Dissent on Keynes

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A Critical Appraisal of Keynesian Economics

Edited by Mark Skousen

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To Larry T. Wimmer,
who raised my first doubts about
Keynesian economics

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Introduction

One of the most curious and unhappy circumstances of the postwar period has been the failure of free-market economists to launch a major and effective assault on Keynesian economics. Despite occasional pronouncements that "Keynes is dead" (Lucas 1982; Biven 1989), there remains a strongly held belief among professional economists and government officials that the basic tenets of Keynesianism are "irreversible" (Samuelson [1971] 1986: 867). This claim is supported by a recent survey of references to various schools of thought as cited in the top ten economics textbooks for 1990:

References to Economics Schools in Top Ten Textbooks

School	*Index Frequency*
Keynes and Keynesianism	442
Friedman and Monetarism	252
Marx and Marxism	131
Rational Expectations	119
Laffer and Supply-Side	95
Austrianism	67
Galbraith and Institutionalism	53

Note: The table above is based on the combined references to specific theories and their expounders found in the name and subject indexes. The top ten textbooks, selected according to a survey of publishers at the 1990 annual meeting of the American Economic Association, are McConnell and Brue; Baumol and

Blinder; Lipsey, Steiner, and Purvis; Ruffin and Gregory; Miller; Samuelson and Nordhaus; Dolan and Lindsey; Byrns and Stone; Qwartney and Stroup; and Bronfenbrenner, Sichel, and Gardner. Keynesian influence may be even greater than the chart above indicates, since elements of Keynesian macroeconomic modeling may be integrated into other schools. For more information, see my book *Economics on Trial* (Skousen 1991).

The various branches of free-market economics (monetarist, rational expectations, supply-side, and Austrian) have made laudable attempts at dislodging the "new economics." Inroads have been made and early versions of crude Keynesianism have been persuasively refuted (e.g., the concept of the liquidity trap, that money does not matter, and that inflation and unemployment cannot coexist). But, in the words of G. K. Shaw, modern Keynesian theory "not only resisted the challenge but also underwent a fundamental metamorphosis, emerging ever more convincing and ever more resilient" (1988: 5). The remaining Keynesian precepts have achieved a certain kind of "permanent revolution," as Mark Blaug calls it, in the minds of most economists.

WHAT'S LEFT?

What forms the basis of this permanent revolution? Let me suggest four enduring theses.

1. Free-market capitalism is seen as not self-equilibrating and, thus, as flawed. Keynesians allege that the economy can remain indefinitely in equilibrium at less than full employment. Because the free market cannot guarantee full employment of labor and resources, it is therefore considered inherently unstable. Say's law, interpreted by Keynesians to mean that "supply creates its own demand," is rejected as a universal principle.

2. According to Keynesian thinking, saving is a virtue only when the economy is at "full employment"; in times of unemployed resources, saving more can make a recession worse. Uninvested savings may "leak" out of the system, causing a reduction in final aggregate demand. Most economists appear to accept the "paradox of thrift" in the short run—the belief that efforts to save more will cause income to fall and will eventually reduce savings—when the economy is in recession.

3. Autonomous government spending and increases in the money supply can, through the multiplier and accelerator effects, increase aggregate demand and expand national income and employment sufficiently to reach permanent "full employment."

4. During a recession or depression, the federal government should operate a budget deficit and/or cut taxes; similarly, public-works programs and monetary inflation are superior to cutting wages as a remedy for a recession or depression.

The economics profession is also enamored with Keynesian terminology and its aggregate approach to analyzing macroeconomic issues. Almost all major schools—Keynesian, monetarist, new classical, and Marxist—rely on large

numbers and purely aggregate concepts to reach their conclusions. Ignoring individual activity, they look primarily at the average or total activity—the wage rate, price level, interest rate, marginal efficiency of capital, total output, money supply, and final aggregate demand. There is little effort by mainstream economists to disaggregate to a microeconomic scale or to analyze relative prices and output. Only the Austrian school appears to emphasize a disaggregative, microeconomic approach.

KEYNES'S ATTACK ON TRADITIONAL ECONOMIC VALUES

The Great Depression of the 1930s gave Keynes a window of opportunity to turn the world on its head by attacking "classical economics." The classical economics espoused by Adam Smith, David Ricardo, and John Stuart Mill had some major defects, but if we look at classical economics in a broad sense, it appears to have included many sound principles.

1. Thrift, hard work, and productivity are virtues. According to the classical economists, saving plays a critical role in the production process and is a sine qua non in achieving economic progress. Production is more important than consumption, which will normally take care of itself. As Say's law suggests, supply is more important than demand, since the supply of one good creates the demand for another good.

2. The classic gold standard restrains the state from inflating and provides a stable monetary environment in which the economy may flourish.

3. Governments should strive for balanced budgets and fiscal responsibility by controlling their spending. During prosperous times, governments should retain a surplus against hard times; and during an economic contraction, governments should tighten their belts, just as individuals are required to do.

4. The state should adopt a general policy of laissez-faire noninterventionism in economic affairs (free trade, low taxes, minimal bureaucracy, etc.).

There are, of course, numerous cases where such classical principles were violated by governments around the world, but these tenets were generally accepted in theory by economists prior to the Great Depression.

However, Keynes sought to reverse these traditional economic values and replace them with unconventional concepts and a new Weltanschauung. In his magnum opus, he established the "general theory" that the classical position applied only in times of full employment and that the predominant condition of the economy is the unemployment of resources (Keynes 1936: 3, 249–50). Under such circumstances, he professed the following principles.

1. An increase in savings can contract income and reduce economic growth. Consumption is more important than production in encouraging investment, thus turning Say's law upside down: "Demand creates its own supply" (ibid.: 18–21, 111).

2. The gold standard is defective because its inelasticity renders it unable to

respond to the burgeoning needs of business. A managed fiat-money currency is preferable (ibid.: 235–36; Keynes 1971: 140). Keynes had a deep-seated hatred of the gold standard and was largely successful in dethroning the yellow metal as a worldwide monetary institution. Keynes was, in fact, a social millenarian who ultimately envisioned a world evolving to the point of infinite accumulation of capital. By progressively expanding credit to promote full investment, Keynes believed that the universal economic problem of scarcity would finally be resolved. Interest rates would fall to zero, and mankind would enter a Garden of Eden. In Keynes's mind, the gold standard severely limited credit expansion and preserved the status quo of scarcity. Thus, gold's inelasticity stood in the way of paradisaical glory and must be abandoned in favor of fiat-money inflation. The Bretton Woods agreement, which was largely Keynes's creation, was the first step toward removing gold from the world's monetary system.

3. The federal government's budget should be deliberately kept in a state of imbalance during a recession. Fiscal and monetary policy ought to be highly expansionary in an effort to restore prosperity, while interest rates should be kept permanently and artificially low (Keynes 1936: 128–31, 322).

4. Government should abandon its laissez-faire policy by intervening in the marketplace whenever necessary. According to Keynes, in desperate times it may be necessary to return to mercantilist policies, including protectionist measures. (ibid.: 333–71).

FREE-MARKET RESPONSE TO THE KEYNESIAN THREAT

We can see, therefore, how Keynesian economics launched a direct assault on traditional economic values and therefore has posed the most serious threat to the principles of economic freedom since Marxism. Keynes's aim was to undercut and overturn the very fabric of classical free-market economics. Virtually all economists agree that Keynes has been the most influential economist of the twentieth century and that *The General Theory* ranks with Charles Darwin's *Origin of Species* and Karl Marx's *Das Kapital* in the radical reshaping of modern thought. Joseph Stagg Lawrence accurately summarizes the impact of *The General Theory*: it "constitutes the most subtle and mischievous assault on orthodox capitalism and free enterprise that has appeared in the English language" (Hazlitt [1960] 1977: 345).

As a financial economist and investment analyst for the past two decades, I have witnessed the impact that Keynesian economics continues to have on the academic, governmental, and business worlds. In many countries the "new economics" has created a strong bias toward excessive inflation, boom-bust cyclical behavior, mismanaged public debt, and capital consumption on a massive scale. Undoubtedly, the Keynesian apologists would argue that they are not responsible for the deficit crisis, capital consumption, or other consequences of legislative excesses and that, if only government leaders had followed the other half of Keynesian policy, that is, to run surpluses during boom times, the system

would not be in such trouble now. And yet the Keynesians are much like Dr. Frankenstein and the monster he created: somebody has to take responsibility for the monster's excesses.

In light of these growing macroeconomic problems, I felt it was time to bring together some of the best minds among free-market economists to dispute the claims of the Keynesians. There have been numerous analyses and symposia on Keynes since the celebration of his 100th birthday, but, as far as I'm aware, until now there has been no full-scale critique of Keynes and Keynesian economics presented in one volume by the most ardent defenders of the free market. The purpose of this work is to fill that void.

CHAPTER SYNOPSES

Each contribution to this volume aims to dissect one or more of the main tenets of Keynes and Keynesianism. In chapter 1, I introduce the subject by recounting the history of anti-Keynes doctrines propounded since the 1930s. I conclude that Keynesianism spread rapidly throughout the Western world in part because defenders of the free market blundered repeatedly in attempting to respond effectively to the "new economics." During the heyday of Keynesian influence, Keynes's conservative opponents failed to confront the theoretical underpinnings of his doctrines; rather, they simply argued from a practical perspective that the political and economic consequences of Keynesianism were inflationary and therefore deleterious. Only in the past few decades have free-market economists made headway in the theoretical debate against Keynes.

In chapter 2, John B. Egger takes issue with the orthodox Keynesian view that federal deficit spending can lift the economy out of a depression or recession. According to Egger, Keynesians tend to ignore the hidden costs and the invisible ill effects of an expansionary fiscal policy, including the crowding out of private investment and employment, a higher tax burden over time, misallocation of resources, and a movement away from the natural rate of interest and long-term planning.

The case for deficit spending was greatly enhanced by the apparent end of the Great Depression as a result of heavy military expenditures during World War II. Can we therefore conclude that war is good for the economy? It is important to note that fiscal expansionism did not take place in a vacuum. There were two other principal factors, in addition to an expansionary fiscal policy, which stimulated economic recovery during the war—a liberal monetary policy and a massive increase in the savings rate. Yet in many ways the stimulation of government spending, monetary inflation, and saving was artificial. By the end of the war, per-capita real income had actually declined as many people were denied basic goods and services, not counting the terrible cost of millions of lives. The only clear, permanent victor in World War II was government power and influence. In short, it was only *after* the war that prosperity returned to the West (Skousen 1988; Higgs 1990).

In chapter 3, Jeffrey M. Herbener provides a devastating critique of the Phillips curve, demonstrating that the alleged trade-off between inflation and unemployment simply cannot be proven from the historical data. In addition to revealing fundamental theoretical problems with the Phillips curve, Herbener shows that the data used by proponents is highly arbitrary, incomplete, and misinterpreted. The correlation coefficient between wage rates and unemployment (or between prices and unemployment) is so low in the scatter diagrams that econometricians would quickly reject the Phillips model as "unprovable."

In chapter 4, Herbener also attacks two other Keynesian tenets, the multiplier and the accelerator, criticizing Keynes for hazy definitions and unproven psychological "laws." Herbener points out that, contrary to Keynes's thesis, the "marginal propensity to consume" can be greater than one in the case of capital consumption, making the multiplier negative. Moreover, the Keynesian multiplier always assumes that savings are hoarded rather than spent on investment goods. Herbener also demonstrates how "negative multipliers" can be created to offset positive ones. This same type of criticism is applied to the accelerator principle, showing that there is no "fixed" proportional relationship between the production of capital goods and the demand for consumer goods.

In chapter 5, I explore the "anti-saving" mentality to which Keynes adhered throughout his career. I also explain the fallacy in the Keynesian doctrine known as the "paradox of thrift," which has led to much mischief in both economic theory and government policy, pointing out that Keynesian theory contradicts the strong historical correlation between savings rates and economic growth rates in both industrial and developing nations.

In chapter 6, Bruce R. Bartlett, Deputy Assistant Secretary for Economic Policy at the U.S. Treasury Department, strongly condemns central planning and other Keynesian policies for developing nations. He criticizes the Harrod/Domar model of economic development, which justifies massive government expenditures on capital and infrastructure, no matter how misallocated. According to Bartlett, the Keynesian influence has led many developing countries to adopt inflationary policies, progressive income taxes, big government, antipathy toward free trade, and heavy reliance on foreign-aid programs. On the other hand, Bartlett notes that Japan and other Far Eastern countries have largely adopted an anti-Keynesian policy and, consequently, have been able to grow at much faster rates than Western nations. Bartlett is also highly critical of the International Monetary Fund and the World Bank.

In chapter 7, Don Bellante traces the philosophical descendants of Keynes, the neo-Keynesians and the post-Keynesians. Bellante expresses alarm at the post-Keynesians' distinction between production and distribution, based on the work of Piero Sraffa. In their distorted view of the world, national output appears to be completely independent of wages and prices, thus allowing the government to pursue the grandest of redistributive schemes without anticipating any serious effect on national output. Past experiments in social redistribution have proven how disastrous such policies can be. The neo-Keynesians are to be congratulated

in one respect, says Bellante, namely, for undermining the "equilibrium always" mind-set of the standard economic models. But to consider exchanges and business interactions as almost always rigid, inefficient, and imperfect, as the neo-Keynesians do, is to fail to recognize that such voluntary actions in the marketplace may actually enhance social welfare.

In chapter 8, Roger W. Garrison raises a rather fascinating and controversial question, "Is Milton Friedman a Keynesian?" Garrison concludes that he is and he isn't. He is, in the sense that he endorses Keynesian aggregates: both Keynes and Friedman view macroeconomics in terms of demand management. But, according to Garrison, they differ markedly in their interpretations of macroeconomic theory and emphasis in government policy.

The next four chapters discuss Keynes, the man, and his philosophy. In chapter 9, philosopher David Gordon points out that Keynes was an elitist, who had little interest in the working man or in democratic principles. According to Gordon, Keynes lacked faith in the public's ability to make the right decisions in the world of business and finance. Under laissez-faire capitalism, the future was uncertain and unpredictable. Thus Keynes turned to government, run by enlightened technocrats. Making the state large and powerful would allow it to control investment, reduce uncertainty, and guarantee full employment.

In chapter 10, I review Keynes's career as a speculator and the Keynesian theory of investment that has developed in the postwar period. Keynes is universally recognized as a superior investor; his investment portfolio grew from £11,000 in 1923 to £450,000 in 1946. But he was far from being a consistent player. In fact, my research shows that Keynes failed to predict or protect himself from either the devastating 1929 crash or the 1937 bear market. Consequently, he lost three-quarters of his net worth in 1929 and two-thirds in 1937. He had an uncanny ability to acquire stocks at the bottom of the market but absolutely no sense for getting out at the top. Ironically, despite his distaste for the long run in economic theory, the vast majority of his investment wealth came from holding stocks for long periods of time. As a short-term speculator, he lost frequently; but as a long-term investor, he became wealthy.

It is my thesis, therefore, that Keynes's "general theory" of market instability can be traced back in large measure to his failures as a short-term speculator. Since Keynes was incapable both of predicting the stock market debacles of 1929 and 1937 and of anticipating the economic crises of the 1930s, he developed a theory that rationalized his financial impotence. The market economy was inherently unstable, he reasoned, because investment was unpredictable. Short-term movements in the stock market were ephemeral, and the fetish for liquidity and cash hoardings was irrational. Only the state could intervene and reverse this unstable condition. Keynes's solution was for the state to socialize investment, which would eliminate irrational speculative fever in the financial markets and would stabilize expectations.

In chapter 11, Murray N. Rothbard debunks the popular view that Keynes was a brilliant scholar and savior of capitalism. Rather, in typical revisionist

fashion, Rothbard argues that throughout his life Keynes looked for opportunities to attack the values of the capitalist bourgeoisie: conventional morality, savings and thrift, and the basic institutions of family life. According to Rothbard, Keynes frequently misrepresented the views of past and contemporary economists to suit his ego and his aims. In summary, Keynes was more charismatic than brilliant, leading the Western world down a pernicious path to inflation, instability, and state power.

The final chapter is a summary article by Hans-Hermann Hoppe, who presents a searing critique of Keynes's theory of capitalism. Hoppe argues that Keynes's *General Theory*, like so many other "underworld" critiques of free-market capitalism, blunders repeatedly in its inaccurate and illogical analysis of employment, money, interest, and the capitalist process. Hoppe contrasts Keynes's hopelessly mixed-up version of the capitalist system with his own Misesian version.

As the editor of this volume, I have to admit that I do not agree with everything Professor Hoppe presents as Misesian economics, even in this significantly revised chapter. For example, I have serious doubts about his claim that market unemployment is "always voluntary." Certainly, *permanent* unemployment is always voluntary in the unhampered market, but a dynamic market is constantly generating *temporary* unemployment that requires time to correct. Neither can I accept Professor Hoppe's thesis that, in a recession or depression, "there still need be no market unemployment. Even a sudden drop in wage rates in a depression . . . can still clear all markets every day and every step of the way." This "equilibrium always" approach is more in keeping with the new-classical school than with the Austrians, who have always viewed the market as a dynamic process that never reaches equilibrium. Mises himself argued that economic readjustment after a monetary inflation is "a slow process" (Mises [1949] 1966: 577). Recovery is often a painful readjustment process that may take months, if not years, depending on the psychology of businessmen and wage earners (ibid.: 578).

Despite these differences, I have elected to include Hans Hoppe's article as representative of a "hard core" position against Keynes and other interventionists.

CONCLUSION

Contrary to occasional pronouncements that "Keynes is dead," government interventionism continues to be a growing threat throughout the world economy. Keynesianism and its many facets represent the most sophisticated defense of the Welfare State ever imagined. It will not die easily. In the long run Keynes may be dead, but in the short run he lives on in the halls of government, the classrooms of academia, and the boardrooms of big business. The purpose of this provocative collection of papers is to begin the expulsion, once and for all, of John Maynard Keynes from these institutions.

Chapter 1

This Trumpet Gives an Uncertain Sound: The Free-Market Response to Keynesian Economics

by Mark Skousen

> For if the trumpet gives an uncertain sound, who shall prepare himself for the battle?
>
> —1 Corinthians 14:8

> While the Keynesian system is a tissue of fallacies, it is a mistake to dismiss it brusquely, as many conservative economists have done, as nonsense. It *is* nonsense, in the last resort; but failure to deal with its fallacies in detail and in depth has left the field of ideas open for Keynesianism to conquer.
>
> —Murray N. Rothbard, 1960

For a variety of reasons, the free-market response to Keynes and his revolution has been more accommodating than antagonistic, more often fine-tuning than rejecting outright. Moreover, the most outspoken critics—followers of the Austrian school—have been largely ineffective in displacing Keynesianism and have often been remarkably silent in response to the Keynesian theoretical challenge. Only a handful of laissez-faire defenders have responded critically to Keynes, mostly in short articles and a few books that are now often out of print. They seemed to be running against the tide, as Wilhelm Röpke put it. Thirty years ago, Henry Hazlitt called it a "strange paradox," asserting:

> The Keynesian literature has perhaps grown to hundreds of books and thousands of articles. There are books wholly devoted to expounding the *General Theory* in simpler and more intelligible terms. But on the critical side there is a great dearth. The non-Keynesians and anti-Keynesians have contented themselves either with short articles, a few parenthetic pages, or a curt dismissal on the theory that his work will crumble from its own contradictions and will soon be forgotten. (Hazlitt [1959] 1973: 4)

Now, a generation later, new efforts are under way to contravene the "new economics" both academically and politically, but it has been a long, uphill battle.

Why has Keynes survived and, indeed, prospered? Why haven't free-market economists been able to dislodge Keynesian economics from either the classroom or the halls of Congress? Certainly, market advocates have made significant headway in the microeconomic arena, as evidenced by the growing popularity of deregulation and privatization around the world. But in the realm of macroeconomics, the free-market approach appears to have had little success in convincing the world that laissez-faire is also the best policy.

There are four reasons for this failure. First, historical events have persuaded economists and government officials of the efficacy of Keynesian policies. Second, some conservative historians, economists, and political thinkers accept the Keynesian theoretical framework and some of the Keynesian policy prescriptions. Third, those who have the power to make policy changes have a vested interest in promoting Keynesianism. And fourth, defenders of the free market have underestimated the impact of Keynesian doctrines on the world and have made a series of tactical blunders in their attack on the "new economics." Let us examine these points in an historical framework.

