one of these to have come after Darwin, yet all attempted to provide a rational reconstruction, conjectural history, or evolutionary account of the emergence of cultural institutions (Hayek 1988, p. 70).

> Adequate explanations of [the market, etc.] were disseminated . . . especially by the Austrian school following Menger, into what became known as the "subjective" or "marginal utility" revolution in economic theory. [The most elementary and important] was the discovery that economic events could not be explained by preceding events acting as determining causes that enabled these revolutionary thinkers to unify economic theory into a coherent system (Hayek 1988, p. 97).

What Menger wrote about using organic analogies in the social sciences in no way justifies Hayek's claim. Menger stated clearly that the analysis of social development must be built from individual action and that reason is the guiding force in understanding social processes.

> In [the organic] category belong above all the attempts of those who think that they have solved the problem involved merely by designating as "organic" the developmental process we are discussing. The process by which social structures originate without action of the common will may well be called "organic," but it must not be believed

> that even the smallest part of the noteworthy problem of the social sciences that we alluded to above has been solved by this image or by any mystic allusions attached to it (Menger 1985, p. 149).

Yet Hayek makes just such allusions when he claims that the spontaneous order of the market "forms itself" or:

> The answer to [how we came to acquire the economic order of the market] is built upon the old insight, well known to economics, that our values and institutions are determined not simply by preceding causes but as part of a process of unconscious self-organisation of a structure or pattern. This is true not only of economics, but in a wide area, and is well known today in the biological sciences (Hayek 1988, p. 9).

Menger sees two mistakes made in the analysis of social processes: the mystic one mentioned above, and the view that society is a product of the "common will," i.e., created by positive legislation.

> Just as meaningless is another attempt to solve the problem discussed here. I mean the theory, which has attained widespread currency, that recognizes in social institutions something *original*, that is, not something that has developed, but an *original* product of the life of the people. This theory (which, incidentally, is also applied by a few of its adherents, for whom a unified principle means more than historical truth or the logic of things, by way of a peculiar mysticism to social institutions created by positive laws) indeed avoids the error of those who reduce all institutions to acts of positive common will. Still, it obviously offers us no solution of the problem discussed here, but evades it. The origin of a phenomena is by no means explained by the assertion that it *was present from the very beginning* or that it *developed originally* (Menger 1985, p. 149).

But Hayek is reduced to such a conclusion, "Although also acclaimed as a biologist, Aristotle lacked any perception of two crucial aspects of the formation of any complex structure, namely, evolution and the self-formation of order" (Hayek 1988, p. 45). Appeals to words like evolution or self-formation are not solutions to the problems of the origin and development of social institutions. Menger clearly looked to individual action as the foundation of the solution.

> Such a phenomenon must obviously have developed at some time from its simpler elements; a social phenomenon, at least in its most original form, must clearly have developed from individual factors. The view here referred to is merely an analogy between the development of social institutions and that of natural organisms which is completely worthless for the purpose of solving our problem. It states, to be sure, that institutions are unintended creations of the human mind, but not *how* they came about. These attempts at interpretation are comparable to the procedure of a natural scientist who thinks he is solving the problem of the origin of natural organisms by alluding

to their "originality," "natural growth," or their "primeval nature" (Menger 1985, p. 149).

In contrast, Hayek approvingly quotes Popper, who stated, "Cultural evolution continues genetic evolution by other means" (Hayek 1988, p. 16). He continues:

> For example, by the time culture began to displace some innate modes of behavior, genetic evolution had probably also already endowed human individuals with a great variety of characteristics which were better adjusted to the many different environmental niches into which men had penetrated than those of any non-domesticated animal. . . . Among the most important of these innate characteristics which helped to displace other instincts was a great capacity for learning from one's fellows, especially by imitation (Hayek 1988, p. 18).

Menger pointed out the poverty of this line of argument:

> The previous attempts to interpret the *changes* of social phenomena as "organic processes" are no less inadmissible than the above theories which aim to solve "organically" the problem of the *origin* of unintentionally created social structures. There is hardly need to remark that the changes of social phenomena cannot be interpreted in a social-pragmatic way, insofar as they are not the intended result of the agreement of members of society or of positive legislation, but are the unintended product of social development. But it is just as obvious that not even the slightest insight into the nature and the laws of the movement of social phenomena can be gained either by the mere allusion to the "organic" or the "primeval" character of the processes under discussion, nor even by mere analogies between these and the transformations to be observed in natural organisms. The worthlessness of the above orientation of research is so clear that we do not care to add anything to what we have already said (Menger 1985, p. 150).

Hayek bases his analysis on exactly these allusions and analogies:

> Despite such differences, all evolution, cultural as well as biological, is a process of continuous adaptation to unforeseeable events, to contingent circumstances which could not have been forecast (Hayek 1988, p. 25).

> Economics has from its origins been concerned with how an extended order of human interaction comes into existence through a process of variation, winnowing and sifting far surpassing our vision or our capacity to design. . . . We are led—for example by the pricing system in market exchange—to do things by circumstances of which we are largely unaware and which produce results that we do not intend (Hayek 1988, p. 14).

Menger rejected these mystic forces and Hayek's characterization

of individuals as mindless, passive, and ignorant:

> If this significant problem of the social sciences is truly to be solved, this cannot be done by way of superficial and, for the most part, inadmissable analogies. It can be done, in any case, only by way of direct consideration of social phenomena, not "organically," "anatomically," or "physiologically," but only in a *specifically sociological* way. The road to this, however, is *theoretical* social research, the nature and main orientations of which (the exact and the empirical-realistic) we have characterized above (Menger 1985, p. 150).

Hayek relies upon evolution to explain language, law, morals, markets, and money (Hayek 1988, p. 24); in contrast Menger claims that these institutions can be understood as built upon individual action.

> [These are] the unintended result of innumerable efforts of economic subjects pursuing *individual* interests. The theoretical understanding of them, the theoretical understanding of their nature and their movement can thus be attained in an exact measure only in the same way as the understanding of the above mentioned social structures. That is, it can be attained by reducing them to their elements, to the *individual* factors of their causation, and by investigating the laws by which the complicated phenomena of human economy under discussion here are built up from these elements. This, however, as scarcely needs saying, is that method which we have characterized above as the one adequate for the exact orientation of theoretical research in the realm of social phenomena in general. The methods for the exact understanding of the origin of the "organically" created social structures and those for the solution of the main problems of exact economics are by nature identical (Menger 1985, pp. 158–59).

Hayek versus Mises

Menger began to build the principles of economics from what he saw as the essence of these individual factors—the human need to satisfy material ends. From this idea of subjective value, he proceeded to derive principles of action of an isolated individual, then the more complex principles; two-person exchange (based upon mutual benefit), the social division of labor, and finally, a consistent, unified theory of price (see Menger 1976). These principles were the basis of his advocacy of laissez faire (see Rothbard 1991).

Eugen von Böhm-Bawerk, accepting Menger's methodological position, constructed the theories of advanced social production, capital and interest, and demolished the underpinnings of Marxian economics (Böhm-Bawerk 1959).

Refining and building upon this work, Mises constructed a very different picture of society's origin and development from that of Hayek (Salerno 1990). His answer to a Hayekian view of society is:

> To those pretending that man would be happier if he were to renounce the use of reason and try to let himself be guided by intuition and instincts only, no other answer can be given than an analysis of the achievements of human society. In describing the genesis and working of social cooperation, economics provides all the information required for an ultimate decision between reason and unreason. If man reconsiders freeing himself from the supremacy of reason, he must know what he will have to forsake (Mises 1966, p. 91).

Mises saw society as a strategy of acting individuals in their struggle against scarcity; purposefulness is the essence of the market, not spontaneity.

> Seen from the point of view of the individual, society is the great means for the attainment of all his ends (Mises 1966, p. 165).

> Society is concerted action, cooperation. Society is the outcome of conscious and purposeful behavior. This does not mean that individuals have concluded contracts by virtue of which they have founded human society. The actions which have brought about social cooperation and daily bring it about anew do not aim at anything else than cooperation and coadjuvancy with others for the attainment of definite singular ends. The total complex of the mutual relations created by such concerted actions is called society (Mises 1966, p. 143).

For Mises the division of labor (which is predicated on the inherent differences in individuals and natural resources) is the essence of society and the linchpin of all aspects of civilization.

> Society is division of labor and combination of labor (Mises 1966, p. 143).

> The fundamental social phenomenon is the division of labor and its counterpart human cooperation (Mises 1966, p. 157).

> The fundamental facts that brought about cooperation, society, and civilization and transformed the animal man into a human being are the facts that work performed under the division of labor is more productive than isolated work and that man's reason is capable of recognizing this truth. But for these facts men would have forever remained deadly foes of one another, irreconcilable rivals in their endeavors to secure a portion of the scarce supply of means of sustenance provided by nature (Mises 1966, p. 144).

> The law of association makes us comprehend the tendencies which resulted in the progressive intensification of human cooperation. We conceive what incentive induced people not to consider themselves simply as rivals in a struggle for the appropriation of the limited supply of means of subsistence made available by nature. We realize what has impelled them and permanently impels them to consort with one another for the sake of cooperation. Every step forward on the way to a more developed mode of the division of labor serves the

> interests of all participants. In order to comprehend why man did not remain solitary, searching like the animals for food and shelter for himself only and at most also for his consort and his helpless infants, we do not need to have recourse to a miraculous interference of the Deity or to the empty hypostasis of an innate urge toward association. Neither are we forced to assume that the isolated individuals or primitive hordes one day pledged themselves by a contract to establish social bonds. The factor that brought about primitive society and daily works toward its progressive intensification is human action that is animated by the insight into the higher productivity of labor achieved under the division of labor (Mises 1966, p. 160).

The degree to which individuals extend and intensify the division of labor depends on their understanding and acceptance of it. In contrast to Hayek, who says, "The curious task of economics is to demonstrate to men how little they really know about what they imagine they can design" (Hayek 1988, p. 76), Mises attached an important role to teaching people economic principles and persuading them to pursue their "rightly understood interests."

> The principle of the division of labor is one of the great basic principles of cosmic becoming and evolutionary change. The biologists were right in borrowing the concept of the division of labor from social philosophy and in adapting it to their field of investigation . . . But one must never forget that the characteristic feature of human society is purposeful cooperation; society is an outcome of human action, i.e., of a conscious aiming at the attainment of ends. No such element is present, as far as we can ascertain, in the processes which have resulted in the emergence of the structure-function systems of plant and animal bodies and in the operation of the societies of ants, bees, and hornets. Human society is an intellectual and spiritual phenomenon. It is the outcome of a purposeful utilization of a universal law determining cosmic becoming, viz., the higher productivity of the division of labor. As with every instance of action, the recognition of the laws of nature is put into the service of man's efforts to improve his conditions (Mises 1966, p. 145).

> The body of economic knowledge is an essential element in the structure of human civilization; it is the foundation upon which modern industrialism and all the moral, intellectual, technological, and therapeutical achievements of the last centuries have been built. It rests with men whether they will make the proper use of the rich treasure with which this knowledge provides them or whether they will leave it unused. But if they fail to take the best advantage of it and disregard its teachings and warnings, they will not annul economics; they will stamp out society and the human race (Mises 1966, p. 885).

The prerequisite for advanced social production is calculation that allows purposeful action within the framework of the division of

labor. Calculation requires money prices and thus, money and free exchange, which requires private property.

> Economic calculation is the fundamental issue in the comprehension of all problems commonly called economic (Mises 1966, p. 199).
>
> Monetary calculation is the guiding star of action under the social system of division of labor. It is the compass of the man embarking upon production.
>
> The system of economic calculation in monetary terms is conditioned by certain social institutions. It can operate only in an institutional setting of the division of labor and private ownership of the means of production in which goods and services of all orders are bought and sold against a generally used medium of exchange, i.e., money.
>
> Monetary calculation is the main vehicle of planning and acting in the social setting of a society of free enterprise directed and controlled by the market and its prices.
>
> Our civilization is inseparably linked with our methods of economic calculation. It would perish if we were to abandon this most precious intellectual tool of action (Mises 1966, pp. 229–30).

From this analysis Mises made his criticism of socialism, that it cannot calculate and thus, it is not an *economic* system at all. The attempt to implement socialism must lead to poverty, death, and retrogression of civilization. Mises said, "In abolishing economic calculation the general adoption of socialism would result in complete chaos and the disintegration of social cooperation under the division of labor" (Mises 1966, p. 861). While Mises saw calculation as *the* problem of socialism, Hayek views it as a knowledge problem:

> To the naive mind that can conceive of order only as the product of deliberate arrangement, it may seem absurd that in complex conditions order, and adaptation to the unknown, can be achieved more effectively by decentralizing decisions, and that a division of authority will actually extend the possibility of overall order. Yet that decentralization actually leads to more information being taken into account. This is the main reason for rejecting the requirements of constructivist rationalism (Hayek 1988, pp. 76–77).

Mises demonstrated that even with *perfect* information, the central planners in socialism cannot rationally calculate how to combine resources to render efficient production (Ebeling 1991). They can only grope in the dark; as Mises put it, socialism is "planned chaos," an irrational endeavor that must leach off and mimic capitalism to provide even a subsistence standard of living to its citizens.

> The paradox of "planning" is that it cannot plan, because of the absence of economic calculation. What is called a planned economy is no economy at all. It is just a system of groping about in the dark. There is no question of a rational choice of means for the best possible attainment of the ultimate ends sought. What is called conscious planning is precisely the elimination of conscious purposive action (Mises 1966, pp. 700–01).

> If no other objections could be raised to the socialist plans than that socialism will lower the standard of living of all or at least of the immense majority, it would be impossible for praxeology to pronounce a final judgment. Men would have to decide the issue between capitalism and socialism on the ground of judgments of value and of judgments of relevance. . . . However, the true state of affairs is entirely different. Man is not in a position to choose between these two systems. Human cooperation under the system of the social division of labor is possible only in the market economy. Socialism is not a realizable system of society's economic organization because it lacks any method of economic calculation (Mises 1966, p. 679).

Mises and the Austrian Tradition

These principles, representing the pinnacle of free-market economic theory, cannot be found in any other modern school of economic thought. By failing to correctly understand the process of the social creation of wealth these other schools have not played a significant, independent role in the current advancement of freedom. Advocates of the free market within other schools have relied upon the basic Austrian arguments or have been relatively ineffective since their economic theories are more easily rebuffed.

What effective defense of the free market has been made by econometrics? By its nature all such work tells us only of what has happened and not what can happen—it cannot result in universal laws applicable to any conceivable historical episode. As such it is easily ignored by those who wish to conduct social experiments for the future. Furthermore, econometrics is coming under increasing criticism as a method capable of rendering useful knowledge at all (see Hoppe 1988).

This criticism extends with equal force to modern neoclassical theory, since it is built upon positivism (Friedman 1974). Milton Friedman tells us that all proper economic theory must be testable and subject to falsification; that economic propositions, like those in physics, are hypothetical, tentative, and forever subject to testing and potential rejection. Yet what basic principles of economics have neoclassical economists rejected for failing tests of statistical significance? The laws of supply and demand? The principle of diminishing marginal utility? The concept of opportunity cost? The idea that exchange leads to

mutual benefit? Such basic principles are either non-testable, and thus, not positivist economic theories at all, or routinely rejected in econometric tests. Yet all *economic* defenses of the free market are built from basic principles. Friedman and other neoclassical economists say that economic theory must be empirical but they do economic theory deductively, although not as well as Mises.

Neoclassical economics has failed to provide any role in defense of the free market to the extent that it stands outside the Austrian tradition. It contains no free-market principles that are both unique and true. It should be kept in mind that after Mises's devastating article on the inability of socialism to calculate, socialists tried to refute him by using mathematical economics and econometrics to show that, in theory at least, the problem could be solved by a system of equations *if* the economy is perfectly competitive (Ebeling 1991). Their failure has not prevented others from employing the pre-eminent neoclassical theory as an argument *against* the free market. It is a common barb that the free market would be a superior economic system *if* it was perfectly competitive. And since it obviously is not perfectly competitive, then government control is essential.

To the contrary, Mises has shown that the argument for free markets does not depend on *any* type of competition, perfect or otherwise. In contrast, Hayek claims:

> One revealing mark of how poorly the ordering principle of the market is understood is the common notion that "cooperation is better than competition." Cooperation, like solidarity, presupposes a large measure of agreement on ends as well as on methods employed in their pursuit. It makes sense in a small group whose members share particular habits, knowledge and beliefs about possibilities. It makes hardly any sense when the problem is to adapt to unknown circumstances; yet it is this adaptation to the unknown on which the coordination of efforts in the extended order rests. Competition is a procedure of discovery, a procedure involved in all evolution, that led man unwittingly to respond to novel situations; and through further competition, not through agreement, we gradually increase our efficiency.
>
> To operate beneficially, competition requires that those involved observe rules rather than resort to physical force. Rules alone can unite an extended order. Neither all ends pursued, nor all means used, are known or need to be known to anybody, in order for them to be taken account of within a spontaneous order. Such an order forms of itself (Hayek 1988, pp. 19–20).
>
> Biological and cultural evolution share other features too. For example, they both rely on the same principle of selection: survival or reproductive advantage. Variation, adaptation and competition are essentially the same kind of process, however different their particular

> mechanisms, particularly those pertaining to propagation. Not only does all evolution rest on competition; continuing competition is necessary even to preserve existing achievements (Hayek 1988, p. 26).

Mises has shown that the social division of labor is not an arena of competition but cooperation, a complex network of voluntary interaction that is absolutely necessary for the continuing life and prosperity of the world's population. If people fail to understand this and act against their "rightly understood interests" then prosperity and civilization will end.

> What makes friendly relations between human beings possible is the higher productivity of the division of labor. It removes the natural conflict of interests. For where there is division of labor, there is no longer question of the distribution of a supply not capable of enlargement. Thanks to the higher productivity of labor performed under the division of tasks, the supply of goods multiplies. A pre-eminent common interest, the preservation and further intensification of social cooperation, becomes paramount and obliterates all essential collisions. Catallactic competition is substituted for biological competition. It makes for harmony of the interests of all members of society. The very condition from which the irreconcilable conflicts of biological competition arise—viz., the fact that all people by and large strive after the same things—is transformed into a factor making for harmony of interests. Because many people or even all people want bread, clothes, shoes, and cars, large-scale production of these goods becomes feasible and reduces the costs of production to such an extent that they are accessible at low prices. The fact that my fellow man wants to acquire shoes as I do, does not make it harder for me to get shoes, but easier. What enhances the price of shoes is the fact that nature does not provide a more ample supply of leather and other raw material required, and that one must submit to the disutility of labor in order to transform these raw materials into shoes. The catallactic competition of those who, like me, are eager to have shoes makes shoes cheaper, not more expensive.
>
> This is the meaning of the theorem of the harmony of the rightly understood interests of all members of the market society (Mises 1966, pp. 673–74).

Most "free-market" economists have failed to absorb Mises's analysis of capitalism and socialism and thus hold to some form of a mixed economy. As Mises has shown this view is untenable.

> The market economy must be strictly differentiated from the second thinkable—although not realizable—system of social cooperation under the division of labor: the system of social or governmental ownership of the means of production. This second system is commonly called socialism, communism, planned economy, or state capitalism. The market economy or capitalism, as it is usually called,

> and the socialist economy preclude one another. There is no mixture of the two systems possible or thinkable; there is no such thing as a mixed economy, a system that would be in part capitalistic and in part socialist. Production is directed by the market or by the decrees of a production tsar or a committee of production tsars.
>
> If within a society based on private ownership by the means of production some of these means are publicly owned and operated—that is, owned and operated by the government or one of its agencies—this does not make for a mixed system which would combine socialism and capitalism. . . . These publicly owned and operated enterprises are subject to the sovereignty of the market. They must fit themselves, as buyers of raw materials, equipment, and labor, and as sellers of goods and services, into the scheme of the market economy. They are subject to the laws of the market and thereby depend on the consumers who may or may not patronize them. They must strive for profits or, at least, to avoid losses. The government may cover losses of its plants or shops by drawing on public funds. But this neither eliminates nor mitigates the supremacy of the market; it merely shifts it to another sector.
>
> Nothing that is in any way connected with the operation of a market is in the praxeological or economic sense to be called socialism. The notion of socialism as conceived and defined by all socialists implies the absence of a market for factors of production and of prices of such factors. The "socialization" of individual plants, shops, and farms—that is, their transfer from private into public ownership—is a method of bringing about socialism by successive measures. It is a step on the way toward socialism, but not in itself socialism (Mises 1966, pp. 258–59).

This step-by-step process, in reverse, is the council given to the countries of Eastern and Central Europe by today's self-proclaimed, free-market economists. After moving toward capitalism, they are to stop at some optimum amount of government intervention. But Mises showed long ago that interventionism is an unstable middle ground between capitalism and socialism that must continue in motion toward one or the other.

> The system of interventionism or of the hampered market economy differs from the German pattern of socialism by the very fact that it is still a market economy. The authority interferes with the operation of the market economy, but does not want to eliminate the market altogether. It wants production and consumption to develop along lines different from those prescribed by an unhampered market, and it wants to achieve its aim by injecting into the working of the market orders, commands, and prohibitions for whose enforcement the police power and its apparatus of violent compulsion and coercion stand ready. But these are *isolated* acts of an integrated system which determines all

> prices, wages and interest rates and thus places full control of production and consumption into the hands of the authorities.
>
> The system of the hampered market economy or interventionism aims at preserving the dualism of the distinct spheres of government activities on the one hand and economic freedom under the market system on the other hand. What characterizes it as such is the fact that the government does not limit its activities to the preservation of private ownership of the means of production and its protection against violent or fraudulent encroachments. The government interferes with the operation of business by means of orders and prohibitions (Mises 1966, p. 718).
>
> The interventionist doctrinaires repeat again and again that they do not plan the abolition of private ownership of the means of production, of entrepreneurial activities, and or market exchange. . . . It is necessary, they say, that the state interfere with the market phenomena whenever and wherever the "free play of the economic forces" results in conditions that appear as "socially" undesirable. In making this assertion they take it for granted that it is the government that is called upon to determine in every single case whether or not a definite economic fact is to be considered as reprehensible for the "social" point of view and, consequently whether or not the state of the market requires a special act of government interference.
>
> All these champions of interventionism fail to realize that their program thus implies the establishment of full government supremacy in all economic matters and ultimately brings about a state of affairs that does not differ from what is called the German or the Hindenburg pattern of socialism. If it is in the jurisdiction of the government to decide whether or not definite conditions of the economy justify its intervention, no sphere of operation is left to the market. Then it is no longer the consumers who ultimately determine what should be produced, in what quantity, of what quality, by whom, where, and how—but it is the government. For as soon as the outcome brought about by the operation of the unhampered market differs from what the authorities consider "socially" desirable, the government interferes. That means the market is free as long as it does precisely what the government wants it to do. . . . Thus the doctrine and the practice of interventionism ultimately tend to abandon what originally distinguished them from outright socialism and to adopt entirely the principles of totalitarian all-round planning (Mises 1966, pp. 723–24).

In Mises's view what we are witnessing today is not the collapse of socialism, since socialism cannot be realized in full, but the collapse of a form of interventionism. He predicted this in 1949: "The interventionist interlude must come to an end because interventionism cannot lead to a permanent system of social organization" (Mises 1966, p. 858). This must happen because interventionism restricts

the goods available to consumers; and fails to bring about the end aimed at, leading to a situation worse than the pre-intervention once it has exhausted the "surplus" it seeks to confiscate (Mises 1966, p. 858). The outcome of changes in Europe depend upon understanding and accepting these Misesian ideas.