ECONOMIC HISTORY AND KEYNES

First, certain historical events seemed to favor a Keynesian interpretation. The Great Depression was the worst economic collapse in modern history. Unemployment was severe and lasted longer than anyone had expected. Contemporary thinking became more and more hostile toward free-market capitalism, which was blamed for the depression. Moreover, the economy did not seem to be self-equilibrating, as free-market economists had expected. When the Keynesians presented their theory of deficient aggregate demand and the need for demand management to stabilize the economy, economists were ready to listen to a new, more plausible model than the alleged "do nothing" ideal of laissez-faire.

The Keynesian revolution, led by Alvin Hansen, Seymour Harris, Abba P. Lerner, and Paul Samuelson, among others, excited the minds of a new generation of economists for several reasons. First, Keynes's middle-of-the-road policies were viewed, not as a threat to free-market capitalism, but as its savior. According to Marxism, which was growing in influence in the 1930s, capitalism was inherently unstable and would be characterized by periodic crises and depressions. Keynes's allegation that government could expand or contract aggregate demand as conditions required seemed to eliminate the apparent cycle in capitalism without eliminating capitalism itself. A laissez-faire policy of economic freedom could be preserved on a microeconomic level. Thus, Keynes changed the dismal science to the optimists' club: man could be the master of his economic destiny. As John Kenneth Galbraith notes, "Here was a remedy for the despair. . . . It did not overthrow the system but saved it. To the non-revolutionary, it seemed

too good to be true. To the occasional revolutionary, it was. The old economics was still taught by day. But in the evening, and almost every evening from 1936 on, almost everyone discussed Keynes'' (Galbraith [1965] 1975: 136). Seymour Harris (1948b), another Harvard professor, wrote a book entitled *Saving American Capitalism*. Elsewhere he stated, ''Keynes indeed offers government a larger degree of control over the economic process and a larger degree of operation than the old-fashioned classical economist; but his motive is to save capitalism, not destroy it.'' Furthermore, wrote Harris, ''Keynes wanted government to assume responsibility for demand, because otherwise the system would not survive. It was possible to have both *more* government activity and *more* private activity—if unemployment could only be excluded. And above all, Keynes would not remove the foundations of capitalism: free choice, the driving force of the quest for profits, the allocation of resources in response to the price incentive'' (Harris 1948a: 5–6).[1]

Further events seemed to confirm the Keynesian prescription. In the 1930s, the only countries which appeared to make headway in eliminating unemployment were totalitarian regimes in Germany, Italy, and the Soviet Union. For the United States, it was not until World War II that recovery seemingly occurred. Government spending and deficit financing increased dramatically during World War II, unemployment disappeared, and economic output soared. The Second World War is used as a classic example of the success of Keynesian economics. As Robert M. Collins comments, ''World War II set the stage for the triumph of Keynesianism by providing striking evidence of the effectiveness of government expenditures on a huge scale'' (Collins 1981: 12).

Although several forecasters predicted depression after the war, no depression developed and the business cycle appeared relatively stable in the postwar period, compared to the 1930s. Economists from Milton Friedman to Paul Samuelson declared the Western world to be ''depression proof'' because of federally insured bank deposits, the large size of government, and the replacement of the gold standard with a fiat-money system which permitted monetary inflation without restriction (Friedman [1954] 1968a; Samuelson 1983).

The self-assured style of Keynesian economics reached its zenith in the United States when the Kennedy administration, under the influence of Walter Heller, J. K. Galbraith, and other followers of the ''new economics,'' reduced marginal tax rates and deliberately ran a deficit in an effort to encourage economic expansion in the early 1960s. The rapid economic growth which followed appeared to confirm the benefits of this new program. During the halcyon days of Keynesian glory, Paul Samuelson's *Economics* became the landmark textbook in college classrooms around the world. Since its first edition in 1948, it has sold more than three million copies and has been translated into thirty-one languages.[2] When the first doubts about Keynesianism were raised in the early 1970s, *Newsweek* asked Samuelson, ''Is Keynes dead?'' He replied, ''Yes, and so are Newton and Einstein'' (Samuelson [1971] 1986: 874).

However, the unexpected appearance of stagflation—the concomitant rise of

inflation and unemployment—was a rude awakening for Keynes's followers in the 1970s. The Phillips curve—the alleged trade-off between inflation and unemployment—was run off its tracks. As James Callaghan, the British prime minister, said in 1977, "We used to think you could spend your way out of a recession. . . . I tell you, in all candor, that that option no longer exists, and that insofar as it ever did exist, it only worked by injecting bigger doses of inflation into the economy followed by higher levels of unemployment as the next step. That is the history of the past twenty years" (Hutt 1979: 13).

New theories, including monetarism, rational expectations, and supply-side economics, gained in popularity. But by the 1980s, with the introduction of aggregate-supply and aggregate-demand curves, the Keynesians had recovered, contending that prior to the 1970s, fluctuations in aggregate demand had dominated the data. In the 1970s, however, aggregate supply dominated, and the result was stagflation. As Alan S. Blinder argues, "That inflation and unemployment rose together following the OPEC shocks in 1973–74 and in 1979–80 in no way contradicts a Phillips-curve trade-off" (Blinder 1987: 42).

According to the Keynesians, the Reagan revolution was not so much a vindication of "supply-side" economics as a confirmation of the Keynesian prescription for a recession. The economic recovery of the 1980s coincided with an expansionary fiscal policy involving high federal deficits and lower marginal tax rates, two fundamental policy recommendations made by Keynesians. This is one side of Reaganomics that the Keynesians glowingly approved.

THE MISPLAYED COUNTERATTACK

Another major reason why macroeconomic interventionism has prevailed for so long is that defenders of the market have blundered repeatedly in attempting to present a cohesive, intelligent, and effective counterattack to the Keynesian revolution since 1936. Representatives of the classical school, such as Alfred Marshall, A. C. Pigou, Dennis Robertson, and other British members, provided little ammunition against Keynes. Although initial reviews of Keynes's *General Theory* were almost universally negative, within a few years the entire profession had shifted gears and accepted the Keynesian revolution.

Both Robertson and Pigou rejected the notion of wage reduction as a cure for unemployment during an economic downturn and endorsed the idea of using artificially stimulating public-works projects. Pigou, who had been hurt by Keynes's caustic attack on him, eventually praised his Cambridge colleague. According to Pigou, Keynes made an original and valuable contribution to economic analysis, for which economists owed him a great debt. "Nobody before him, so far as I know, had brought all the relevant factors, real and monetary at once together in a single formal scheme, through which their interplay could be coherently investigated" (Pigou 1950: 65).

Pigou should be given credit, however, for striking a significant blow against Keynes's concept of the liquidity trap. According to Keynes, the economy might

not be able to pull itself out of a depression; a further reduction in interest rates might not stimulate investment activity (Keynes 1936: 207). But Pigou refuted the liquidity-trap hypothesis and vindicated the classical belief in the ultimate adjustment to full employment by pointing out that deflation automatically increases the real value of cash holdings. This increase in the "real balance effect," as Don Patinkin calls it ([1956] 1965), could increase demand independent of any interest rate effect. This achievement has become known as the "Pigou Effect" (Pigou 1941; Shaw 1988: 10–14). Nevertheless, it should be kept in mind that the "Pigou Effect" is presented within the Keynesian aggregate framework and therefore cannot be regarded as purely "anti-Keynesian."

HAYEK AND THE AUSTRIAN SCHOOL

After *The General Theory* was published, the school that was in the best position to counter the "new economics" was that of the Austrians, led by Mises and Hayek. The Viennese economist Friedrich A. Hayek was in an excellent position to lead an anti-Keynes rebuttal in the late 1930s. As director of the Austrian Institute of Business Cycle Research, he worked closely under Ludwig von Mises in Vienna and, based on Mises's theory of the trade cycle, warned of an impending crisis and depression several months before the October 1929 stock market crash. He became the principal spokesman for Austrian economics as a professor at the prestigious London School of Economics. His book *Prices and Production* extended Austrian principles into a full-fledged macroeconomic model. The publication date, 1931, in the depths of the Great Depression, could not have been more propitious. Young economists, including John Hicks, Nicholas Kaldor, and Lionel Robbins, were searching for an explanation for the worsening crisis and were initially attracted to the Hayekian version of macroeconomics. Joseph A. Schumpeter claimed that the 160-page book "met with a sweeping success that [had] never been equaled by any strictly theoretical book," including Keynes's *General Theory* (Schumpeter 1954: 1120). Most contemporary economists and statesmen still believed that increased thrift and retrenchment were the logical cures for a depression, which had been caused by excessive spending and credit. "When therefore Professor Hayek's famous *Prices and Production* appeared in 1931, it fell on ready ears—it provided, seemingly, scientific justification for views already strongly held" (Kaldor 1980: 10).

During the early 1930s, Hayek was, in the words of John Hicks, "the principal rival to the new theories of Keynes" (Hicks 1967: 203). Keynes's most famous work was not published until 1936, but his antithrift views and his deficit spending recommendations were already being propagated. In *Prices and Production*, Hayek demonstrated that the government's inflationary policies, not the free market, were responsible for both the economic boom and the subsequent depression. Furthermore, he argued that renewed inflation during a depression simply makes matters worse. According to Hayek, a noninterventionist policy is the fastest way to reverse an economic downturn.

Hayek had previously criticized Keynes directly in a 1931–32 series of articles reviewing his *Treatise on Money* in *Economica*. According to Hayek, Keynes's approach to macroeconomics was too aggregative, emphasizing absolute price levels rather than relative prices, and lacked a basic understanding of the vital role of capital and interest in the economy (Hayek 1931a; Skousen 1990: 47–49).

Unfortunately, when Keynes's *General Theory* was published several years later, Hayek made the strategic error of ignoring it. After Hayek's negative reviews of *A Treatise on Money* had appeared, Keynes told him that he had changed his mind and was working on a new theory. Years later, Hayek lamented, "I did not return to the attack when he published his now famous *General Theory*—a fact for which I later much blamed myself. But I feared that before I had completed my analysis he would again have changed his mind. Though he had called it a 'general' theory, it was to me too obviously another tract for the times" (Hayek [1966] 1978a: 284). But there is more to the story than this excuse. Later, Hayek confessed that he did not write a full-scale critique because during World War II he was living in Cambridge and found himself "supporting Keynes in his struggle against wartime inflation, and at that time wished nothing less than to weaken his [Keynes's] authority" (Hayek 1983: 41).

Hayek's own theory of macroeconomics was assailed by Keynes, R. G. Hawtrey, and other leading economists. The new generation of Hicks, Robbins, and Kaldor, soon becoming disenchanted with Hayek's laissez-faire approach as the depression continued, turned to Keynes as their new mentor. By the early 1940s, Hayek had decided to pursue other interests in philosophy and politics. "When it proved that this new version—the *General Theory* of 1936—conquered most of the professional opinion, . . . I largely withdrew from the debate, since to proclaim my dissent from the near-unanimous views of the orthodox phalanx would merely have deprived me of a hearing on other matters about which I was more concerned at the time" (Hayek 1978b: 219). His bestselling book, *The Road to Serfdom* (Hayek 1944), was largely a political tract on totalitarianism, not a critique of Keynesian economics. (In fact, Keynes called it "a grand book" and said he was "in agreement with virtually the whole of it.")

In 1941, Hayek wrote his final book on theoretical economics, *The Pure Theory of Capital*, a treatise that matches Keynes's *General Theory* in obtuseness. Hayek was apparently dissatisfied with the growing complexity of his approach. Forty years later, he said that refuting Keynes would require "an elaboration of the still inadequately developed theory of capital." War and the difficulties of capital theory precluded Hayek from doing so (Hayek 1983: 41).

Once inflation had become a serious worldwide problem in the late 1960s and early 1970s, Hayek finally returned to a discussion of macroeconomic issues. Many of Hayek's earlier articles were compiled into a little book, *A Tiger by the Tail: The Keynesian Legacy of Inflation* (Hayek 1978b). It was meant to be a "40-years' running commentary on Keynesianism." Keynesian economists were criticized for their misuse of aggregates and inflationary policies. According

to Hayek, Keynesian economics is based on a "critical error," namely, that economic activity is solely a function of final aggregate demand, when the truth is that employment and production are based on a delicate balance between investment and final consumption (1983: 40). Another Hayek work, the pamphlet *Full Employment at Any Price?* (1975a), gave an Austrian critique of the Phillips curve which was in many ways quite distinct from Friedman's analysis. Based on Austrian theory of the business cycle, Hayek's critique emphasizes the "misdirection" of labor that inflation inevitably causes. There is no escape, says Hayek: "Unemployment must follow inflation" (1975a: 43).

LUDWIG VON MISES

When Hayek's mentor, Ludwig von Mises, came to the United States from Europe in the early 1940s, he was confronted head-on with a growing Keynesian revolution at the major American universities. Unfortunately, like Hayek, Mises miscalculated the impact of Keynes. He failed to anticipate that the revolutionary features of the "new economics"—the consumption function, final aggregate demand, the paradox of thrift, the liquidity trap, and unemployment equilibrium—would be so completely accepted by the economics profession. In his 1949 magnum opus, *Human Action*, Mises denied the creative genius of Keynes:

> Keynes did not add any new ideas to the body of inflationist fallacies, a thousand times refuted by economists. His teachings were even more contradictory and inconsistent than those of his predecessors who, like Silvio Gesell, were dismissed as monetary cranks. He merely knew how to cloak the plea for inflation and credit expansion in the sophisticated terminology of mathematical economics. (Mises [1949] 1966: 793)

Hayek believed Keynes's book to be a "tract of the times," and so did Mises. Thinking that Keynes was not a revolutionary but a vulgar inflationist who simply rehashed the older "monetary cranks," Mises was convinced that Keynesianism would die out fairly quickly. In 1948, the very year when the new economics was being hailed by Keynes's rapidly growing number of disciples as the "wave of the future" and the savior of capitalism, with literally hundreds of articles and dozens of books being published, including Samuelson's classic *Economics* and Seymour Harris's *New Economics*, Mises wrote his short article "Stones into Bread, the Keynesian Miracle" for a conservative publication, *Plain Talk*. In it, Mises misread the times in declaring the premature death of Keynesianism: "What is going on today in the United States is the final failure of Keynesianism. There is no doubt that the American public is moving away from the Keynesian notions and slogans. Their prestige is dwindling" (Mises [1952] 1980: 62).

Interestingly, in the same article, Mises contended that "it is one of the tasks of economics to analyze carefully each of the inflationist plans," yet he chose not to analyze Keynes in detail. To Mises, the choice involved "the awkward position of either leaving an apparent argument unanswered or of employing the

tools of logic and discursive reasoning against sparkling wit'' (ibid.: 56, 63). Of the dozens of books and hundreds of articles Mises wrote, I can find only three devoted specifically to refuting Keynes, all of which were general criticisms and not analytical in nature. *Human Action*, a tome of 900 pages, contains only a handful of references to Keynesian economics. Mises was not averse to writing a whole book exposing major fallacies—after all, he wrote one called *Socialism* ([1936] 1951). But it is baffling that he would largely ignore what William H. Hutt called ''the most serious single blow that the authority of orthodox economics has yet suffered'' (Hutt 1979: 12). Perhaps it was his age; Mises was already sixty when he came to the United States. As the elderly spokesman for the Austrian school of free-market economics, he probably expected his students to take up the anti-Keynesian crusade.

Mises's approach was largely antagonistic toward the academic statists and Keynesian apologists. He engaged in polemics and exchanged ad hominem attacks with the enemy. The Keynesians dismissed the free-market critics as ''reactionary,'' ''narrow-minded fanatics'' and as ''old-fashioned.'' Mises responded by calling the interventionists ''anti-economists,'' ''pseudo-progressives,'' and ''ignorant zealots.'' There was a lot of bad blood.

Mises also had little patience with political conservatives who began accepting various forms of interventionism. During a 1953 meeting of the Mont Pèlerin Society, a group of political and economic libertarian thinkers organized by Hayek, Mises rebuked those members who had begun to suggest state ownership, social insurance, minimum wages, and countercyclical fiscal policy (Peterson 1982: 149).

Mises's contribution to the anti-Keynesian debate was small but powerful. First, he argued that Keynes did not actually refute Say's law. ''He rejected it emotionally, but he did not advance a single tenable argument to invalidate its rationale'' (Mises [1952] 1980: 70). He pointed out that Keynes ignored the anti-inflation arguments of David Hume, W. S. Jevons, Leon Walras, Knut Wicksell, and the Austrians, all of whom had demonstrated the ill effects of currency depreciation. Second, Mises noted that inflationary policies were effective only in the short run and were therefore bankrupt policies. As Henry Hazlitt wrote in *Economics in One Lesson* ([1946] 1979), the proper role of the economist is to look beyond the short run and also to call attention to long-run consequences. According to Mises, ''We have outlived the short-run and are suffering from the long-run consequences of [Keynes's] policies.'' After quoting Lord Keynes's cynical dictum ''in the long run we are all dead,'' he wryly adds, ''I do not question the truth of this statement; I even consider it as the only correct declaration of the neo-British Cambridge school,'' going on to say, ''But the conclusions drawn from this truism are entirely fallacious'' (Mises [1952] 1980: 7).

Actually, Keynes was not saying that we do not have to worry about the long-run consequences of inflation, as Mises and other free-market economists have alleged. When Keynes made his now-famous statement ''in the long run we are

all dead," he was criticizing the monetarists who had adopted the strict quantity theory of money. According to the quantity theorists, an increase in the money supply would have no ill effects in the long run; it would simply increase prices. Keynes retorts, "Now 'in the long run' this is probably true . . . but this *long run* is a misleading guide to current affairs. *In the long run* we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again" (Keynes 1971: 65).

Third, Mises recognized Keynes's anti-savings and anti-capital bias. "The essence of Keynesianism is its complete failure to conceive the role that savings and capital accumulation play in the improvement of economic conditions" (Mises [1952] 1980: 207). Furthermore, "Keynes did not teach us how to perform the 'miracle . . . of turning a stone into bread,' but [taught instead] the not at all miraculous procedure of eating the seed corn" (ibid.: 71).

HENRY HAZLITT

With few professional free-market economists willing to take on the Keynesians, the task fell upon the shoulders of a business and literary journalist, Henry Hazlitt, who did not have a degree in economics. Now, in many ways having a nonprofessional write such a critique is welcome, but Hazlitt's lack of credentials made it all the more difficult for the economics profession to accept his critique. Moreover, his book was not published by a well-known university press but, rather, by a publisher of scientific books, D. Van Nostrand Company of Princeton, New Jersey (which, incidentally, produced a large number of free-market books in the 1950s and 1960s).

Hazlitt began his criticism much earlier than 1959, when *The Failure of the "New Economics"* was published. In his 1946 bestseller, *Economics in One Lesson*, he assailed public-works projects, the fetish of full employment, the anti-savings mentality, and the Keynesian notion that war and destruction are economically beneficial. He pointed out that the direct, obvious benefits of government action must not obscure the indirect, hidden harm to the rest of the economy. "The art of economics consists in looking not merely at the immediate but at the longer effects of any act or policy; it consists in tracing the consequences of that policy not merely for one group but for all groups" (Hazlitt [1946] 1979: 17).

Hazlitt's 1959 work, *The Failure of the "New Economics,"* is a lengthy, chapter-by-chapter, page-by-page critique of Keynes's *General Theory*. In many ways, it was a noble and brilliant effort. The book sold fairly well among conservatives and was reviewed favorably in the *Wall Street Journal* and other conservative publications. However, Hazlitt was dismissed in the academic journals as a "pamphleteer." Abba P. Lerner called the work a "most depressing book" and likened Hazlitt to an intelligent student who writes clearly and interestingly, yet misses every question on the exam and therefore gets an "F"

(Lerner 1960: 234). In the *American Economic Review*, his book was considered "completely unsatisfactory" (McKenna 1960: 190).

But bad reviews do not necessarily end the influence of a good work. However, the most serious problem with Hazlitt's book was that, instead of attacking the simpler, more straightforward apparatus of Keynesianism as taught in the classroom and the textbooks, he narrowly focused on Keynes's *General Theory*, which even admirers condemn as unreadable and unread. As Paul Samuelson declared:

> It is a badly written book, poorly organized; any layman who, beguiled by the author's previous reputation, bought the book was cheated of his five shillings. It is not well suited for classroom use. It is arrogant, bad-tempered, polemical, and not overly generous in its acknowledgements. It abounds in mares' nests or confusions. . . . Flashes of insight and intuition intersperse tedious algebra. An awkward definition suddenly gives way to an unforgettable cadenza. When finally mastered, its analysis is found to be obvious and at the same time new. In short, it is a work of genius. (Samuelson [1946] 1948: 148–49)

Hazlitt made a penetrating, scholarly, and intelligent dissection of every page of *The General Theory*, but he weakened his punch by getting bogged down in Keynes's esoteric terminology. In order to read the lucid Hazlitt, you had to read the oblique Keynes. Hazlitt himself refers to the "tedious length" of his arguments, the "dreary hours of analysis" (Hazlitt [1959] 1973: 6). (Thus, Hazlitt often reads like a graduate-level text!) He used a popular title, which sold plenty of copies, but his book gathered dust on the shelves of conservatives and businessmen while being largely ignored by economics professors. Hazlitt attempted initially to critique Keynesianism in general, but he gave up. "There is no effort to cope with all the errors of the immense body of Keynesian literature. Such an effort would have been hopeless, as I realized when I was once well launched on my task" (ibid.: 8).

Hazlitt rejected the popular view that Keynes was a pioneer: "I have been unable to find in it a single important doctrine that is both true and original. What is original in the book is not true, and what is true is not original" (ibid.: 6). Hazlitt's book is a wholesale indictment of Keynesianism. Hazlitt observes that Keynes, engaged in excessive aggregation, failed to note relative changes in prices and wages. He failed to understand Say's law. His "underemployment equilibrium" was a contradiction in terms. Keynes placed too little, not too much, emphasis on expectations. Hazlitt exposes Keynes's anti-savings mentality, his "strange lifelong bias against thrift." He points out Keynes's confusion in using terms. In short, according to Hazlitt, Keynes seemed to wish to deny "nearly every doctrine that is 'orthodox' or established" (ibid.: 329). He was against Adam Smith, J. B. Say, E. von Böhm-Bawerk, Alfred Marshall, and A. C. Pigou. In conclusion, Keynes was a modern-day mercantilist, favoring inflation, protectionism, usury, government controls, socialized investment, and nationalism.

Hazlitt also demonstrates the fallacy of Keynes's attack on the classical remedy for unemployment, which is to reduce wage rates. According to Keynes, reducing wage rates would be self-defeating because such an action would reduce aggregate demand (Keynes 1936: 260). Hazlitt shows that Keynes confuses wage rates with wage income. "This in turn leads him tacitly to assume that a reduction in wage rates means a corresponding reduction in wage *income*, and hence 'reduces purchasing power' and 'effective demand' and leads to a descending spiral without limit" (Hazlitt [1960] 1977: 5; see also [1959] 1973: 267–69). On the other hand, a reduction in wage rates can actually *increase* the aggregate income of wages paid if, as a result of a wage cut, more workers are hired or employees work more hours (Hazlitt [1960] 1977: 5).

Hazlitt's Choice of Keynes's Critics

Hazlitt followed up his *Failure* book with a compilation of essays by professional economists who also assailed Keynesian economics, including Jacob Viner, Frank H. Knight, Franco Modigliani, Benjamin Anderson, L. Albert Hahn, John H. Williams, W. H. Hutt, Arthur F. Burns, and Ludwig von Mises. One critic he did not include was George Terborgh, who demolished Alvin Hansen's (and Keynes's) stagnation thesis in *The Bogey of Economic Maturity* (1945).

In the introduction, Hazlitt again outlines his basic arguments against Keynes, then asks "How did it happen that a book so full of obscurities, contradictions, confusions, and misstatements was hailed as one of the great works of the Twentieth Century, and its author as a master economist?" He concludes, "But whatever the full explanation of the Keynesian cult, its existence is one of the great intellectual scandals of our age" (Hazlitt [1960] 1977: 10).

Hazlitt's selection of essayists varies in value. Many of the articles are not easy reading. Moreover, many of the contributors cannot be regarded as anti-Keynesian, although their articles are all critical of Keynes in one way or another. Jacob Viner was not opposed to deficit financing during a depression. Franco Modigliani is often regarded as a "neo-Keynesian," although his article, originally published in *Econometrica* (Modigliani 1944), caught the attention of the anti-Keynes camp when it convincingly demonstrated that the Keynesian system rested on one crucial non-market assumption, namely, that wage rates are rigid downward. David McCord Wright's musings on the Keynesian system, often muddled, are considered a rationalization for the "new economics" by most free-market economists. Wilhelm Röpke, the German economist who is considered the theoretical architect of West Germany's postwar economic miracle, reappraised Keynes in *Economics of a Free Society* (Röpke 1963), accepting the idea of running deficits and expanding the money supply as a necessary step during an economic breakdown. And John H. Williams wrote, "I have sympathized all along with the idea of a cyclically unbalanced budget and with tax policies designed to promote stability and growth" (Hazlitt [1960] 1977: 285).

CONSERVATIVE ECONOMISTS AS FRIENDLY CRITICS

A number of conservative economists have accepted the Keynesian version of depression economics. Ludwig M. Lachmann, a leader in the Austrian school and a longtime visiting professor at New York University, has expressed viewpoints closely allied with G. L. S. Shackle, some of which may be considered quasi-Keynesian. For example, Lachmann believes that Keynesian economics fits "extreme situations," such as war and deep depression. "It fits the circumstances of war and post-war inflation with the universal shortage of labour and material resources just as much as it did the world of the early 1930s with almost universal unemployment and 'excess capacity' " (Lachmann 1977: 136).

Leland Yeager, now Ludwig von Mises Professor of Economics at Auburn University, has applied the same logic to the postwar era: "If anyone should argue that pro-spending policies inspired by Keynesian doctrines contributed to general prosperity in the industrialized countries for roughly two decades after World War II, I would concede the point" (Yeager 1986: 27). Yeager also believes that, despite his reputation as an inflationist, Keynes was a "lifetime and eloquent opponent of inflation" (ibid.: 38; see also Humphrey 1981). It should be added, in his defense, that Yeager rejects many aspects of Keynesianism, which he says "was largely a dressing-up of old fallacies." In its place, Yeager supports a monetary-disequilibrium thesis of macroeconomic behavior (Yeager 1986: 40, 1973).

In his work in the late 1950s on the roots of capitalism, John Chamberlain, usually a staunch defender of the free market, states, "Keynes seemed justified in the Thirties in his call for 'government investment' to turn the tide from underconsumption and unemployment for the very palpable reason that Say's Law wasn't taking hold" (Chamberlain [1959] 1965: 199).

Must Conservatives Reject Keynes?

Hazlitt's anti-Keynes campaign in the early 1960s drew fire from some conservatives. For example, writing in the *National Review*, Ernest van den Haag argued that conservatives need not repudiate Keynes. "Conservatives often object to the economics of Lord Keynes with more heat than light." Keynesian theory is "politically neutral," Haag asserted, and does not require an enlargement of government. The Keynesian prescriptions of lowering taxes or giving away money (e.g., increased pensions) can expand demand. "There is no need for an increase in government activity—public works or services." Nor should there be any fear of runaway inflation. "Many people feel that the attempt to remedy depression may land us in inflation. By this logic we should never irrigate land for it may lead to inundation, nor should we drain swamps for it may lead to aridity." Haag accepted the Keynesian doctrines that depression is due to a lack of aggregate spending and that wage cutting, the standard solution to unem-

ployment, reduces aggregate demand and is counterproductive. "One might as well recommend death as a remedy for illness" (Haag 1960: 361–64).

The business community had mixed emotions about Keynes as well as the New Deal. Opposition to deficit spending and New Deal programs, such as the National Recovery Act (NRA), was fairly consistently maintained by the U.S. Chamber of Commerce and the National Association of Manufacturers (NAM). The Chamber supported tax relief, budget balancing through cuts in federal spending, an easing of securities regulation, and returning relief programs to local authority. After World War II, the NAM championed the cause of free enterprise and repeatedly attacked Keynesian policies through its extensive advertising in business publications. NAM advocated balanced budgets, tax cuts, and government efficiency (Collins 1981: 23–52). However, there was no consensus among business leaders, and a form of commercial Keynesianism developed in other business groups, such as the Business Advisory Council (BAC) and the Committee for Economic Development (CED) (ibid.: 53–73, 115–95).

KEYNES AT HARVARD

At around the same time that Hazlitt's anti-Keynes books were published, a group of older political conservatives who were Harvard graduates had become perturbed that their alma mater was developing into "a pink and red hotbed" and the "launching pad for the Keynesian rocket in America." They created the Veritas Foundation and commissioned a 100-page booklet entitled *Keynes at Harvard*. Students in the 1960s who were seeking a simple but thorough refutation of the "new economics" contained in Samuelson's textbook were greatly disappointed by this volume. Unfortunately, rather than being a cogent analysis of Keynesian fallacies, it was merely a polemical tract that attacked Keynesianism through guilt by association with Fabian Socialists and Communists. Galbraith called it a "minor witch hunt" intended to extirpate Keynesianism from Harvard University (Galbraith [1965] 1975: 139). Keynesianism was "not economics," we were told by the Veritas Foundation, "but left-wing political theory." It was linked to Fabian socialism, Marxism, and communism. "The Keynesians and the Communists remain blood-brothers to the end" (Dobbs 1962: 85). Alfred Marshall was labeled a Fabian Socialist, and even Joseph Schumpeter, the Austrian who became a Harvard economist in the 1940s, was inaccurately called an "old time socialist" (ibid.: 9). The booklet sold well among political conservatives, particularly in American Opinion bookstores, but in the end, as Galbraith stated, "The university was unperturbed, the larger public sadly indifferent" (Galbraith [1965] 1975: 139).

The naive approach of the Veritas Foundation is reminiscent of William F. Buckley's facetious shortcut to deciphering the meaning of a book without reading it. He suggests that one look at the first and last words, which together will miraculously reveal the essential purpose of a work. Hard-core political con-

servatives will find comfort in learning that the first and last words of *The General Theory* are "this . . . evil."

BETTER CRITICS

More laudable efforts to refute Keynes's doctrines were undertaken by L. Albert Hahn, Jacques Rueff, and Benjamin Anderson, among others. Hahn, a German economist who wrote a Keynesian-style work in the early 1920s, repudiated his own inflationary theories and castigated Keynes for resurrecting his earlier thesis. Hahn's translated work, *The Economics of Illusion*, a major critique of the "new economics," appeared in 1949. In the introduction, Henry Hazlitt wrote, "It was not merely increased scholarship and thought, but his daily experiences as a business man and as a banker, that led him to desert his pre–Keynesian Keynesianism" (Hahn 1949: 2). Hahn attacks many aspects of Keynesianism: liquidity preference, the purchasing-power theory, wage inflexibility, mercantilism, and the anti-savings bias. In response to Keynes's symbolic promotion of pyramid-building, Hahn states, "But the building of pyramids is, in any circumstances, one of the most useless enterprises, since they serve as a residence not for the living but for the dead—and for very few dead at that" (ibid.: 97). Refuting the "paradox of thrift," Hahn declares that, even in a depression, thrift still makes sense, both privately and publicly. "The thriftily, not the wastefully, managed enterprise survives. The wealth of a nation rests not only on the industry but also the thrift of its citizens. Thrift, and not wasteful spending, is the fundament of public finances" (ibid.: 105).

Hahn's more general book, *Common Sense Economics*, followed in 1956. A neglected but extremely valuable exposition of free-market principles, with many Austrian threads woven into its fabric, it emphasizes the importance of time in the production and consumption process. Hahn rejects the multiplier and accelerator principles, writing that "more investment, so far as it can take place at all, will not lead to more but to less simultaneous consumption—contrary to the reasoning of the multiplier theory" (Hahn 1956: 141). On the length of the Great Depression, he declares, "The fact that the United States, at the peak of the boom in 1936, still had several million unemployed can be explained only by excessive real wages" (ibid.: 177). He also criticizes Keynesian growth theory, which assumes wage rigidity, fixed relationships between capital and labor, and other "mechanistic" data. "Growth theories may turn out to be just as devoid of practical significance as the stagnation theories," he concluded (ibid.: 124).

Jacques Rueff, a French Treasury official and Professor of Economics at the Institut d'Études Politiques in Paris, was a major supporter of the gold standard and a chief opponent of Keynesian policies, which he felt would lead to inflation, macro-imbalances, and controls (Rueff 1964). He delineated what he considered the Keynesian fallacies in a lengthy article for the *Quarterly Journal of Economics*, objecting to Keynes's chief "error," the belief that "to save is to demand nothing" (Rueff 1947: 355). Specifically, Rueff demonstrates that, under a pure

metallic standard, an increase in the demand for cash balances—Keynes's liquidity preference—is not permanently lost, but causes increased demand for investment goods, securities, or money. But since an increase in the demand for money is the same as an increase in the demand for more gold production, new employment opportunities will arise, and unemployment will be reduced. "It is therefore impossible to accept Lord Keynes' conclusion that, in the case assumed, the insufficiency of demand for consumers' goods or investment goods constitutes an obstacle to the increase of employment" (ibid.: 348–49). An indispensable catalyst to increasing employment is a reduction in money wages and prices, which Rueff advocated. He also predicted the political consequences of Keynes's policies: "Thus, the inauguration of a vast program of public works, if it is carried out over a prolonged period, will revive in the world an economic regime invented by Hitler, from which victory was supposed to free us" (ibid.: 365–66).

Hazlitt included Rueff's article in *Critics*, but, unfortunately, he did not include either the rebuttal by Harvard's James Tobin or Rueff's rejoinder. The Keynesians always seemed quick to assign someone to respond to each and every criticism in the academic journals. Even though Tobin asserts that Rueff's attack failed to dethrone the Keynesian system, he does grant Rueff's gold-standard case. Still, Tobin clings to the notion that wage and price cuts are self-defeating and "socially divisive" (Tobin 1948: 769). Tobin seems surprised by Rueff's opposition, arguing that "the standard Keynesian remedies for unemployment require little direct state intervention, since they rely on the fiscal powers of the government" (ibid.). Tobin also thought that Rueff exaggerated the possibilities of inflation (ibid.: 770). In his rejoinder, Rueff continued his attack. "My thesis is opposed to that of Lord Keynes because, when he says that to demand financial reserves is to demand nothing, I reply, it is to demand forms of wealth," which in turn "tends to create an additional demand," thus restoring full employment (Rueff 1948: 774).

Two other critics worth mentioning are Benjamin Anderson, chief economist at Chase National Bank, and Colonel E. C. Harwood, founder of the American Institute for Economic Research. As editor of the *Chase Economic Bulletin*, Anderson warned his readers of an impending crisis in the 1920s and later blamed the 1930s depression on government mismanagement. In his financial and economic history of the United States in the twentieth century, Anderson devotes a chapter to Keynesian economics, criticizing Keynes for his excessive use of aggregate concepts, which obscure the "interrelationships of the elements in these vast aggregates" (Anderson [1949] 1979: 393). The multiplier is fallacious, says Anderson, because Keynes assumes that all new income that is not consumed is hoarded (ibid.: 396).

Colonel E. C. Harwood, a professor of military science at MIT, wrote regularly on economic issues for the *Annalist*, a financial and economic weekly published by the *New York Times*. Not only did he forecast the stock market crash and the subsequent depression, but he disagreed with Keynes on the cause of the depres-

sion. Harwood corresponded with Keynes in the 1930s, taking issue with, among other things, Keynes's explanation that the depression was caused by a lack of purchasing power or effective demand. According to Harwood, hoarding and excessive bank reserves were not evident in the banking system until 1932, at the bottom of the depression, and therefore deficient demand could not have been a cause of the depression (Mehra 1985: 15–16).

One other critic worth highlighting is Peter F. Drucker, the Austrian-born guru of business management. Drucker has been a vigorous opponent of the "new economics" since 1946, when he wrote an article dispelling Keynesianism as a "magical system" (Drucker [1946] 1971). Keynesian policies have penalized capital formation, created excessive taxation, aggravated inflation, promoted political irresponsibility, and caused "under-saving on a massive scale," he has charged. (Drucker 1981: 11). "Keynes is in large measure responsible for the extreme short-term focus of modern politics, of modern economics, and of modern business. . . . Short-run, clever, brilliant economics—and short-run, clever, brilliant politics—have become bankrupt" (Drucker 1976: 114–15). Drucker points out that Western nations which have adopted Keynesian thinking, such as the United States and Great Britain, have had the lowest growth rates, while non-Keynesian countries, particularly Japan and other Far Eastern nations, have had the highest growth rates. Regarding Keynes's theory of final aggregate demand, Drucker states emphatically that there is "no Keynesian 'multiplier' which automatically transforms consumer demand into capital and investment" (Drucker 1985: 226). However, "actual experience has been the very opposite from what Keynes postulated: policies to raise consumption have produced sharply lower capital formation, declining investment, declining productivity, increasingly intractable unemployment, and self-delusions of a 'soft landing' " (ibid.: 225). There is much of the old Vienna in Peter Drucker.

W. H. HUTT

The free-market economist who devoted more time and effort than anyone else to dissecting Keynes was W. H. Hutt, Professor of Economics at the University of Cape Town. Unlike other market economists, he recognized from the beginning the revolutionary character of *The General Theory* and its threat to the free market. His "intense dissatisfaction" with Keynes's theory of unemployment caused him to write his first major work, *The Theory of Idle Resources*, in 1939. His basic theme is that truly involuntary idleness is "always and solely due to a defect in the administration of the pricing mechanism" (Hutt [1939] 1977: 20). It is not simply due to a deficiency in purchasing power, as Keynes had alleged. According to Hutt, all unemployment is really voluntary since resources are deliberately withheld by their owners, who insist on a price or wage rate higher than the free market's. The only exception is in the case of government intervention, such as setting a minimum wage.

During the late 1930s, Hutt devoted much time to figuring out *The General*

Theory, "thinking through the complexities of the subject." Then the war came. "But early in 1940 the whole attempt suddenly seemed fruitless and unimportant. I tied up my voluminous typescripts, put them in a cupboard and dismissed them from my mind." After the war, Hutt's views seemed to him hopelessly "out of fashion," with "no warm support." He postponed publishing his critique of Keynes for nearly a quarter of a century.

Unfortunately, Hutt appears to have simply gathered up his voluminous random notes and published them in 1963 under the title *Keynesianism: Retrospect and Prospect*. His writing style is often unclear and rambling, with the introduction of new terminology that rivals Keynes's in complexity and possible misinterpretation. Perhaps he had studied Keynes for so long that he began imitating his disorganized, confusing style. I counted at least two dozen new phrases that did more to obscure than to elucidate: "real damping effect," "pseudo-idleness," "savings hump," "cushioning effect," "autonomous growth," "supposed decumulation," "gross and net accumulation," "elasticity of release of capacity," and "maximum price fixation," among others (Hutt 1963 passim).[3]

Hutt's book was not well received. Later, he explained, "I must frankly admit to a failure in communication in my 1963 *Keynesianism*. My argument failed to get across, on some points, even to my friends" (Hutt 1979: 16–17). Hutt made a second attempt in his 1979 work, *The Keynesian Episode: A Reassessment*, with extensive revisions and new sections on the consumption, multiplier, and accelerator fallacies. It is a definite improvement over the 1963 version, eliminating most of the unfamiliar jargon. He reiterates his principal criticism of Keynesianism, that is, that Keynesians view any decline in prices and wages as the cause, not the cure, of crises and depressions. In reality, Hutt asserts, "the cutting of prices in any field is simply the creation of additional demand for noncompeting goods" (ibid.: 153–54). Yet, despite his improved version, Hutt's broad criticism went unheeded.

MURRAY N. ROTHBARD

In the early 1960s, Murray N. Rothbard, now considered the dean of the neo-Austrian school, devoted substantial sections of his works to a free-market counterattack on Keynesianism. Rothbard recognized early in his professional career that Keynesian economics had to be addressed. In "The Essential Von Mises" he wrote, "Keynesian economics was beautifully tailored to be the intellectual armor for the modern Welfare State, for interventionism and statism on a vast and mighty scale" (Rothbard [1973] 1980: 264).

Rothbard's extensive analysis of the Keynesian system in his massive treatise, *Man, Economy, and State*, includes a critique of the accelerator principle, the multiplier, liquidity preference, the consumption function, and deficit financing. On the "underemployment equilibrium" thesis, Rothbard concludes: "The sum and substance of the 'Keynesian Revolution' was the thesis that there *can* be an

unemployment equilibrium on the free market. As we have seen, the only sense in which this is true was known years before Keynes: that widespread union maintenance of excessively high wage rates will cause unemployment'' (Rothbard [1962] 1970: 685).