> Optimists hope that at least those nations which have in the past developed the capitalist market economy and its civilization will cling to this system in the future too. There are certainly as many signs to confirm as to disprove such an expectation. It is vain to speculate about the outcome of the great ideological conflict between the principles of private ownership and public ownership, of individualism and totalitarianism, of freedom and authoritarian regimentation. All that we can know beforehand about the result of this struggle can be condensed in the following three statements:
>
> (1) We have no knowledge whatever about the existence and operation of agencies which would bestow final victory in this clash on those ideologies whose application will secure the preservation and further intensification of societal bonds and the improvement of mankind's material well-being. Nothing suggests the belief that progress toward more satisfactory conditions is inevitable or a relapse into very unsatisfactory conditions impossible.
>
> (2) Men must choose between the market economy and socialism. They cannot evade deciding between these alternatives by adopting a "middle-of-the-road" position, whatever name they may give to it.
>
> (3) In abolishing economic calculation the general adoption of socialism would result in complete chaos and the disintegration of social cooperation under the division of labor (Mises 1966, p. 861).

We are all participating in this great ideological struggle and thus economic education holds paramount importance.

> Economics must not be relegated to classrooms and statistical offices and must not be left to exoteric circles. It is the philosophy of human life and action and concerns everybody and everything. It is the pith of civilization and of man's human existence.
>
> There is no means by which anyone can evade his personal responsibility. Whoever neglects to examine to the best of his abilities all the problems involved voluntary surrenders his birthright to a self-appointed elite of supermen. In such vital matters blind reliance upon "experts" and uncritical acceptance of popular catchwords and prejudices is tantamount to the abandonment of self-determination and to yielding to other people's domination. As conditions are today, nothing can be more important to every intelligent man than economics. His own fate and that of his progeny is at stake (Mises 1966, p. 878).

Conclusions

The Austrian tradition is identified by and built upon praxeology—the application of deductive reasoning to the irrefutable fact of human action. This method is the red thread that runs from Menger to Böhm-Bawerk to Mises to Murray Rothbard and the modern practitioners of Austrian economics. Working within this tradition, economists have produced a great edifice of irrefutable, universally applicable economic theory. They have shown how the free market advances mankind in its struggle against scarcity and why socialism cannot do so. They have taught us that we must choose one of these two social arrangements, since no system exists between them. We must make our selection and advance, by education and persuasion, either capitalism or socialism. Let us choose wisely.

References

Böhm-Bawerk, Eugen. *Capital and Interest*. Spring Mills, Penn.: Libertarian Press, 1959.

Ebeling, Richard. "Economic Calculation Under Socialism: Ludwig von Mises and His Predecessors," in *The Meaning of Ludwig von Mises*, Jeffrey Herbener, ed. Boston: Kluwer Academic Publishers, 1991.

Friedman, Milton. "The Methodology of Positive Economics," in *Essays in Positive Economics*. Chicago: University of Chicago Press, 1974.

Hayek, F. A. "Introduction," in *Principles of Economics*, by Carl Menger. New York: New York University Press, 1976.

—— *The Fatal Conceit: The Errors of Socialism*. Chicago: University of Chicago Press, 1988.

Hoppe, Hans-Hermann. *Praxeology and Economic Science*. Auburn, Ala.: The Ludwig von Mises Institute, 1988.

Menger, Carl. *Principles of Economics*. New York: New York University Press, 1976.

—— *Investigations into the Method of the Social Sciences with Special Reference to Economics*. New York: New York University Press, 1985.

Mises, Ludwig von. *Human Action: A Treatise on Economics*, 3rd rev. ed. Chicago: Henry Regnery, 1966.

——Quoted by Margit von Mises in, "A Call to Activism," in *The Free Market Reader*. Auburn, Ala.: The Ludwig von Mises Institute, 1988.

Rothbard, Murray. *The Essential Ludwig von Mises*. Auburn, Ala.: The Ludwig von Mises Institute, 1983.

——"Mises and the Role of Economist in Public Policy," in *The Meaning of Ludwig von Mises*, Jeffrey Herbener, ed. Boston: Kluwer Academic Publishers, 1991.

Salerno, Joseph. "Ludwig von Mises as Social Rationalist," in *The Meaning of Ludwig von Mises*, Jeffrey Herbener, ed. Boston: Kluwer Academic Publishers, 1991.

The End of Socialism and the Calculation Debate Revisited

Murray N. Rothbard*

At the root of the dazzling revolutionary implosion and collapse of socialism and central planning in the "socialist bloc" is what everyone concedes to be a disastrous economic failure. The peoples and the intellectuals of Eastern Europe and the Soviet Union are crying out not only for free speech, democratic assembly, and *glasnost*, but also for private property and free markets. And yet, if I may be pardoned a moment of nostalgia, four-and a-half-decades ago, when I entered graduate school, the economics Establishment of that era was closing the book on what had been for two decades the famed "socialist calculation debate." And they had all decided, left, right, and center, that there was not a thing economically wrong with socialism: that socialism's only problems, such as they might be, were *political*. Economically, socialism could work just as well as capitalism.

Mises and the Challenge of Calculation

Before Ludwig von Mises raised the calculation problem in his celebrated article in 1920,[1] everyone, socialists and non-socialists alike, had long realized that socialism suffered from an *incentive problem*. If, for example, everyone under socialism were to receive an equal income, or, in another variant, everyone was supposed to produce "according to his ability" but receive "according to his needs," then, to sum it up in the famous question: Who, under socialism, will take out the garbage? That

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[1]Mises's article, published in 1920 in German, "Die Wirtschaftsrechnung im sozialistischen Gemeinwesen," was only made available in English in 1935: Mises, "Economic Calculation in the Socialist Commonwealth," in F. A. Hayek, ed., *Collectivist Economic Planning* (London: Routledge and Sons, 1935), pp. 87–130. The article was republished as a monograph by the Mises Institute with a notable postscript by Professor Joseph T. Salerno (Ludwig von Mises, *Economic Calculation in the Socialist Commonwealth* [Auburn, Ala.: Ludwig von Mises Institute, 1990]).

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is, what will be the incentive to do the grubby jobs, and, furthermore, to do them well? Or, to put it another way, what would be the incentive to work hard and be productive *at any job*?

The traditional socialist answer held that the socialist society would transform human nature, would purge it of selfishness, and remold it to create a New Socialist Man. That new man would be devoid of any selfish, or indeed any self-determined, goals; his only wish would be to work as hard and as eagerly as possible to achieve the goals and obey the orders of the socialist State. Throughout the history of socialism, socialist *ultras*, such as the early Lenin and Bukharin under "War Communism," and later Mao Tse-tung and Che Guevara, have sought to replace material by so-called "moral" incentives. This notion was properly and wittily ridiculed by Alexander Gray as "the idea that the world may find its driving force in a Birthday Honours List (giving to the King, if necessary, 165 birthdays a year)."[2] At any rate, the socialists soon found that voluntary methods could hardly yield them the New Socialist Man. But even the most determined and bloodthirsty methods could not avail to create this robotic New Socialist Man. And it is a testament to the spirit of freedom that cannot be extinguished in the human breast that the socialists continued to fail dismally, despite decades of systemic terror.

But the uniqueness and the crucial importance of Mises's challenge to socialism is that it was totally unrelated to the well-known incentive problem. Mises in effect said: All right, suppose that the socialists have been able to create a mighty army of citizens all eager to do the bidding of their masters, the socialist planners. What exactly would those planners tell this army to do? How would they know what products to order their eager slaves to produce, at what stage of production, how much of the product at each stage, what techniques or raw materials to use in that production and how much of each, and where specifically to locate all this production? How would they know their costs, or what process of production is or is not efficient?

Mises demonstrated that, in any economy more complex than the Crusoe or primitive family level, the socialist planning board would simply not know what to do, or how to answer any of these vital questions. Developing the momentous concept of *calculation*, Mises pointed out that the planning board could not answer these questions because socialism would lack the indispensable tool that private entrepreneurs use to appraise and calculate: the existence of a market in the means of production, a market that brings about money

[2]Alexander Gray, *The Socialist Tradition* (London: Longmans, Green, 1946), p. 90.

prices based on genuine profit-seeking exchanges by private owners of these means of production. Since the very essence of socialism is collective ownership of the means of production, the planning board would not be able to plan, or to make any sort of rational economic decisions. Its decisions would necessarily be completely arbitrary and chaotic, and therefore the existence of a socialist planned economy is literally "impossible" (to use a term long ridiculed by Mises's critics).

The Lange-Lerner "Solution"

In the course of intense discussion throughout the 1920s and 1930s, the socialist economists were honest enough to take Mises's criticism seriously, and to throw in the towel on most traditional socialist programs: in particular, the original communist vision that workers, not needing such institutions as bourgeois money fetishism, would simply produce and place their products on some vast socialist heap, with everyone simply taking from that heap "according to his needs." The socialist economists also abandoned the Marxian variant that everyone should be paid according to the labor time embodied into his product. In contrast, what came to be known as the Lange-Lerner solution (or, less commonly but more accurately, the Lange-Lerner-Taylor solution), acclaimed by virtually all economists, asserted that the socialist planning board could easily resolve the calculation problem by ordering its various managers to fix accounting prices. Then, according to the contribution of Professor Fred M. Taylor, the central planning board could find the proper prices in much the same way as the capitalist market: trial and error. Thus, given a stock of consumer goods, if the accounting prices are set too low, there will be a shortage, and the planners will raise prices until the shortage disappears and the market is cleared. If, on the other hand, prices are set too high, there will be a surplus on the shelves, and the planners will lower the price, until the markets are cleared. The solution is simplicity itself![3]

In the course of his two-part article and subsequent book, Lange concocted what could only be called the Mythology of the Socialist Calculation Debate, a mythology which, aided and abetted by Joseph Schumpeter, was accepted by virtually all economists of whatever ideological stripe. It was this mythology which I found handed down as

[3]Oskar Lange's well-known article was originally in two parts: "On the Economic Theory of Socialism," *Review of Economic Studies* 4 (October 1936): 53–71, and ibid. 5 (February 1937): 132–42; Fred M. Taylor's article was "The Guidance of Production in a Socialist State," *American Economic Review* 19 (March 1929); Taylor was reprinted and Lange revised and published in Oskar Lange and Fred M. Taylor, *On the Economic Theory of Socialism*, B. Lippincott, ed. (Minneapolis: University of Minnesota Press, 1938).

the Orthodox Line when I entered Columbia University's graduate school at the end of World War II—a line promulgated in lectures by no less an expert on the Soviet economy than Professor Abram Bergson, then at Columbia. In 1948, indeed, Professor Bergson was selected to hand down the Received Opinion on the subject by a committee of the American Economic Association, and Bergson interred the socialist calculation question with the Orthodox Line as its burial rite.[4]

The Lange-Bergson Orthodox Line went about as follows: Mises, in 1920, had done an inestimable service to socialism by raising the problem of economic calculation, a problem of which socialists had not generally been aware. Then Pareto and his Italian disciple Enrico Barone had shown that Mises's charge, that socialist calculation was impossible, was incorrect, since the requisite number of supply, demand, and price equations existed under socialism as under a capitalist system. At that point, F. A. Hayek and Lionel Robbins, abandoning Mises's extreme position, fell back on a second line of defense: that, while the calculation problem could be solved *theoretically*, in practice it would be too difficult. Thereby Hayek and Robbins fell back on a practical problem, or one of degree of efficiency rather than of a drastic difference in kind. But now, happily, the day has been saved for socialism, since Taylor-Lange-Lerner have shown that, by jettisoning utopian ideas of a money-less or price-less socialism, or of pricing according to a labor theory of value, the socialist Planning Board can solve these pesky equations simply by the good old capitalist method of trial and error.[5]

Bergson, attempting to be magisterial in his view of the debate, summed up Mises as contending that "without private ownership of, or (what comes to the same thing for Mises) a free market for the means of production, the rational evaluation of these goods for the purposes of calculating costs is ruled out . . ." Bergson correctly adds that to put Mises's point

> somewhat more sharply than is customary, let us imagine a Board of Supermen, with unlimited logical faculties, with a complete scale of values for the different consumers goods', and present and future consumption, and detailed knowledge of production techniques. Even such a Board would be unable to evaluate rationally the means of production. In the absence of a free market for these goods, decisions

[4]Abram Bergson, "Socialist Economics," in H. S. Ellis, ed., *A Survey of Contemporary Economics* (Philadelphia: Blakiston, 1948), pp. 412–48.

[5]Lange was aided in this construction by being able to use Hayek's collection of articles on the subject, which had just been published the year before his first article, as a useful foil. Hayek's volume included the seminal article by Mises, other contributions by Pierson and Halm, two articles by Hayek himself, and the alleged refutation of Mises by Barone. See Hayek, *Collectivist Economic Planning.*

> on resource allocation in Mises' view necessarily would be on a haphazard basis.

Bergson sharply comments that this "argument is easily disposed of." Lange and Schumpeter both point out that, as Pareto and Barone had shown,

> once tastes and techniques are given, the values of the means of production can be determined unambiguously by imputation without the intervention of a market process. The Board of Supermen could decide readily how to allocate resources so as to assure the optimum welfare. It would simply have to solve the equations of Pareto and Barone.[6]

So much for Mises. As for the Hayek-Robbins problem of practicality, Bergson adds, that can be settled by the Lange-Taylor trial-and-error method; any remaining problems are only a matter of degree of efficiency, and political choices. The Mises problem has been satisfactorily solved.

Some Fallacies of the Lange-Lerner Solution

The breathtaking naivete of the Orthodox Line should have been evident even in the 1940s. As Hayek later chided Schumpeter on the assumption of "imputation" outside the market, this formulation "presumably means . . . that the valuation of the factors of production is implied in, or follows necessarily from, the valuation of consumers' goods. But . . . implication is a logical relationship which can be meaningfully asserted only of propositions simultaneously present to one and the same mind."[7]

Economists were convinced of the Lange solution because they had already come under the sway of the Walrasian general equilibrium model; Schumpeter, for example, was an ardent Walrasian. In this model, the economy is always in static general equilibrium, a changeless world in which all "data"—tastes or value scales, alternative technologies, and lists of resources—are known to everyone, and where costs are known and always equal to price. The Walrasian world is also one of "perfect" competition, where prices are given to all managers. Indeed, both Taylor and Lange make the point that the Socialist Planning Board will be better able to calculate than capitalist markets, since the socialist planners can ensure "perfect competition," whereas the real world of capitalism is shot through with various sorts of "monopolies"! The socialist planners can act like the

[6]Bergson, "Socialist Economics," p. 446.

[7]F. A. Hayek, "The Use of Knowledge in Society" (1945), in Hayek, *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948), p. 90.

absurdly fictional Walrasian "auctioneer," bringing about equilibrium rapidly by trial and error.

Set aside the obvious absurdity of trusting a coercive governmental monopoly to act somehow as if it were in "perfect competition" with parts of itself. Another grievous flaw in the Lange model is thinking that general equilibrium, a world of certainty where there is no room for the driving force of entrepreneurship, can somehow be used to depict the real world. The actual world is one not of changeless "givens" but of incessant change and systemic uncertainty. Because of this uncertainty, the capitalist entrepreneur, who stakes assets and resources in attempting to achieve profits and avoid losses, becomes the crucial actor in the economic system, an actor who can in no way be portrayed by a world of general equilibrium. Furthermore, it is ludicrous, as Hayek pointed out, to think of general equilibrium as the only legitimate "theory," with all other areas or problems dismissed as mere matters of practicality and degree. No economic theory worth its salt can be worthwhile if it omits the role of the entrepreneur in an uncertain world. The Pareto-Barone-Lange, etc. "equations" is not simply excellent theory that faces problems in practice; for in order to be "good," a theory must be useful in explaining real life.[8]

Another grave flaw in the Lange-Taylor trial-and-error approach is that it concentrates on consumer good pricing. It is true that retailers, given the stock of a certain type of good, can clear the market by adjusting the prices of that good upward or downward. But, as Mises pointed out in his original 1920 article, consumers goods are not the real problem. Consumers, these "market socialists" are postulating, are free to express their values by using money they had earned on a range of consumers' goods. Even the labor market—at least in principle[9]—can be treated as a market with self-owning suppliers who are free to accept or reject bids for their labor and to move to different occupations. The real problem, as Mises has insisted from the beginning, is in all the intermediate markets for land and capital goods. Producers have to use land and capital resources to

[8]The silliness of hailing Barone's essay as a refutation of Mises is highlighted by the fact that Barone's article was published in 1908, twelve years before Mises's article which it is supposed to have refuted. The date was well known to, and made no impression upon, Ludwig von Mises. Moreover, Barone and Pareto themselves had only scorn for any notion that their equations could aid socialist planning. See Trygve J. B. Hoff, *Economic Calculation in the Socialist Society* (1949; Indianapolis, Ind.: Liberty Press, 1981), pp. 222–23.

[9]Here, as in other parts of his argument—as we shall see further below—Mises is leaning over backward to concede the market socialists their best case, and is not considering whether such free consumer or labor markets are really likely in a world where the state is the only seller, as well as the only purchaser, of labor.

decide what the stocks of the various consumer goods should be. Here there are a huge number of markets where the State monopoly can only be both buyer and seller for each transaction, and these intra-monopoly, intra-state transactions permeate the most vital markets of an advanced economy—the complex lattice-work of the capital markets. And here is precisely where calculational chaos necessarily reigns, and there is no way for rationality to intrude on the immense number of decisions on the allocation of prices and factors of production in the structure of capital goods.

Mises's Rebuttal: The Entrepreneur

Moreover, Mises's brilliant and devastating rebuttal to his Lange-Lerner "market socialism" critics has virtually never been considered—neither by the economics establishment nor by the post-World War II Hayekians. In both cases, the writers were eager to dispose of Mises as having safely made his pioneering contribution in 1920, but being superseded later, either by Lange-Lerner or by Hayek, as the case may be. In both cases, it was inconvenient to ponder that Mises continued to elaborate his position with a penetrating critique of his critics, or that Mises's "extreme" formulation may, after all, have been correct.[10]

Mises began his rebuttal in *Human Action* by discussing the "trial-and-error" method, and pointing out that this process only works in the capitalist market. There the entrepreneurs are strongly motivated to make greater profits and to avoid losses, and further, such a criterion does not apply to the capital goods or land market under socialism where all resources are controlled by one entity, the government.

Continuing his reply, Mises pressed on to a brilliant critique, not only of socialism, but of the entire Walrasian general equilibrium model. The major fallacy of the "market socialists," Mises pointed out, is that they look at the economic problem from the point of view of

[10]Mises's later rebuttal is in his *Human Action* (New Haven: Yale University Press, 1949), pp. 694–711. For the establishment, the debate was supposed to be over by 1938. For an example of a Hayekian survey of the debate that does not bother to so much as mention *Human Action*, see Karen I. Vaughn, "Introduction," in Hoff, *Economic Calculation*, pp. ix–xxxvii. Indeed, in an earlier paper, Vaughn had sneered that "Mises' so-called final refutation in *Human Action* is mostly polemic and glosses over the real problems . . ." Vaughn, "Critical Discussion of the Four Papers," in Lawrence Moss, ed. *The Economics of Ludwig von Mises* (Kansas City: Sheed and Ward, 1976), p. 107. The Hayekian doctrine will be treated further below.

For a refreshing example of an outstanding Misesian contribution to the debate that does not neglect or deprecate *Human Action* but rather builds upon it, see Joseph T. Salerno, "Ludwig von Mises as Social Rationalist," *Review of Austrian Economics* 4 (1990): 36–48. Also see Salerno, "Why Socialist Economy is *Impossible*," a Postscript to Mises, *Economic Calculation in the Socialist Commonwealth* (Auburn, Ala.: Ludwig von Mises Institute, 1990).

the manager of the individual firm, who seeks to make profits or avoid losses within a rigid framework of a given, external allocation of capital to each of the various branches of industry and indeed to the firm itself. In other words, the "market socialist" manager is akin, not to the real driving force of the capitalist market, the capitalist entrepreneur, but rather to the relatively economically insignificant manager of the corporate firm under capitalism. As Mises brilliantly puts it:

> the cardinal fallacy implied in [market socialist] proposals is that they look at the economic problem from the perspective of the subaltern clerk whose intellectual horizon does not extend beyond subordinate tasks. They consider the structure of industrial production and the allocation of capital to the various branches and production aggregates as rigid, and do not take into account the necessity of altering this structure in order to adjust it to changes in conditions. . . . They fail to realize that the operations of the corporate officers consist merely in the loyal execution of the tasks entrusted to them by their bosses, the shareholders. . . . The operations of the managers, their buying and selling, are only a small segment of the totality of market operations. The market of the capitalist society also performs those operations which allocate the capital goods to the various branches of industry. The entrepreneurs and capitalists establish corporations and other firms, enlarge or reduce their size, dissolve them or merge them with other enterprises; they buy and sell the shares and bonds of already existing and of new corporations; they grant, withdraw, and recover credits; in short they perform all those acts the totality of which is called the capital and money market. It is these financial transactions of promoters and speculators that direct production into those channels in which it satisfies the most urgent wants of the consumers in the best possible way.[11]

Mises goes on to remind the reader that the corporate manager performs only a "managerial function," a subsidiary service that "can never become a substitute for the entrepreneurial function." Who are the capitalist-entrepreneurs? They are "the speculators, promoters, investors and moneylenders, [who] in determining the structure of the stock and commodity exchanges and of the money market, circumscribe the orbit within which definite tasks can be entrusted to the manager's discretion." The crucial question, Mises continues, is not managerial activities, but: "In which branches should production be increased or restricted, in which branches should the objective of production be altered, what new branches should be inaugurated?" In short, the crucial decisions in the capitalist economy are the allocation of capital to firms and industries. "With regard to these issues," Mises

[11]Mises, *Human Action*, pp. 703–04.

adds, "it is vain to cite the honest corporation manager and his well-tried efficiency. Those who confuse entrepreneurship and management close their eyes to the economic problem . . . The capitalist system is not a managerial system; it is an entrepreneurial system."

But here, Mises triumphantly concludes, no "market socialist" has ever suggested preserving or carrying over, much less understood the importance of, the specifically entrepreneurial functions of capitalism:

> Nobody has ever suggested that the socialist commonwealth could invite the promoters and speculators to continue their speculations and then deliver their profits to the common chest. Those suggesting a quasi-market for the socialist system have never wanted to preserve the stock and commodity exchanges, the trading in futures, and the bankers and money-lenders as quasi-institutions.[12]

Mises has been cited as stating, in *Human Action*, that it is absurd for the socialist planning board to tell their managers to "play market," to act *as if* they are owners of their firms in trying to maximize profits and avoid losses. But it is important to stress that Mises was focusing, not so much on the individual managers of socialist "firms," but on the speculators and investors who decide the crucial allocations of capital throughout the structure of industry. It is at least conceivable that one can order a manager to play market and act as if he were enjoying the profits and suffering losses; but it is clearly ludicrous to ask investors and capital speculators to act as if their fortunes were at stake. As Mises adds:

> one cannot *play* speculation and investment. The speculators and investors expose their own wealth, their own destiny. This fact makes them responsible to the consumers, the ultimate bosses of the capitalist economy. If one relieves them of this responsibility, one deprives them of their very character.[13]

One time, during Mises's seminar at New York University, I asked him whether, considering the broad spectrum of economies from a purely free market economy to pure totalitarianism, he could single out one criterion according to which he could say that an economy was essentially "socialist" or whether it was a market economy. Somewhat to my surprise, he replied readily: "Yes, the key is whether the economy has a stock market." That is, if the economy has a full-scale market in titles to land and capital goods. In short: Is the allocation of capital basically determined by government or by private owners? At the time, I did not fully understand the vital importance

[12]Ibid., pp. 704–05.
[13]Ibid., p. 705.

of Mises's answer, which I realized recently when poring over the great merits of the Misesian, as compared to the Hayekian, analysis of the socialist calculation problem.

For Mises, in short, the key to the capitalist market economy and its successful functioning is the entrepreneurial forecasting and decisionmaking of private owners and investors. The key is emphatically *not* the more minor decisions made by corporate managers within a framework already set by entrepreneurs and the capital markets. And it is obvious that Lange, Lerner, and the other market socialists merely envisioned the relatively lesser managerial decisions. These economists, who had never grasped the function of speculation or capital markets, therefore had no idea that they would need to be or could be replicated in a socialist system.[14] And this is not surprising, since in the Walrasian general micro-equilibrium model, there is no capital structure, there is no role for capital, and capital theory has become totally submerged into "growth theory," that is, growth of a homogeneous "level," or blob, of aggregate macro-capital. The allocation of capital is considered external and given, and receives no consideration.

The Structure of Capital

Joseph Schumpeter and Frank H. Knight are interesting examples of two eminent economists who were personally anti-socialist but were seduced by their Walrasian devotion to general equilibrium and their lack of a genuine capital theory into strongly endorsing the orthodox view that there is no economic calculation problem under socialism. In particular, in capital theory, both Schumpeter and Knight were disciples of J. B. Clark, who denied any role at all for time in the process of production. For Schumpeter, production takes no time because production and consumption are somehow always "synchronized." Time is erased from the picture, even to assuming away the existence of any accumulated stocks of capital goods, and therefore of any age structure of such goods. Since production is magically synchronized, there is then no necessity for land or labor to receive advances in payment from capitalists out of accumulated savings. Schumpeter achieves this feat by sundering capital completely from its embodiment in capital goods, and limiting the concept to a money fund used to purchase such goods.[15]

Frank Knight, the doyen of the Chicago School, was also an ardent

[14]The fact that some socialist bloc countries, such as Hungary, now permit a stock market, albeit small and truncated, and that other ex-communist countries are seriously considering introducing such capital markets, demonstrates the enormous importance of the de-socialization now under way in Eastern Europe.

[15]See Murray N. Rothbard, "Breaking Out of the Walrasian Box: The Cases of Schumpeter and Hansen," *Review of Austrian Economics* 1 (1987): 98–100, 107.

believer in the Clarkian view that time preference has no influence on interest paid by producers, and that production is synchronized so that time plays no role in the production structure. Hence, Knight believed, along with modern orthodoxy, that capital is a homogeneous, self-perpetuating blob that *has no* lattice-like, time-oriented structure. Knight's fiercely anti-Böhm-Bawerkian, anti-Austrian views on capital and interest led him to a then-famous war of journal articles over capital theory during the 1930s, a war he won by default when Austrianism disappeared because of the Keynesian Revolution.[16]

In his negative review of Mises's *Socialism*, Frank Knight, after hailing Lange's "excellent" 1936 article, brusquely dismisses the socialist calculation debate as "largely sound and fury." To Knight, it is simply "truistical" that the "technical basis of economic life" would continue as before under socialism, and that therefore "the managers of various technical units in production—farms, factories, railways, stores, etc.—would carry on in essentially the same way." Note, there is no reference whatever to the crucial capital market, or to the allocation of capital to various branches of production. If capital is an automatically renewing homogeneous blob, all one need worry about is growth in the amount of that blob. Hence, Knight concludes that "socialism is a political problem, to be discussed in terms of social and political psychology, and economic theory has relatively little to say about it."[17] Certainly, that is true of Knight's orthodox-Chicagoite brand of economic theory!

It is instructive to compare the naivete and the brusque dismissal

[16]On Knight vs. Hayek, Machlup, and Boulding in the 1930s, see F. A. Hayek, "The Mythology of Capital," in W. Fellner and B. Haley, eds., *Readings in the Theory of Income Distribution* (Philadelphia: Blakiston, 1946), pp. 355–83. For a Knightian attack on the Austrian discounted marginal productivity theory on behalf of what is now the orthodox undiscounted (by time-preference) marginal productivity theory, see Earl Rolph, "The Discounted Marginal Productivity Doctrine," ibid., pp. 278–93. For an Austrian rebuttal, see Murray N. Rothbard, *Man, Economy, and State*, vol. 1 (Los Angeles: Nash, 1970), pp. 431–33; and Walter Block, "The DMVP-MVP Controversy: A Note," *Review of Austrian Economics* 4 (1990): 199–207.

[17]Frank H. Knight, "Review of Ludwig von Mises, *Socialism*," *Journal of Political Economy* 46 (April 1938): 267–68. In another review in the same issue of the journal, Knight claims that there *would* be a "capital market" under socialism, but it is clear that he is referring only to a market for loans, and not to a genuine market in equities throughout the production structure. Here again, Mises has a devastating critique of this sort of scheme in *Human Action*, pointing out that managers bidding for governmental planning board funds would not be bidding for or staking their own property, and hence they would "not be restrained by any financial dangers they themselves run in promising too high a rate of interest for the funds borrowed. . . . All the hazards of this insecurity fall only upon society, the exclusive owner of all resources available. If the director were without hesitation to allocate the funds available to those who bid most, he would simply . . . abdicate in favor of the least scrupulous visionaries and scoundrels." See Knight, "Two Economists on Socialism," *Journal of Political Economy* 46 (April 1938): 248; and Mises, *Human Action*, p. 705.

of the problem by Schumpeter and Knight with the penetrating Misesian critique of socialism by Professor Georg Halm:

> Because capital is no longer owned by many private persons, but by the community, which itself disposes of it directly, a rate of interest *can* no longer be determined. A pricing process is always possible only when demand and supply meet in a market. . . . In the socialist economy . . . there can be no demand and no supply when the capital from the outset is in the possession of its intending user, in this case the socialistic central authority.
>
> Now it might perhaps be suggested that, since the rate of interest cannot be determined automatically, it should be fixed by the central authority. But this likewise would be quite impossible. It is true that the central authority would know quite well how many capital goods of a given kind it possessed or could procure . . .; it would know the capacity of the existing plant in the various branches of production; *but it would not know how scarce capital was.* For the scarcity of means of production must always be related to the demand for them, whose fluctuations give rise to variations in the value of the good in question . . .
>
> If it should be objected that a price for consumption-goods would be established, and that in consequence the intensity of the demand and so the value of the means of production would be determinate, this would be a further serious mistake. . . . The demand for means of production, labor and capital goods, is only indirect.

Halm goes on to add that if there were only one single factor of production in making consumers' goods, the socialist "market" might be able to determine its proper price. But this can not be true in the real world where *several* factors of production take part in the production of goods in various markets.

Halm then adds that the central authority, contrary to his above concession, would not *even* be able to find out how much capital it is employing. For capital goods are heterogeneous, and therefore how "can the total plant of one factory be compared with that of another? How can a comparison be made between the values of even only two capital-goods?" In short, while under capitalism such comparisons can be made by means of money prices set on the market for every good, in the socialist economy the absence of genuine money prices arising out of a market precludes any such value comparisons. Hence, there is also no way for a socialist system to rationally estimate the costs (which are dependent on prices in factor markets) of any process of production.[18]

[18]Georg Halm, "Further Considerations on the Possibility of Adequate Calculation in a Socialist Community," in Hayek, *Collectivist Economic Planning*, pp. 162–65. Also see ibid., pp. 13–200.

Mises's Rebuttal: Valuation and Monetary Appraisement

In his original 1920 article, Mises emphasized that "as soon as one gives up the conception of a freely established monetary price for goods of a higher order, rational production becomes completely impossible." Mises then states, prophetically:

> One may anticipate the nature of the future socialist society. There will be hundreds and thousands of factories in operation. Very few of these will be producing wares ready for use; in the majority of cases what will be manufactured will be unfinished goods and production goods. All these concerns will be interrelated. Every good will go through a whole series of stages before it is ready for use. In the ceaseless toil and moil of this process, however, the administration will be without any means of testing their bearings. It will never be able to determine whether a given good has not been kept for a superfluous length of time in the necessary processes of production, or whether work and material have not been wasted in its completion. How will it be able to decide whether this or that method of production is the more profitable? At best it will only be able to compare the quality and quantity of the consumable end-product produced, but will in the rarest cases be in a position to compare the expenses entailed in production.

Mises points out that while the government may be able to know what ends it is trying to achieve, and what goods are most urgently needed, it will have no way of knowing the other crucial element required for rational economic calculation: valuation of the various means of production, which the capitalist market can achieve by the determination of money prices for all products and their factors.[19]

Mises concludes that, in the socialist economy "in place of the economy of the 'anarchic' method of production, recourse will be had to the senseless output of an absurd apparatus. The wheels will turn, but will run to no effect."[20]

Moreover, in his later rebuttal to the champions of the Pareto-Barone equations, Mises points out that the crucial problem is not simply that the economy is not and can never be in the general equilibrium state described by these differential equations. In addition to other grave problems with the equilibrium model (e.g.: that the socialist planners do not now know their value scales in future

[19]Mises, "Economic Calculation in the Socialist Commonwealth," pp. 106–08.

[20]Ibid., p. 106. This conclusion of 1920 is strikingly close to the quip common in the Poland of 1989, as reported by Professor Krzyztof Ostazewski of the University of Louisville: that the socialist planned economy is "a value-shredding machine run by an imbecile."

equilibrium; that money and monetary exchange cannot fit into the model; that units of productive factors are neither perfectly divisible nor infinitesimal—and that marginal utilities of different people cannot be equated—on the market or anywhere else), the equations "do not provide any information about the human actions by means of which the hypothetical state of equilibrium" has been or can be reached. In short, the equations offer no information whatever on how to get from the existing disequilibrium state to the general equilibrium goal.

In particular, Mises points out, "even if, for the sake of argument, we assume that a miraculous inspiration has enabled the director without economic calculation to solve all problems concerning the most advantageous arrangement of all production activities and that the price image of the final goal he must aim at is present to his mind," there remain crucial problems on the path from here to there. For the socialist planner does not start from scratch and then build a capital goods structure most perfectly designed to meet his goals. He necessarily starts with a capital goods structure produced at many stages of the past and determined by past consumer values and past technological methods of production. There are different degrees of such past determinants built into the existing capital structure, and anyone starting today must use these resources as best he can to meet present and expected future goals. For these heterogeneous choices, no mathematical equations can be of the slightest use.[21]

Finally, the unique root of Mises's position, and one that distinguishes him and his "socialist impossibility" thesis from Hayek and the Hayekians, has been neglected until the present day. And this neglect has persisted despite Mises's own explicit avowal in his memoirs of the root and groundwork of his calculation thesis.[22] For Mises was *not*, like Hayek and his followers, concentrating on the flaws in the general equilibrium model when he arrived at his position; nor was he led to his discussion solely by the triumph of the socialist revolution in the Soviet Union. For Mises records that his position on socialist calculation emerged out of his first great work,

[21]Mises, *Human Action*, pp. 706–09. As Mises puts it: "socialists of all shades of opinion, repeat again and again that what makes the achievement of their ambitious plans realizable is the enormous wealth hitherto accumulated. But in the same breath they disregard the fact that this wealth consists to a great extent in capital goods produced in the past and more or less antiquated from the point of view of our present valuations and technological knowledge." Ibid., p. 710.

[22]In Mises's *Notes and Recollections* (Spring Mills, Penn.: Libertarian Press, 1978), p. 112. Also see the discussion in Murray N. Rothbard, *Ludwig von Mises: Scholar, Creator, Hero* (Auburn, Ala.: Ludwig von Mises Institute, 1988), pp. 35–38.

The Theory of Money and Credit (1912). In the course of that notable integration of monetary theory and "micro" marginal utility theory, Mises was one of the very first to realize that subjective valuations of the consumers (and of laborers) on the market are purely ordinal, and are in no way measurable. But market prices are cardinal and measurable in terms of money, and market money prices bring goods into cardinal comparability and calculation (e.g., a $10 hat is "worth" five times as much as a $2 loaf of bread).[23] But Mises realized that this insight meant it was absurd to say (as Schumpeter would) that the market "imputes" the values of consumer goods back to the factors of production. Values are not directly "imputed"; the imputation process works only indirectly, by means of money prices on the market. Therefore socialism, necessarily devoid of a market in land and capital goods, must lack the ability to calculate and compare goods and services, and therefore any rational allocation of productive resources under socialism is indeed *impossible*.[24]

For Mises, then, his work on socialist calculation was part and parcel of his expanded integration of direct and monetary exchange, of "micro" and "macro," that he had begun but not yet completed in *The Theory of Money and Credit*.[25]

Fallacies of Hayek and Kirzner

The orthodox line of the 1930s and 40s was wrong in claiming that Hayek and his followers (such as Lionel Robbins) abandoned Mises's "theoretical" approach by bowing down to the Pareto-Barone equations, falling back on "practical" objections to socialist planning.[26] As we have already seen, Hayek scarcely ceded to mathematical equations of general equilibrium the monopoly of correct economic theory. But it is also true that Hayek and his followers fatally and radically changed the entire focus of their "Austrian" position, either by mis-

[23]On the market, then, consumers *evaluate* goods and services ordinally, whereas entrepreneurs *appraise* (estimate and forecast future prices) cardinally. On valuation and appraisement, see Mises, *Human Action*, pp. 327–330; Salerno, "Mises as Social Rationalist," pp. 39–49; and Salerno, "Socialist Economy is *Impossible*."

[24]Mises says in his memoirs: "They [the socialists] failed to see the very first challenge: How can economic action that always consists of preferring and setting aside, that is, of making unequal valuations, be transformed into equal valuations, by the use of equations? Thus the advocates of socialism came up with the absurd recommendation of substituting equations of mathematical catallactics, depicting an image from which human action is eliminated, for the monetary calculation in the market economy." Mises, *Notes and Recollections*, p. 112.

[25]This integration was later completed by his business-cycle theory in the 1920s, and then in his monumental treatise *Human Action*.

[26]Except for the unfortunate emphasis of Hayek and Robbins on the alleged socialist difficulty of computing or "counting" the equations. See below.

construing Mises's argument or by consciously though silently shifting the crucial terms of the debate.

It is no accident, in short, that Hayek and the Hayekians dropped Mises's term "impossible" as embarrassingly extreme and imprecise. For Hayek, the major problem for the socialist planning board is its lack of *knowledge*. Without a market, the socialist planning board has no means of knowing the value-scales of the consumers, or the supply of resources or available technologies. The capitalist economy is, for Hayek, a valuable means of disseminating knowledge from one individual to another through the pricing "signals" of the free market. A static, general equilibrium economy would be able to overcome the Hayekian problem of dispersed knowledge, since eventually all data would come to be known by all, but the everchanging, uncertain data of the real world prevents the socialist planning board from acquiring such knowledge. Hence, as is usual for Hayek, the argument for the free economy and against statism rests on an argument from ignorance.

But to Mises the central problem is not "knowledge." He explicitly points out that *even if* the socialist planners knew perfectly, and eagerly wished to satisfy, the value priorities of the consumers, and *even if* the planners enjoyed a perfect knowledge of all resources and all technologies, they *still* would not be able to calculate, for lack of a price system of the means of production. The problem is not knowledge, then, but calculability. As Professor Salerno points out, the *knowledge* conveyed by present—or immediate "past"—prices is consumer valuations, technologies, supplies, etc. of the immediate or recent past. But what acting man is interested in, in committing resources into production and sale, is *future* prices, and the present committing of resources is accomplished by the entrepreneur, whose function is to *appraise*—to anticipate—future prices, and to allocate resources accordingly. It is precisely this central and vital role of the *appraising entrepreneur*, driven by the quest for profits and the avoidance of losses, that cannot be fulfilled by the socialist planning board, for lack of a market in the means of production. Without such a market, there are no genuine money prices and therefore no means for the entrepreneur to calculate and appraise in cardinal monetary terms.

More philosophically, the entire Hayekian emphasis on "knowledge" is misplaced and misconceived. The purpose of human action is not to "know" but to employ means to satisfy goals. As Salerno perceptively summarizes Mises's position:

> The price system is not—and praxeologically cannot be—a mechanism for economizing and communicating the knowledge relevant to production plans [the Hayekian position]. The realized prices of history are an accessory of appraisement, the mental operation in

> which the faculty of understanding is used to assess the quantitative structure of price relationships which corresponds to an anticipated constellation of economic data. Nor are anticipated future prices tools of knowledge; they are instruments of economic calculation. And economic calculation itself is not the means of acquiring knowledge, but the very prerequisite of rational action within the setting of the social division of labor. It provides individuals, whatever their endowment of knowledge, the indispensable tool for attaining a mental grasp and comparison of the means and ends of social action.[27]

In a recent article, Professor Israel Kirzner argues for the Hayekian position. For Hayek and for Kirzner, the market is a "discovery procedure," that is, an unfolding of knowledge. There is, in this view of the market and of the world, no genuine recognition of the entrepreneur, not as a "discoverer," but as a dynamic risk taker, risking losses if his appraisal and forecast go awry. Kirzner's commitment to the "discovery process" fits all too well with his own original concept of the entrepreneurial function as being that of "alertness," and of different entrepreneurs as being variously alert to the opportunities that they see and discover. But this outlook totally misconceives the role of the entrepreneur. The entrepreneur is not simply "alert"; he forecasts; he appraises; he meets and bears risk and uncertainty by questing for profits and risking losses. As Salerno points out, for all their talk of dynamism and uncertainty, the Hayek-Kirzner "entrepreneur" is curiously bloodless and passive, receiving and passively imbibing knowledge imparted to him by the market. The Hayek-Kirzner entrepreneur is far closer than they like to think to the Walrasian automaton, to the fictional "auctioneer" who avoid all real trades in the marketplace.[28]

Unfortunately, while lucidly expounding the Hayekian position, Kirzner obfuscates the history of the debate by claiming that the later Mises, along with Hayek, changed his position (or, at the least, "elaborated" it) from his original, "static" view of 1920. But on the contrary, as Salerno points out, the "later" Mises explicitly spurned

[27]Salerno, "Mises as Social Rationalist," p. 44.

[28]Israel M. Kirzner, "The Economic Calculation Debate: Lessons for Austrians," *Review of Austrian Economics* 2 (1988): 1–18. Hayek coined the term "discovery procedure" in F. A. Hayek, "Competition as a Discovery Procedure," in *New Studies in Philosophy, Politics, Economics and the History of Ideas* (Chicago: University of Chicago Press, 1978), pp. 179–90. For a critique of Kirzner's concept of entrepreneurship, see Murray N. Rothbard, "Professor Hébert on Entrepreneurship," *Journal of Libertarian Studies* 7 (Fall 1985): 281–85. For Hayek's own contributions to the socialist calculation debate after Lange-Lerner, see F. A. Hayek, "Socialist Calculation III: The Competitive 'Solution'" (1940), and "The Use of Knowledge in Society," (1945), in *Individualism and Economic Order*, pp. 181–208; 77–91.

uncertainty of the future as the key to the calculation problem. The key to the calculation question, stated Mises in *Human Action*, is *not* that "all human action points to the future and the future is always uncertain." No, socialism has

> quite a different problem. Today we calculate from the point of view of our present knowledge and of our present anticipation of future conditions. We do not deal with the problem of whether or not the [socialist] director will be able to anticipate future conditions. What we have in mind is that the director cannot calculate from the point of view of his own present value judgments and his own present anticipation of future conditions, whatever they may be. If he invests today in the canning industry, it may happen that a change in consumers' tastes or in the hygienic opinions concerning the wholesomeness of canned food will one day turn his investment into a malinvestment. But how can he find out today how to build and equip a cannery most economically?
>
> Some railroad lines constructed at the turn of the century would not have been built if the people had at that time anticipated the impending advance of motoring and aviation. But those who at the time built railroads knew which of the various possible alternatives for the realization of their plans they had to choose from the point of view of their appraisements and anticipations and of the market prices of their day in which the valuations of the consumers were reflected. It is precisely this insight that the director will lack. He will be like a sailor on the high seas unfamiliar with the methods of navigation . . .[29,30]

Solving Equations and Lange's Last Word

One of the unfortunate formulations of Hayek and the Hayekians in the 1930s, giving rise to the general misunderstanding that the only problems of socialist planning are "practical" not "theoretical," was their stress on the alleged difficulty of socialist planners in computing or solving all the demand and supply functions, all the "simultaneous differential equations" needed to plan prices and the allocation of resources. If socialistic planning is to rely on the Pareto-Barone equations, then how will all of them be known, especially in a world of necessarily changing data of values, resources, and technology?

Lionel Robbins began this equation-difficulty approach in his

[29]Mises, *Human Action*, p. 696. Also see Salerno, "Mises as Social Rationalist," pp. 46–47ff.

[30]Kirzner apparently believes that Mises's concentration on entrepreneurship in his *Human Action* discussion of socialism demonstrates that Mises had gone over to the Hayek position. Kirzner seems to overlook the vast difference between Mises's forecasting and appraisement view of entrepreneurship and his own "alertness" doctrine, which totally leaves out the possibility of entrepreneurial loss.

study of the 1929 depression, *The Great Depression*. Conceding, with Mises, that the planners could determine consumer preferences by allowing a market in consumer goods, Robbins correctly added that the socialist planners would also have to "know the relative efficiencies of the factors of production in producing all the possible alternatives." Robbins then unfortunately added:

> On paper we can conceive this problem to be solved by a series of mathematical calculations. We can imagine tables to be drawn up expressing the consumers' demands . . . And we can conceive technical information giving us the productivity . . . which could be produced by each of the various possible combinations of the factors of production. On such a basis a system of simultaneous equations could be constructed whose solution would show the equilibrium distribution of factors and the equilibrium production of commodities.
>
> But in practice this solution is quite unworkable. It would necessitate the drawing up of millions of equations on the basis of millions of statistical tables based on many more millions of individual computations. By the time the equations were solved, the information on which they were based would have become obsolete and they would need to be calculated anew.[31]

While Robbins's strictures about changes in data were and still are true enough, they helped divert the emphasis from Mises's even-if-static and full-knowledge calculation approach, to Hayek's emphasis on uncertainty and change. More important, they gave rise to the general myth that Robbins's strictures against socialism, unlike Mises's, were only "practical" in the sense of not being able to calculate all these simultaneous equations. Furthermore, in the concluding essay in his *Collectivist Economic Planning*, Hayek set forth all the reasons why the planners could not know essential data, one of which is that they would have to solve "hundreds of thousands" of unknowns. But

> this means that, at each successive moment, every one of the decisions would have to be based on the solution of an equal number of simultaneous differential equations, a task which, with any of the means known at present, could not be carried out in a lifetime. And yet these decisions would . . . have to be made continuously . . .[32]

It is fascinating to note the twists and turns in Oskar Lange's reaction to the equation-solving argument. In his 1936 article, which was long considered the last word on the subject, Lange ridiculed the

[31]Lionel Robbins, *The Great Depression* (New York: Macmillan, 1934), p. 151.

[32]F. A. Hayek, "The Present State of the Debate," in Hayek, *Collectivist Economic Planning*, p. 212.

very terms of the problem. Adopting his "quasi-market" socialist approach, and ignoring the crucial Misesian problem of the necessary absence of any market in land or capital, Lange simply stated that there is no need for planners to worry about these equations, since they would be "solved" by the socialist market:

> Neither would the Central Planning Board have to solve hundreds of thousands . . . or millions . . . of equations. The only "equations" which would have to be "solved" would be those of the consumers and the managers of production plants. These are exactly the same "equations" which are solved in the present economic system and the persons who do the "solving" are the same also. Consumers . . . and managers . . . "solve" them by a method of trial and error . . . And only few of them have been graduated in higher mathematics. Professor Hayek and Professor Robbins themselves "solve" at least hundreds of equations daily, for instance, in buying a newspaper or in deciding to take a meal in a restaurant, and presumably they do not use determinants or Jacobians for that purpose.[33]

Thus, the orthodox neoclassical economic establishment had settled the calculation dispute with Lange-Lerner the acclaimed winner. Accordingly, when the end of World War II brought communism/socialism to his native Poland, Professor Oskar Lange left the plush confines of the University of Chicago to play a major role in bringing his theories to bear on the brave new world of socialist Poland. Lange became Polish ambassador to the United States, then Polish delegate to the United Nations Security Council, and finally chairman of the Polish Economic Council. And yet not once in this entire period or later, did Poland—or any other communist government, for that matter—attempt to put into practice anything remotely like Lange's fictive accounting-type, play-at-market socialism. Instead, they all put into effect the good old Stalinist command-economy model.