Rothbard continued his critique in his 1963 book, *America's Great Depression*, especially regarding the liquidity trap, wage rigidity, and the stagnation thesis. Finally, based on the earlier work of Hutt, he offered the clearest, most devastating attack on the accelerator principle ever presented (Rothbard [1963] 1983a: 58–65). Rothbard pointed out a major oversight of the Keynesian accelerator principle, that is, the failure to recognize that when investment demand in one industry accelerates, investment demand in another industry may fall. The net result in the whole economy may be zero. Thus, the Keynesians commit the fundamental error that Hazlitt warns against in his *Economics in One Lesson*: focusing on one side of an action while ignoring the other.

THE CHICAGO SCHOOL

The Austrian economists, as defenders of the free market and critics of state interventionism, had great difficulties achieving academic recognition during the 1950s and 1960s. However, the Chicago school, led by Milton Friedman, was another brand of free-market defenders that had greater success, although its path to recognition was often delayed and detoured by the monolithic Keynesian roadblock.

No doubt one of the reasons why the Chicago school gained greater acceptance was that there were some things they had in common with the Keynesians: they both used aggregate concepts; they both relied on empirical studies to support their models; and they both favored some form of government involvement in the macroeconomic sphere. Granted, the Chicagoites favored monetary policy, while the Keynesians emphasized fiscal policy, but both involved forms of state interventionism.

The Chicago school was surprisingly pro-Keynesian in certain respects during the depression and afterwards. Frank H. Knight, pictured as the most ''anti-Keynesian'' of economists by *Fortune* was quoted as saying, ''We're all Keynesians in wanting to do something about depression'' (McDonald 1950:131). Another Chicagoite Henry C. Simons advocated deficit spending, monetary inflation, and the nationalization of railroads, utilities, and all other ''uncompetitive'' industries—all in a book ironically entitled *Economic Policy for a Free Society* (Simons 1948). J. Ronnie Davis notes, ''Frank H. Knight, Henry Simons, Jacob Viner, and their Chicago colleagues argued throughout the early 1930's for the use of large and continuous deficit budgets to combat the mass unemployment and deflation of the times'' (Davis 1968: 476). Milton Friedman recounts the Chicago response to Keynesian ideas: ''There was nothing in these views to repel a student; or to make Keynes attractive. On the contrary, so far as policy was concerned, Keynes had nothing to offer those of us who had sat

at the feet of Simons, Mints, Knight, and Viner'' (Friedman 1974: 163). In sum, Keynes did not offer anything new to the Chicago school. It was Keynesian before Keynes!

Friedman on Keynes

Milton Friedman himself has been accused of being a quasi-Keynesian (see, for example, Patinkin 1974; Drucker 1981: 7; Garrison's chapter in this volume). He has made a number of remarks sympathetic to Keynes, such as the following, on the Great Depression:

> By contrast with this dismal picture [the Austrian laissez-faire prescription], the news seeping out of Cambridge (England) about Keynes's interpretation of the depression and of the right policy to cure it must have come like a flash of light on a dark night. It offered a far less hopeless diagnosis of the disease. More important, it offered a more immediate, less painful, and more effective cure in the form of budget deficits. It is easy to see how a young, vigorous, and generous mind would have been attracted to it. (Friedman 1974: 163)

Of course, Keynesianism presented by Keynes was not so attractive to Friedman as the pre-Keynesianism authored by Friedman's colleagues at Chicago. Elsewhere, Friedman has glorified Keynes as a ''brilliant scholar'' and ''one of the great economists of all time,'' describing *The General Theory* as a ''great book.'' In sum, he declares, ''I believe that Keynes's theory is the right kind of theory in its simplicity, its concentration on a few key magnitudes, its potential fruitfulness'' (Friedman 1986: 47–48, 52).

However, while Friedman may be viewed as a Keynesian in a macro sense, he should be considered an anti-Keynesian in a micro sense. For instance, he rejects Keynes's interpretation of the quantity theory of money. According to Friedman, the velocity of money is much more stable than Keynes had formulated, and thus the relationship between the money supply and prices and output is much more reliable. As such, Friedman consistently contends, monetary policy is far more effective than fiscal policy in influencing employment and national output (Friedman and Heller 1969). The Keynesians argue that monetary policy was relatively ineffective during the Great Depression, while the monetarists argue that the Federal Reserve policy was all too effective in allowing the banking system to collapse and the money stock to decline precipitously. ''In the United States—and the experience of the United States is not atypical—the total stock of money in the hands of the public declined by more than a quarter from 1929 to 1933. . . . Far from being testimony to the irrelevance of monetary factors in preventing depression, the early 1930's are a tragic testimony to their importance in producing depression'' (Friedman [1954] 1968a: 78–79). Friedman's monumental history of monetary policy (Friedman and Schwartz 1963), which links economic expansions and contractions with the money supply, made such a

dramatic impact on economic thinking that he was awarded the Nobel Prize in Economics in 1976.

According to Friedman, open-market operations are sufficient to reverse a recession or to curtail inflation. In his 1962 book, *Capitalism and Freedom*, he questioned the effectiveness and stability of Keynesian countercyclical finance, and he challenged the crude Keynesian multiplier analysis that a $100 increase in government expenditures would expand national output by $300 (assuming a multiplier of three). Friedman debunked the myth of the multiplier:

> This simple analysis is extremely appealing. But the appeal is spurious and arises from neglecting other relevant effects of the change in question. When these are taken into account, the final result is much more dubious: it may be anything from no change in income at all, in which case private expenditures will go down by the $100 by which government expenditures go up, to the full increase specified. And even if money income increases, prices may rise, so real income will increase less or not at all. . . . The simple Keynesian analysis implicitly assumes that borrowing the money does not have any effects on other spending. (Friedman 1962: 80, 82)

Friedman noted that the federal budget is the "most unstable component of national income in the postwar period." The Keynesian balance wheel is usually "unbalanced," and it has "continuously fostered an expansion in the range of government activities at the federal level and prevented a reduction in the burden of federal taxes" (ibid.: 76–77).

Nevertheless, it should be emphasized that monetarists do not normally reject the role of government in monetary affairs; they only differ on the form of government participation. Keynesians prefer fiscal policy, while monetarists emphasize monetary policy. Both reject the gold standard, the free-market policy, and both support a fiat-money standard.

Keynesians and monetarists still debate the effectiveness of various macroeconomic policies. Keynesians believe in constantly tinkering with the economy, while monetarists believe that a mechanical rule—a gradual expansion of the money supply approximately equal to the economic rate of growth—should be established so that government interference is minimal. In this sense, the Chicago tradition, while not as laissez-faire as the Austrian school, is more laissez-faire than the Keynesian activists and therefore constitutes a "counter-revolution" (Johnson 1971).

However, a recent development in the monetarist camp suggests that the Chicago school may not be very far from the Austrian position on macroeconomic policy. Friedman apparently no longer rejects a pure gold standard on the basis of its alleged resource cost to society: "Yet the resource cost has not been eliminated" under a fiat-money standard and, in fact, may increase due to the uncertainty of government policy. He has hinted that there may not be any role for government in the macroeconomic arena. "Our own conclusion—like that of Walter Bagehot and Vera Smith—is that leaving monetary and banking ar-

rangements to the market would have produced a more satisfactory outcome than was actually achieved through government involvement'' (Friedman and Schwartz 1986: 59).

Friedman has attacked many other critical concepts in Keynesianism, such as the consumption function and the Phillips curve. Keynes himself considered his ''consumption function'' (1937) to be the most significant discovery of *The General Theory*, where he hypothesized a ''psychological law'' such that individuals, and therefore nations, that become wealthier not only save more income but at a higher rate (Keynes 1936: 96–97). Therefore, the possibility of secular stagnation increases as a country becomes more developed, since investment opportunities would have to expand at a more rapid pace to keep up with savings. Moreover, Keynesians believe that, by redistributing income and wealth through highly progressive taxation rates and heavy death duties, a nation's marginal propensity to consume can be increased, which in turn will increase the multiplier and stimulate economic activity (ibid.: 372–73). Historically, of course, Keynes's theory has proved inaccurate—higher marginal tax rates reduce economic activity.

Friedman challenged Keynes's policy recommendation by questioning his basic assumption that the marginal propensity to consume declines as individual and national income increases. Previous work by Simon Kuznets and other statisticians had shown that the national savings rate did not fluctuate significantly over the years, even though countries had become more developed. According to Kuznets, consumption rises secularly over the long run; therefore, no tendency toward permanent stagnation occurs (Kuznets 1941: 274–83). Then came Friedman's pathbreaking work, *A Theory of the Consumption Function* (1957), where he argued convincingly that one's savings habits do not depend entirely on current income but on one's permanent income level over a period of time. This ''permanent income hypothesis'' destroyed the Keynesian idea that the marginal propensity to consume declines for wealthier individuals; rather, it tends to stay the same. Thus, neither a progressive income tax nor a high estate tax would necessarily stimulate economic activity, as the Keynesians had supposed.

Friedman also disputed the implications of the Phillips curve. According to Friedman, A. W. Phillips had erred by confusing nominal wages with real wages, thus falsely concluding that a national policy of low inflation would necessarily cause high unemployment and that a policy of low unemployment could only be accomplished by high inflation. While Friedman granted the possibility that higher inflation could temporarily reduce unemployment, he contended that no such relationship existed in the long run because there is no long-run money illusion between nominal wages or prices and real wages or prices. Thus, ''there is always a temporary trade-off between inflation and unemployment; there is no permanent trade-off'' (Friedman 1969a: 104). According to Friedman, any effort to push unemployment below the ''natural rate of unemployment'' must lead to an accelerating inflation. Moreover, ''the only way in which you ever get a reduction in unemployment is through *unanticipated* inflation,'' which is

unlikely (Friedman 1975: 29). Friedman concluded that any acceleration of inflation would eventually bring about higher, not lower, unemployment. Thus, efforts to reduce unemployment by expansionary government policies could only backfire in the long run.

MELTZER'S NEW INTERPRETATION

Allan H. Meltzer, a conservative economist and monetarist at Carnegie Mellon, has suggested a new interpretation of Keynes: Keynes's original theory of employment and output was not so much related to rigid wage rates as to expectations and uncertainty in the investment markets and capital goods. This instability was caused by erratic government rules. According to Meltzer, Keynes believed that an elite body of intellectuals, including himself, could manage the capitalist economy by adopting various socialistic rules. Keynes favored the adoption of stable rules, a concept that naturally appeals to Meltzer and other monetarists. But Meltzer differs with Keynes over the types of rules the government should adopt: "I believe that he [Keynes] chose the wrong policy rules" (Meltzer [1968] 1988: 319). The Keynesian rules included the socialization of investment, permanently lower interest rates, and inflation through a Bretton Woods-style international monetary system.

Meltzer has criticized Keynes on several counts: Keynes neglected the open international economy; his system was based on a closed economy; although he frequently opposed inflation, "nevertheless, Keynes took the lead in developing an international monetary system with a bias toward inflation" (ibid.: 313). Furthermore, Keynes's idea of state management of investment fails. He supported central planning, which does not work. Finally, "if Keynes's sympathies lay with freedom, his policies often sacrificed freedom" (ibid.). Keynes favored state-directed investment, cartels, commodity price stabilization schemes, and rigid exchange controls.

THE NEW CLASSICISTS AND RATIONAL EXPECTATIONS

An offshoot of the Chicago school is the New Classical school, which uses the concept of "rational expectations" to argue that government policies are ineffective at best and counterproductive at worst. Leaders of the New Classical macroeconomics include Robert E. Lucas at the University of Chicago and Thomas J. Sargent at the University of Minnesota. They contend that Keynesians and other proponents of interventionism fail to take into account the reaction of businesses and individuals to their policies. When the expectations of these market participants are taken into account, the impact of systematic government policies is less likely to be felt, while unsystematic government behavior is likely to be deleterious (Lucas and Sargent 1978: 69–70).

The theoretical conclusion of the New Classical economists reflects a return to pre–Keynesian principles. "The central lesson of economic theory is the proposition that a competitive economy, left to its own devices, will do a good job of allocating resources" (Lucas 1982: 4). Keynes's whole effort was an attempt to deny this basic classical supposition. In the end he failed, according to Lucas. Thus, Lucas concludes, "Keynesian economics is dead. . . . True, there are still leading Keynesians in academic and government circles: Keynesian economics is alive in that sense. But this is transient because there is no fresh source of supply" (ibid.: 3).

BUCHANAN AND THE PUBLIC CHOICE SCHOOL

Another broadside attack on the "new economics" has come from the Public Choice school, headed by James Buchanan, a George Mason University professor, who won the Nobel Prize in 1986. According to Buchanan and his followers, Keynesian policies in the West have resulted in tragedy, not triumph. "Keynesianism may represent a substantial disease, one that can, over the long run, prove fatal for a functioning democracy" (Buchanan and Wagner 1977: 56). They point out that the legacy of Keynes includes huge budget deficits, massive inflation, gigantic capital consumption, and a bloated public sector.

Yet Buchanan and his school do not attempt to dissect the Keynesian apparatus. "Our critique of Keynesianism is concentrated on its political presuppositions, not on its internal theoretical structure" (ibid.: 5). They simply argue that Keynesianism is the wrong model with which to describe the democratic decision-making process. "It is as if someone tried to make a jet engine operate by using the theory of the piston-driven machine" (ibid.). According to their theory of public choice, it is natural for politicians to continue spending while avoiding taxation. The resulting destruction of the balanced-budget constraint has created an unhealthy inflationary bias. Adopting an Austrian theme, Buchanan and Wagner object to inflation, which causes destructive "nonneutral" malinvestments. "Money creation falsifies the signals that operate within the economy. In consequence, labor and capital move into employments where they cannot be sustained without increasing inflation" (ibid.: 183). Buchanan and Wagner echo the views of the new classicists: "There is simply no evidence at all that a free economy operating with a regime of fiscal-monetary stability is inherently unstable, or that such an economy must suffer excessive unemployment" (ibid.: 184). The solution to the nation's economic ills is to support a balanced-budget constitutional amendment, repayment of the national debt, and a noninflationary monetary system. By noninflationary, Buchanan and Wagner do not mean a return to the gold standard but, rather, a monetary expansion rule equal to real output growth (ibid.: 180–82). In general, the Public Choice school appears to incorporate the ideas of several other "free-market" camps—the monetarists, new classicists, and Austrians.

THE SUPPLY-SIDERS

Another "neoconservative" school has been highly critical of Keynesian spending and tax policies. Led by Paul Craig Roberts, Jude Wanniski, Martin Anderson, and Arthur B. Laffer, the Supply-Side school became prominent in the 1980s during the Reagan administration. They argue that the Keynesian economists mistakenly claim that government spending stimulates the economy more effectively than tax cuts. Moreover, the high progressive taxes advocated by the Keynesians do not stimulate economic growth, as Keynes and his followers claim (Keynes 1971: 373), but are a strong disincentive to work, to invest, and to save. As Paul Craig Roberts states,

> Supply-side economics brought a new perspective to fiscal policy. Instead of stressing the effects on spending, supply-siders showed that tax rates directly affect the supply of goods and services. Lower tax rates mean better incentives to work, to save, to take risks, and to invest. As people respond to the higher after-tax rewards, or greater profitability, incomes rise and the tax base grows, thus feeding back some of the lost revenues to the Treasury. The saving rate also grows, providing more financing for government and private borrowing. (Roberts 1984: 25)

While supply-siders have prescribed many free-market policies, such as tax cuts and a return to a gold standard, they have been accused of adopting a Keynesian philosophy in other respects. The Laffer curve, for example, suggests that there is an optimal tax rate that maximizes government revenues, which many free-market economists would consider a dubious national goal at best. Supply-siders also downgrade the size of the federal budget deficit, concern over which Roberts calls "unjustified hysteria" (1989: 28). According to Roberts, the United States has one of the lowest ratios of federal debt to GNP among industrialized nations. Finally, by perpetually calling for lower interest rates and a more expansionary monetary policy during "tight money" conditions, the supply-siders often appear to be as inflationary as the Keynesians.

MODERN AUSTRIANS AND THE NEW MACRO VIEW

The modern Austrian school has recently shown a strong interest in macroeconomic issues. A large number of free-market economists, including Hans F. Sennholz, Gerald O'Driscoll, Jr., Sudha R. Shenoy, and Stephen O. Littlechild, have followed in the footsteps of the Austrian founding fathers and have written extensively on Keynesian theory.

One economist who has been in the forefront of contributors to the anti-Keynesian literature is Roger W. Garrison, Professor of Economics at Auburn University. According to Garrison, Keynes's chief mistake is rooted in his excessive propensity to aggregate and his failure to recognize the economic process as a time-oriented, capital-using system. It takes both time and capital to trans-

form raw commodities into manufactured goods and, ultimately, into consumer goods and services that people can use. By excessively aggregating key variables, Keynes ignores critical market processes that determine economic fluctuations. Specifically, the Keynesian system fails to recognize the potential miscoordination between the stages of production and final consumption which form the foundation of business cycles. In this regard, Garrison contrasts Keynesian macroeconomics with Austrian theory.

> Significantly, Keynes used a single variable, the marginal efficiency of capital, to gauge the value of capital goods. The Austrian theorists, by comparison, distinguished between the different stages of production and associated a demand price with each stage. It is precisely at this point in *The General Theory* that Keynes's propensity to aggregate conceals market processes. (Garrison 1985: 317)

Because of this inability to recognize miscoordination between stages of production, the Keynesian model fails to recognize the false signals that inflation can systematically impose on the economy.

In one of the most profound articles ever written on macroeconomic issues, "Time and Money: The Universals of Macroeconomic Thinking," Garrison demonstrates the inherent weaknesses of the Keynesian model (as well as the monetarist alternative). The two key variables in macroeconomics are time and money: "Time is the medium of action; money is the medium of exchange" (Garrison 1984: 200). Using Hayekian imagery, Garrison claims that Keynesian economics envisions the relationship between time and money as a "broken joint," while monetarists view the relationship as a "tight joint." The Austrian position is the middle ground, where there is a "loose joint" between the supply of and demand for goods (ibid.: 202–11). The Keynesian "broken joint" approach leads to a short-term view only. "With no effective intertemporal link (money is a broken joint), the [Keynesian] analysis focuses exclusively on the short run. The long run, in this view, is nothing more than an unending sequence of short runs, each with its own equilibrium (or disequilibrium) solution" (ibid.: 208).

In my own analysis of macroeconomic behavior, *The Structure of Production* (Skousen 1990), I come to conclusions along the lines of Garrison's and Hayek's. Keynes's theory of macroeconomics is not so much general as incomplete in describing total economic activity. Aggregate demand must take into account demand at every level of production, not just final consumer demand. Moreover, changes in aggregate supply, that is, technological advancement, productivity, capital deepening and lengthening, and new savings, must also be considered. Keynes made the mistake of ignoring the most critical part of the macroeconomic structure, the intertemporal demand for and supply of higher-order capital goods.

CONCLUSION

In this extended survey, we have witnessed a kaleidoscopic variety of opinions and reactions to the Keynesian revolution. Unfortunately, no immediate con-

sensus among free-market advocates arose in response to the challenge of a new and dangerous macroeconomics that grew out of the Great Depression. Some dismissed Keynes prematurely; others considered Keynes a major threat; still others treated his theory as a second-best solution to the vagaries of laissez-faire capitalism. Many were mesmerized by Keynes's new bag of techniques, which they could not always claim fully to understand. Because no united front developed to counter the Keynesian revolution, the most industrialized nations of the world languished under the spell of its magic.

Slowly but surely, the House That Keynes Built has become worn and decayed. Makeshift repairs have been applied, but the workmanship was poor and the material cheap to begin with. The building desperately needs remodeling, but the owners are short of new capital. Now that the foundation is crumbling, there is talk of tearing the building down and replacing it with another edifice designed by a new architect. There was once a foolish man who built his house upon the sand: "And the rains descended, and the floods came, and the winds blew, and beat upon that house; and it fell: and great was the fall of it" (Matt. 7:26–27). Eventually the House of Keynes will fall. Hopefully, it will be replaced by a new house, built upon the rock of thrift, fiscal responsibility, sound money, and free enterprise.

NOTES

1. Actually, Keynes adopted a highly socialistic approach in *The General Theory*, including control of consumption, "socialization of investment," taxation of stock transactions, protectionism, progressive income taxation, and heavy death duties (Keynes 1936: 372–84).

2. Paul Samuelson's *Economics* has been attacked by both sides, the Marxists and the Austrians, although for different reasons. The Marxists regard Samuelson's Keynesian textbook as an apologia for capitalism, while the Austrians treat Samuelson's book as a promoter of interventionism.

3. Hutt's book reminds me of Arthur Marget's ramshackle two-volume work, *Theory of Prices* (1938–42). I kept reading page after page, thinking there must be something of value in this detailed work (with footnotes footnoting footnotes!), but my search was in vain. Marget's warning in his preface could easily apply to Hutt's book: "It is not necessary to bring into the exhibition gallery all the shavings of the workshop" (Marget 1938: vol. 1, ix).

Chapter 2

Fiscal Stimulus: An Unwise Policy for Recovery

by John B. Egger

The nature of the proper government response to periods of recession has long been one of the most vexing questions of economics. During the middle third of this century, one answer commanded much support: the federal government can, and should, speed the end of recessions with deficit spending.

The Employment Act of 1946 charged the government with promoting "maximum employment." The new and exciting Keynesian macroeconomics identified fluctuations in private demand as the main source of unemployment, so it seemed natural that a humane government should smooth out these fluctuations. Federal budget surpluses would dampen excessive private demand in boom times, and budget deficits would be used to take up the slack when private demand was insufficient to maintain full employment. But does it work? Even if deficit spending does exactly what its supporters have claimed, are there hidden costs that make it inadvisable anyway? These are the questions addressed in this chapter.

The efficacy of fiscal policy is one of the standard topics in the study of macroeconomics. Its aggregated concepts, with their smooth curves and mathematical formulas, are immensely helpful for some purposes, and during the past two decades the explicit incorporation of expectations has improved macroeconomics considerably. These advances have cast doubt on the government's ability to affect real economic variables systematically with either fiscal or monetary policy.

Despite this improvement, the macroeconomic approach contains an inherent pro–policy bias. Substantial costs arise from the effects of stimulative fiscal policy on the pattern of economic activities, specifically, the composition of

output and employment. The macroeconomic focus on measurable aggregates conceals these costs: "What is seen and what is not seen," as Frederic Bastiat wrote in 1850. "There is only one difference between a bad economist and a good one: the bad economist confines himself to the *visible* effect; the good economist takes into account both the effect that can be seen and those effects that must be *foreseen*" (Bastiat [1850] 1964: 1).

To understand these invisible effects of fiscal policy, we must interpret the market as a galaxy of voluntary exchanges, with information about others' demands communicated by observable market prices. Relationships among these prices determine both the composition of output and the techniques by which it is produced. The argument against a policymaker's ability to identify and effect improvements in these structures, even during a recession, is just an application of the classic case against socialist economic calculation (e.g., Hayek 1948: 119–208).

A careful consideration of the accomplishments of markets implies that the effects of deficit spending on the patterns of exchange, information, output, and technique (including employment) are necessarily negative, despite the possibility of short-run effects on measurable aggregates that appear to be beneficial. Followers of Keynes have argued that a laissez-faire economy lacking their policy assistance would function persistently below its potential. They had the story precisely backwards.

SMOOTHING OUT FLUCTUATIONS IN AGGREGATE PRIVATE DEMAND

In the simplest Keynesian model, unemployment arises because the aggregate demand for output (the sum of individuals' consumption and businesses' investment spending) is not large enough. Suppose these amounts remain constant, while the government borrows a billion dollars and then spends it on goods and services. Aggregate demand rises initially by the full billion dollars, but its effect is magnified further by "the multiplier," and businesses rebound, output and employment increase, and the recession ends. A surplus run during the next boom will both pay off the bonds and dampen excessive private demand.

As early as 1909, the Minority Report of Britain's Royal Commission on the Poor Law had recommended countercyclical fiscal policy to offset and smooth fluctuations in private demand (Hawtrey 1925: 38). But if the government's policy actually causes private demand to decline, to that extent it will not raise aggregate demand. Many British economists of the 1920s and 1930s agreed with the official Treasury view that deficit spending would crowd out private spending, investment, and employment (Peden 1988). To allow for this possibility, suppose now that consumption and investment depend on the rate of interest. The government's bond issue raises the market rate of interest, reducing private investment by, say, $300 million and increasing savings (reducing consumption) by

$700 million. Here, the bonds crowd out a full billion dollars of private spending, leaving no effect on aggregate demand.

A compromise example might crowd out $200 million of investment and $650 million of consumption, leaving a $150-million rise in aggregate demand. This increase in overall spending can come from only one of two sources: individuals' or businesses' reducing their money balances, or the government's increasing the money supply. If individuals buy the entire billion dollars' worth of new government bonds, yet reduce their consumption and purchases of private bonds by only $850 million, where do they get the other $150 million? If none of the deficit spending is monetized, some combination of private spending and money holdings have to be crowded out. Thus, deficit spending (unaccompanied by monetary expansion) increases aggregate demand only to the extent that it crowds out private money balances.

However, individuals may well want to reduce their money holdings. If those who purchase the bonds have been satisfied with the relationships among their income, consumption, savings, and holdings of various forms of wealth (including money), they will try to maintain this kind of balance, raising the funds by changing each of their actions and their holdings of assets. They may work some overtime, consume less, hold a yard sale, or reduce purchases and/or holdings of private bonds, stocks, and money balances. It is unlikely, therefore, that changes in these initial purchasers' private expenditures fully "crowd out" the policy. They will probably reduce their demands for money—by, say, $150 million.

Perhaps the government simply hands this billion dollars—probably using make-work, such as building monuments, as camouflage—to individuals who allocate it in precisely the reverse of the manner in which it was raised. They add $150 million to their money balances, buy a little junk at yard sales or a few corporate bonds, and so forth. (Later, when taxpayers are forced to redeem the bonds, $150 million of their money balances is transferred back to the bond buyers. We may as well assume that changes in these two groups' actions cancel each other out.) The overall result will have been simply a transfer of a billion dollars of wealth from the taxpayers to the transfer recipients. The total amount of private spending is unchanged, but it will be directed away from activities favored by the taxpayers and toward those favored by the transfer recipients.

A simple quantity-equation approach can interpret MV (the money supply times its velocity of circulation) as aggregate demand. If deficit spending is to raise it, either M or V must rise. Unless the deficit is monetized (mixing monetary with fiscal policy), there must be some mechanism by which the fiscal action increases the velocity of circulation of money.

It is helpful to recognize that deficit spending—and fiscal policy in general—affects aggregate demand only to the extent that it promotes changes in the supply of, or the demand for, money. This reformulation allows us to think about fiscal policy, aided by the substantial literature of monetary policy. There

are few differences between the effects of deliberate policies to increase the supply of money (monetary policy) and to reduce the demand for it (fiscal policy).

Crowding out results from the private sector's incorporation into its plans and actions of whatever knowledge it has of government policy. During the past two decades, economists have been especially interested in the probable effects of macroeconomic policy on individuals' expectations and the effects of these changes in expectation on private economic activity. Milton Friedman (1968c) explained that if individuals anticipated the inflationary effect of monetary policy, they would act differently—demanding higher nominal wages—and would prevent the policy from reducing unemployment. Robert Barro (1974) noted that if the public perceived as a present liability the capitalized value of the higher future taxes entailed by a current deficit, they would neither consider the government bonds to be net wealth nor, therefore, spend more freely.

These were important anticipations of the rational-expectations argument that any predictable real effect of macroeconomic policy would be anticipated and offset by changes in individuals' actions. We see these anticipations, for example, in newspaper reports that "the market is nervous" or that "consumer confidence is down" because of federal budget deficits. Narrowly considered, the deficit is stimulative, but if private fears of its future effects have so reduced the level of activity that the stimulus at best restores the economy to the conditions prevailing before it developed these fears, the stimulus has been fully negated. This new theory is an exciting reaffirmation of the Treasury view and the classical economics on which it was grounded.

Impressive as these advances have been, the macroeconomic method itself conceals important real costs of deficit spending and of fiscal and monetary policy in general. To examine them, we must reconsider such fundamental matters as what a market is and what it may be reasonably expected to accomplish. That helps us to identify more carefully the natures of recessions and unemployment and to formulate policies for ameliorating them. The proper approach had already been sketched, in works that Keynes derided as "classical," well before *The General Theory.*

UNEMPLOYMENT AND RECESSIONS

A system of markets results from the enforcement of individuals' rights to property. Perceiving gains from trade, individuals develop complex patterns of exchange, each "voluntary" in not violating any individual's legitimate property right. Each party to a prospective trade—and emphatically not just one of them—must anticipate that it will make him better off; otherwise, it is "not exchanging" that is voluntary (Nozick 1974: 262). One implication of this insight is that market unemployment cannot appropriately be called "involuntary." Although Axel Leijonhufvud (1983: 218) and others dismiss this as an "unproductive" terminological issue, it is of the utmost importance in determining the standard by which a market system should be judged.

The obligation that each trader make the exchange beneficial to his partner is responsible for both the dynamism and the inherent uncertainty of the capitalist system. Any long-established trading pattern that is not contractually protected may be upset by the whim of the other party or by an interloper offering the trader a better deal. This uncertainty is discomfiting, but it is inherent to the nature of property rights and voluntary exchange. We would all like assurance that others will always be willing to buy our services at a high price, but we also want the freedom to change our minds about what we want to buy and sell. Universalized to all individuals, these desires are inconsistent: if I can change my mind, they can change theirs, and there goes my assurance. Only the freedom to change the terms on which one's own property is offered is consistent with a universally applicable concept of property rights.

The demands that individuals exercise for various goods and services will be market demands if they perceive trading opportunities that make them better off, but will be reserve demands if they don't. (If I decide on a reserve price of $10 for my special coffee mug, I'll demand it myself if the highest market offer is $9, but I'll supply it—demanding some bidder's money—if the offer is $11.) At any moment, we can describe these demands with a vector of excess demands for tradable goods and services; corresponding to it will be a vector of money prices. Each element of the excess-demand vector is the amount by which the number of units of a particular good that some individuals want to buy (given the vector of prices) exceeds the number of units of that good that others want to sell. If it is zero, then the current price for that good is an equilibrium price and that particular market is in equilibrium (given the prices of the other goods).

The relationship that exists among the prices of goods expected at different times—the rate of interest—has been especially important in the history of the theory of monetary policy. When individuals have different time preferences, there are mutual gains from trades in which those with low time preferences lend money to those with more urgent desires, and a uniform price—or interest rate—tends to be established for loans of each term. This interest rate (which, to the extent that it accurately measures peoples' real time preferences, reflects the natural rate) establishes relationships among the prices of capital goods and of their services, and it partly determines the least-cost techniques of production. Because the natural rate implicit in peoples' preferences is unobservable, it is especially important that the observable money loan rate convey accurate information about it. The likelihood that macroeconomic policy will upset this balance makes the intertemporal aspect of the economy's price structure crucial to an understanding of the effects of policy.

The great problems of macroeconomics originate in the fact that both the benefits and the costs on which individuals base their actions (and their demands) are values that they attribute to expected future states. There is a double layer of subjectivism here—in the formation of expectations about future states and in the valuation of them—that confronts even a Robinson Crusoe or some hermit living in a cave. The problem becomes much more complex in an exchange

society because each individual's expectations and values interact with, and are partly determined by, those of other individuals. Before an individual can evaluate an action that he is considering, he must anticipate the reactions of others to it—reactions determined by their own values and expectations.

There is an essential unknowability about others', and even our own, future valuations and expectations, but by its very nature a laissez-faire system of prices provides the most trustworthy observable evidence of others' values. This is because exchanges under a system that secures individuals' property rights are determined solely by the current valuations of the individual traders. Communicating full information about both valuations and expectations is too much to ask of any one number, such as a price, or even of many related prices, so there is a limited degree to which even a free-price system can permit us to predict others' demands.

But where could better information come from? Economists frequently claim to have knowledge of individuals' preferences that contradicts and is superior to that implied by the individuals' own, voluntarily chosen actions, knowledge justifying intervention to correct the alleged failures of markets. Apart from the fact that these policies violate individuals' property rights, the policymakers' claims of superior information about other peoples' lives should be subjected to the strongest scrutiny.

Unemployment

"Employment" usually refers to the ongoing, day-to-day sale of labor services to the same purchaser under an informal agreement that, while some continuity is presumed, can be terminated at will by either party. Getting a job means setting up such an agreement, and being unemployed means not having one. (Technically, one can leave the ranks of the officially unemployed by a unilateral decision, e.g., a worker's becoming self-employed or a discouraged worker's leaving the official labor force.) An individual remains in a job only as long as both he and his employer perceive the relationship to be beneficial. Training and transacting costs discourage a short-run focus, leading employers to retain a work force over slack periods they expect to be brief and employees to tolerate temporary unpleasantness. But a job's benefit to every employer is the sales revenue it produces, and that depends on customers who are free to change their minds.

The uncertainty of the employment relationship under laissez-faire conditions originates in the unpredictability of customers' choices. When an employer terminates an employee, it is because other individuals (consumers, perhaps, or competitors) have exercised their freedom to change the way in which they use their own property. What keeps a newly unemployed person from immediately establishing other employment is the cost of finding a new exchange opportunity that he perceives as beneficial. Omniscient economists can classify this unemployment as "frictional" (if they know that the worker's skills are demanded somewhere at his demanded wage) or "structural" (if they know that changes

in consumer demand or production technique have eliminated demand for the worker's skills at a wage he considers acceptable). Individuals may sometimes want to test the demand price for their services, individually or in a union, producing what has been called "wage-setting" unemployment.

These types of unemployment arise from the costs of determining what kinds and terms of exchange others consider beneficial. Since it results from individuals' exercise of their legitimate property rights, the market's unemployment is "voluntary," but the term "natural" is also appropriate because unemployment arises from facts of nature, including individuals' natural rights to property. Except in the silly sense of its being too bad that we all don't know everything, there is nothing wrong with a society characterized by this type of unemployment, and the general presumption among Keynes, Keynesians, and non-Keynesians alike is that the price system provides a satisfactory resolution to it.

The familiar category of unemployment that does *not* exist in a market system is "cyclical" or "aggregate-demand" unemployment. Yet only this kind of unemployment is distinctively Keynesian, and it is what policymakers try to measure by subtracting the "full-employment" unemployment rate from the rate they measure. Keynes (1936: 6) recognized and understood the other sources of unemployment, but he quickly dismissed them in a few early pages, frankly aware that he had nothing to add to classical treatments. As Robert E. Lucas put it, "Keynes wanted to get labor markets out of the way in chapter 2 so that he could get on to the demand theory which really interested him" (Lucas 1978: 354).

The entire rationale for macroeconomic policy depends on the concept of aggregate demand and on its insufficiency. This characterization of market recessions and their unemployment required Keynes to reject Say's law.

Recession

Recession in a laissez-faire society is a period of readjustment, accompanied by unusually high confusion, following widespread error about others' demands. Although not inconceivable, Murray N. Rothbard ([1962] 1970: 747) and others have noted that a market recession requires the coincidence of similar misjudgments by thousands of individual entrepreneurs—a "cluster of errors." In a market economy, decisions are so decentralized that it is difficult to imagine real supply shocks, even an OPEC cartel, powerful enough to produce general recession.

Equally difficult to conceive of is the kind of deflationary shock that would arise from a sharp and widespread increase in individuals' demand for money. In a true laissez-faire monetary system, an increase in the demand for money may call forth an increase in the quantity of nominal monetary units that is supplied. Even without this supply response, no special problems arise. Each person will try to build up his money balances by reducing his demands for specific nonmoney commodities, including leisure (i.e., by increasing his supply

of labor). Although producers' demands for inputs will decline, unemployment will emerge only to the extent that labor supply increases more slowly than the demand for it falls. A new price structure will emerge, with relative prices probably a bit different and most money prices lower than before.

There is no doubt that unemployment will occur during this adjustment, but it arises from the fundamental nature of voluntary exchange in a world of costly information. Writers on monetary disequilibrium (e.g., Yeager 1983) appear to consider the possibility of this kind of deflationary fumbling uniquely perfidious. But it reflects the best knowledge that individuals have about beneficial exchanges available to them. The resulting unemployment constitutes a temporary rise in the natural rate.

These recessions are fully consistent with Say's law, which recognizes that, while there can never be too many goods, there can be too many of some and too few of others. This implies that the pattern of money prices is inconsistent with demands: some goods' prices are too high and others' are too low. The solution to temporary widespread discoordination and its attendant unemployment, pre–Keynesian economists contended, is the mutual readjustment of money prices and demands in the various goods' markets. Profit-motivated searching by individual entrepreneurs will shift the patterns of prices and demands into greater consistency, eliminating unusually high unemployment. Because individuals' demands are always changing, and the very act of attempting to discern information about them can make them change, the pricing process is one of continual adjustment to a fuzzy, moving target. The mutual adjustment between demands and prices is never complete, and unemployment is never eliminated. But the pricing process of voluntary market exchange provides the best information, and the strongest incentives, to keep unemployment at its natural minimum.

Keynes argued that this process could not work because of "fundamental psychological laws" that he attributed to workers and businessmen (Egger 1989). His laws permitted money-wage rates and prices to fall, but alleged a rigid connection between them. A five-percent reduction in workers' wage demands would not stimulate employment, he argued, because employers would anticipate a resulting five-percent reduction in the demands for their products and would simultaneously reduce their demand for labor. As Peter Clarke puts it, "If prices and wages simply chased each other down a spiral—since 'one man's expenditure is another man's income'—then in theory there was no means of effecting the necessary cut in real wages" (Clarke 1988: 274–75).

The claim that the market is incapable of achieving a pattern of prices consistent with demands is Keynes's rejection of Say's law. The economists derided by Keynes as "classical" generally looked for institutional causes of price rigidities: union intransigence and/or legislation restraining the flexibility of wages and prices. Keynes preferred to use the political process to adjust the demand for commodities. He seemed to believe, schizophrenically, that market forces worked well to determine the type of spending and employment, but they just

didn't produce enough of either. It was the policymaker's task simply to boost the total, and no attention to the policy's effects on patterns was necessary. Either there wouldn't be any or they would be unimportant. The taking for granted—or ignoring—of these market forces explains Robert W. Dimand's approving comment that "Keynes had no wish to bring Austrian capital theory into his macroeconomics" and that this enabled him to avoid the Knight/Hayek capital debates (Dimand 1988: 57). Unfortunately, this stance received full endorsement in the monetarism of Milton Friedman, who dismissed "first-round" effects on patterns as empirically insignificant. The allegation that pattern effects are trivial, we argue later, is responsible for the grave underestimation in macroeconomics of the costs of fiscal policy.

Keynes was correct to assert that his system constituted a rejection of Say's law. His error was believing that his system of rigid linkages and aggregated decision making accurately depicts the capitalist system. There not only *are* price patterns consistent with individuals' preferences (which Keynes would not have denied), but they are attainable through individuals' voluntary actions (which he *did* deny), and entrepreneurship in the market tends to discover and establish them fairly quickly. Lowell Gallaway and Richard K. Vedder's (1987) theoretical and historical study describes this process during the depressions of 1921 (when it was allowed to work) and the 1930s (when misguided policy hampered it greatly). Keynes argued that it was necessary to take some parts of a maladjusted price pattern for granted, and he assigned to macroeconomic policy the task of adjusting demands to validate those disequilibrium nominal prices.

General economic malaise results from inappropriate patterns of money prices, which reduce incomes and production and produce unemployment. The total amount of money that people want to, or actually do, spend is completely irrelevant. Aggregate demand is an unintended result of individuals' actions and has no causal role in determining them. But if aggregate demand is irrelevant to action and has no meaning in an analysis of the functioning of a market system, there can be no standard for determining that it falls short of some ideal, and there can be no such thing as unemployment caused specifically by this shortfall. All unemployment is caused by mispricing, and none by insufficient aggregate demand. This, in turn, implies that a policy designed to reduce unemployment by bringing aggregate demand closer to its ideal is fundamentally misconceived from the start. The result is typical of well-intentioned efforts to solve problems that do not exist: the problems that do exist are made worse.

Conclusions: The Market's Unemployment and Recessions

The market system is the galaxy of voluntary (rights-observing) exchanges among individuals. An unfettered price system, recording exchanges conducted in the immediate past, provides the best attainable information about others' values and expectations. This information is far from complete, but any poli-

cymaker who argues for its systematic inaccuracy must explain how he obtains knowledge of others' beliefs superior to that demonstrated by their own actions.