It did not take long for Oskar Lange to adjust to the persistence of the Stalinist Model. Indeed, it turns out that Lange, in post-war Poland, argued strongly for the historical necessity of the persistence of the Stalinist model as opposed to his own market socialism. Arguing

[33]Oskar Lange, "On the Economic Theory of Socialism, Part One," p. 67. The Norwegian economist and defender of Mises's position, Trygve Hoff, commented that "Quite apart from the fact that the equations the central authority would have to solve are of quite a different nature to those of the private individual, the latter tend to solve themselves automatically, which Dr. Lange must admit the former do not." Hoff, *Economic Calculation in the Socialist Society*, pp. 221–22. This excellent book on the socialist calculation controversy was originally published in Norwegian in 1938. In contrast to Bergson's almost contemporaneous survey article, Hoff's English-language translation, published in 1949 in Britain but not in the United States, sank without a trace.

against his own quasi-decentralized market-socialist solution, Lange, in 1958, revealed that "in Poland, we had some discussions whether such a period of highly centralized planning and management was historical necessity or a great political mistake. Personally, I hold the view that it was a historical necessity."

Why? Lange now claimed:

(a) that the "very process of the social revolution which liquidates one social system and establishes another requires centralized disposal of resources by the new revolutionary state, and consequently centralized management and planning."

(b) second, in underdeveloped countries—and which socialist country was not underdeveloped?—"Socialist industrialization, and particularly very rapid industrialization, which was necessary in the first socialist countries, particularly in the Soviet Union . . . requires centralized disposal of resources." Soon, however, Lange promised, the dialectic of history will require the socialist government to organize quasi-market, decentralized decision-making within the overall plan.[34]

Shortly before his death in 1965, however, Oskar Lange, in his neglected last word on the socialist calculation debate, implicitly revealed that his socialist-market "solution" had been little more than a hoax, to be jettisoned quickly when he indeed saw a way for the Planning Board to solve all those hundreds of thousands or millions of simultaneous equations! Strangely gone was his gibe that everyone "solves equations" every day without having to do so formally. Instead, technology had now supposedly come to the rescue of the Planning Board! As Lange put it:

> Were I to rewrite my essay ["On the Economic Theory of Socialism"] today my task would be much simpler. My answer to Hayek and Robbins would be: so what's the trouble? Let us put the simultaneous equations on an electronic computer and we shall obtain the solution in less than a second. The market process with its cumbersome *tatonnements* appears old-fashioned. Indeed, it may be considered as a computing device of the pre-electronic age.[35]

Indeed, Lange claims that the computer is superior to the market, because the computer can perform long-range planning far better, since it somehow already knows "future shadow prices" which markets cannot seem to obtain.

[34]Oskar Lange, "The Role of Planning in Socialist Economy," in *The Political Economy of Socialism* (1958) in M. Bornstein, ed., *Comparative Economic Systems*, rev. ed. (Homewood, Ill.: Richard D. Irwin, 1969), pp. 170–71.

[35]Oskar Lange, "The Computer and the Market," in A. Nove and D. Nuti, eds. *Socialist Economics* (London: Penguin Books, 1972), pp. 401–02.

Lange's naive enthusiasm for the magical planning qualities of the computer in its early days can only be considered a grisly joke to the economists and the people in the socialist countries who have seen their economies go inexorably from bad to far worse despite the use of computers. Lange apparently never became familiar with the computer adage, *GIGO* ("garbage in, garbage out"). Nor could he have become familiar with the recent estimate of a top Soviet economist that, even assuming that the planning board and its computers could learn the correct data, it would take even the current generation of computers 30,000 years to process the information and allocate the resources.[36]

But there is a more important flaw in Lange's last article than his naivete about the magical powers of the then-new technology of the computer. His eagerness to embrace a way of solving those equations he earlier had claimed didn't *need* conscious solving, demonstrates that he had been disingenuous in claiming that his pseudo-market trial-and-error method would provide a facile way for the socialist society to solve the calculation problem.

Socialist Impossibility and the Argument from Existence

Ever since 1917, or at least since Stalin's great leap forward into socialism in the early 1930s, the defenders of the possibility of socialism against Mises's strictures had one final, clinching, fallback argument. When all the arguments over general equilibrium or equations or entrepreneurship or Walrasian *tatonnements* or the command economy or pseudo-markets had been hashed over, the defenders of socialism could simply fall back on one point: Well, socialism exists, doesn't it? When all is said and done, it exists, and therefore it must be, for one reason or another, possible. Mises must clearly be wrong, even if the "practical" arguments of Hayek or Robbins, arguments of mere degrees of efficiency, need to be soberly considered. At the end of his celebrated survey essay on socialist economics Professor Abram Bergson put the point starkly:

> there can hardly be any room for debate: of course, socialism can work. On this, Lange certainly is convincing. If this is the sole issue, however, one wonders whether at this stage such an elaborate theoretic demonstration is in order. After all, the Soviet planned economy has been operating for thirty years. Whatever else may be said of it, it has not broken down.[37]

[36]Yuri M. Maltsev, "Soviet Economic Reform: An Inside Perspective," *The Freeman* (March 1990).

[37]Bergson, "Socialist Economics," p. 447.

In the first place, this triumphal conclusion now rings hollow, since the economies of the Soviet Union and the other socialist bloc countries have now manifestly broken down. And now it also turns out that the Soviet GNP and production figures that Bergson, the CIA, and other Sovietologists have been taking at face value for decades have been nothing but a pack of lies, designed to deceive not the United States, but the Soviet managers' own ruling elite. Even now, Western Sovietologists are reluctant to believe the Soviet economists who are finally trying to tell them the truth about these alleged and much revered data.

But apart from all that, this sort of seemingly decisive empiricist counter to the Misesian critique reveals the perils of using allegedly simple and brute "facts" to rebut theory in the sciences of human action. For why must we assume that the Soviet Union and the Eastern European countries ever really enjoyed full and complete socialism? There are many reasons to believe that, try as they might, the communist rulers were never able to impose total socialism and central planning. For one thing, it is now known that the entire Soviet economy and society has been shot through with a vast network of black markets and evasions of controls, fueled by a pervasive system of bribery known as *blat* to allow escape from those controls. Managers who could not meet their annual production quotas were approached by illegal entrepreneurs and labor teams to help them meet the quotas and get paid off the books. And black markets in foreign exchange have long been familiar to every tourist. Long before the Eastern European collapse of communism, these countries stopped trying to stamp out their black markets in hard currency, even though they were blatantly visible in the streets of Warsaw, Budapest, and Prague. Without uncontrolled black markets fueled by bribery, the communist economies may well have collapsed long ago.[38] This historical point has also been bolstered by Michael Polanyi's "span of control" theory, which denies the possibility of effective central planning from a rather different viewpoint than Mises's.[39]

But the decisive rebuttal has, once again, been levelled by Mises in *Human Action*: the Soviet Union and Eastern European economies were not fully socialist because they were, after all, islands in a world capitalist market. The communist planners were therefore able, albeit clumsily and imperfectly, to use prices set by world markets as

[38]One source on this pervasive system in the Soviet Union is Konstantin M. Simis, *USSR: The Corrupt Society* (New York: Simon & Schuster, 1982).

[39]Michael Polanyi, *The Logic of Liberty* (Chicago: University of Chicago Press, 1951), pp. 111–37 and passim.

indispensable guidelines for the pricing and allocation of capital resources. As Mises pointed out:

> People did not realize that these were not isolated social systems. They were operating in an environment in which the price system still worked. They could resort to economic calculation on the ground of the prices established abroad. Without the aid of these prices their actions would have been aimless and planless. Only because they were able to refer to these foreign prices were they able to calculate, to keep books, and to prepare their much talked about plans.[40]

Mises's insight was confirmed as early as the mid-1950s, when the British economist Peter Wiles visited Poland, where Oskar Lange was helping to plan Polish socialism. Wiles asked the Polish economists how they planned the economic system. As Wiles reported:

> What actually happens is that "world prices", i.e. *capitalist world prices*, are used in all intra-[Soviet] bloc trade. They are translated into rubles . . . entered into bilateral clearing accounts.

Wiles then asked the Polish communist planners the crucial question. Since the Poles were, as good Marxist-Leninists, presumably committed to the triumph, as soon as possible, of world-wide socialism, Wiles asked: "What would you do if there were no capitalist world" from which you could obtain all those crucial prices? The Polish planners' rather cynical answer: "We'll cross that bridge when we come to it." Wiles added that "In the case of electricity the bridge is already under their feet: there has been great difficulty in pricing it since there is no world market."[41] But fortunately for the world and for the Polish planners themselves, they were never truly forced to cross that bridge.

Epilogue: The End of Socialism and Mises's Statue

In his supposedly definitive article of 1936 vindicating economic calculation under socialism, Oskar Lange delivered a once-famous gibe at Ludwig von Mises. Lange began his essay by ironically hailing Mises's services to socialism: "Socialists have certainly good reason to be grateful to Professor Mises, the great *advocatus diaboli* of their cause. For it was his powerful challenge that forced the socialists to

[40]Mises, *Human Action*, pp. 698–99.

[41]Peter J. D. Wiles, "Changing Economic Thought in Poland," *Oxford Economic Papers* 9 (June 1957): 202–03. Also see Murray N. Rothbard, "Ludwig von Mises and Economic Calculation Under Socialism," in Lawrence Moss, *The Economics of Ludwig von Mises*, pp. 67–77.

recognize the importance of an adequate system of economic accounting. . . . the merit of having caused the socialists to approach this problem systematically belongs entirely to Professor Mises." Lange then went on to taunt Mises:

> Both as an expression of recognition for the great service rendered by him and as a memento of the prime importance of sound economic accounting, a statue of Professor Mises ought to occupy an honorable place in the great hall of the Ministry of Socialization or of the Central Planning Board of the socialist state.

Lange went on to say that "I am afraid that Professor Mises would scarcely enjoy what seemed the only adequate way to repay the debt of recognition incurred by the socialists . . ." For one thing, Lange concluded, to complete Mises's discomfiture

> a socialist teacher might invite his students in a class on dialectical materialism to go and look at the statue, in order to exemplify the Hegelian *List der Vernuft* [cunning of Reason] which made even the staunchest of *bourgeois* economists unwittingly serve the proletarian cause.[42]

Curiously enough, Lange, during his years as socialist planner in Poland, never got around to erecting the statue to Mises at the Ministry of Socialization in Warsaw. Perhaps socialist planning was not successful enough to accord Mises that honor—or perhaps there were not enough resources to build the statue. In any case, the opportunity has been lost. The countries of Eastern Europe now stand in the rubble wrought by what used to be called in the 1930s "the great socialist experiment." Emerging gloriously out of the rubble of the collapse of socialism are a myriad of Misesian economists, to whom socialism is little more than a grisly joke. Even as early as the 1960s it was a common quip among economists that, at international economic conferences, "the Western economists talk about the glories of planning while the Eastern economists talk about the virtues of the free market." Now Misesian economists are springing out of the ruins of socialism in Poland, Lithuania, Czechoslovakia, Hungary, Yugoslavia (especially Croatia and Slovenia) and the Soviet Union. Neither socialist planning nor Marxism-Leninism hold any charms for the economists of the once-socialist nations.

In all of these countries, the giant statues of Lenin are being unceremoniously toppled from the public squares. Whether or not the coming free societies of Eastern Europe choose to replace them with statues of Ludwig von Mises, as the prophet of their liberation, one

[42]Lange, "The Economic Theory of Socialism," p. 53.

thing seems certain: there will be no statues erected to Oskar Lange in Cracow or Warsaw. It is hard to see how even the cunning of Reason and the Hegelian dialectic can make Lange out to be a prophet or an important contributor to the laissez-faire Polish economy of the future. Perhaps the closet approach was a bitter quip pervading Eastern Europe during the revolutionary year of 1989: "Communism can be defined as the longest route from capitalism to capitalism."

De-Socialization in a United Germany

Hans-Hermann Hoppe*

I

As a result of the defeat of Hitler's Germany in Word War II, there were 10 million refugees living on a significantly reduced German territory; 40 percent of the population was bombed-out (the population of Cologne, for instance, had declined from 750,000 to 32,000) and 60 percent was undernourished.[1]

In those territories occupied by the Western Allies, initially the economic system inherited from the Nazi regime—a command-war-economy—was retained. Almost all consumer goods were rationed, all-around price and wage controls remained in effect, and imports and exports were strictly regulared by the military administration. Black markets and barter trade were ubiquitous. Due to general price maxima and an expansionary supply of paper Reichs marks, no goods were to be found and money was largely useless.[2] Black-market prices experienced a highly inflationary development and substitute currencies like coffee, cigarettes, and butter emerged. German output in 1946 was less than one-third of what it had been in 1938. Chaos and desperation were the mark of the day.

In respone to the beginning Cold War between the Allies, in particular the United States and the Soviet Union, the Western

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[1]For details see Gustav Stolper, *German Realities* (New York: Reynal & Hitchcock, 1948); Frank Grube and Gerhard Richter, *Die Schwarzmarktzeit: Deutschland zwischen 1945 und 1948* (Hamburg, 1979); Theodor Eschenburg, *Jahre der Besatzung 1945–1949* (Stuttgart, 1983); Charles Kindleberger, *The German Economy, 1945–1947: Charles Kindleberger's Letters from the Field* (Westport, Conn.: Meckler, 1989) with a historical introduction by Günther Bischof.

[2]On the phenomenon of repressed inflation see Wilhelm Röpke, *Die Lehre von der Wirtschaft* (Bern, 1979), pp. 142–45; idem, "Repressed Inflation," *Kyklos* 1, no. 3 (1947); for a purely theoretical treatment of the phenomenon see Murray N. Rothbard, *Power and Market* (Kansas City: Sheed Andrews & McMeel, 1977), pp. 28–29.

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Powers in 1947 changed their policy toward Germany. While their previous goal had been the de-industrialization of Germany—the industrial production was supposed to be frozen at 50–55 percent of Germany's 1938 output level—so as to permanently impoverish the German population, it was now decided to further the economic reconstruction of the Western occupied territories in order to build up an economic power base for the new strategy of *containment* and *roll back*.[3]

From 1948 through 1952 the three Western zones received $1.5 billion in Marshall aid. More importantly, in May of 1947 the British and American occupied zones were merged, and the economic administration of the unified region was largely put back into German hands, and on March 2, 1948, Ludwig Erhard, former economic minister of Bavaria, was elected director. Erhard, whose economic philosophy had been heavily influenced by the neo-liberal Freiburg school of Walter Eucken and Franz Böhm, which had in turn been influenced by the Austrian school of Ludwig von Mises,[4] initiated a currency reform on June 20, 1948, and consequently pursued a hard-money policy. As long as the monopoly of note issue rested with the Allies—who had set up a central banking system modeled after the United States Federal Reserve—the money supply remained drastically expanded (by more than 150 percent), with almost

[3]On the Cold War and the international dimensions of Germany's post World War II development see Paul Johnson, *Modern Times* (New York: Harper & Row, 1983), chaps. 13 and 17; Paul Kennedy, *The Rise and Fall of the Great Powers* (New York: Random House, 1987), chap. 7.

[4]See Ludwig Erhard, *Wohlstand für Alle* (Düsseldorf, 1957; updated edition 1990); idem, *Deutsche Wirtschaftspolitik* (Düsseldorf, 1967). Erhard's closest direct advisor was Alfred Müller-Armack, *Wirtschaftslenkung und Marktwirtschaft* (Hamburg, 1947). Walter Eucken's most influential works are *Die Grundlagen der Nationalökonomie* (Jena, 1940) and *Grundsätze der Wirtschaftspolitik* (Hamburg, 1959); for Franz Böhm see his *Reden und Schriften*, ed. E.S. Mestmäcker (Karlsruhe, 1960) and "Privatrechtsgesellschaft und Marktwirtschaft," *Ordo* 17 (1966). The annual *Ordo* is the main organ of the Freiburg School. Of similar influence were Wilhelm Röpke: *Die Lehre von der Wirtschaft* (Bern, 1979), *Die Gesellschaftskrisis der Gegenwart* (Erlenbach-Zürich, 1948), *Jenseits von Angebot und Nachfrage* (Erlenbach-Zürich, 1957), and Alexander Rüstow: *Ortsbestimmung der Gegenwart*, 3 vols. (Erlenbach-Zürich: Eugen Rentsch, 1950, 1952 and 1957). The influence of Ludwig von Mises was mostly through his *Theory of Money and Credit*, H. E. Batson, trans. (1912; London: Jonathan Cape, 1934), *Nation, State, and Economy*, Leland B. Yeager, trans. (1919; New York: New York University Press, 1983), *Socialism: An Economic and Sociological Analysis*, J. Kahane, trans. (1922; Indianapolis, Ind.: Liberty Fund, 1981), *Liberalism*, Ralph Raico, trans. (1927; Princeton, N.J.: D. Van Nostrand, 1962), and *Human Action: A Treatise on Economics*, 3rd ed. (1949; Chicago: Henry Regnery, 1966). On the relationship between these and other strands of free market thought see Friedrich A. Hayek, *Studies in Philosophy, Politics and Economics* (Chicago: University of Chicago Press, 1957), chap. 13.

immediate inflationary consequences. However, after October 1948 a continuously tight monetary policy was put into effect (in the beginning, the minimum reserve requirements and the discount rate were actually raised, while taxes were lowered), which quickly established West Germany as one of the world's least inflationary countries and the deutsche mark as one of the hardest currencies (during this 13-year period from 1948-1961 the consumer price index rose by a 'mere' 14 percent).

More importantly, contrary to the advice of American and British economic experts, who were taken completely by surprise, and against the prevailing public opinion in Germany, on June 24, 1948, only 4 days after the currency reform, Ludwig Erhard implemented a radical—although by no means flawless[5]—free-market reform. In accordance with the precepts of the 'new' Keynesian economics and the practice of the ruling British Labor Party, foreign experts and German public opinion had favored a policy of macro-economic management, of socialized investment, and a sector of nationalized 'basic' industries.[6] Instead, with one stroke Erhard abolished almost all price and wage controls and allowed almost complete freedom of movement, trade and occupation, thus radically expanding the rights of *private*-property owners.[7]

Less than one year later, on May 23, 1949, the Federal Republic of Germany (FRG) was founded and the framework of the *soziale Marktwirtschaft* (Socialist Market Economy) created by Ludwig Erhard, became ratified as West Germany's economic constitution.[8]

From the outset, the development in the Soviet-occupied territories of Germany took a different course.[9] In 1945, with its first order,

[5]On this see p. 87 ff below.

[6]The leading American economic advisors, for instance, were the "new-dealers" and free-market foes Charles P. Kindleberger, John K. Galbraith, and Walt W. Rostow. Indicative of the German public opinion is the fact that even the newly founded conservative Christian Democratic Union, in its Ahlen Program of 1947, stated that "the capitalist economic system has not done justice to the vital interests of the German people in state and in society" and accordingly demanded large-scale socialization policies.

[7]The U.S. high commissioner, General Lucius D. Clay, reacted to Erhard's liberalization plans by saying: "My advisors tell me they are much opposed to this." Erhard replied: "Never mind, General, mine are telling me the same thing."

[8]On the development of West Germany's economic system up to the mid-1960s see the generally excellent study by Hans-Joachim Arndt, *West Germany: Politics of Non-Planning* (Syracuse: Syracuse University Press, 1966).

[9]For comparative economic analyses of East and West Germany see H. Winckel, *Die Wirtschaft im geteilten Deutschland 1945–1970* (Wiesbaden, 1974); Karl Thalheim, *Die wirtschaftliche Entwicklung der beiden Staaten in Deutschland* (Opladen, 1978);

the Soviet Military Administration nationalized all banks. In the same year, all farms of more than 250 acres were seized (50 percent of all land used for agriculture), and all property of actual and alleged Nazis and war criminals was confiscated. When on November 7, 1949,—a few months after the Western Allies had licensed the new West German government—the new East German state (GDR) received its license from the Soviet Union, the Soviet practice of large-scale expropriation was elevated to a constitutional principle: "The economy of the German Democratic Republic is a planned socialist economy."[10] By 1960, more than 90 percent of all agricultural land was in the hands of socialized producer co-ops. By 1950, more than 60 percent of all productive output was produced in socialized firms. By 1960, more than 80 percent of East German output originated from socialized production; and by the early 1970s the expansion of the socialized sector had reached 95 percent (i.e., a mere 5 percent of productive output originated in state-licensed private enterprises).[11]

In addition, from 1945 through 1953, during the Stalin era, East Germany was forced to pay heavy reparations (45 percent of the productive equipment of 1945 was dismantled and confiscated by the Soviets vs. 8 percent in the West). To facilitate centralized economic planning, a one-stage central banking system was set up. The central bank became the monopolistic note issuer and central commercial bank at the same time, with regional and local banks as its branches (rather than separating both functions and leaving the commercial banking function in private hands, as in West Germany and the United States). Three days after the West German currency reform, on June 23, 1948, a new East German currency—initially with an official 1:1 exchange rate against West Germany's deutsche mark—was introduced. However, a continuing policy of monetary expansion, combined with price maxima for all 'basic' consumer goods, quickly led back to the phenomenon of "repressed inflation," i.e., an excess supply of anesthetized money. In response, in 1957 a second currency reform was carried out: All banknotes in excess of 300 East marks per person were declared invalid. But to no avail: the excess supply

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E. Jesse, ed., *BRD und DDR* (Berlin, 1982); Hannelore Hamel, ed., *Bundesrepublik Deutschland-DDR: Die Wirtschaftssysteme* (Munich, 1983); also: E. Windmöller and T. Höpker, *Leben in der DDR* (Hamburg, 1976).

[10]German Democratic Republic constitution, para. 9, sect. 3.

[11]Interestingly, the speed of East German socialization was significantly *slower* than in all the other Soviet-licensed states of Eastern and Central Europe except for Poland, where agriculture remained largely in private hands. See Jürgen Hartmann, *Politik und Gesellschaft in Osteuropa* (Frankfurt/M., 1983), p. 169.

of money again swelled to an estimated 150 billion Marks (about 10,000 per person). The steady supply of anesthetized money entered the black, private markets, where prices drastically increased and the East German currency continually depreciated against the deutsche mark. Increasingly, the deutsche mark outcompeted the East mark as a medium of exchange on the black markets ("good money drives out bad") and soon became East Germany's second currency: its unofficial but "real" money.

From 1949, at which time the West and East German states were founded, until the dramatic events of 1989, a controlled social experiment was conducted. A homogeneous population, with a common history, culture, character structure, work ethic and above all language, was subject to two fundamentally different economic constitutions and institutional incentive structures.

II

The difference in the results has been striking. Yet no social experiment was necessary to find this out. Naturally not all empirical details, but the fundamental outcome of the German experiment could have been predicted with certainty by those familiar with the principles of economic theory, and in particular the theoretical economic analyses of socialism by the Viennese (Austrian) school, most notably Ludwig von Mises's. In his famous *Die Gemeinwirtschaft: Untersuchungen über den Sozialismus*, of 1922,[12] Mises irrefutably demonstrated what the East Germans were forced to find out the hard way: that socialism must end in disaster.

Wealth can be brought into existence or increased in three and only three ways: by perceiving certain nature-given things as scarce and actively bringing them into one's possession before anyone else has seen and done so (homesteading); by producing goods with the help of one's labor and such previously appropriated resources; or by acquiring a good through voluntary, contractual transfer from a previous appropriator or producer. Acts of original appropriation turn something which no one had previously perceived as a possible source of income into an income-providing asset; acts of production are by their very nature aimed at the transformation of a less valuable asset into a more valuable one; and every contractual exchange concerns the exchange and redirection of specific assets from the hands of those

[12]The first English translation appeared in 1936 under the title *Socialism: An Economic and Sociological Analysis*. The latest edition was published in 1981 by Liberty Fund. See also Mises's *Human Action*, chaps. 25 and 26, in which he provides a definitive answer to criticisms of his earlier work.

who value their possession less to those who value them more.

From this it follows that socialism cannot but lead to impoverishment:[13]

(1) Under socialism, ownership of productive assets is assigned to a collective of individuals regardless of each member's prior actions or inactions in relation to the owned assets. In effect, then, socialist ownership favors the non-homesteader, the non-producer, and the non-contractor and disadvantages homesteaders, producers, and contractors. Accordingly, there will be less original appropriation of natural resources whose scarcity is realized, there will be less production of new and less upkeep of old factors of production, and there will be less contracting. All of these activities involve costs. Under a regime of collective ownership the costs of performing them is raised, and that of not performing them is lowered.