To the extent that unemployment and recession arise, they too are manifestations of individuals' exercising legitimate property rights. Entrepreneurial alertness, and the freedom to profit from it, promote the most rapid discovery of exchange opportunities that end recession and reduce unemployment by reshuffling the pattern of money prices into closer alignment with the pattern of demands. The magnitude of the shortcomings of using fiscal policy to end a recession is apparent only from a perspective like this one. It places a considerable burden on the advocates of using macroeconomic policy.

THE PROCESS OF DEFICIT SPENDING

As our macroeconomic introduction noted, deficit spending unaccompanied by an increase in the money supply affects the economy only to the extent that it reduces individuals' demands for money. Analytically, an increase in M and an increase in V have so much in common that it matters little if a deficit is monetized. In either case we can draw on a substantial and rich literature addressing the process of monetary change.

The kind of disaggregated analysis of sequential effects on individual markets that we require was pioneered by Richard Cantillon ([1755] 1931: 161). The only writers who have consistently followed and improved on Cantillon's method are those of the Austrian school. The business-cycle work of F. A. Hayek during the 1930s guides my examination of the process of deficit spending. If we are supposed to take the existence of widespread unemployment for granted (contrary to sound analytical method), then the work in which Hayek (1939b) did so is especially interesting.

During a recession, the pattern of money prices is unusually mismatched to the pattern of voluntary demands. As we have repeatedly emphasized, this pattern of voluntary demands is not observable and can only be inferred from individuals' actual behavior in a political system that protects their natural rights to property. Even in a normally functioning economy, at any instant many of the prices that constitute the price structure are likely to deviate, in a seemingly random fashion, from those consistent with demands. In a recession the deviations between existing prices and those prices consistent with individuals' voluntary demands are much larger. Macroeconomic policy of any type is an effort to accelerate the process of matching prices with demands by modifying the pattern of *demands*. The fact that the resulting demands can no longer be considered voluntary is critical to our evaluation.

Deficit spending produces four distinct effects on patterns: at the borrowing, the spending, the taxing, and the redemption. Any belief we might have that these effects cancel out in the aggregate cannot be extended to their patterns.

The Treasury initially offers for sale a bond to be redeemed at maturity from that future period's tax receipts. This increase in the demand for loanable funds

will raise the market rate of interest, and the individuals who find the purchase attractive will reduce their own demands for consumption goods and for money balances. They will reduce their lending to private businesses too, which in turn will demand fewer resources for investment. The pattern of crowding out demands is unobservable and complex, depending on the specific goods for which the individuals restrict their demands and the resources associated with the marginal investment projects bumped out by the rise in the interest rate. These initial changes, in turn, have effects that work through the entire economy, as (to describe just the "second round") those who had earned incomes by producing the crowded-out goods find that they must reduce their own demands for yet other goods.

It is hardly necessary to repeat this whole story, with a few changes, three more times to complete the deficit-spending process. At each step, the effects on patterns depend first on specific choices made by the individuals who receive or give up the money and then on choices by all the others who are affected by those first-round decisions. While the economy's resource use and prices are in the process of adjusting to one of the four steps in the policy, the next step is carried out, imposing its own set of pattern effects. It is tempting simply to conclude that the policy just leads to chaos, and this conclusion is not unreasonable. But there are a few things that can be said about general tendencies in the deficit-spending process.

One effect likely to be suggested, by reference to Hayek and the Austrian business-cycle theory, is that of the higher market rate of interest on the economy's "capital structure," namely, the kinds of capital goods that are used in production. The higher rate does not simply "crowd out" private investment; it produces a change in its form. But Rothbard ([1962] 1970: 940 n.113) has argued that this effect would not produce the calamity that the theory associates with policy-induced reductions in the rate of interest, which promote attempts to create a capital structure that cannot be supported by voluntary real saving. Under a policy-induced *rise* in the interest rate, the capital structure is also distorted, but the capital goods promoted in this case are exceedingly nonspecific, and there is more than enough saving to complete them. The difficulties that comprise the core of the Austrian business-cycle theory do not occur.

The effects of the process on employment are more interesting. If there are substantial unemployed resources (indicating substantial mispricing in many individual markets), then demands arising from government spending will very likely draw some of those resources into use. The preceding act of borrowing tends to increase unemployment by reducing demands, and we have no way of knowing whether many of the kinds of unemployment resulting from the crowded-out demands are offset by the stimuli provided by demands originating in government spending. But for nonspecific resources (unskilled labor is the classic example) the net effect is likely to be positive.

This is the policy's raison d'être: a fall in the measures of the unemployment of labor and capital. But to be among Bastiat's "good economists" we should

consider Hayek's (1939b) story about the effects of monetary expansion on an economy suffering from substantial unemployed resources. Hayek appreciated that the expansion could draw idle resources into use (which satisfied the Keynesians), but he also turned his attention to how they were used. The difficulty that he perceived, which applies without modification to our deficit-spending case, is that the pattern of uses into which the idle resources are drawn is most unlikely to be that which conforms to the voluntary preferences of the individuals who constitute the catallaxy.

As individuals happily earn their new incomes producing the goods demanded by the first-round recipients of the government spending, they allocate it according to their own preferences. The market almost immediately starts the process, familiar to any scholar of Austrian business-cycle theory, of correcting the policy-imposed distortion by adjusting to the public's reassertion of its genuine preferences. To the extent that the fiscal stimulus has drawn resources into specific employments not satisfying individuals' real preferences, the subsequent market process is likely to throw them out on the street again. If policymakers try to head this off by another round of deficit spending, the accelerationist problem arises, with the necessary size of the operation always larger than what is expected.

The difficulty is that the overall effect of the fiscal stimulus, even when it pulls resources into use, does not pull them into uses consistent with individuals' real preferences and demands. In fact, the view of markets as expressing voluntary choices in a world of costly information encourages us to interpret voluntary unemployment as fully consistent with the proper functioning of markets. The effect of stimulative fiscal policy on this kind of unemployment can be dramatized with an analogy.

A skilled painter faces a partially completed canvas, racked by indecision about how to continue, how to depict the emotions he seeks to convey. Suddenly, into the studio strides a woman carrying a small can of Sears' "Federal Blue" interior latex. "Help from the government," she announces, as she wedges a two-inch polyester brush into the can and fills the empty canvas with broad strokes. The problem of the unemployed canvas is solved, and the widely reported ratio of square inches painted to total square inches increases. Someone is sure to note that "Federal Blue" is better than nothing, and we cannot be certain that the work would ever have been completed. But surely most of us are likely to consider the act one of wanton destruction. Besides dramatically violating the artist's property rights, it substantially increases the costs of achieving his goal, perhaps precluding it entirely. There is a permanent reduction in wealth.

Economists, who understand the usefulness of natural unemployment, are unlikely to consider the blank portion of the painter's canvas to be wasted, that is, inefficiently or suboptimally employed. Because the artist was provided with a low-cost opportunity to complete the work, that blank canvas is very likely being employed in the highest-valued imaginable way.

The assumption that the labor services of those suffering from natural un-

employment are necessarily not being used optimally is, just as surely, unfortunate and incorrect. W. H. Hutt, referring to a job seeker, argued that "when *actively* searching for work, the situation is that he is really investing in himself by working on his own account without immediate remuneration. He is prospecting." Hutt adds, "Individuals actively 'prospecting' for remunerative jobs are employed" (Hutt [1939] 1977: 83).

We might want to be cautious about this terminology, avoiding what Leland Yeager has called "the 'Austrian vice'—disposing of substantive issues . . . by mere verbal maneuvering" (Yeager 1988: 209). Although it might not be wise to define unemployment out of existence, we should strongly reject the view (as most economists do) that even the market's "natural" unemployment represents some kind of social problem, and we should firmly argue (as few economists do) that *all* of the market's unemployment is of this mispricing, "natural" type. To the extent that it does indeed increase measures of employment, fiscal policy turns some of Hutt's "prospectors" into government-project laborers, crowding out a superior use (job-searching) of both their labor and various kinds of capital goods. Hutt put it this way: "When governments promise to 'create jobs,' in that way they are indeed unwittingly committing themselves to destroying 'job opportunities,' " that is, the higher-valued uses of labor and other resources that the search process would have produced (Hutt [1939] 1977: 251).

The uncertainty about future policy produces another harmful effect on long-term planning and capital formation. When government policymakers, unwilling to tolerate temporary unemployment, have the power virtually at their whim to pull resources away from their owners and devote them to reducing a measured rate of unemployment, even the long-term rate of growth of the economy is reduced. Macroeconomic policy of all types increases the natural rate of interest because it dramatically reveals the government's lack of commitment to the protection of property rights. The pervasive effect of macroeconomic policy in shortening time horizons has been addressed at length by T. Alexander Smith (1988).

An even broader impact results from the government's arrogation of responsibility for economic outcomes that it demonstrably lacks the ability to achieve. The public, believing the rhetoric created to justify the expansion of government control, is likely to blame its failure on what remains of market freedom. In general, macroeconomic policy is likely to "exacerbate social tensions and undermine popular confidence in inherited political institutions and social arrangements," to borrow Leijonhufvud's (1983: 211) warning about the effects of his "random-walk inflation."

If we are truly to evaluate the use of fiscal policy to end a recession, we must conceive of a "net present value" of the policy. We must somehow compare the present value of the stream of future outputs in the presence of fiscal stimulus to the present value of the future outputs that would have been produced had market forces been left to resolve the problems. No economist sensitive to the implications of subjectivism would even attempt to quantify this "net present

value'' as the difference between two cardinal numbers. Judgment must be based not on two hypothetical flows of outputs but on knowledge of the processes associated with them. The ultimate case against fiscal stimulus is that it is a process of taking property from rightful owners and awarding it to others. Detailed calculations of monetary sums are neither necessary nor relevant.

The true Treasury-view case that deficit spending crowds out superior uses of resources does not depend on absurd propositions that new public-works laborers simply resigned from jobs in private industry or that measured unemployment statistics cannot be reduced. It relies on the Say's-law proposition that measured unemployment arises not from fundamental inconsistencies in the market system but from disequilibrium pricing, as well as on the hypothesis that the market itself provides the best incentives to its resolution. It is this process of efficient reallocation and repricing that public-works employment crowds out, destroying wealth in the process.

CONCLUSION: IN DEFENSE OF BETTER POLICIES

As the famous debates about the feasibility of socialist economic calculations made clear, government policymakers and planners simply do not have the knowledge that would justify their countermanding the market in their citizens' best interests. An attempt to use macroeconomic policy to ''improve'' the patterns or money values of demands voluntarily expressed in market transactions falls prey to precisely the same fundamental objection.

Of course, unemployment is distressing. Even those who understand that it arises—and arises solely—from the difficulties of obtaining information in a world where we are all free to change our minds appreciate that it can create grave hardships for individuals and their families. Many charitable organizations provide sustenance and counseling, and the fine people who staff them deserve our voluntary support. But even at this level, genuine assistance must be informed by an understanding of what markets are and how they work.

If a government wishes to adopt a truly humane policy toward unemployment, it must embrace the physician's creed: first, do no harm. Governments must reduce, and eventually eliminate, the uncertainty and distortion that they themselves create. Within this constraint, well-intentioned policymakers may search for some positive contribution. It is likely that the search will be in vain. The best thing our government could do for recessions and unemployment would be to stop interfering with the market process and simply to enforce individuals' property rights. This would automatically facilitate market-directed reallocation and repricing by establishing a stable monetary system and repealing legislation that prevents individuals from freely exercising their rights to set prices.

We all want to imagine some kind of policy that, like an ideal electronic linear amplifier, would make market signals about real consumer demands clearer,

reducing search costs and speeding efficient reallocation, without introducing any distortion. It would be wonderful if such a neutral unemployment policy could be devised, but both history and theory make it hard to be optimistic about government attempts to make the market work better.

Chapter 3

The Fallacy of the Phillips Curve

by Jeffrey M. Herbener

The modern Phillips curve is the alleged trade-off between price inflation and unemployment that exists in market economies. Acceptance of the trade-off is based on the alleged statistical correlation between percentage changes in a price index and the unemployment rate. For decades in the United States, economists have asserted that fiscal and monetary policy should be tailored to the trade-off, thus making it the centerpiece of macroeconomics. Yet damaging criticisms of the Phillips curve exist in theory, data, and estimation.

THEORY

The Phillips curve had a more humble origin as a cursory observation concerning data from labor markets in Great Britain. Thus, economists of various schools of thought have attempted to explain the process underlying the trade-off as a theory of labor markets. The original theory, offered first by A. W. Phillips (1958) and then by Richard Lipsey (1960), attempted to explain the rate of change in money wage rates in the labor market. Phillips wrote:

> When the demand for a commodity or service is high relative to the supply of it we expect the price to rise, the rate of rise being greater the greater the excess demand. . . . It seems plausible that this principle should operate as one of the factors determining the rate of change of money wage rates. . . . It seems possible that a second factor influencing the rate of change of money wage rates might be the rate of change of the demand for labour, and so of unemployment. . . . A third factor which may affect the rate of change of money wage rates is the rate of change of retail prices, operating through cost of living adjustments in wage rates. (Phillips 1958: 283)

These assertions misstate the economic theory of market activity. Demand relative to supply determines the *level* of price, not *changes* in price. When demand is high relative to supply, price will be high, not rising. Movements in price occur in response to changes in demand and supply. When demand rises relative to supply, price will rise. Any theory claiming to explain changes in price must incorporate a theory of "disequilibrium" transitions from one price to another. It must explain how individuals deal with imperfect coordination, that is, excess demand and excess supply. The factor in the market that improves cooperation in the face of disequilibrium situations, thereby tending to establish equilibrium, is entrepreneurship (Mises [1949] 1966: 289–303).

Catallatics is *fundamentally* an explanation of cooperation and coordination among individuals attempting to satisfy their diverse needs. Because individuals voluntarily participate in the free market, all "problems" that arise there, such as unemployment, are *coordination* problems. The theory of price is a necessary component of the explanation of social cooperation. The existence of market prices and changes in these prices have no catallatic meaning apart from the process of integrating individual human actions. Furthermore, the theory of market activity demonstrates *nothing* about the *rate* of change in price. Greater excess demand or excess supply implies greater profit to entrepreneurial arbitrage, but this fact does not imply a greater percentage change in price. The latter depends on entrepreneurial perceptions of profit, risk, resource availability, and arbitrage alternatives.

Because it is disconnected from action, an explanation of rates of change in the prices of a collection of goods has no purpose in a theory of market activity. The catallatic importance of explaining price levels and changes comes from the fact that they are created by actions in the market. Market prices are essential for entrepreneurial profit/loss calculations, which are essential in determining what goods and services to produce and how to produce them. These calculations are based on entrepreneurs' expectations of the future and thus cannot be determined by past prices (ibid.: 200–231). Existing prices are useful in making ex post facto profit/loss calculations, which show entrepreneurs their past performance and economize on their efforts to form expectations of the future. Past prices can also be used to form an endless list of constructs by means of various mathematical formulas. To have catallatic significance, such constructs must be logically connected to human action and must render knowledge of the process of coordination in the market. Price indices used to form rates of change in prices have no catallatic purpose. They are arbitrary, both in the collection of goods selected and in the weighting procedure used to construct them (Hansen 1941: 314).

Phillips and Lipsey committed the fallacy of replacing concepts grounded in human action with arbitrary mathematical constructs. Lipsey revealed the purpose: "This relationship between wage inflation and unemployment is an extremely simple one, and it holds considerable promise for empirical testing" (Lipsey 1960: 16).[1] The Phillips/Lipsey relationship was used to replace the

universally correct but untestable theory of the labor market with a spurious but empirically testable one. However, Lipsey attempted to reconcile it with general economic theory (Harris 1948a: 55–58). Unlike Phillips, he clearly treated it as a disequilibrium phenomenon:

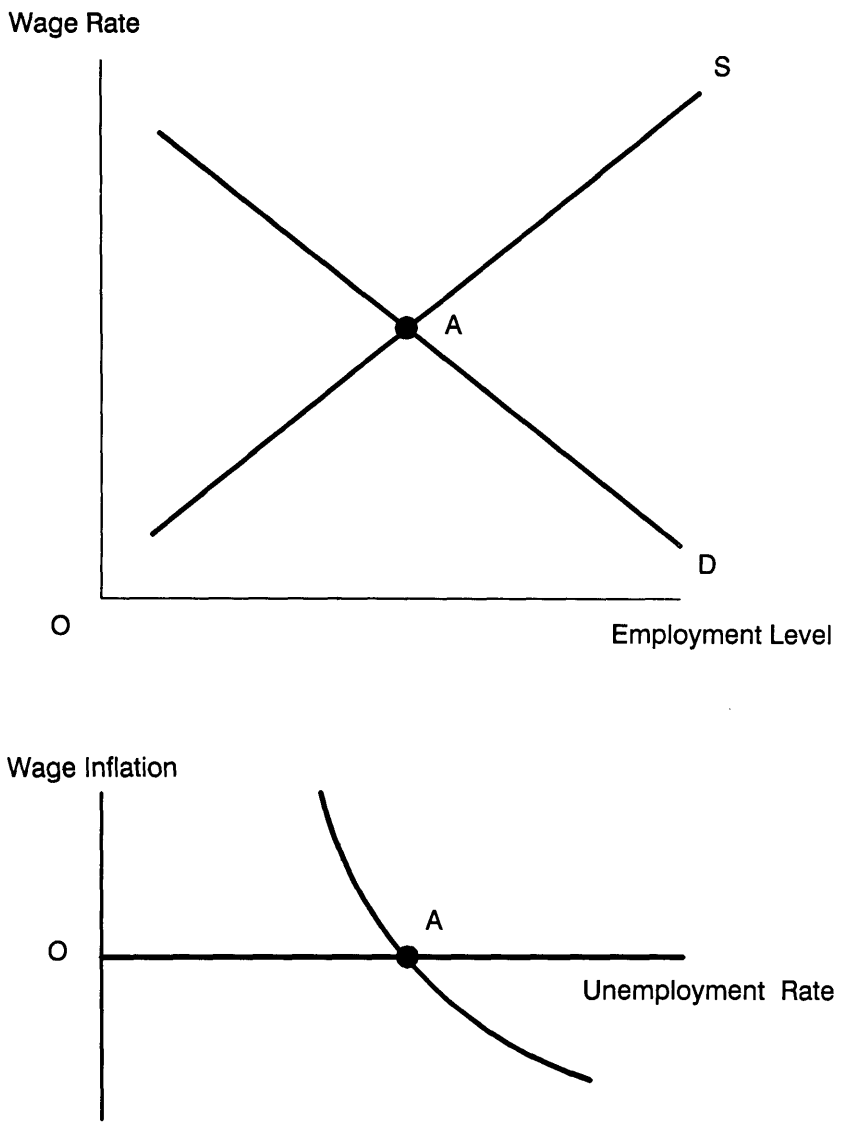
> We now introduce the dynamic hypothesis that the rate at which the wage changes is related to the excess demand, and specifically, the greater is the proportionate disequilibrium, the more rapidly will wages be changing. . . . For [this] relation . . . to be observed it is necessary only that there be an unchanging adjustment mechanism in the market, i.e., that a given excess demand should cause a given rate of change of price. (Lipsey 1960: 13)

Lipsey attempted to connect the unemployment rate (measurable) to the condition of disequilibrium in the market (unmeasurable) by claiming that, at equilibrium, purely frictional unemployment exists. From this base amount, excess demand will reduce the unemployment rate, while excess supply will increase it (see Figure 3.1).

This theory cannot be integrated into general economic theory on two counts. First, the assumption of an unchanging adjustment mechanism in the market is an arbitrary deus ex machina. A valid concept must be linked to human action. The actual disequilibrium adjustment mechanism in the free market is entrepreneurial arbitrage. This activity enhances coordination by moving resources from lower- to higher-valued uses. It succeeds because market prices reflect subjective values and form the basis of economic profit and loss calculations (Mises [1949] 1966: 701–15). The Phillips/Lipsey assumption is inconsistent with this process. Second, equilibrium is a situation of *perfect* coordination. It would exist once entrepreneurial activity had eliminated the lack of cooperation among market participants, that is, excess demand or excess supply. Equilibrium is the conceptual (but unrealizable) end of the market process, where no further activity could improve the situation for anyone. At this point, economic theory would have nothing more to explain (Rothbard [1962] 1970: 387–409, 502–28). In labor market theory, unemployment cannot exist at equilibrium. Only for wage rates above the market-clearing level can unemployment exist. Thus, unemployment must result, on the unhampered market, in a falling wage rate and hence, in a negative rate of change, in the price of labor. Wage rates below the market-clearing level result in the opposite of unemployment, namely, a labor shortage. In both cases *less* labor is bought and sold than at equilibrium. This result is not unemployment but a *misallocation* of labor into less valuable activities, such as leisure. The fact that the amount of time withheld from the labor market is excessive compared to the point of *perfect* coordination results from allocation based on a wage rate that is either too low or too high. This coordination problem is removed by entrepreneurial arbitrage evoked by the profit from correctly allocated labor.