(2) Since means of production cannot be sold under socialism, no market prices for factors of production exist. Without such prices, cost-accounting is impossible. Inputs cannot be compared with outputs; and it is impossible to decide if their usage for a given purpose has been worthwhile or has led to a squandering of scarce resources in the pursuit of projects with relatively little or no importance for consumers. By not being permitted to take any offers from private individuals who might see an alternative way of using some given means of production, the socialist caretaker of capital goods simply does not know what his foregone opportunities are. Hence, permanent misallocations of production factors must ensue.

(3) Even *given* some initial allocation, since input factors and the output produced are owned collectively, every single producer's incentive to increase the quantity and/or quality of his individual output is systematically diminished; and likewise, his incentive to use input factors so as to avoid their over- or under-utilization is reduced. Instead, with gains and losses in the socialist firm's capital- and sales-account socialized instead of attributed to specific, individual producers, everyone's inclination toward laziness and negligence is systematically encouraged. Hence, an inferior quality and/or quantity of goods will be produced and permanent capital consumption must ensue.

(4) Under a regime of private property, the person who owns a resource can determine independently of others what to do with it. If

[13]See also Hans-Hermann Hoppe, *A Theory of Socialism and Capitalism: Economics, Politics, and Ethics* (Boston: Kluwer Academic Publishers, 1989); idem, "Why Socialism Must Fail," in Llewellyn H. Rockwell, ed., *The Free Market Reader* (Burlingame, Calif.: Ludwig von Mises Institute, 1988).

he wants to increase his wealth and/or rise in social status, he can only do so by better serving the most urgent wants of voluntary consumers through the use that he makes of his property. With collectively owned factors of production, collective decision-making mechanisms are required. Every decision as to what, how and for whom to produce, how much to pay or charge, and who to promote or demote, is a political affair. Any disagreement must be settled by superimposing one person's will on another's view, and this invariably creates winners and losers. Hence, if one wants to climb the ladder under socialism, one must resort to one's political talents. It is not the ability to initiate, to work, and to respond to the needs of consumers that assures success. Rather, it is by means of persuasion, demagoguery, and intrigue, through promises, bribes, and threats that one rises to the top. Needless to say, this politicalization of society, implied in any system of collectivized ownership, contributes even more to impoverishment.

The German experiment provides the sad illustration for the validity of economic theory.

Erhard's free-market reforms quickly generated what has become known as the West German *Wirtschaftswunder* (economic miracle). After a short—and unsurprising—increase of unemployment, peaking at a rate of 8 percent in 1950, unemployment began steadily to decrease. By 1962, at the height of the Erhard era, the unemployment rate had fallen to 0.2 percent, and the number of employed persons had increased by some 8 million (more than 60 percent). The total wage sum tripled during the period from 1948–1960, and wage rates more than doubled in constant terms. In the same time, total industrial production increased fourfold, GNP per capita tripled, and the West German rate of economic growth far surpassed that of all other West European nations and the United States. By the early 1960s, West Germans ranked among the world's most prosperous people, and West Germany had become one of the foremost industrial nations, with products made in West Germany increasingly in demand worldwide (in 1960 West German exports made up 10 percent of world exports: nearly twice the world market share of 1937).[14]

Predictably, the economic development of East Germany took the opposite direction. After 40 years of West German *soziale Marktwirtschaft* versus East German socialism, the visitor going from West to East enters an almost completely different and impoverished world. Life is characterized by permanent shortages of all sorts of consumer goods (from meat to housing), endless mismatches

[14]See Ludwig Erhard, *Wohlstand für Alle.*

of complementary factors of production, an inferior, shoddy quality of almost everything produced, and a pervasive black market struggling to alleviate the mess created by the official economy. Indicators of misallocation and capital consumption are omnipresent. Insufficiently maintained, deteriorating, unrepaired, and rusting property is common, and vandalism of production factors, machinery, and buildings is rampant. Within the official economy, negligence, laziness, despair, cynicism and sheer incompetence abound, and widespread hidden unemployment exists. Environmental damage has at many places reached catastrophic dimensions (socialization of negative externalities). Economic illiteracy among the population is pervasive. In world export markets East Germany is reduced to the rank of a third-world country that cannot sell anything except raw materials, half-finished products, or basic, simple consumer goods.

In the mid-1950s the East German per capita consumption already lagged an estimated 40 percent behind West Germany's. In the late 1980s, average wage income in East Germany was less than half of that in West Germany assuming a 1:1 currency exchange rate, and less than 1/10th if, more realistically, the black-market exchange rate between the East mark and deutsche mark is taken as the conversion ratio. Nominally, the average wage income in East Germany was somewhat lower—and in real terms more than 5 times lower—than the typical *unemployment subsidy* in West Germany. Nominally, average old age pensions in East Germany were 3 times—and in real terms 15 times—lower than in West Germany; and East Germany's minimum welfare handouts were nominally nearly 50 percent—actually more than 7 times—less than those paid in the West.

However, most revealing is the voting-by-feet-statistic: While all socialist countries of Eastern Europe have been plagued by the emigration problem of people wanting to leave for the more prosperous West, and while they all gradually had to establish tighter border controls in order to prevent this outflow, the case of Germany is a most striking one. With language differences, traditionally the most severe natural barrier for emigrants, nonexistent and West Germany automatically granting citizenship to all East German immigrants, the difference in living standards between the two Germanys proved to be so great that East Germany was from its very inception confronted with a massive wave of emigration. Following the industrial revolts of 1953, and their suppression by the occupying Soviet military forces, emigration reached such proportions—more than 3.5 million individuals had already deserted the East and this number increased by more than 1,000 per day—that on August 13, 1961 the

socialist regime in East Germany desperately had to close its borders to the West. To keep its population in, it erected a containment system the likes of which the world has never seen. A system of walls, barbed wire, electrified fences, mine fields, automatic shooting devices, and watchtowers almost 900 miles long were constructed, for the sole purpose of preventing the East Germans from running away from socialism. From 1961–1989 the problem was thus contained. However, beginning in the summer of 1989, when socialist Hungary began to open its border to Austria, and even more so since the dismantling of the East German wall in November of 1989, the wave of East German emigration immediately resumed. Since then, each day more then 2,000 East Germans have packed and left socialism behind.[15]

[15]It is interesting to note how American comparative economic systems textbooks have treated the case of East versus West Germany. Apart from ignoring migration statistics and not mentioning the "Wall" at all, or merely in passing, they rely almost exclusively on official government statistics. Based on these they reach conclusions which can only be called perverse, and illustrate at best that economic statistics have very little to do with reality as perceived by acting individuals. The most scandalous example of this is Andrew Zimbalist, Howard J. Sherman and S. Brown, *Comparing Economic Systems* (New York: Harcourt Brace Jovanovich, 1989). After mentioning that from the outset East Germany was relatively disadvantaged by having to pay heavy reparations and because of massive population losses (but why did it lose its population?) they write: "During the 1950s, the economy of West Germany grew at a rate close to 7 percent while—in spite of its initial disadvantages—the growth rate for the East German economy was around 6.5 percent. On a GNP per capita basis, between 1960 and 1979 West Germany grew at 3.3 percent per year and East Germany grew at 4.7 percent. In West Germany real GNP grew by 1.8 percent in 1980 and fell by 0.3 percent in 1981; in East Germany, real national income grew by 4.2 percent in 1980 and increased by 4.5 percent in 1981. Thus, according to CIA estimates. . . . East German per capita income had risen to 87.6 percent of West German per capita income. The gap continued to narrow during 1982 and the first half of 1983. The conclusion appears uncontestable that over the entire post-war period East Germany has experienced more rapid growth per head than West Germany" (p. 468). Further, there was "a stronger *dynamic* efficiency in East Germany. . . . in West Germany the average annual increase in total factor productivity was 3.0 percent, and in East Germany it was 3.4 percent." Moreover, "East Germany has had greater economic stability [i.e. 'absence of excessive inflation and unemployment'] throughout the post-War period" (p. 469). In addition, while the "environmental quality is superior in West Germany," East Germany has less than half of the former's income inequality and "in all areas of life [East German] women have achieved a much higher degree of equality with men than have their counterparts in West Germany" (p. 470).

After reading this one must surely wonder why people did not move from West to East, and why an economic success story such as East Germany's ended with its total collapse! But the authors have an answer to this: "Finally, although we have been concerned only with economic performance, it is difficult to overlook the more desirable democratic political system in West Germany" (p. 470). Not much better is the analysis by P. R. Gregory and G. C. Stuart, *Comparative Economic Systems* (Boston: Houghton Mifflin, 1985), pp. 402–14. Largely irrelevant is also the earlier study by Wolfgang F. Stolper, *The Structure of the East German Economy* (Cambridge: Harvard University Press, 1960).

III

While the underlying cause for the collapse of the East German socialist experiment in 1989 was economic, there is little doubt that Gorbachev's policy of *glasnost* and *perestroika* in the Soviet Union during the second half of the 1980s served as the catalyst for the revolutionary developments currently taking place in Germany and across Eastern Europe. This policy reduced the Soviet Union's pressure on its East European satellite states, in particular since from the outset Gorbachev's new internal policies had been explicitly connected to a non-interventionist foreign policy, and at the same time it dramatically uplifted the hopes and expectations of all East European people. Without this special constellation of data, created by Gorbachev, neither the peaceful anti-communist revolution in Poland nor the liberalization of Hungary would have been possible; and without the Polish and Hungarian events neither the East German nor the Czechoslovakian revolution would have followed.

Ultimately, Gorbachev must also be credited for the move towards reunification of East and West Germany. On the forever memorable November 9, 1989, steadily increasing pressures of mass emigration and civil unrest burst the East German socialist bubble, the borders to West Berlin and West Germany had to be thrown open, and the Germans of East and West reunited, moved and overjoyed, on top of the Berlin Wall. Since that date there has been no question of two separate German States. Public opinion in East and West overwhelmingly demanded reunification.

The economic dynamic set in motion by the events of November 9th succeeded in burying any remaining hopes within the East German regime of somehow restoring a separate socialist East German state. The uninterrupted mass flight of highly qualified personnel and unceasing internal unrest sharply aggravated East Germany's already desperate economic situation. Within a few days, the East mark depreciated against the deutsche mark from a ratio of 5:1 to 10:1, and only two reasons prevented it from becoming completely worthless. First, with increasingly open borders, for a short period of time holders of East marks could buy a number of maximum price controlled products in East Germany and profitably resell them in the West. Once the already sparsely decorated East German shelves were thus emptied and fewer or no new supplies were forthcoming, only one other reason remained: the public expectation that as part of the inevitable process of German reunification the West German central bank would eventually redeem East marks at some arbitrarily overvalued rate into deutsche marks.

Different but related economic problems emerged in West Germany. While during the 1950s and 1960s the West German economy successfully integrated millions of East German refugees and Southern European "guest workers," the economy of the 1980s was severely strained by the latest wave of immigration. For from 1950 until the 1980s, the West German economy experienced a gradual transformation. Over time, Erhard's free-market Germany changed into a gigantic welfare state, and the early West German economic expansionism was replaced by economic stagnation.

From the outset Erhard's free-market reforms had been far from pure.[16] He had not introduced a *Marktwirtschaft*, but a *soziale Marktwirtschaft*, and theoretical observers such as Ludwig von Mises had warned early—prophetically—that this concession to a *social* economy would ultimately lead to welfare state socialism.[17] As the successor of the German Reich, the West German state immediately became West Germany's biggest real-estate owner, capitalist, and employer. Education, traffic, communication, schools, universities, streets, rivers, lakes, railroads, airlines, mail, telephone, radio, and

[16]See also Hans-Joachim Arndt, *West Germany: Politics of Non-Planning*, chap. 3.

[17]The supporters of "the German 'soziale Marktwirtschaft'," writes Mises, "stress that they consider the market economy to be the best possible and most desirable system of society's economic organization, and that they are opposed to the government omnipotence of socialism. But, of course, all these advocates of a middle-of-the-road policy emphasize with the same vigor that they reject Manchesterism and laissez-faire liberalism. It is necessary, they say, that the state interfere with the market phenomena whenever and wherever the 'free play of the economic forces' results in conditions that appear as 'socially' undesirable. In making this assertion they take it for granted that it is the government that is called upon to determine in every single case whether or not a definite economic fact is to be considered as reprehensible from the 'social' point of view and, consequently whether or not the state of the market requires a special act of government interference."

"All these champions of interventionism fail to realize that their program thus implies the establishment of full government supremacy in all economic matters and ultimately brings about a state of affairs that does not differ from what is called the German or the Hindenburg pattern of socialism. If it is in the jurisdiction of the government to decide whether or not definite conditions of the economy justify its intervention, no sphere of operation is left to the market. Then it is no longer the consumers who ultimately determine what should be produced, in what quantity, of what quality, by whom, where, and how—but it is the government. For as soon as the outcome brought about by the operation of the unhampered market differs from what the authorities consider 'socially' desirable, the government interferes. That means the market is free as long as it does precisely what the government wants it to do. It is 'free' to do what the authorities consider to be the 'right' things, but not to do what they consider the 'wrong' things; the decision concerning what is right and what is wrong rests with the government. Thus the doctrine and the practice of interventionism ultimately tend to abandon what originally distinguished them from outright socialism and to adopt entirely the principles of totalitarian all-round planning" (*Human Action: A Treatise on Economics*, pp. 723–24).

television were in government hands and were soon complemented by a newly founded conscription army. All banks were cartelized within a government-controlled central banking system. Bismarck's compulsory social security system was resurrected and remained under government control. Housing and agriculture were largely left outside of and protected from markets. Mining, coal, steel, shipbuilding, and textiles were accorded special government protection. Beginning with the Co-Determination Law of 1951 and the Commercial Constitution Law' (*Betriebsverfassungsgesetz*) of 1952, a series of so-called labor-protection laws were introduced (including subsidies to unemployment and compulsory collective bargaining), which increasingly limited the right of freedom of contract in employer-employee relations. With the deceptive "law against restrictions of competition" (*Anti-Kartell Gesetz*) of 1957, the basic principle of market competition—of free and unrestricted entry—was largely suspended, and all 'significant' economic developments were subject to government approval.[18] All the while, the West German government could not resist the temptation to steadily increase taxes and the supply of paper money. Consequently, in 1966 West Germany experienced its first major recession, putting an end to Erhard's career, who by then had become chancellor. Economic growth fell from 9 percent in 1960 to 2 percent in 1966 and was negative in 1967. For the first time in over a decade the number of unemployed rose (to 2 percent).

In the post-Erhard era, in particular during the period from 1969-1982 under the reign of a social-democratic-liberal government coalition led by Willy Brandt and Helmut Schmidt, the welfare-statist transformation of the West German economy proceeded at an accelerated rate.[19] From 1969–1975 alone, some 140 laws were passed that entitled various 'socially disadvantaged' groups to tax subsidies. The

[18]While the Freiburg School, and in particular Röpke, recognize that in practice monopolies are almost always the creation of state power (see Wilhelm Röpke, *Die Lehre von der Wirtschaft*, p. 215; for a typical Freiburg treatment see Erich Hoppmann, *Fusionskontrolle* [Tübingen, 1972]), they admit (in agreement with neo-classic orthodoxy) the theoretical possibility of exploitative free-market monopolies and advocate a kind of compulsory anti-merger, and allegedly pro-small business legislation to combat their emergence. For a theoretical critique of the neo-classic monopoly theory and a defense of the classic view that monopolies can only exist if and insofar as free entry is restricted by legal compulsion, and that under conditions of free entry no operationally meaningful distinction between competitive vs. monopoly prices and/or output is possible, see Murray N. Rothbard, *Man, Economy, and State: A Treatise on Economic Principles* (Los Angeles: Nash Publishing, 1970), chap. 10; also Hans-Hermann Hoppe, *Eigentum, Anarchie und Staat. Studien zur Theorie des Kapitalismus* (Opladen, 1987), pp. 129–41; idem, *A Theory of Socialism and Capitalism*, chap. 9.

[19]See R. Merklein, *Griff in die eigene Tasche: Hintergeht der Bonner Sozialstaat seine Bürger?* (Hamburg, 1980); idem, *Die Deutschen werden ärmer. Staatsverschuldung, Geldentwertung, Markteinbussen, Arbeitsplatzverluste* (Hamburg, 1982).

so-called labor-protection and anti-trust laws were drastically stiffened. Taxes and social security contributions were significantly increased, in order to finance all sorts of so-called public goods and enhance 'the quality of life.' By resorting to a Keynesian policy of deficit spending (the Federal government deficit rose from 57 billion deutsche marks in 1970 to 232 billion in 1980 and 503 billion in 1989), and aided by the fact that initially inflation was not anticipated, the economic consequences of these policies were delayed for a few years—only to appear later with a vengeance. Unanticipated inflation and credit expansion had created and prolonged the malinvestment typical of a boom; yet this boom, built on nothing but paper money, would inevitably be followed by a liquidation crisis—a recession.[20] Socialist chancellor Helmut Schmidt's motto had been "rather 5 percent inflation than 5 percent unemployment." In fact, not only was there soon much more than 5 percent inflation (inflation became anticipated and the demand for money declined), but unemployment also rose steadily, with both rates simultaneously approaching 10 percent. Economic growth slowed until early in the 1980s, when GNP fell in absolute terms. For the first time in West German history, the number of employed people actually decreased. More and more pressure was put on foreign workers to leave the country, and the immigration barriers were raised.

Since 1982, at which time the socialist-liberal government (and left-wing Keynesianism) was ousted and replaced by a conservative-liberal government coalition (and right-wing Keynesianism), West Germany has proceeded on its march toward the welfare state, if only at a slower pace: Government expenditures, which had increased from about 30 percent of GNP in 1960 to more than 50 percent in the early 1980s, and government debts have continued to rise. The inflation rate has been lowered, and the rate of economic growth raised. But neither rate has fallen or risen to levels anywhere near those which had characterized the Erhard era; and after 8 years of conservative-liberal rule the number of unemployed, which reached 2.3 million in 1983, was still above 2 million (nearly 8 percent). In this situation, the arrival of large numbers of East German immigrants at once eligible for West German welfare handouts and unemployment subsidies quickly began to expose not only the bankruptcy of socialism, but that of the West German welfare state as well.

[20]On the theory of the business cycle see Ludwig von Mises, "Monetary Stabilization and Cyclical Policy," in *On the Manipulation of Money and Credit*, Percy L. Greaves, ed. (1928; Dobbs Ferry, N.Y.: Free Market Books, 1978); Friedrich A. Hayek, *Prices and Production* (1931; London: Routledge & Sons, 1935); Richard von Strigl, *Kapital und Produktion* (Vienna, 1934); Murray N. Rothbard, *America's Great Depression* (Kansas City: Sheed & Ward, 1975).

Thus, the threat of East Germany's political instability spilling over to West Germany forced the West German political power elite to act quickly and take the initiative in the inevitable process of reunification. However, contrary to the situation in the late 1940s, when Erhard had handled a similar crisis in German history by adopting an unpopular but successful strategy of free-market crisis management, some 40 years later the course pursued by West Germany's political establishment is yet another giant step toward welfare socialism and bound to further aggravate West Germany's economic stagnation (notwithstanding the popularity of the policy among the West and in particular the East German public). Rather than seeking German reunification through a quick and radical de-socialization of East Germany—and indirectly of West Germany—which alone would be in accordance with fundamental principles of justice and sound economics, and which will be outlined and explained shortly, West Germany's political power elite seeks the reunification through the complete incorporation of East Germany into the West German welfare state.

Immediately following the events of November 9, 1989, West Germany's political parties—the ruling conservative Christian Democratic Union, the liberal Free Democratic Party as its minor federal government partner, the Social Democratic Party as the major opposition party, and the national-conservative Republicans as well as the leftist Greens as the two minor opposition forces—largely in control of the West German state apparatus and essentially tax-funded (through campaign costs compensations), began to extend their presence to East Germany and establish sister organizations. In order to distract from their own steadily increasing invasion of private property rights, the East German crisis was labeled as one of non-democracy rather than non-private property.[21] The East German public,

[21]In fact the lack of democracy has essentially nothing to do with East Germany's plight. It is obviously not the selection principle for politicians that causes the problem. It is politics and political decision-making as such that are responsible. Collectively owned factors of production require collective decision-making. Instead of each producer deciding independently what to do with particular resources as under a regime of private property and contractualism, with socialized means of production each decision requires a collective's permission. It is irrelevant to the producer how those giving permission are chosen. What matters to him is that permission has to be sought at all. As long as this is the case, the incentive for producers to produce is reduced and impoverishment will continue. Privatization is as incompatible with democracy, then, as it is with any other form of political rule. Privatizing means to de-politicize society and to establish, in Marx's terms, an anarchy of production, in which no one rules anybody, and all producers' relations are voluntary and thus mutually beneficial.

familiar with the West German political system via West German government television and overwhelmingly in favor of welfare-statist ideologies (the territory of East Germany had indeed traditionally been a stronghold of social-democratic and communist support), widely welcomed the West German party 'invasion.' East Germany's first multi-party election on March 18, 1990 ended with a resounding victory for the West German party system. The formerly ruling communist party, meanwhile reconstituted as the Party of Democratic Socialism, was ousted from power (while it remained the third largest party, with a remarkable 15 percent of the vote). Instead, the East German Christian Democratic Union-equivalent, boosted by its affiliation with West Germany's ruling party and its bribe-like promise of a 'generous' exchange rate for East marks through the West German central bank—most frequently proposed were rates of 1:1 or 2:1, which made the East mark rise immediately to 4:1 against the deutsche mark—and a quick and complete incorporation of East Germany into the Federal Republic via article 23 of the West German constitution (which provides for the possibility of legal entry, or *Anschluss*), became by far the strongest political force and senior partner in a newly formed conservative-liberal-social-democratic government coalition representing more than two thirds of the popular vote. Indirectly, the West German power elite had gained control of the development of East Germany and its future course of desocialization.[22]

The date for the official beginning of the German reunification process was set for July 2, 1990, and an outline of the reunification process, including a currency reform and the extension of the West German welfare system to East Germany as its key elements, was announced.[23]

East marks up to 4,000 per person would be exchanged at a rate

[22]The elections on October 14, 1990, in East Germany's reconstituted 5 federated states, and on December 2, 1990, in the meanwhile reunited Germany, confirmed these results and added even more strength to the ruling conservative-liberal government coalition. The national-conservative Republicans were reduced to insignificance; and the Green Party did not manage to return to the Federal Parliament (Bundestag). The PDS experienced further voter losses and, although currently represented in the Bundestag due to a provisionary suspension of the 5 percent hurdle for 'genuine' East German parties during the December election, it is bound ultimately to disappear as a political power.

Indicative of the West German power elite's political 'imperialism' is the fact that almost all of the three major parties' (CDU, FDP, and SPD) leading candidates in East Germany's October state election were 'imported' from West Germany.

[23]The formal reunification took place only three months later, on October 3, and was 'democratically ratified' in the first all-German election of December 2, 1990.

of 1:1 against the deutsche mark (and at 2:1 in excess of this limit).[24] Because the East German money supply is only a small fraction of the deutsche mark supply, and because the market for non-money goods would automatically be expanded through the currency unification, the expected inflationary consequences will be relatively minor. However, the currency reform will cause a twofold income redistribution. On the one hand, it implies a compulsory redistribution of purchasing power from West German citizens onto East Germans, although the former are in no way responsible for the plight of the latter and indeed have in the past transferred massive amounts of income to East Germans on a voluntary basis. On the other hand, it implies a coercive income redistribution from West Germany's private sector onto the West German government—which will print the required deutsche marks essentially at no cost—and indirectly its East German government affiliate.

With this currency reform as its foundation, the socio-economic integration of East Germany would begin. Having supplied East Germany with 'sufficient' initial purchasing power, the East German government, directed by its Western senior partner, and as if it were the legitimate owner, would sell off state property.[25] East Germans would be given special treatment as buyers. The East German demand that West Germans be prevented for about a decade from buying land in East Germany has been defeated after a protracted battle, but other less severe restrictions are likely to remain in place. Further, among the hampered West German buyers, large established government-connected firms would enjoy a systematic advantage (in expectation of this likely event their stock market prices have already significantly increased). East Germans with valid titles to expropriated, socialized assets would be reinstated as private owners without having to pay, although only with a large number of exceptions favoring the current asset users over their original owners. On the other hand, West German holders of East German titles would be widely restricted from likewise reclaiming their property and receive instead some arbitrary sub-market price compensation.[26] Although

[24]For a detailed analysis of the currency reform see P. Bofinger, "The Germany Monetary Unification: Converting Marks to D-Marks," *Federal Reserve Bank of St. Louis Review* (July/August 1990).

[25]For this purpose a trust fund corporation (Treuhandanstalt) directed by West German establishment 'managers' was set up.

[26]In fact, the West and East German governments agreed in their reunification treaty of October 3, that all expropriations prior to the founding of the East German state in 1949 were to be regarded as "valid" (more than 50 percent of East Germany's

substantial, the reprivatization of East Germany would not include any of the state's command posts—police, courts, traffic, communication, and education—and its extent will be significantly less than the degree of private ownership in West Germany so as to raise the relative size of the government sector for the united Germany above its current level in West Germany alone.[27]

Initially, the receipts from the sale of government assets would be used to finance East Germany's welfare system. Prominent among the already accepted provisions of this new system will be the complete adoption of West Germany's social security system: retirement benefits for East Germans, to be paid in deutsche marks, would be raised quickly to West German levels (at the pre-November 1989 market exchange rate of 5:1 they had been about 1/15 of those in the West). The current East German wages would be converted 1:1 into deutsche marks (which would lift them to about 1/2 of West German rates, and to roughly the same height as West Germany's average unemployment subsidies, as compared with a market value of about 1/10). In addition, East Germany would immediately introduce the West German unemployment 'insurance' system; and West Germany's highly centralized labor union organization and collective bargaining would take hold in East Germany. Further, rents would be converted 1:1; and at least 'temporarily', severe rent controls would remain in effect. All debts, denominated now in deutsche marks, would be cut in half. Lastly, but unsurprisingly already seen as of the highest priority, in order to finance current and future government expenditures the East German government would adopt West Germany's tax structure and, no longer in control of the money printing press, would immediately begin establishing an 'effective' decentralized tax collection system, assisted by its West German counterpart and the expertise of its *Finanzämter* (equivalent to the United States Internal Revenue System).

Naturally, the political power elite responsible for this reunification program has expressed little doubt about its success. Indeed, some of its representatives such as Chancellor Helmut Kohl and Otto Lambsdorff, head of West Germany's Free Democratic Party, have gone on record saying that it would "cost West Germany nothing." However, economic logic dictates otherwise and predicts rather dis-

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land used for agriculture had been forcibly socialized before this date). This provision is currently being challenged in the government's court system.

[27]After one year of de-socialization a mere 700 out of 9,000 East German 'production units' had been privatized.

appointing results.[28]

To be sure, due to the partial re-privatization of East Germany and the lifting of most price controls, East Germany's economic performance would quickly improve over its present desperate showing. Yet the recovery process will not only be slower and much more painful than need be, it will soon be replaced by economic stagnation; and likewise, due to the relatively larger size of the government sector in the united Germany as compared to its present size in West Germany, stagnation tendencies will be strengthened within the already listless West German economy.

The full inclusion of East Germans into the West German social security system is bound to lead to increased social security taxes. Every restriction imposed on West German buyers of East German assets will also harm East Germans by not permitting them to sell to the highest bidder and will hamper the speedy transfer of assets into the most value-productive hands. Similarly, the preferential treatment accorded established West German companies will prevent the quickest breakup of the mostly oversized East German production units into efficient firms and contribute from the outset to the cartelization of East Germany's new economy. Rent controls will largely halt the reconstruction of East Germany's rental housing market from its shambled state and will lead to large-scale public housing projects (*sozialer Wohnungsbau*) and even higher taxes. However, worst of all for East Germany's economic recovery will be the combined policies of minimum wage guarantees and unemployment subsidies. For one thing, these policies will not stop the population outflow from East to the West with its higher wages and unemployment subsidies[29]; and with downwardly inflexible wage rates also in

[28]In fact, by early 1991, higher gasoline taxes, a 2.5 percent increase in the unemployment 'insurance' tax, and a 'temporary' 7.5 percent increase of the income tax had been introduced, and various other 'revenue enhancement' schemes had come under official consideration (including a road user fee, and a price increase for governmentally provided and monopolized telephone services). The money supply (M3) had been increased at an annual rate of 6 percent (as compared to 1 percent in the United States). Government debt *increases* rose from 20 billion deutsche marks in 1990 to an officially (under-)estimated 140 billion for 1991, to a total of some 900 billion, requiring nearly 10 percent of the Federal government's budget for interest payments (with an anticipated further increase to 17 percent by 1994). Due to increased government borrowing, the interest rate rose by about 1 percent (as compared to a 1 percent drop in the United States during the same period) and accordingly, private investment was 'crowded out.' In addition, some 10,000 new tenured government jobs (*Beamte*) had been 'created' in West Germany, so as to teach East Germany 'bureaucratic efficiency.'

[29]Since the currency unification and the incorporation of East by West Germany the number of emigrants has expectedly fallen (from above 2,000 per day). However, up to this day emigration from East to West continues at a rate of more than 500 per day.

West Germany the continuing migration is bound to further aggravate West Germany's already recalcitrant unemployment problem. On the other hand, even at the present East mark-wage-rates the East German economy is largely uncompetitive in world markets. By actually fixing wage rates several times higher—by requiring nominally identical deutsche mark-wage-payments—the East German labor force will be priced out of the market to an even greater extent. The 'normal' flow of capital from high to low wage areas will be drastically reduced and massive—and with unemployment insurance—lasting unemployment will result. In order to finance East Germany's large-scale unemployment, steady massive transfer payments will be required from West to East, but also from East Germany's productive sector to its unproductive one. Once again, taxes and/or paper money creation will have to be substantially increased. Whatever new productive energies were set free by East Germany's partial privatization will immediately be stifled, and within an environment of rising unemployment figures and economic stagnation nationalistic sentiments, already on the rise, will receive another boost.[30]

While the course has largely been set and German reunification has proceeded through the incorporation of East Germany into the West German welfare state, an alternative existed which would have spared the Germans the economic frustrations inevitably associated with the current planned course of reunification.

Unfortunately, this radical alternative—the uncompromising privatization of East Germany, the adoption of a private-property constitution, and reunification through a policy of complete, unilateral free trade—has so far found practically no audience. Almost all alternatives proposed are variations of the same welfare-statist theme: either somewhat more drastic (i.e., more redistributionist), advocated mostly by Eastern economic 'experts', or somewhat more moderate, as advanced mostly by the economics establishment of West Germany. Nor does there appear to be any suspicion among the German public regarding this happy uniformity of expert opinion. Is it not curious that even in 'liberal' West Germany the instruments of opinion molding are largely in governmental hands? There are practically no private schools or universities; radio and television are

[30]By the end of 1990, the unemployment rate in East Germany had risen to about 25 percent (2.5 million); and increasing animosity among East Germans toward their own foreign 'guest workers' had become a widespread phenomenon.

mostly state-owned or, in the case of a few exceptions allowed since the mid-1980s, subject to strict governmental licensing requirements; and there are almost no independent, private free-market think-tanks or foundations. Moreover, why should the West German power elite and the economic establishment on its payroll actually have the same interests as the German public? Indeed, is it not much more realistic to assume, as the Austrian school of economics long ago explained[31] and the public choice school has reiterated more recently,[32] that government officials and their intellectual bodyguards, like everyone else, pursue their own narrow self-interest rather than promoting the so-called public good? And is it not rather obvious that the interest of the West German government and its Eastern affiliate is the expansion of its own power: of tax revenue and governmentally controlled assets. The presently unfolding reunification process promotes precisely *this* goal and is indeed bound to lead to Germany's becoming Europe's foremost political power: and that what might appear as an ill-conceived strategy from the point of view of the German public, then, is actually the successful accomplishment of the German government's own different, even antagonistic interests?[33]

The German public today is too authoritarian minded to ask any such questions seriously. Much learning the hard way will be required, and much damage done, before the radical privatization alternative is to receive its chance, if ever it does. Only then may the German public begin to realize that the complete neglect of this option among the presently discussed reunification strategies may not be an accident, but have a systematic explanation.

The solution of the present crisis must begin with the recognition that while it may not be the East Germans' fault that they are as bad off as they are, it is also not the fault of the West Germans. As a matter of fact, the millions of people who left East Germany for the West, in many cases risking their lives, actively contributed to the undermining of the East German regime and in any case demonstrated *correct*

[31]See Ludwig von Mises, *Bureaucracy* (New Haven: Yale University Press, 1944).

[32]See James M. Buchanan, *What Should Economists Do?* (Indianapolis, Ind.: Liberty Fund, 1979); Gordon Tullock, *The Politics of Bureaucracy* (Washington, D.C.: Public Affairs Press, 1965).

[33]On the theory of the state see Franz Oppenheimer (one of Ludwig Erhard's teachers), *System der Soziologie, Vol. 2: Der Staat* (Stuttgart, 1964); Albert J. Nock, *Our Enemy the State* (Delevan: Hallberg Publishing, 1983); Murray N. Rothbard, *For A New Liberty*, (New York: Macmillan, 1978); idem, *The Ethics of Liberty* (Atlantic Highlands: Humanities Press, 1982); Hans-Hermann Hoppe, *Eigentum, Anarchie und Staat*; idem, *A Theory of Socialism and Capitalism*; Anthony de Jasay, *The State* (Oxford: Blackwell, 1985).

entrepreneurial judgment, whereas millions of East Germans collaborated with the regime—socialist party membership was above 2 million, or some 15 percent of the population, and many more willingly participated by looting the property left behind by emigrants. Even those who did not do so obviously displayed *poor* entrepreneurial foresight. To compel the West German populace to give wholesale financial support to East Germans, then, not only constitutes a moral outrage, but is a counterproductive measure as well. Justice and economics require instead that East Germany solve its problems alone, without anything but voluntary West German assistance. Accordingly, any form of compulsory redistribution should be rejected outright. There should be no currency reform of the sort already inaugurated, but exchange at market rates[34]; and likewise, there should be no incorporation, but a decidedly *separatist* reunification course chosen.

Since the ultimate cause of East Germany's economic misery is the collective ownership of factors of production, the solution and key to a prosperous future is privatization. Yet how can socialized property be privatized justly?[35] There is a second moral observation at the beginning of the answer to this question. The former East German government was, and is by now largely recognized by the East German population as a criminal organization, guilty of murder, robbery and, in erecting an impenetrable wall around the country responsible for the enslavement of an entire people. Not only should those directly responsible for these activities be prosecuted far beyond the current timid attempts in this direction, but all government property, ill-begotten from the very start, should be forfeited. The new government, even if freely elected, cannot be considered the owner of any property, for a criminal's heir, even if himself innocent of any crimes, does not become the legitimate owner of illegitimately acquired assets. On account of his personal innocence he remains exempt from prosecution; but all of his 'inherited' gains must imme-

[34]Temporarily—until the East Germans were willing to adopt a still better *commodity* money such as gold, for instance—this would lead to the rapid replacement of the *bad* East mark by the *good* deutsche mark, to deflationary pressure put on deutsche mark prices, and to the welcome lowering of East German import prices.

[35]While a vast body of literature dealing with the socialization of private property exists, hardly anything has been written on how to de-socialize. Most likely, one would suspect, because of most Western intellectuals' explicit or implicit socialist predilections, which preclude any treatment of this problem as simply irrelevant. For why should anyone ever want to go back from an allegedly *higher stage of social evolution*, i.e., socialism, to a lower one, i.e., capitalism? As one of the few exceptions see Murray N. Rothbard, "How To Desocialize?," *Free Market*, vol. 7 (Auburn, Ala.: The Ludwig von Mises Institute, September 1989).

diately revert to the original victims, and their repossession of government property must take place without their being required to pay anything. In fact, to charge a victimized population a price for the reacquisition of what was originally its own would itself be a crime and once and forever take away any innocence the new East German government previously might have had.

More specifically, all original property titles should be immediately recognized, regardless of whether they are presently held by East or West Germans. Insofar as the claims of original private owners or their heirs clash with those of the current asset users, the former should in principle override the latter. Only if a current user can prove that an original owner-heir's claim is illegitimate, i.e., that the title to the property in question had been acquired initially by coercive or fraudulent means, should a user's claim prevail and should he be recognized as owner.[36] In the case of East Germany—in contrast to that of the Soviet Union, for instance,—where the policy of expropriation started only some 40 years ago, where most land registers have been preserved, and where the practice of government authorized murder of private-property owners was relatively 'moderate', this measure would quickly result in the reprivatization of most, though by no means all, of East Germany. Regarding governmentally controlled resources that are not reclaimed in this way, syndicalist ideas should be implemented. Assets should become owned immediately by those who use them—the farmland by the farmers, the factories by the workers, the streets by the street workers, the schools by the teachers, the bureaus by the bureaucrats (insofar as they are not subject to criminal prosecution), and so on.[37] To break up the mostly over-sized East German production conglomerates, the syndicalist principle should be applied to those production units in which a given individual's work is actually performed, i.e., to individual office buildings, schools, streets or blocks of streets, factories and farms. Unlike syndicalism, yet of the utmost importance, the so acquired individual property shares should be freely tradeable and a stock market established, so as to allow a separation

[36]In those cases in which current users actually bought expropriated assets from the government, they should seek compensation from those responsible for this sale of loot, and the government officials accountable for it should be compelled to repay the purchase price, if necessary through forced labor.

[37]On the economics and ethics of privatization see Murray N. Rothbard, *For A New Liberty*; for the privatization of streets in particular Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* (1979); idem, "Public Goods and Externalities: The Case of Roads," *Journal of Libertarian Studies* (1983).

of the functions of owner-capitalists and non-owning employees, and the smooth and continuous transfer of assets from less into more value-productive hands.[38]

Two problems are connected with this privatization strategy. For one thing, what is to be done in the case of newly erected structures—which according to the proposed scheme would be owned by their current productive users—built on land that is to revert to a different original owner? While it may appear straightforward enough to award each current producer with an equal property share, how many shares should go to the land owner? Structures and land cannot be physically separated. In terms of economic theory, they are absolutely specific complementary production factors whose relative contribution to their joint value product cannot be disentangled. In these cases there is no alternative but to bargain.[39] Yet this—contrary to the first impression that it might lead to permanent, unresolvable conflict—should hardly cause many headaches. For invariably there are only two parties and strictly limited resources involved in any such dispute. Moreover, to find a quick, mutually agreeable compromise is in both parties' interest, and if either party possesses a weaker bargaining position it is clearly the landowner (because he cannot sell the land without the structure owners' consent while they could dismantle the structure without needing the landowner's permission).

Secondly, the syndicalist privatization strategy implies that producers in capital intensive industries would have a relative advantage as compared to those in labor intensive industries. For the value of the property shares received by the former would exceed the wealth awarded to the latter, and this unequal distribution of wealth would require justification, or so it seems. In fact, such justification is readily available. Contrary to widespread 'liberal' myths, there is nothing ethically wrong with inequality.[40] Indeed, the problem of privatizing formerly socialized property is almost perfectly analogous to that of establishing private property in a *state of nature*, i.e., when resources previously had been unowned. In this situation, according

[38]For an economic analysis of syndicalism see Ludwig von Mises, *Socialism*, chap. 16, sec. 4.

[39]On the economic theory of bargaining see Ludwig von Mises, *Human Action*, pp. 338-39; and Murray Rothbard, *Man, Economy, and State*, pp. 308-12.

[40]See Murray N. Rothbard, *Egalitarianism As A Revolt Against Nature and other Essays*, (Washington, D.C.: Libertarian Review Press, 1974); also: Robert Nozick, *Anarchy, State, and Utopia* (New York: Basic Books, 1974), chap. 8; Helmut Schoeck, *Der Neid. Eine Theorie der Gesellschaft* (Munich, 1966); idem, *Das Recht auf Ungleichheit* (Munich, 1979); Erik von Kuehnelt-Leddhin, *Freiheit oder Gleichheit* (Salzburg, 1953).

to the central Lockean idea of natural rights which coincides with most people's natural sense of justice, private property is established through acts of homesteading: by mixing one's labor with nature-given resources before anyone else has done so[41]; and insofar as any differences between the quality of nature-given resources exist, as is surely the case, the outcome generated by the homesteading ethic is inequality rather than equality.[42] The syndicalist privatization approach is merely the application of this homesteading principle to slightly changed circumstances. The socialized factors of production are already homesteaded by particular individuals. Only their property right regarding particular production factors has so far been ignored, and all that would occur under the proposed scheme is that this unjustifiable situation would finally be rectified. If such rectification results in inequalities, this is no more unfair than the inequalities that would emerge under a regime of original, unadulterated homesteading.[43]

Moreover, our syndicalist proposal is economically more efficient than the only conceivable privatization alternative in line with the basic requirement of justice (that the government does not legitimately own the socialized economy and hence its selling or auctioning it off should be out of the question). According to the latter alternative, the entire population would receive equal shares in all of the country's assets not reclaimed by an original, expropriated owner. Aside from the questionable moral quality of this policy,[44] it would be

[41]See John Locke, *Two Treatises of Government*, Peter Laslett, ed. (Cambridge: Cambridge University Press, 1960), pp. 305-07.

[42]For an attempt to justify an *egalitarian* homesteading ethic see H. Steiner, "The Natural Right to the Means of Production," *Philosophical Quarterly* 27 (1977); for a refutation of this theory as inconsistent see Jeffrey Paul, "Historical Entitlement and the Right to Natural Resources," in Walter Block and Llewellyn H. Rockwell, eds., *Man, Economy, and Liberty: Essays in Honor of Murray N. Rothbard* (Auburn, Ala.: The Ludwig von Mises Institute, 1988); Fred D. Miller, "The Natural Right to Private Property," in Tibor R. Machan, ed., *The Libertarian Reader* (Totowa: Rowman & Littlefield, 1982).

[43]For the most consistent and complete Lockean property rights theory see Murray Rothbard, *The Ethics of Liberty*; idem, "Law, Property Rights, and Air Pollution," *Cato Journal* 2, no. 1 (Spring 1982); for a theoretical justification of the homesteading principle in particular, as the indisputable, axiomatic foundation of ethics see Hans-Hermann Hoppe, *Eigentum, Anarchie und Staat*, chap. 4; idem, *A Theory of Socialism and Capitalism*, chaps. 2 and 7; idem, "From the Economics of Laissez Faire to the Ethics of Libertarianism," in Walter Block and Llewellyn H. Rockwell, eds., *Man, Economy, and Liberty*; idem, "The Justice of Economic Efficiency," *Austrian Economics Newsletter* 9, no. 2 (Winter 1988).

[44]How can one justify that ownership of productive assets should be assigned without considering a given individual's actions or inactions in relation to the owned asset? More specifically, how can it be justified, for instance, that someone who has contributed literally nothing to the existence or maintenance of a particular asset—and

extremely inefficient. For one thing, in order for such countrywide distributed shares to become tradeable property titles, they must specify to which particular resource they refer. Hence, to implement this proposal, first a complete inventory of all of the country's assets would be required, or at least an inventory of all its distinctively separable production units. Secondly, even if such an inventory were finally assembled, the owners would consist by and large of individuals who knew next to nothing about the assets they owned. In contrast, under the non-egalitarian syndicalist privatization scheme no inventory is necessary. Furthermore, initial ownership comes to rest exclusively with individuals who, because of their productive involvement with the assets owned by them, are by and large best informed to make a first realistic appraisal of such assets.

In conjunction with the privatization of all of East Germany according to the principles outlined, the current East German government should adopt a private property constitution and declare it the immutable basic law for the entire East German territory. This constitution should be extremely brief and lay down the following principles in terms as unambiguous as possible: Every person, apart from being the sole owner of his physical body, has the right to employ his private property in any way he sees fit so long as in so doing he does not uninvitedly change the physical integrity of another person's body or property. All interpersonal exchanges and all exchanges of property titles between private owners are to be voluntary (contractual). These rights of a person are absolute. Any person's infringement on them is subject to lawful prosecution by the victim of this infringement or his agent, and is actionable in accordance with the principles of the proportionality of punishment and of strict liability.[45]

As implied by this constitution, then, all existing wage and price controls, all property regulations and licensing requirements, and all import and export restrictions should be immediately abolished and complete freedom of contract, occupation, trade and migration introduced. Subsequently, the East German government, now property-

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who might not even know that any such asset exists—should own it in the same way as someone else who actively, objectifiably contributed to its existence or maintenance?

[45]On the proportionality principle of punishment see Murray Rothbard, *The Ethics of Liberty*, chap. 13; Hans-Hermann Hoppe, *Eigentum, Anarchie und Staat*, pp. 106-28; on the principle of strict liability also Richard A. Epstein, "A Theory of Strict Liability," *Journal of Legal Studies* 2 (January 1973); idem, "Medical Malpractice: The Case for Contract," *Center for Libertarian Studies: Occasional Paper Series*, no.9 (Burlingame, 1979); Judith J. Thomson, *Rights, Restitution, and Risk* (Cambridge: Harvard University Press, 1986), esp. chaps. 12 ("Remarks on Causation and Liability") and 13 ("Liability and Individualized Evidence").

less, should declare its own continued existence unconstitutional—insofar as it would have to rest on non-contractual property acquisitions, that is, taxation—and abdicate.[46]

The result of this complete abolition of socialism and the establishment of a pure private-property society—an anarchy of private-property owners, regulated exclusively by private-property law—would be the quickest economic recovery of East Germany. From the outset, East Germany's population would, by and large, be made amazingly rich. For while the East German economy is in shambles, the country is not destroyed. High real-estate values exist, and in spite of all capital consumption of the past there are still massive amounts of capital goods in East Germany. With no government sector left and the entire national wealth in private hands, East Germans could soon become the envied objects of their West German counterparts.[47]

Moreover, with factors of production released from political control and handed over to private individuals who are allowed to use them as they see fit—independent of whatever anyone else may want—provided only that they do not physically damage the resources owned by others, the ultimate stimulus for future production is provided. With an unrestricted market for capital goods, rational cost-accounting is made possible. With profits as well as losses individualized, and reflected in an owner's capital- and sales-account, every single producer's incentive to increase the quantity and/or quality of his output and to avoid any over- or underutilization of his capital is maximized. In particular, the constitutional provision that only the physical integrity of property (not property values) be protected guarantees that every owner will undertake the greatest value-productive efforts—efforts to promote favorable changes in property values and to prevent and counter any unfavorable ones (as might result from another person's actions regarding his property).

Specifically, the abolishment of all price controls would almost instantaneously eliminate all present shortages; and output would immediately begin to increase, quantitatively as well as qualitatively.

[46]On the ethics and economics of state-less societies see Murray N. Rothbard, "Society Without a State," in J. Roland Pennock and John W. Chapman, eds., *Anarchism (Nomos 19)* (New York: New York University Press, 1978); Bruce Benson, *The Law, The Legal System and The State* (San Francisco: Pacific Institute, 1991).

[47]National wealth statistics are notoriously problematic. However, for illustrative purposes it might be worthwhile to point out that estimates of East Germany's national wealth range from 30 to 800 trillion deutsche marks. Using the lowest estimate and adding to the East German population some 4 million West Germans reclaiming their Eastern property this would amount to per capita assets of about $900,000.

Temporarily, unemployment would drastically increase, as it did in West Germany after World War II. Yet with flexible wage rates, no collective bargaining, and no unemployment subsidies it would quickly begin to disappear again. Initially, average wage rates would remain substantially below West German rates. But this, too, would soon begin to change. Lured by comparatively low wages, by the fact that East Germans will expectedly show a great need for cashing in (liquidating) their newly acquired capital assets so as to finance their current consumption, and above all by the fact that East Germany would be a no-tax, free-trade haven, large numbers of investors and huge amounts of capital, in particular from wealthy neighboring West Germany, would immediately begin to flow in.