Because of his view of equilibrium, Lipsey's theory is inconsistent with general

Figure 3.1
Phillips/Lipsey Relationship between Wage Inflation and Unemployment Rate



economic theory. If economists were to reformulate general economic theory according to a Phillips/Lipsey labor market analysis, it would sound like this:

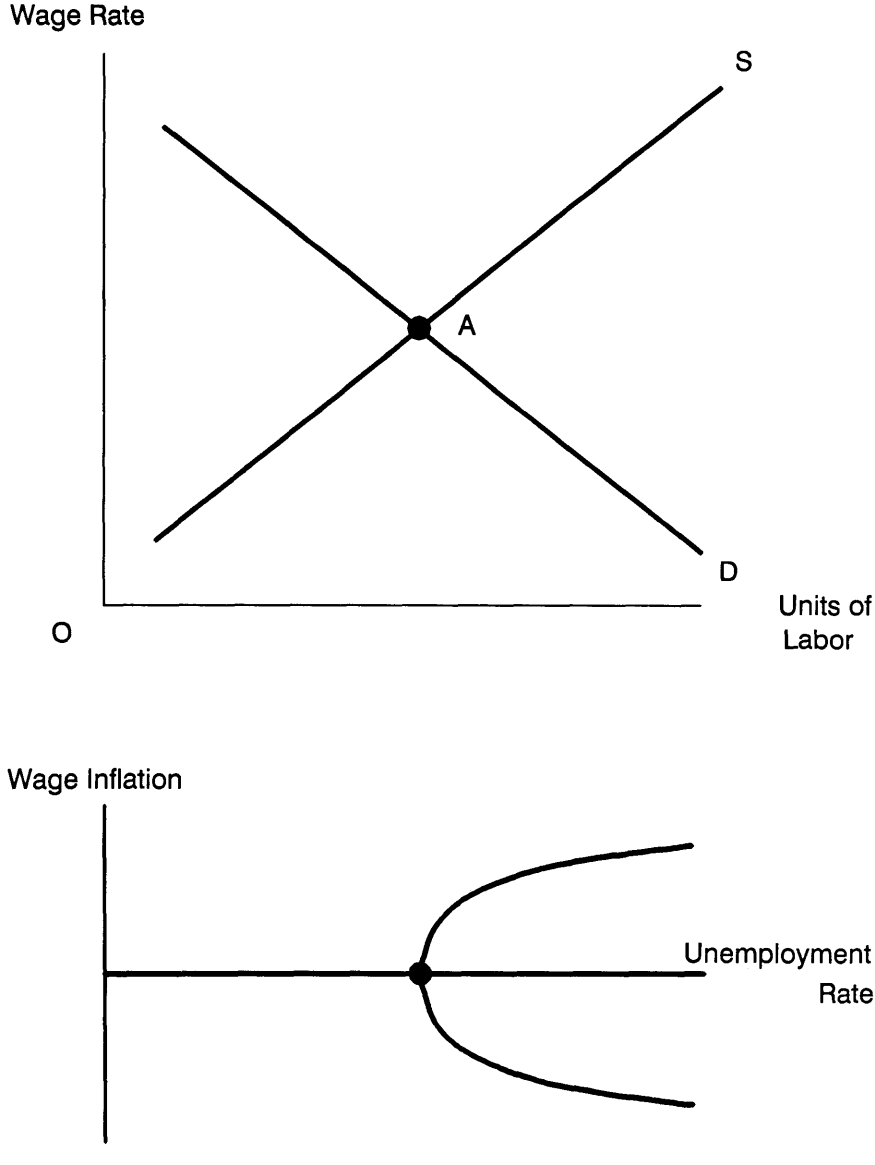
> Shoe stores always have unsold inventories (unemployed shoes). At equilibrium, the number of unemployed shoes exists because of frictions—lack of information, temporary misallocations due to the cost of moving the shoes, etc. Thus, a relationship exists between the rate of change in the price of shoes and the proportion of unsold shoes left in inventory.

Likewise, workers always withhold some of their time from the labor market even in equilibrium. To call this unemployment, or unsold inventory, establishes the dangers of seeking to answer irrelevant questions and of searching for solutions to nonexistent problems (Hutt [1939] 1977).

Even if we accept this reformulation of the concept of equilibrium, the Phillips/Lipsey formulation does not produce the posited relationship between excess demand and unemployment *rates*. There is no mechanism in the theory to reduce the equilibrium level of unemployment for wage rates below the market-clearing level. As the wage rate increases above the market-clearing level, more and more individuals wish to be employed but cannot be hired. Thus, the number of those unemployed increases one for one, with increases in the labor force, causing the *rate* of unemployment to rise. But as the wage rate decreases below the market-clearing level, the number of employed decreases, one for one, with decreases in the labor force. This will also cause the *rate* of unemployment to increase. The condition of the market for those who choose to remain in the labor force (employed or not) does not necessarily change because no mechanism exists to translate greater excess demand into less frictional unemployment.[2] Greater labor shortages may cause greater effort to diminish these problems, but that does not automatically translate into success. Thus, greater excess demand means a greater rate of increase in wage rates and a greater *rate* of unemployment (even if the *level* of unemployment is reduced). The resulting relationship between wage inflation and unemployment rates appears in Figure 3.2.

Even if a mechanism can be provided to overcome this criticism, the Phillips/Lipsey theoretical framework cannot generate the Phillips curve. The trade-off is between rates of change of wage rates (a flow) and the rate of unemployment (a stock). The theory they use is incapable of generating both of these simultaneously. For any given amount of excess supply or demand, there exists a corresponding rate of unemployment and a given wage rate. In order to generate a change in the wage rate, the amount of excess supply or demand must change, and thus the rate of unemployment must change. The theory correlates either *changes* in the wage rate with changes in the rate of unemployment or *levels* of the wage rate with levels of the rate of unemployment. But the theory cannot correlate *changes* in the wage rate with *levels* of the rate of unemployment without making additional assumptions. In summary, the Phillips/Lipsey theory fails to explain any of the three components of the Phillips curve. It does not generate rates of change in wage rates, or rates of unemployment, or a correlation

Figure 3.2
Relationship between Wage Inflation and Unemployment Rate Resulting from Excess Demand



between these two concepts. And so, the mission to "explain" Phillips's empirical observations has continued.

Keynesian economists made attempts to explain these observations based on J. M. Keynes's theory of employment. In their efforts, they significantly broadened the scope of the Phillips curve. Paul Samuelson and Robert Solow (1960) provided the transitional article. They transformed the original relationship between wage inflation and unemployment into one between price inflation and unemployment, and they added the trade-off concept:

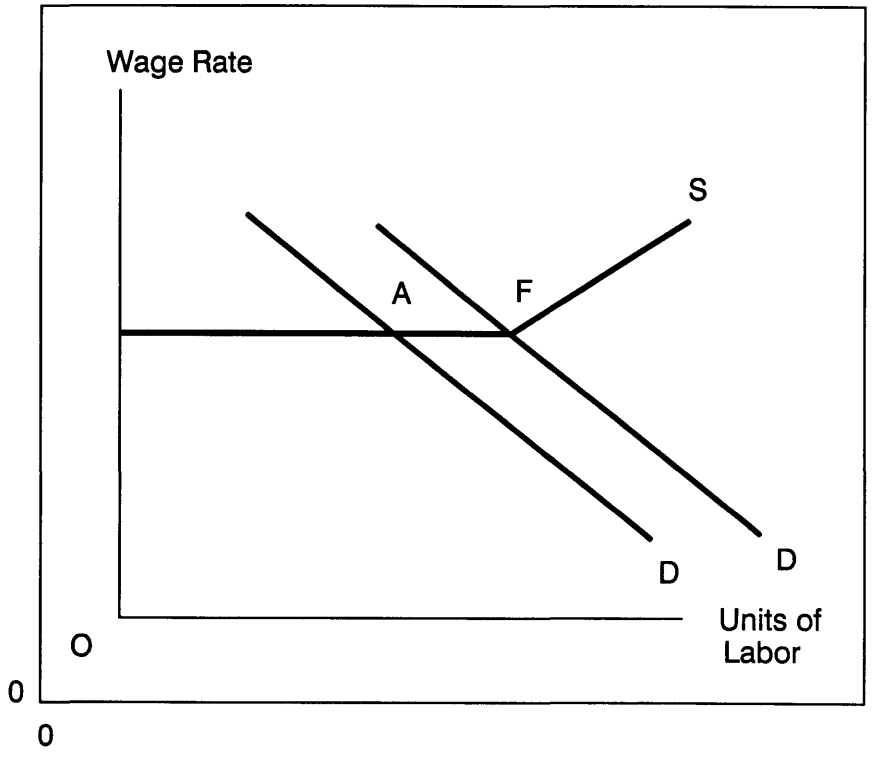
> Our own view will by now have become evident. When we translate the Phillips diagram showing the American pattern of wage increase against degree of unemployment into a related diagram showing the different levels of unemployment that would be "needed" for each degree of price level change . . . this [curve] shows the menu of choices between different degrees of unemployment and price stability. (Samuelson and Solow 1960: 191–92)

That a connection between price inflation and unemployment rates is consistent with Keynes's theory was understood by Alvin Hansen, who said, "Full employment programs are loaded with inflationary dangers" (Hansen 1947: 234). Following Keynes, Hansen believed that employment and unemployment are determined by aggregate (effective) demand, calling it the sine qua non of full employment (ibid.: 42). And, like Keynes, he viewed demand management as a balancing act between adequate and excessive demand (ibid.: vii, 42, 248). Expanding aggregate demand would increase employment without price inflation up to the point of full employment, but expansion beyond that point would increase prices (Keynes 1936: 117). While the existence of a *continuous* trade-off between price inflation and unemployment was a setback for the Keynesians, it did not shake their faith in the theory of demand-management policy. In fact, it inspired them to call for additional government controls in their quest for a full-employment, noninflationary utopia.[3]

While it may have been simple for Keynes to state the basic relationship between aggregate demand and employment, he left his followers the difficult task of reconciling the tangled web of constructs necessary to support his claim. His basic relationship, that is, increasing demand will increase employment, certainly operates as a tendency for each particular production process of any particular good. But to apply this notion to an entire economy is another matter. Contrary to those economists who hold that Keynes's great contribution was developing macroeconomics as distinct from microeconomics, Keynes actually utilized micro principles and assumed they were macro principles (Harris 1948a: 48). This error created the need to use shifting definitions, refute Say's law, invent arbitrary concepts, and construct fallacious arguments.

The obscurity of Keynes's presentation (and the criticism by non-Keynesians) led the early Keynesians to reformulate his employment theory.[4] Wassily Leontief provided one that is comparable to the Phillips/Lipsey relationship (see Figure

Figure 3.3
Leontief's Reformulation of Keynes's Employment Theory



3.3).[5] Keynes's implicit assumption that the labor supply is perfectly elastic at some inflexibly downward money wage rate was perceptively likened by Leontiff to a minimum-wage rate. Full employment corresponds to the level of employment at point *F* in the diagram. Here, everyone who wishes to work at the going money wage can do so. Involuntary unemployment exists anytime labor demand is insufficient to cross labor supply at this point.[6] Finally, the foundation of a perfectly elastic labor supply is the inability and/or unwillingness of workers to bid the money wage downward in the face of involuntary unemployment. About unwillingness, Keynes said:

> Ordinary experience tells us, beyond doubt, that a situation where labor stipulates (within limits) for a money-wage rather a real wage, so far from being a mere possibility, is the normal case. Whilst workers will usually resist a reduction of money-wages, it is not their practice to withdraw their labor whenever there is a rise in the price of wage-goods. (Keynes 1936: 9)

On inability, Keynes said:

Except in a socialized community where wage-policy is settled by decree, there is no means of securing uniform wage reductions for every class of labor. The result can only be brought about by a series of gradual, irregular changes, justifiable on no criterion of social justice or economic expediency. If important classes are to have their remuneration fixed in terms of money in any case, social justice and social expediency are best served if the remuneration of *all* factors are somewhat inflexible in terms of money. (Ibid.: 267–68)

Even if wage rates could be reduced, Keynes stated, "only a foolish person . . . would prefer a flexible wage policy to a flexible money policy," and "it can only be an unjust person who would prefer a flexible wage policy to a flexible money policy" (ibid.: 268).

Finally, labor demand is determined by effective demand via the employment function. Keynes wrote:

The object of the employment function is to relate the amount of the effective demand . . . with the amount of employment. (Ibid.: 280)

The aggregate demand function relates various hypothetical quantities of employment to the proceeds which their outputs are expected to yield; and the effective demand is the point on the aggregate demand function which becomes effective because . . . it corresponds to the level of employment which maximizes the entrepreneur's expectation of profit. Furthermore the effective demand is: simply the aggregate income (or proceeds) which the entrepreneur expects to receive. (Ibid.: 55)

Keynes then provided the "substance of the General Theory of Employment":

Now if for a given value of [the quantity of employment] N the expected proceeds are greater than the aggregate supply price, i.e., if [the demand-price for labor] D is greater than [the supply-price for labor] Z, there will be an incentive to entrepreneurs to increase employment beyond N and, if necessary, to raise costs by competing with one another for the factors of production, up to the value of N for which Z has become equal to D. Thus the volume of employment is given by the point of intersection between the aggregate demand function and the aggregate supply function; for it is at this point that the entrepreneurs' expectation of profits will be maximized. The value of D at the point of the aggregate demand function, where it is intersected by the aggregate supply function, will be called *the effective demand*. This is the substance of the General Theory of Employment. (Ibid.: 25)

Keynes supplied more details about the theory:

The outline of our theory can be expressed as follows. When employment increases, aggregate real income is increased. The psychology of the community is such that when aggregate real income is increased aggregate consumption is increased, but not by so much as income. Hence employers would make a loss if the whole of the increased employment were to be devoted to satisfying the increased demand for immediate con-

sumption. Thus, to justify any given amount of employment there must be an amount of current investment sufficient to absorb the excess of total output over what the community chooses to consume when employment is at the given level. For unless there is this amount of investment, the receipts of the entrepreneurs will be less than is required to induce them to offer the given amount of employment. It follows, therefore, that given what we shall call the community's propensity to consume, the equilibrium level of employment . . . will depend on the amount of current investment. The amount of current investment will depend, in turn, on what we shall call the inducement to invest; and [this] will . . . depend on the relation between the schedule of the marginal efficiency of capital and the complex of rates of interest. (Ibid.: 27–28)

As Frank Knight stated, "The thesis of the work is, first, that unemployment is due to the failure of effective demand, that neither actually nor properly, naturally nor artificially, is unemployment to be remedied otherwise than by an increase in the effective (monetary) demand for labor" (Knight 1960: 73).[7] Keynes claimed that this failure depends on "ultimate independent variables":

Our independent variables are, in the first instance, the propensity to consume, the schedule of the marginal efficiency of capital and the rate of interest. The schedule of the marginal efficiency of capital depends, however, partly on the given factors and partly on the prospective yield of capital-assets of different kinds; whilst the rate of interest depends partly on the state of liquidity-preference (i.e., on the liquidity function) and partly on the quantity of money measured in terms of wage-units. Thus we can sometimes regard our ultimate independent variables as consisting of (1) the three fundamental psychological factors, namely, the psychological propensity to consume, the psychological attitude to liquidity and the psychological expectation of future yield from capital-assets, (2) the wage-unit as determined by the bargains reached between employers and employed, and (3) the quantity of money as determined by the action of the central bank. Our dependent variables are the volume of employment and national income. (Keynes 1936: 245)

Essentially, Keynes's theory is a set of questionable psychological assumptions woven into an inaccurate (aggregated) depiction of a market economy. And his doomsday scenario of unemployment equilibrium can only be fundamentally solved by monetary expansion; no other ultimate, independent, policy variable exists.

The Keynesian theory has several shortcomings as an explanation of the Phillips curve. First, like that of Phillips and Lipsey, it is a theory of equilibrium, not disequilibrium.[8] As such, it does not generate Phillips-curve data; it determines only levels of wage rates and levels of employment, not rates of change of wages or rates of unemployment, nor a correlation between the two. In figure 3.3, starting at point A, as monetary inflation drives labor demand upward, the *level* of employment increases, but the wage rate stays constant. Thus, every level of employment less than full employment is consistent with a zero *rate* of wage inflation. As labor demand moves beyond point F, employment will exceed the full employment level. Even in this case, nothing can be said about rates of

change in wage rates and rates of unemployment. In fact, Keynes's theory, ironically, implies that any time wage rates increase, the labor market is at full employment. Furthermore, once wage rates reach any given level, labor supply becomes horizontal to the left of that wage rate. Thus, Keynes's theory also implies that wage rates cannot fall.

While Keynes's theory of unemployment hinges on inflexible wages and prices, this condition could not exist in the free market. First, prices and wages are components of voluntary contracts designed to bring about cooperation and coordination of individuals. The voluntary nature of the exchanges demonstrates the desire of individuals to cooperate with others. Prices are a means to render this cooperation and, thus, are as flexible as individuals wish them to be. Even if some extramarket force, such as government coercion, fixed prices, individuals, still desirous of satisfying their needs, could alter the other components of their contracts to create the desired flexibility.

Second, unlike Phillips and Lipsey, Keynes claimed that involuntary unemployment could exist at equilibrium. He based this result on his assertion that workers would not accept a lowered wage unless the wages of all workers fell. If such a situation prevailed, it would seem paradoxical to call this involuntary employment. By construction, job offers would still exist, albeit at lower wages. If workers choose to separate themselves from the coordination of the market, it makes little sense to call such activity "involuntary." It is simply allocation of labor into its highest-valued use, that is, personal use (leisure) instead of market use (labor). Certainly the market cannot be blamed for "unemployment" that results from the desire of workers to stop cooperating with others. Nor is it obvious how government intervention in the market can overcome this psychological problem of workers to the satisfaction of all market participants: workers, consumers, capitalists, and entrepreneurs.

Third, while Keynes recognized the existence of the entrepreneur as the coordinating actor in the market, his aggregated conception misstates the concept of entrepreneurship. Entrepreneurial profit does not depend at all on aggregate demand; it depends only on the revenue generated by the demand for specific products relative to the costs generated by hiring specific resources. Some entrepreneurs make profits as they move resources from lower- to higher-valued uses, while others suffer losses at the same time. Successful entrepreneurship moves the market to equilibrium, where no (additional) profit can be made. Keynes's aggregated view is no better than the Phillips/Lipsey mechanism at explaining the market process.