The production of security—of police protection and of a judicial system—which is usually (without argument) assumed to lie outside the province of free markets and be the proper function of government, would most likely be taken over by the major West German insurance companies.[48] Providing insurance for personal property, police-action—the prevention and detection of crime as well as the exaction of compensation—is in fact part of this industry's natural business (if it were not for governments preventing it from doing so and arrogating this task to itself, with all the usual and familiar inefficiencies resulting from such a monopolization). Likewise, being already in the business of arbitrating conflicts between claimants of competing insurers, they would naturally assume the function of a judicial system.[49]

Yet more important than the entrance of big business, such as insurance companies in the field of security production, would be the influx of large numbers of small entrepreneurs from West Germany. Facing not only a heavy load of taxation in the West but being stifled

[48]On the economics of competitive, private security production see Gustave de Molinari, "The Production of Security," *Center for Libertarian Studies: Occasional Paper Series,* no. 2 (Burlingame, Calif., 1977); Murray Rothbard, *Power and Market*, chap. 1; idem, *For A New Liberty*, chap. 12; Morris and Linda Tannehill, *The Market For Liberty* (New York: Laissez Faire Books, 1984); W. Wooldridge, *Uncle Sam the Monopoly Man* (New Rochelle: Arlington House, 1970); Bruno Leoni, *Freedom and the Law* (Princeton: Van Nostrand, 1972); Hans-Hermann Hoppe, "Fallacies of the Public Goods Theory and the Production of Security," *Journal of Libertarian Studies* 9, no. 1 (1989); Bruce Benson, *The Law, The Legal System and The State*.

[49]As regards national defense one should note that for the foreseeable future, this is not a problem for East Germany. West Germany would certainly not attack East Germany—public opinion would make this impossible. And insofar as the Soviet Union is concerned, it will continue to station troops on East German territory for the time being under *any* scenario. On the privatization of defense see Murray Rothbard, *For A New Liberty*, chap. 13; also, Jeffrey Rogers Hummel, "National Goods vs. Public Goods: Defense, Disarmament, and Free Riders," *Review of Austrian Economics* 4 (1990).

there by countless regulations (licensing requirements, labor protection laws, mandated working and shop-opening hours), an unregulated East German private-property economy would present an almost irresistible attraction. The large-scale import of entrepreneurial talent and capital would soon begin to raise real wage rates in East Germany, stimulate internal savings, and lead to a rapidly accelerating process of capital accumulation. Rather than people leaving the East, migration would quickly take place in the opposite direction, with increasing numbers of West Germans abandoning welfare socialism for the unlimited opportunities offered in the East. Finally, faced with increasing losses of productive individuals, which would put even more pressure on West Germany's welfare budgets, the West German power elite would be forced to do what it presently is trying desperately to avoid with its own strategy of reunification through incorporation: to begin to de-socialize West Germany as well.

Notes and Replies

The Preferred Tax Type: Comment on Herbener

Alexander Tabarrok*

A standard theorem in neoclassical public finance holds that income taxes are preferred to equal revenue excise taxes.[1] Herbener (1988) rejects this theorem because the proof is (a) based upon methodologically suspect indifference curves and (b) must follow a certain conceptual ordering—namely the excise tax must first be placed upon consumers who are then given the option of facing an equal-revenue income tax and not vice versa. This comment demonstrates that indifference curves are not required to prove the theorem nor must the proof of the theorem follow a specific order.

It is an easy job to prove the theorem without using indifference curves, as has been done many times.[2] The proof requires only the idea of revealed (or demonstrated) preference. Consider figure 1: there are two goods, money (M) and a good X; AA represents the initial budget line, AC is the new budget line after an excise tax has been placed on good X.[3] Let us say that the consumer chooses the consumption bundle at point D which is on his budget constraint AC.[4] The budget constraint when an equal revenue income tax is imposed must pass through point D and is labelled BB. The consumer now has the option of staying at D (his most preferred position under the excise tax) or consuming anywhere along BB. If the consumer switches, this demonstrates his utility has increased and proves the theorem. We now show that the consumer will switch.

Consider line segment BD. The consumer had enough income to

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[1]See Herbener's note 8 for numerous references to different versions of this theorem.

[2]In fact, the originator of indifference curves and one of the earliest economists to prove the theorem, J. R. Hicks (1946, p. 41), uses a revealed preference approach.

[3]We are following the traditional ordering for this part of the proof. See below.

[4]The proof does not depend on where point D is so long as it is on the budget constraint AC. This is guaranteed by the praxeological law that more of a good is preferred to less.

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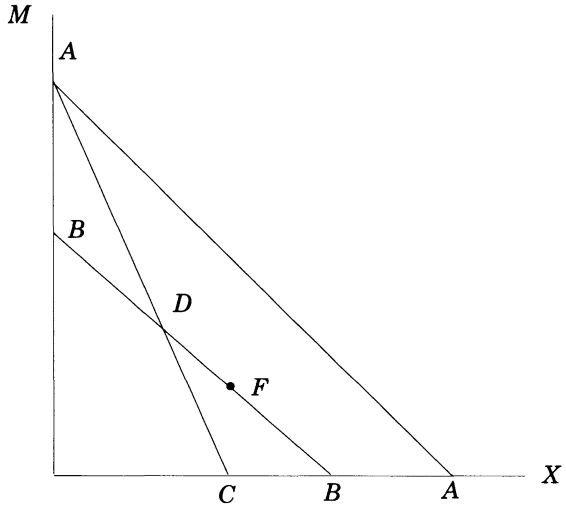

Figure 1.

consume anywhere along *BD before* the income tax was introduced. In fact, the consumption bundles along line segment *AD* contain more of both types of goods than those along *BD* and the consumer could have chosen any of these bundles. By choosing not to consume along *AD* the consumer has demonstrated that he prefers bundle *D* to any other point along line segment *AD* and a *fortiori* line segment *BD*. Now compare line segment *DB* with *DC*. More of both types of goods are available to the consumer along line segment *DB* than *DC*. Since more of a good is preferred to less we can state with assurance that the consumer will choose to change his consumption from *D* to a point somewhere along *DB* such as *F*.[5] The fact that the consumer voluntarily changes his consumption bundle demonstrates that his utility increases.

It has now been shown that following the traditional sequence the preferred tax theorem can be proven without the concept of indifference. We have needed only the idea of revealed/demonstrated preference and the law that more is preferred to less.[6]

[5]It is possible for the consumer to continue to prefer *D* to any other point along *DB* but this requires *X* to be a non-good at point *D*.

[6]Rothbard (1956) has criticized Samuelson's (1948) concept of revealed preference because it assumes constancy of tastes through time. However, his critique was made in the context of Samuelson's attempt to map out the "preference function." No such attempt has been made here. The only constancy that is assumed is that the assumptions with which the analysis begins—in particular that money and *X* are both goods—remain true at the end of the analysis. This sort of constancy is required by any deductive theory.

Herbener's second critique of the preferred tax theorem is that the proof requires a certain sequence of events: (1) the excise tax is placed on good X, (2) the amount of tax revenue is measured, (3) an equal-revenue income tax is levied. He argues that the sequence cannot begin with an income tax followed by an equal-revenue excise tax because the government does not know the preferences of individuals and therefore cannot compute the equal-revenue excise tax. According to Herbener the first scheme is the one that is presented "because only it allows the government to conduct the postulated experiment." But as Herbener himself notes, the neoclassical method (at least the part required to prove the theorem) is axiomatic and deductive. The theorem is a conclusion of theory and not a description of how to conduct an experiment.[7]

For a theory to be correct it need not be experimentally testable. But it must have true premises and sound reasoning. The preferred tax theory is presented the way it is because this is the only method which guarantees that one of the implied premises is true. The implied premise which must be true for the theory to hold is that there exists an excise tax capable of generating revenue equal to that of an income tax. The sequence of the first proof guarantees that this premise is true because the excise tax is placed first followed by an equal-revenue income tax.[8] The alternate sequence, proposed by Herbener, cannot guarantee that this statement is true. No excise tax on toothpicks could raise the same amount of revenue as does the present income tax of the United States. This is the problem which the first sequence avoids.

If we make the implied premise explicit, then the proof follows as before. Referring to figure 1, AA is the original budget constraint, BB is the budget constraint after an income tax. Let us assume, so as not to clutter the diagram, that the consumer chooses bundle F. We now assume that an excise tax exists which raises revenue equal to that of the income tax. In general we do not know exactly how high this tax must be but this is irrelevant as far as the theory is concerned.[9] We do know by assumption that such a tax exists; assume that it is AC. If AC is the equal revenue excise tax then we know that the

[7]There is no reason it could not be both, but this is unimportant for present purposes.

[8]As a matter of logic, *ceterius paribus*, it must be true that an income tax can always raise as much money as an excise tax.

[9]The situation is equivalent to knowing that demand curves slope downward yet being unable to *a priori* predict by how much quantity demand increases when price falls by 10 percent.

consumer must be consuming at point D (any other point along AC would raise to much or to little revenue). But point D was available to our consumer before the excise tax was imposed and he chose not to consume at that point. His action demonstrated that he preferred to consume at point F. We therefore know that this consumer's utility has been unambiguously decreased by the switch from an income tax to an excise tax.

Concluding Comments

It has been shown without the use of indifference curves and using either sequence that an income tax is preferred to an equal-revenue excise tax. As Herbener notes, and is widely recognized, this type of analysis is only partial in nature. Taxes also have effects on the production side of the economy.

References

Herbener, Jeffrey M. "Austrian Methodology: The Preferred Tax Type." *Review of Austrian Economics* 2 (1988): 97–111.

Hicks, J. R. [1939] 1946. *Value and Capital*, 2nd ed. Oxford: Clarendon Press.

Rothbard, Murray N. 1956. "Toward a Reconstruction of Utility and Welfare Economics," in Sennholz, Mary, ed. *On Freedom and Free Enterprise: Essays in Honor of Ludwig von Mises*. Princeton, N.J.: Van Nostrand, pp. 224–49.

Samuelson, Paul A. 1948. *Foundations of Economic Analysis*. Cambridge, Mass.: Harvard University Press.

Comment on Preferred Tax Type: Reply to Tabarrok

Jeffrey M. Herbener*

I appreciate the opportunity to respond to the criticisms made by Alexander Tabarrok of my preferred-tax-type article since it provides a forum to clarify and elaborate on what is wrong with this neoclassical "theorem," as he calls it.

Before addressing the critique, I would like to make two historical clarifications. J. R. Hicks did not originate indifference curves as my critic claims (p. 107n). That "honor" goes to Francis Edgeworth, who gave a complete mathematical description of this technique in his *Mathematical Psychics*, published in 1881.[1] Vilfredo Pareto's extensive development and use of indifference-curve analysis also predates the work of Hicks in this area.[2] Hicks even gives credit to these two authors at various places in his *Value and Capital*.[3]

Second, I expended considerable effort at the beginning of the original article to establish the fact that I am an unabashed Misesian economist, and thus my major complaint against the neoclassical economists approach to the preferred-tax-type question is their failure to correctly employ the axiomatic-deductive method. Tabarrok seems to imply that my point about the government's inability to conduct the postulated experiment concerning equal tax revenues concerns the empirical problem of the testability of an hypothesis. But I wholeheartedly agree with him when he states, "For a theory to be correct it need not be experimentally testable. But it must have true premises and sound reasoning" (p. 109). The major argument of

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[1]See F. Y. Edgeworth, *Mathematical Psychics* (New York: Augustus M. Kelly Publishers, 1967 [1881]), pp. 35–36.

[2]See V. Pareto, *Manual of Political Economy* (New York: Augustus M. Kelley Publishers, 1971 [1909]), pp. 118f.

[3]See J. R. Hicks, *Value and Capital*, 2nd ed. (Oxford: Oxford University Press, 1946 [1939]), pp. 13 and 41f.

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my original article was precisely that the neoclassical theory had false premises and unsound reasoning and was therefore false. The problem of conducting the experiment that I referred to was the *mental* experiment necessary to the praxeological method.[4]

Tabarrok makes two criticisms of my original article: indifference curves are not required to prove the "theorem" and the proof does not depend on a specific sequence. By dropping indifference curves, Tabarrok has dramatically changed the conditions of the analysis and thus, his criticisms do not affect my original results, derived assuming a well-behaved set of indifference curves. This is not much consolation, however, if his assertion is true that indifference curves are not necessary for the proof. Let me demonstrate the difficulty of proving the "theorem" without them, or at least some additional restrictions on preferences beyond Tabarrok's "more is preferred to less" assumption.[5]

Consider figure 1, a reproduction of Tabarrok's figure 1. The individual begins by choosing point A with no taxation. Now the government imposes an excise tax on good X, *at some fixed rate per unit* (they do not fix the amount of the tax revenue, the individual's choice determines his tax payment), causing the budget constraint to rotate inward to M_0X_E. The individual chooses point B with an amount of tax extracted of M_0M_1. Now he is offered another opportunity; pay the same amount of tax and choose any combination along M_1X_1. Given the expanded range of choice, he can assuredly find a preferable point, say C. But note carefully, he prefers C to B because, by assumption, it is his most preferred point on his entire income tax budget line. From a tax-payment standpoint, when he compares C to a point along M_0X_E, say D, he prefers it *because it involves a lower* tax payment. It has nothing to do with comparing equal tax revenues extracted in two different forms. By construction, his choice is between a fixed income tax payment and a fixed excise tax rate. With the latter, point B is the only point on M_0X_E that extracts the same amount of tax, M_0M_1, as the income tax. With the excise tax option,

[4]Ludwig von Mises calls such mental experiments imaginary constructions, Mises, *Human Action*, 3rd rev. ed. (New Haven: Yale University Press, 1966 [1949]), pp. 31–32, 64–69, and 236–237.

[5]There are two praxeological laws of utility: the law of diminishing marginal utility and the law of increasing total utility. The first states that with units of a given size the marginal utility of each unit declines as the stock of the good increases. The second states that the marginal utility of a larger-sized unit exceeds the marginal utility of a smaller-sized unit. Both laws derive from the same source, viz., the purposefulness of human action, and thus in praxeological analysis one cannot "assume" the latter without "assuming" the former. See Murray N. Rothbard, *Man, Economy, and State* (Los Angeles: Nash, 1962), pp. 17–28 and 270.

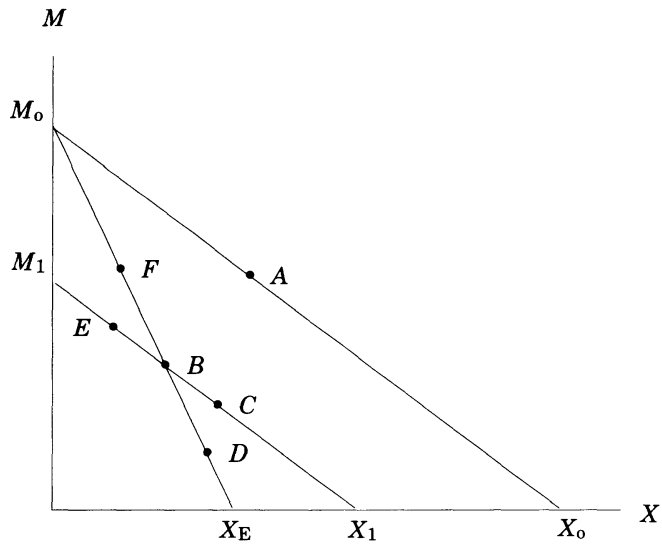

Figure 1.

the individual must stay at point B, *in order to pay the same tax*, while the income tax option he can select from various combinations of M and X. The individual's choice of the income tax is not based on his preference concerning tax types but on the fact that the analysis allows him no effective choice with the excise tax option.

Let me make this point from a different angle. What if his most preferred point on M_1X_1 was point E? With indifference curves this would be impossible but without them, or some added restriction beyond more is preferred to less, this can not be ruled out.[6] Then what he would prefer to do is move to some point on M_0B to the left of point B. He may prefer point B to any other point on M_0X_E, but he prefers, say, point F, to point E *because it involves a lower tax payment*. The

[6]It is insufficient to respond to this choice by arguing that it violates the law of demand. Indifference curves are the underpinnings of the neoclassical conception of the law of demand and the latter cannot be assumed to exist without them, in the neoclassical paradigm, without restrictions on preferences beyond more is preferred to less (see note 5). Also, the law of demand can only be derived *ceteris paribus*. Point B is selected under different underlying conditions than point E and thus, cannot be ruled out by the assumption that more is preferred to less. If this still seems untenable then consider the alternative sequence of tax offerings. Say an income tax is offered first and the individual selects point E, establishing it as his most preferred point on M_1X_1. Now he is given the excise tax option at a rate resulting in M_0X_E along which he prefers point B. The same situation is created.

analysis only allows the comparison of a fixed excise tax rate with a fixed income tax payment.[7] Equalizing tax payments forces the individual to consider only one combination of M and X with the excise tax against many such combinations with the income tax.

Only one way exists to make the two tax types render the same tax payment (while not eliminating the individual's choice under the excise tax): allow the individual to freely select the excise tax rate. (The original excise tax rate is arbitrary and no specific rate is necessary to extract a given sum of tax revenue; it depends on the individual's choice.) Otherwise, one is comparing a fixed excise tax rate with a fixed income tax payment, which, as I stated in the original article, is not the postulated question.[8] If the individual picks the excise tax rate, without indifference curves to bind him, he will pick the rate so that the excise tax budget line will go through point C, allowing him to continue to consume his most preferred combination on M_1X_1. (With indifference curves this is impossible since they cannot intersect). Such a rate is the only one that allows the question of comparing the two tax types to be answered. And the answer is: He will be, dare I say it, indifferent between the two tax types.[9] This result stems from posing the correct question: The government will take M_0M_1 in income from you regardless of the collection method; which do you prefer? Without indifference curves to obscure the analysis, this question can finally be meaningfully asked, but the result is to reveal the two tax types as a lump-sum tax from the individual's perspective collected in two different ways (we are ignoring the other diverse effects of the two taxes). As I mentioned in the original article, the individual cares much more about how much he is forced to pay than in what manner the tax is collected.[10]

Tabarrok's quip about an excise tax on toothpicks not being a source of tax revenue equivalent to an income tax is erroneous (p. 109). As long as the individual continues to purchase at least one toothpick the government could indeed raise an equal amount of tax revenue by applying a very high excise tax rate. And why should it matter to

[7]Unless the government forces the individual to buy the amount of X at point B. I made this point in the original article; see Herbener, "Austrian Methodology: The Preferred Tax Type," *Review of Austrian Economics* 2 (1988): 106. It is this additional coercion that makes the excise tax option less preferable.

[8]See Herbener, "Austrian Methodology," p. 106.

[9]His indifference in this situation is an artificial construct of the analysis, not a conceivable demonstrated preference. Only his action, i.e., his choice, can reveal which he actually prefers. The point in this analysis is that nothing definitive can be said about this choice, e.g., he *must* prefer one to the other.

[10]See Herbener, "Austrian Methodology," p. 105.

the individual if the government forces him to pay $5000 in income tax by sending a check payable to the IRS or $5000 in excise tax by sending a check to Tom's Toothpick Outlet which Tom sends on to the IRS? This is the only plausible meaning of the phrase "equal tax revenue," i.e., the only way in which the government can conduct the postulated (mental) experiment.

But this result is not what an individual unbound from indifference curves will accept under the sequence of excise tax then income tax options. Without indifference curves, the individual would do the following (remember, he prefers point A to all others): Offered the excise tax option at the fixed rate, he would choose point M_0, i.e., he would consume no X (zero tax payment); then, offered an income tax of the same amount, he would move back to point A, paying nothing in taxes. This result does not require shifting preference rankings. His rankings would be: (1) point A with no tax, (2) point M_0 with the threat of excise tax, (3) point C forced to pay the tax of M_0M_1, (4) point B forced to pay the tax of M_0M_1 and forced to buy the amount of X at point B. Indifference curves prevent this subjective maneuvering, making it appear that the analysis is answering the posited question.

For further clarification, let us explore the alternative sequence. Without indifference curves and forced to pay the income tax of M_0M_1, the individual selects point C, which, by construction, must be his most preferred combination on M_1X_1. Now he is offered the excise tax option that renders the same tax payment, but not a given excise tax rate, and asked to choose. Because point C is his most preferred combination, he will continue to choose point C, not some point to the left of C as Tabarrok contends, asking for an excise tax rate such that the budget line runs from point M_0 through point C. (Otherwise the analysis is comparing a fixed income tax payment with a fixed excise tax rate.) Again he is indifferent between the two tax types. This result is impossible with indifference curves since the indifference curve tangent to the excise-tax budget line at point C would intersect the one tangent to the income-tax budget line at point C. The use of indifference curves obscures the analysis, making it appear to answer the question that it cannot even meaningfully ask. Tabarrok notwithstanding, the "theorem" cannot be proved without indifference curves or at least some restrictions on preferences beyond "more is preferred to less."

Tabarrok's second criticism, that the proof of the theorem need not follow a specific sequence (if indifference curves are removed), depends upon how one poses the question to be answered. If the government offers what the original question appears to ask, both tax types simultaneously, then the choice is: You must pay M_0M_1 regard-

less but you can select to pay either by income tax or by an excise tax on X, and the individual will not prefer one tax type to the other. If the government offers the excise tax first (at a fixed rate, for how else can it offer this option?), the individual (not bound by indifference curves) will substitute away from X to avoid the tax payment, then given the income tax alternative (with a zero tax payment), the individual will choose the income tax option and consume at the original point. If the government offers the income tax first (at a fixed amount, for how else can it offer this option?) the individual will adjust accordingly, then given the excise tax option (allowing the individual to choose the rate else the analysis is comparing a fixed excise tax rate with a fixed income tax amount), the individual will not prefer one type to the other. Sequence still matters, only now, without indifference curves, the solution is different.

Finally, Tabarrok failed to mention the most obvious result of the analysis (with or without indifference curves): The individual prefers not to be taxed. By extension, an individual will prefer a tax offering that provides *ceteris paribus*, more chances to avoid so as to lower his tax payment. In the real world, where the government cannot enforce equal tax payments for different tax types, an excise tax on one good tends to be more easily avoided and thus preferred to an income tax, *ceteris paribus*. However, in the real world governments rarely allow citizens to make such choices. Instead they impose broad-based taxes for the very purpose of extracting greater tax revenues and search for theories they can use to pacify the long-suffering taxpayer.

Book Reviews

Economic Freedom and Interventionism: An Anthology of Articles and Essays. By Ludwig von Mises. Selected and edited by Bettina Bien Greaves. Irvington-on-Hudson, New York: Foundation for Economic Education, 1990.

Admirers of Ludwig von Mises will welcome this new collection of 46 articles and essays, most from the 1950s and 1960s, many rescued from obscure publication, and some recently translated into English. The titles of the book's subsections, "Economic Freedom," "Interventionism," "Mises as Critic," and "Economics and Ideas," remind us that Mises dealt with the big issues. Except in the final section, the individual selections are short and pithy; but throughout the book and with variation in context and level of abstraction, Mises makes the strongest and most fundamental case in favor of a market economy and against socialism and interventionism.

Characteristically, Mises has no patience with those who seemingly feign ignorance of economics in order to bolster their case for central control or those who flaunt their ignorance in some misdirected criticism of the business community. He condemns these detractors roundly and brands them as hypocrites, idle babblers, and ignoramuses. But Mises has near-infinite patience with the layperson who is eager to understand economic principles. He argues both explicitly (e.g., pp. 157 and 179) and by example that writing for the layperson is an important task that economists must undertake. Unlike experts in the natural sciences, who can apply their knowledge without soliciting the understanding and sympathy of the general citizenry, experts in the field of economics must educate the public. We can have market solutions to economic problems only if the participants in our political process can see through the fallacies of socialism and interventionism and accept the outcome of the market process.

Economists must also be able to converse with one another over the full range of economic issues. Mises emphasizes the

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interconnectedness of economic phenomena when he writes that "Economics does not allow any breaking up into special branches" (p. 55). Here, the modern reader can take Mises's "does not" for an "ought not." The actual breaking up of economics into separate fields and subfields together with the insular nature of these highly specialized areas of concentration demonstrates, by its mocking contrast, the essential unity of economics.

Several of Mises's essays are linked substantively by recurring themes: The market does not favor big business or even business in general; it favors consumers. By their choices in the marketplace, consumers decide whether a business can get big, stay big, or stay in business at all. Consumers are sovereign in a market economy: their spending determines what it produces; their saving determines how fast it grows. The choices of consumers also determine indirectly the wage rates of workers. Interventionists who would override the market process that ties labor income to consumer spending and grant workers a larger share of business renevues on the basis of their proclaimed productivity misconceive the relationship between capital and labor. They fail to recognize that changes in labor productivity are attributable not to labor itself but to the capital that gives labor its leverage. To divert income away from capital and towards labor would be to discourage capital accumulation and hence to halt the increases in labor productivity that supposedly justified the income diversion. Mises identifies institutions that preserve ownership rights and maintain a sound monetary system as the essential prerequisites for encouraging saving, which finances capital accumulation, which makes labor productive, which maintains high living standards for the Western countries and distinguishes them from the underdeveloped countries.

The ultimate choice faced by the social scientist as citizen—and by the general citizenry—is the choice between a market system and a socialist system. Mises argues in terms of this either-or choice with great rhetorical effect using both overstatement and understatement. He argues (p. 55) that there can exist no middle way in the form of interventionism. The political dynamics of any such mixed economy result in either (1) interventionist policies pursued to the extreme of socialism or (2) the wholesale abandonment of interventionism in favor of the market system. In discussing a particular interventionist policy, farm subsidies enacted for the benefit of the independent farmer, Mises remarks in mid-paragraph (p. 209) that "One cannot subsidize a man to render him independent."

Though writing decades ago, Mises incorporates into his arguments many economic theories that have emerged full-blown only in

recent years. He anticipates the kernel of truth in so-called rational expectations theory by criticizing Keynes for his implicit belief that inflation can deceive the public persistently and systematically (p. 72); he anticipates a key aspect of supply-side economics and its Laffer Curve in noting that governments resort to inflation when tax rates have been pushed beyond the point of maximum returns (p. 103). The reader will encounter several such passages which establish Mises's ideas as precursors of now-fashionable insights.

If there is a weakness that characterizes this collection of essays, it is Mises's tendency to underestimate the enduring appeal of the ideas he criticizes. For instance, he writes (p. 140) that "As an economic doctrine, Keynesianism is now [1964] dead" and (pp. 120–21) that with the posthumous publication of the third volume of Marx's *Das Kapital* [1894], "the essential dogma of the Marxian philosophy, the class conflict doctrine. . . , was unmasked as a flop." But even now, as much as then, Keynesian doctrine is still alive, and Marxian doctrine still masquerades as high theory. In fact, these two doctrines (Keynesian demand failures and Marxian class conflict) plus the equally fallacious Ricardian production theory have all been combined to produce the present-day Post Keynesianism.

Today, as always, the general citizenry needs to understand economic principles and to recognize economic fallacies. The champions of freedom, Mises reminds us, can win out only through economic education. Students of Misesian economics will recognize Mises as the champion of champions and will be grateful to Bettina Bien Greaves and the Foundation for Economic Education for giving these essays and articles a new life.

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If You're So Smart: The Narrative of Economic Expertise. By Donald N. McCloskey. Chicago: University of Chicago Press, 1990.

The book *If You're So Smart* continues and extends the analysis of positivism in economics presented in *The Rhetoric of Economics*. Here, once again, Donald McCloskey champions the claims of rhetoric. He applies his approach to several issues of economic history and lambastes economists who don the mantle of science for their forecasts of the future.

McCloskey's critics often condemn him as an irrationalist who wishes to substitute myths of his own devising for the dictates of reason.[1] This accusation the author firmly rejects. He does not wish to expel fact and reason from economics; instead, he wishes to clear a space for literary understanding. Method, in his view, rests on a "rhetorical tetrad—fact, logic, metaphor, and especially story" (p. 24). Economists cannot proceed untrammeled by the constraints of fact; however, the world does not compel a simple response but leaves room for alternative accounts.

These accounts make use of the devices of literary persuasion. Rather than speak of a theory that confronts reality, McCloskey prefers to talk of "metaphorical and narrative questions [which] answer each other" (p. 10). The use of rhetoric aims to convince. Truth in economics, as in other academic disciplines, rests to a large extent on consensus among the subject's practitioners.

McCloskey writes with clarity and force, ably applying in practice the literary skills he endeavors to promote. His views on proper method, however, strike me as largely unpersuasive. The positivists whom McCloskey opposes divide meaningful statements into two classes: empirical and necessary. Only the former type secures new knowledge since logical necessity is a matter of linguistic convention and analytic statements are tautologies. (Necessarily false state-

[1]An example of such is Hans-Hermann Hoppe, "In Defense of Extreme Rationalism: Thoughts on Donald McCloskey's *The Rhetoric of Economics*," *Review of Austrian Economics* 3 (1989): 179–214.

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ments are meaningful, but for obvious reasons these need not be taken up here.) Whatever in language is neither empirical nor necessary is in strict terms without meaning. To claim that murder is wrong, e.g., is simply to express one's rejection of killing. Nothing factual has been asserted.[2]

McCloskey remains the prisoner of the positivist theories he so roundly condemns. If positivists dismiss the unverifiable as poetry, McCloskey simply reverses the usual moral positivists draw from their partition of language. "Poetry" is not bad but good: science extends far beyond the limits to which positivists desire to confine it. Nowhere does McCloskey challenge the positivist theory of meaning itself. He fails to consider the view that strict knowledge may be obtained through other methods than those favored by positivists. (The praxeology of Mises is of course a key instance of such a view.) Instead, he tacitly agrees with his professed foes about scientific knowledge but calls for the inclusion in science of the emotive language that positivist method has as a principal aim to expel.

McCloskey states, e.g., "a metaphor used in an economic story is not 'true' in a simple way" (p. 64). By "metaphor" McCloskey does not intend a particular trope alone but rather all use of language which fails to be strictly factual in the positivist sense. Almost all statements used in economics count as metaphorical for McCloskey; since these statements are not fully verifiable they *cannot* be literally true. Of course, a metaphor in ordinary language is literally false: but, unless one accepts McCloskey's view of literal meaning, a "metaphor" is his extended sense can be an ordinary language sentence that is true without qualification. "The value of an economic good depends on its marginal utility" is, if I have understood McCloskey's usage, a metaphor, since the statement can be tested only approximately. But why not take the statement as non-metaphorically true, in the Austrian manner? I wish that McCloskey had examined the Austrian view, rather than simply embrace what his quondam Chicago colleagues reject while leaving unchanged their underlying analysis. Like them, he believes that the extent a statement cannot be verified, it lacks literal meaning.

One may, I think, go further. Even if McCloskey holds the view of literal meaning I have attributed to him, he ought still to examine the Austrian position. Praxeology starts from the axiom of action and a few additional assumptions and attempts to deduce the body of economic theory through common-sense reasoning. Mises devoted considerable effort to a refutation of positivism, and to good purpose.

[2]I do not wish to claim that all logical positivists adopt the group of positions noted here.

But do his own findings require one to reject the positivist criterion of meaning? I do not think so, unless one adds (as nearly all positivists do) that a scientific statement must be subject to continual experimental test. But why must it? The common-sense reasoning used by Austrians seems to generate propositions that are empirical, to the satisfaction of the strictest supporter of verifiability. The fact that Austrians hold a different position about what sort of tests need to be used in science is altogether a different question. I do not wish to defend the verifiability criterion—quite the contrary. But even those who acknowledge it have no excuse to turn a blind eye toward praxeology.

McCloskey might reply that he has not neglected the deductive method. Praxeology claims to establish truth. In so doing, it falls victim to an argument McCloskey advances to show that we have no direct access to reality. (The argument is found in *Rhetoric* rather than *If You're So Smart*.) The argument is this: To determine whether our concepts accurately grasp reality would require us to examine reality without using our concepts, since it is their ability to convey truth which we wish to assess. But this we cannot do: We use concepts in all our knowledge. Absent any direct, non-conceptual grasp of reality, we must stay within the circle of our concepts. Once our inability to free ourselves from our conceptual net is accepted, we cannot shrink from the next step. We must recognize that we construct our concepts: they are found rather than made. To the extent that the Austrian method of deduction claims that its results are literally true, it must be rejected.

The argument just presented lacks the decisive force McCloskey, closely following Richard Rorty, attributes to it. What exactly is meant by the possibility that none of our concepts enables us accurately to grasp reality? "Negation" and "identity" are concepts we use: is there a "world-in-itself" to which they do not apply? The assumed non-conceptual world is, *ex hypothesi*, incapable of description. Why assume that it is possible?

The foregoing remarks do not suffice to dissolve skepticism. Even if some of our concepts cannot be imagined incapable of application, it does not follow that all of them share in this privileged status. Does not McCloskey's problem then recur? To determine whether a concept applies to reality, must one not "step outside" the concept and examine reality directly? And how exactly is one to do this?

This skeptical question cannot easily be answered, and I fear that I must take refuge in the evasion that this is not the place to address difficult issues in the theory of knowledge. Before turning from the issue, one needs to ask: Does McCloskey's problem require us to regard claims to knowledge as at least in part constructions based on metaphor rather than depictions of an independent world? Not at all.

McCloskey's difficulty has to do with verification—how do we know that our claims to depict the world accurately are true? Even if the question cannot be answered, our claims have not been undermined. To elicit a skeptical outcome from his question McCloskey needs to add the controversial "KK" principle— if S knows p, then S knows that S knows p. (Perhaps a weaker variant of the principle will do.) Suffice it to say that the principle is a dubious one: absent an argument for it, McCloskey has succeeded only in raising an interesting question.

In any event, even if one were to grant McCloskey the gap he alleges between our concepts and reality, economics emerges unscathed. Economics is concerned with human action: questions about the world independent of our concepts do not arise in it. One might object that economics deals with land, natural resources, techniques of production, etc., as well as action. But this is not to the point, since the items just mentioned do not belong to the noumenal world. They fall under our concepts, whatever else might not. McCloskey's foray into epistemology, though valuable, is not relevant to economics.

Though I have considerable reservations about McCloskey on the theory of knowledge, he seems to me much better when he takes up questions within economics. He discusses insightfully the views of several economic historians on the British economy in the late-nineteenth century. He questions whether it is useful to speak of decline, when in point of fact the British economy was expanding. The higher growth rate of Germany in some industries hardly suffices to show disaster for Britain. Here McCloskey makes an excellent case for the value of attention to metaphor. His discussion of what "decline" means is a model of acute literary analysis. His presentation of the career of Alexander Gerschenkron, one of his teachers, is also informative.

Unfortunately, McCloskey cannot leave philosophy alone; and in the central issued addressed in his book, he mars an otherwise useful treatment by dubious remarks.[3] He denies that economists can accurately foresee the future of the economy. Toward those who make such predictions, he asks the "American question" that forms his title: If you're so smart, why aren't you rich? If anyone could foretell the economic future, he would be in a position to gain for himself fabulous wealth. Why would he disclose his goldmine to others?

McCloskey's skepticism about economic predictions fits in well

[3]McCloskey makes several technical mistakes. The statement about inflation in a parallel world should be in the indicative, not the conditional sense (p. 91). Leibniz did not hold that no possible worlds are similar to the actual world (p. 93). Church's theorem does not say that it is impossible to predict the future of mathematics (p. 131). A Pareto-superior change is confused with a condition of Pareto optimality; and a change that does not meet McCloskey's condition can be Pareto superior (p. 136).

with the Austrian view, and his ironic account of economic forecasting amuses and instructs. At times, McCloskey fails to distinguish two separate issues: is it possible to predict the future of the economy? If it is, why would the information be disclosed to the public? Perhaps, for all McCloskey has shown, there *are* successful predictors who keep their methods to themselves. Of course, McCloskey does not deny that there are successful entrepreneurs. The point at issue is whether there are *methods* of foreseeing the future.

Worse is to come. McCloskey informs us: "Humans react to economic predictions in ways that dampen or magnify the prediction" (p. 121). Hence the disclosure of a prediction will result in its falsification, as people take account of it in guiding their behavior.

This argument begs the question. If a prediction is correct, then people will not react to it in a way that falsifies it. It is logically possible that they modify their behavior in the ways McCloskey specifies, but a successful prediction does not require logical necessity. To say that people *will* modify their behavior is just to assume that the prediction will fail, the presumable point of the argument.

McCloskey's claim that self-prediction is impossible fails for the same reason. He states: "The impossibility of self-prediction has become a commonplace in philosophy. You do not know today what you will decide tomorrow, unless you have already decided it, in which case it is not tomorrow but today that you decided it" (p. 130). Is that so? I know what I shall have for breakfast tomorrow, but I have not now *decided* what to have. That I shall do tomorrow. The impossibility involved in this last remark I am entirely unable to fathom.

Returning to his epistemological theme, McCloskey offers his readers an important lesson: "Dogmatic Marxists, dogmatic neoclassicals, dogmatic Austrian economists, dogmatic institutionalists, who have put each other's writings on an index of forbidden books, are ethically dangerous, all of them. They are true believers, or rather, believers in truth. The best lack all conviction, while the worst / Are full of passionate intensity" (p. 146).

McCloskey has misread the familiar lines: Yeats did not praise tolerance but described an imminent apocalypse. No doubt McCloskey, whose analysis of a Wallace Stevens poem (pp. 97–99) shows remarkable skill, knows "The Second Coming" perfectly well. Perhaps he is making a small joke at the unwary reader's expense. In any event, non-dogmatic is, if not the last adjective one would apply to McCloskey, very near the last.

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Robert Nozick: Property, Justice and the Minimal State. By Jonathan Wolff. Stanford University Press, 1991.

Jonathan Wolff sets himself an ambitious goal in *Robert Nozick*. His principal aim is to offer a guide to Nozick's *Anarchy, State, and Utopia*. Beyond this, he says that "part of [my] task will be to reconstruct Nozick's arguments and conclusions to make them as coherent as possible. . . . I shall try to clarify Nozick's reasoning and make good the gaps where necessary and possible, so that we might appreciate the force of the arguments, and subject them to rigorous examination" (p. 2).

Wolff succeeds admirably in presenting a simplified version of *Anarchy, State, and Utopia*.[1] His accomplishment deserves extra praise because he strongly opposes what he believes to be the political consequences of the work (p. viii), but nevertheless remains fair in his presentation. Wolff never stoops to caricature, and the quarrels I have with his discussion concern matters of interpretation, not outright errors.

Wolff's account suffers from one principal defect, which prevents me from wholeheartedly recommending it. The author conflates Nozick's position with that of other libertarians. Sometimes he criticizes Nozick for positions he does not hold, but other libertarians do; on other occasions he challenges libertarians generally for not answering difficulties just because Nozick does not address them. Wolff's mistake in large part stems from his acceptance of the arguments of G. A. Cohen, one of his teachers. Cohen, a Marxist political philosopher of great acuity, has devoted several articles to Nozick which suffer from the problem previously discussed.

The issue arises quite early: At page 4, Wolff refers to Nozick as holding that one has "rights of ownership over oneself." He amplifies this remark so that the "thesis of self-ownership" becomes the basic

[1]The book is concerned only with the Nozick of *Anarchy, State, and Utopia* (New York: Basic Books, 1974). Wolff notes Nozick's criticism of libertarianism in *The Examined Life* (New York: Simon and Schuster, 1989), but he does not discuss Nozick's later views at length (p. 2).

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principle of Nozick's system. In point of fact, Nozick never uses the term "self-ownership" in *Anarchy, State, and Utopia*. He does indeed hold that a person has rights over his or her body, in similar fashion to those such as Murray Rothbard who do use the term.

But much more than a difference in words is involved. In part because Wolff thinks that Nozick believes in self-ownership, he ascribes to him the position that all political rights consist of either rights over one's body or absolute rights to property. There is no room for civil liberties, that cannot be reduced to the two basic forms of rights. Murray Rothbard and several other libertarians do hold exactly this view, but Nozick does not. Rothbard contends, for example, that free speech dissolves as a problem if one reduces situations of conflict to their underlying basis in property rights. Nozick attempts no such reduction.

Wolff's introductory chapter is otherwise accurate. He rightly notes that Nozick, and libertarians generally, sharply distinguish between the morally right and the legally enforceable. If people do not have welfare rights, it does not follow that the poor should be cast aside. Wolff asks: "But if all aid were voluntary, how much would be forthcoming?" (p. 12). He proceeds to canvas some ideas on voluntary aid by Milton and Rose Friedman, and others; but he neglects Nozick's own comments on the issue. Nozick holds that if people democratically support welfare taxes, there is little reason to think they would refuse to give charity voluntarily. He questions whether welfare provision is a public good.

Wolff then turns to a fuller characterization of Nozick's position on rights. He points out that Nozick attaches great importance to the Kantian principle that one ought not to use others simply as means. Each person has a separate life, and people cannot be used as means to the welfare of others.

But why should people be treated as ends? Wolff notes that Nozick's response places great stress on the value of each individual pursuing a "self-shaping" life plan. He suggests that if one regards the meaning of one's life as more closely connected with others than does Nozick, a different view of rights might ensue (p. 29).

Here I think Wolff's slightly but significantly misapprehends Nozick's view. The prohibition against using others follows from the Kantian principle, not from Nozick's explanation of why people are morally valuable. Even if one were to adopt a view of life's meaning along the lines Wolff suggests, this would not directly challenge Nozick's view of rights. It would do so only if the new view required rejection of the Kantian principle, or a different interpretation of it from the one Nozick offers. But to claim this requires more argument then Wolff offers.

Wolff presents as an example of a different view of rights a theory advanced by Samuel Scheffler, in which people have welfare rights as well as the negative rights favored by libertarians. In this view, "one necessary condition of leading a life is to lead a life" (p. 32). In order to lead a life, do not people require rights to food, shelter, etc.?

The argument has gone too fast. Granted that people need certain goods to lead meaningful lives, does it follow that they need the right to these goods as well? Why is not sufficient if they obtain the goods through charity? Further, Nozick's proposal, once more, is not that people should have a set of rights determined by the notion of a meaningful life; it is that political measures ought not to require using some people as means to the ends of others. Even if one needs certain goods to lead a meaningful life, welfare rights may give some people the right to use others as means. (Scheffler's suggestion is unsatisfactory as stated here (p. 31), since on its terms, if anyone's using a particular good would prevent someone else from having a reasonable chance of living a decent and fulfilling life, no one would have a right to the good. What then is to be done with it? I suspect that this could be "fixed up.")

There is one further problem in Wolff's discussion of Nozick on rights. In his discussion of self-defense and punishment, Wolff does not mention that Nozick's use of the term "punishment" is different from its ordinary language sense of the imposition of a penalty. Nozick means by punishment a penalty that exceeds compensation. His question: why may we punish? is not equivalent to: why may we use force to retaliate for violations of rights?

Probably the most difficult section of *Anarchy, State, and Utopia* is Part I, in which the minimal state is derived. On the whole, Wolff does an excellent job in presenting clearly the steps in Nozick's complex argument. I found particularly valuable his challenge to the view that a monopoly protection agency will arise from the state of nature. Nozick's argument rests on the assumption that a larger agency will tend to defeat a smaller one in cases of conflict. A snowballing effect will ensue in which more and more people will transfer to the large agency. Wolff contends that in some cases, a smaller agency may defeat a larger one (p. 56).

Wolff also presents some interesting challenges to Nozick's principle of compensation. In his sketch of the role risk plays in the derivation of the minimal state, he fails to place sufficient stress on the type of fear Nozick thinks risky behavior that threatens bodily harm generates. Those who employ risky decision procedures may induce this anxiety. Compensation for the fear in case of wrongful use of a procedure is not feasible, since the anxiety arises not from any

given instance of the use of the procedures, but from perceptions of a general policy. It is for this reason that Nozick holds that the use of such procedures may be prohibited. "Prohibition" means that punishment, as earlier defined, may be imposed.

Wolff raises the pertinent question of why the dominant agency must compensate those who are disadvantaged by the prohibition of risky decision procedures, if one has no right to impose this risk. He overlooks the stress Nozick places on differences of opinion as to what constitutes an unacceptably risky procedure. A procedure need not be prohibited because its user, or a consensus of moral opinion, consider it too risky. Rather, the dominant agency acts on its own view of the matter. An example might be the prohibition of the use of majority verdicts in jury trials for criminal offenses. The user of the prohibited procedure who is compensated has not done something morally blameworthy.

Further, Wolff fails to note that the dominant agency has no rights that other agencies lack. Non-dominant agencies, or independents for that matter, may prohibit the dominant agency from using risky decision procedures on their members or themselves, respectively. The problem with their doing so is that the dominant agency will not accept their views about risky procedures and will win in case the dispute leads to forcible conflict.

Wolff considers at length Nozick's entitlement theory of justice. Naturally, he gravitates toward the Wilt Chamberlain case; and here his reliance on Cohen leads him in a misapprehension. The example depends for its force on the moral intuition that people have the right to make voluntary transfers of goods to which they are entitled. Wolff questions whether Nozick can use this claim, since he has not shown that the liberty of transfer follows from property rights. Nozick, he alleges, believes that "your liberty is only restricted if someone stops you from doing what you have a right to do" (p. 94). This contention rests on the view already mentioned that Nozick's political theory recognizes only self-ownership and property rights as legitimate moral claims. Cohen takes Nozick to be saying this, and Wolff wrongly follows in his footsteps. To reiterate, this position is not to be found in *Anarchy, State, and Utopia*. Likewise mistaken is the view that Nozick thinks "you are only forced to do something if someone . . . violates your rights" (p. 94). This misinterpretation, also taken over from Cohen, extrapolates from an analysis of coercion in a particular case—wage bargains in which there is no threat or use of overt violence—to a general theory of coercion.

Wolff rightly does not commit himself to accepting Cohen's supposition that the Lockean proviso is the sum and substance of

Nozick's principle of property acquisition (pp. 113–14). Nozick does not specify a principle of acquisition at all, as Wolff also correctly notes. He might usefully have discussed work by Rothbard, Ellen Paul, and others, who have addressed this problem from a libertarian standpoint. Also, what Wolff aptly terms the "zipping back argument" (p. 108) does not show that Locke's proviso prevents property acquisition under all circumstances. This argument claims that if one appropriator fails to satisfy the proviso, no one can do so. It does so only if there is a "last" person who cannot appropriate while leaving as much and as good for others. Nevertheless, the argument does indeed show that a problem exists given what most Lockeans have in mind as the outcome of property acquisition.

Wolff is not convinced by Nozick's claim that taxation is on a par with forced labor. Wolff objects that there is a continuum between forced labor, on the one hand, and unrestricted liberty, on the other. Starting with slavery, we can gradually portray various states of affairs, each allowing greater liberty than its predecessor. Why is the infringement of liberty represented by taxation especially important? Depending on its severity, taxation may leave people relatively free.

Recourse to the prohibition of treating people as exclusively as means will I think enable us to see a difficulty in this argument. The various social states do not lie on the continuum that Wolff supposes. Rather, there is a gap between cases in which people are recognized as ends-in-themselves and those in which they are not. Within the latter class, some instances of coercion are more severe than others. But all suffer from the disqualifying defect of using some people for the benefit of others. In this way, taxation is akin to forced labor in an important respect.

Wolff discusses many other issues, but I think enough has been said to indicate the book's flavor. Wolff has amply achieved his goal of writing a useful introduction to Nozick. If he had in mind a more ambitious aim, i.e., a full-fledged assessment of the virtues and vices of Nozick's theory and of libertarianism as a whole, the verdict must be less favorable.

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The Review of Austrian Economics, the predecessor to the *QJAE*, was founded and edited by Murray N. Rothbard and functioned as the premier Austrian School scholarly journal between 1987 and 1997. After 1995, it was edited by Walter Block, Hans-Hermann Hoppe, and Joseph T. Salerno. Published first by Lexington Books and later by Kluwer Academic Publishers, the journal played a central role in attracting a new generation of economists to the theoretical foundations established in the work of Carl Menger and Ludwig von Mises.

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