Finally, because the trade-off is inconsistent with Keynes's theory, its "existence" was a tremendous setback for the early Keynesians. They scrambled to adjust the theory, but did not completely give up the hope of creating ever-expanding employment in response to an increasing effective demand.[9]

In light of both the inadequacy of Phillips/Lipsey and the failure of the Keynesians, neoclassical economists have made their own attempts to explain the Phillips curve.[10] According to Edmund Phelps, "The 'frictions' in an advanced economy

create a linkage between the path of the unemployment rate over time and the path of the inflation rate generated by the course of aggregate demand'' (Phelps 1972: xii). These frictions, stemming from faulty information, are modeled by ''search theories'' of the labor market and by assumptions about the formation of expectations (ibid.: 3–34). As Phelps explains:

> A common thread runs through all these models. The actors of each model have to cope ignorant of the future or even much of the present. Isolated and apprehensive, these Pinteresque figures construct expectations of the state of the economy—over space and over time—and maximize relative to that imagined world. The supply prices of outputs and of labor services and, similarly, the demand prices for labor, are linear homogeneous in known and expected prices (including expected mean demand prices in the stochastic case)—present and future. Quantity decisions are homogeneous of degree zero in these variables.
>
> On adaptive or other error-correcting hypotheses, a change of aggregate demand alters the relations between sampled prices and expected prices. The implied alteration of expected relative prices—of expected wage rates elsewhere relative to sampled rates, of expected mean future demand prices relative to current demand prices, of expected real rates of interest, etc.—causes a change in quantity decisions, hence changes in employment and output. If by accident or design there should be maintained a disequilibrium in which expectations on average are systematically in error, error-learning will cause expectations continuously to be revised and, correspondingly, successive revisions of the supply and demand prices for labor services and the supply prices of outputs. This is the process identifiable with the Phillips curve. Whether there exists a permanent Phillips curve is another matter. It is widely believed by the authors of this volume that equilibrium output and employment are approximately independent of expectations of wage and price increases. Hence, if these expectations adapt to actual wage and price increases, little or no permanent increase of output and employment would be obtainable through rising aggregate demand. (Phelps 1970: 22–23)

A complete analysis of this literature would be out of place in a book about Keynesian theory. However, it deserves some attention because this neoclassical theory has grafted the Keynesian concept of aggregate demand onto a ''new'' disequilibrium adjustment mechanism, namely, adaptive expectations. Phelps et al. used the latter as a means to give a micro foundation to Keynesian macro theory. Yet, replacing the simple *deus ex machina* of Phillips/Lipsey with a complex one does not advance our understanding of how human beings coordinate their actions. The market process of specialized production requires a rational basis for entrepreneurial calculations about the profitability of using specific resources in various combinations to produce specific goods and services. Profit-oriented entrepreneurs render coordination among all market participants, who are neither ''isolated'' nor ''Pinteresque.'' The profit/loss calculations require entrepreneurs to form expectations about prices of the specific goods they plan to sell and the specific resources they plan to hire. No expectations about changes in prices of groups of goods or in prices distant from their activities are needed. Furthermore, the acceptance of this uncertainty by specialized entre-

preneurs relieves workers of the need to form such expectations—they simply compare the current offers made by the entrepreneurs. The market process is not one of adapting to error-learning but one of adjusting to the discovery of opportunity.

To the extent that the Phillips curve trade-off does exist, it is explained by the Misesian theory of the business cycle.[11] In the hampered market economy, where the government monopolizes money production with fiat paper and regulates fractional-reserve financial institutions, the central bank can initiate the business cycle by expanding the money supply through the credit market. The increased supply of credit, appearing to be genuine savings, artificially lowers the rate of interest, making investment in higher-stage capital goods more profitable. Entrepreneurs begin to expand the higher stages of the production structure at the expense of stages near the production of consumption goods. It is possible during this expansion phase of the business cycle for unemployment to fall and price inflation to rise, appearing to be the Phillips curve trade-off. When the central bank ends the monetary inflation, the rate of interest will rise and the credit supply will shrink, causing the expansion of higher stages of production to become unprofitable. Entrepreneurs dismantle their projects and reallocate resources back into stages near the production of consumption goods, where consumers desire them. During this recession phase of the business cycle, unemployment will likely rise and price inflation will probably fall, giving the appearance of the Phillips curve trade-off. However, there is no menu forcing government officials to trade more price inflation for less employment or vice versa. Government policy causes both price inflation and unemployment. If government officials were to eliminate price controls and central banking (and other interventions), the unhampered market would not exhibit sustained price inflation, undesirable unemployment, or business cycles.

DATA

Several problems exist with the data used to form the Phillips curve. First, the data are aggregated from a large number of specific sources. Econometrically, aggregating data destroys the "information" necessary for least-squares estimation.[12] This information is the *variation* that exists between data points and the estimated regression line. The least-squares procedure fits this line to minimize such variations. When data are aggregated, the necessary variation is lost both because fewer data points exist and because averaging eliminates it. The resulting aggregated-data regression line will differ from the "true" relationship, which can only be estimated with raw data. Phillips-curve data manifest this problem because they are purposely aggregated into economy-wide annual figures. This process leaves only one point for the entire economy per year, but the government publishes price indices and unemployment figures monthly and for various subcomponents of the economy. Thus, all Phillips-curve estimates (whether from regression lines or eyeballing a scatter diagram) are biased against

the "true" relationship. Since no econometric justification exists to further aggregate data, Phillips-curve estimation should use the least aggregated data available, that is, individual firm data. Instead of compiling this data into economy-wide annual aggregates and then running an ordinary least-squares regression, the appropriate procedure is to pool the raw data across both firms and time periods and then run a generalized least-squares regression. Furthermore, it cannot be objected that different industries or collections of goods generate data from a different statistical process and, thus, cannot be pooled together in one regression. If this is true, then it is also statistically improper to aggregate data from these different processes.

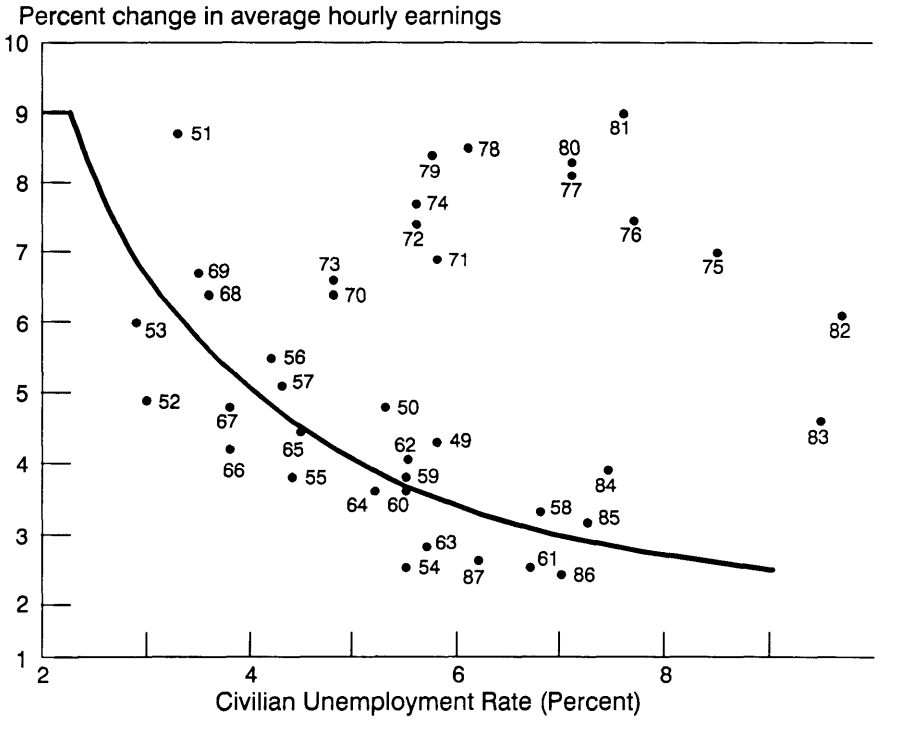
Second, to generate the trade-off, the data is necessarily misinterpreted. The most flagrant example is displaying the data on a two-dimensional scatter diagram.[13] It is clearly arbitrary to arrange these data as if they had no time dimension since they are actually generated sequentially through time. In fact, Phillips demonstrated that time systematically affects the data points (his famous loops) and then ignored the effect of time in his trade-off curve (Phillips 1958: 286–87). Samuelson completely misunderstood this issue when he tried to incorporate specific years into a regression equation as an explanatory variable.[14] Time is not a regressor that can be quantitatively measured in years (1921 is "more" time than 1920). If the data are presented sequentially, the trade-off is routinely falsified. In Figure 3.4, a scatter diagram of inflation and unemployment for U.S. data from 1950 to 1986, consider: 1951 to 1952, 1959 to 1960, 1965 to 1966, 1966 to 1967, 1970 to 1971, 1972 to 1973, 1973 to 1974, 1978 to 1979, 1980 to 1981, 1982 to 1983, 1983 to 1984, 1984 to 1985, and 1985 to 1986. Furthermore, there is no way to predict from year to year how a change in inflation is (quantitatively or qualitatively) associated with a change in unemployment. Therefore, these data provide no basis on which to conduct social engineering aimed at either full employment or optimal inflation.

Finally, to apply the least-squares technique requires three additional assumptions about the data: they must be (1) generated by an iterative process that is (2) subject to randomness and (3) described by a normal distribution. It is clearly erroneous to make these assumptions for any process generated by human action, including those of inflation and unemployment. Such processes are not repeatable or random or normally distributed (Mises [1949] 1966: 105–18). Each pair of unemployment and inflation figures is generated by a unique, infinitely complex set of human interactions. No statistical technique can be made sophisticated enough to overcome these data problems.

ESTIMATION

In Phillips's original article, he stated, "The purpose of the present study is to see whether statistical evidence supports the hypothesis that the rate of change of money wage rates in the United Kingdom can be explained by the level of unemployment and the rate of unemployment and if so to form some quantitative

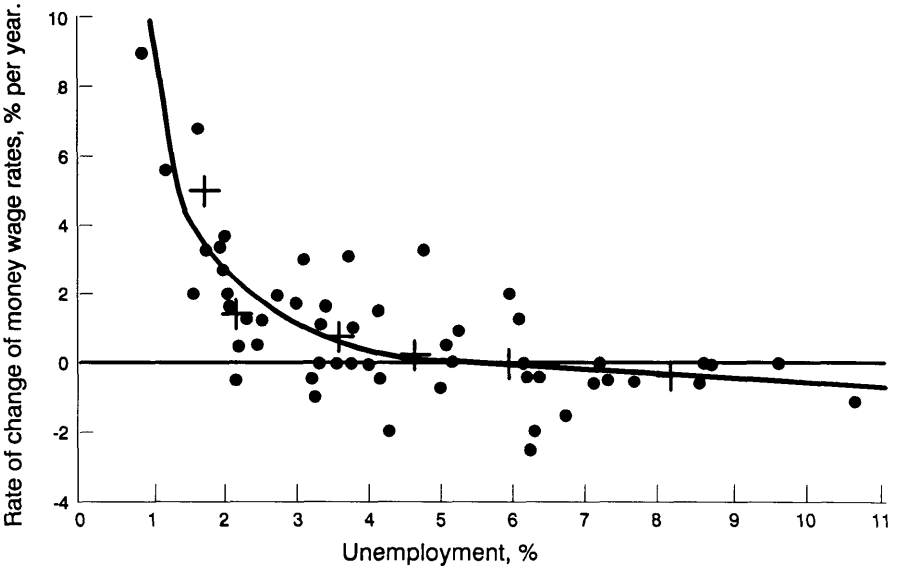
Figure 3.4
U.S. Inflation and Unemployment Data, 1950–1986



estimate of the relation between unemployment and the rate of change of money wage rates" (Phillips 1958: 284). After inspecting the scatter diagram (reproduced as Figure 3.5), he claimed that, for the period 1861–1913, "there is a clear tendency for the rate of change of money wage rates to be high when unemployment is low and to be low or negative when unemployment is high" (ibid.: 290). He then estimated the first Phillips curve, assuming the form to be $y + a = bx^c$, where y is the rate of change of wage rates and x is the percentage of unemployment. He explained the estimation procedure as follows:

> The constant b and c were estimated by least-squares using the value of y and x corresponding to the crosses in the four intervals between 0 and 5 percent unemployment, the constant a being chosen by trial and error to make the curve pass as close as possible to the remaining two crosses in the intervals between 5 and 11 percent unemployment.
>
> The crosses . . . give the average values of the rate of change of money wage rates and of percentage unemployment in those years in which unemployment lay between 0 and 2, 2 and 3, 3 and 4, 4 and 5, 5 and 7, and 7 and 11 percent, respectively. Since each interval includes years in which unemployment was increasing and years in which it was decreasing the effect of changing unemployment on the rate of change of wage rates

Figure 3.5
Phillips's First Estimation of the "Phillips Curve"



tends to be cancelled out by this averaging, so that each cross gives an approximation to the rate of change of wages which would be associated with the indicated level of unemployment if unemployment were held constant at that level. (Ibid.: 290)

Several problems exist with this procedure. The first is that Phillips misstated the nature of econometrics. Estimation cannot explain levels of variables; it shows how variation in one variable is correlated with variation in another variable. Explanations for the correlation must be provided by economic theory. For example, a high correlation may have existed between variation in the number of dirty dishes washed per day and variation in total revenue per day at a restaurant. This provides no theoretical explanation that more dirty dishes washed causes more total revenue. Generally, very high correlations may occur where no theoretical connection exists.

Second, inspection of the scatter diagram for 1861–1913 does not reveal a clear tendency for wage inflation to be high when the unemployment rate is low or vice versa. At any given level of the unemployment rate, there exists a wide range for wage inflation. In Figure 3.5, when the unemployment rate is approximately 2 percent, nine different levels of wage inflation exist, ranging from about $-1/2$ to $+7$ percent. In fact, for unemployment levels from 2 to 6 percent (obtained by omitting extreme values for wage inflation and unemployment rates), the points lie evenly distributed in a band from about -2 to 4 percent for wage inflation. This grouping is no more arbitrary than Phillips's originally

dividing the data into three periods: 1861–1913, 1913–1949, and 1948–1957, and then fitting his curve to the first period's data only. If all the data is put on a single scatter diagram, as it should be, the relationship becomes even muddier.

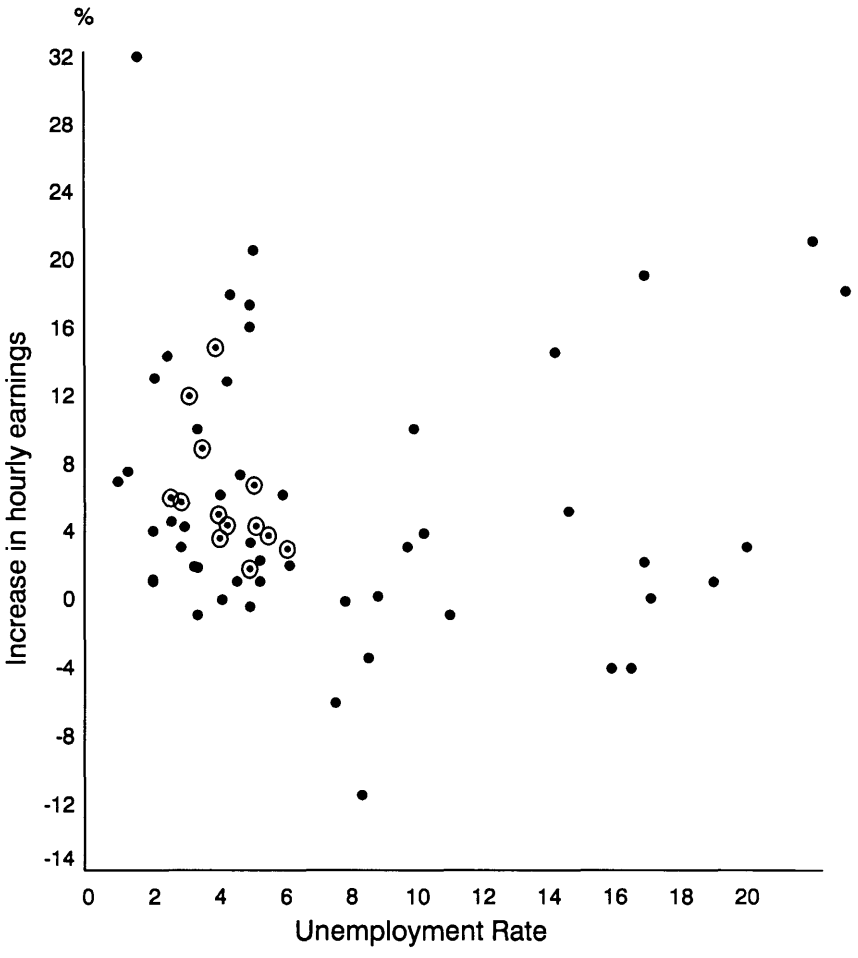
The third problem with Phillips's estimation was his manipulation of both the equation and the data. While Phillips provided a brief explanation for a nonlinear equation, he simply *assumed* a log-linear form (ibid.: 283). This form was particularly inappropriate for Phillips's data because he could not take the log of negative numbers, so he had to ignore a large number of data points.[15] Furthermore, using the same data, Lipsey revealed this form to be statistically inferior, causing Phillips's estimates to be inaccurate (Lipsey 1960: 4–5). Even more damaging was Phillips's estimating two of the equation's parameters, b and c, with only four data points, that is, the crosses discussed above. This averaging process destroys the information necessary to calculate regression estimates and hides the considerable variation that exists in the raw data. In fact, it may allow a regression equation to be fitted to randomly generated data (as long as a limited number of points are generated).

Lipsey tried to clean up the econometric mess that Phillips had left by addressing the first and third problems discussed above, but not the second. Using all 52 data points for the period 1862–1913, he estimated the equation $w = a + bu^{-1} + cu^{-2}$, where w stands for the rate of change of wage rates and u for the rate of unemployment. Lipsey concluded, "The relation specified in [this] equation gives an r^2 of 0.64, indicating that, over the period 1862–1913, 64 percent of the variance in money wage rates is associated with variations in the level of unemployment" (ibid.: 5). And for the period 1919–1957, Lipsey found that "the curvilinear relation between w and u described by [this] equation was first fitted to the data for this period. R^2 for this relation is 0.28, which indicates that only a low proportion of the variance in w can be accounted for by variations in u" (ibid.: 25). If the entire span (1861–1957) is put together, the correlation coefficient is even smaller. This is flimsy evidence on which to make the trade-off the centerpiece of macroeconomics. Yet Keynesians and mainstream economists alike seem willing to bet the economics profession and social welfare on this "relationship." Their acceptance of the trade-off is an act of faith, since they have no theory to explain it or evidence that it even exists. Samuelson and Solow exemplify such faith, calling Phillips's findings "remarkable" and concluding:

> In the first place, the period 1861–1913 . . . shows a fairly close relationship between the percent change in wage rates and the fraction of the labor force unemployed. . . . In the second place . . . the same relationship that fits for 1861–1913 also seems to fit about as well for 1913–48 and 1948–57. (Samuelson and Solow 1960: 186–87)

They were impressed enough with the trade-off to construct a scatter diagram (reproduced as Figure 3.6) for U.S. data (ibid.: 188). Without even bothering to run a regression to test the Phillips relationship, Samuelson and Solow an-

Figure 3.6
Samuelson and Solow's Demonstration of the "Trade-Off"



nounced its existence merely from inspection of the points. This was an act of great faith since, as they said, "there are points all over the place" (ibid.). Already true believers, they began a quest to discover the trade-off and, in the process, provided an example par excellence of the adage that you can prove anything with statistics. Only someone who "knows" that a trade-off exists could find it in Figure 3.6. Looking at the scatter diagram is like cloud gazing—one can see what one wants to see.

To find the trade-off, Samuelson and Solow employed the same method as Phillips and Lipsey, that is, arbitrarily separating the data into carefully selected

periods. The only reason they gave for making their divisions was that doing so resulted in the trade-off. Even so, for the early years of World War I and the period from 1933 to 1941, the trade-off was falsified. However, they claimed that a "consistent pattern" existed for the period from 1900 to World War I and for the decades of the 1920s and 1950s. Although this pattern has "shifted" upward over time, Samuelson and Solow were confident that implementing their suggestions for government policy would improve the trade-off. This procedure is econometric chicanery. The econometrician should use the data as given to test his hypothesis. If the relationship is falsified, then he should move on and search for another hypothesis to test. Economists should have moved on from the Phillips curve long ago, but apparently faith is stronger than fact.

Furthermore, the shift of the trade-off that Samuelson and Solow identified is econometric evidence of misspecification. Simply put, there are variables missing from the trade-off equation, that is, the equation is wrong. If these other variables could be found, putting them into the equation would eliminate the shift and correctly identify the relationship between inflation and unemployment. A misspecified equation gives the wrong indication of the correlation between variables, even to the point of switching the sign of the coefficient from negative to positive. Prudence demands that, before making policy pronouncements that could change the course of an entire economic system, economists wait until they find the correct equation.

Just as the trade-off was becoming holy writ in the wake of the apparently successful Keynesian fine-tuning during the mid–1960s, the specification error manifested itself, and the Phillips curve has been shifting, sometimes violently, always unexplainably, ever since. During the 1970s, alternative (non-Keynesian) presentations, led by the Phelps/Friedman approach (Phelps 1972), began to dominate the journals. Rejecting the Keynesian explanation in part, this literature returned to Phillips's original theory. It became a quest for the microeconomic "roots" of the trade-off (Phelps 1970). The econometric result of this search was to include expected inflation in the equation in order to correct the specification error. Phelps summarized this attempt as follows:

> It is easy to see . . . that a Phillips-like relation between the output level . . . and the rate of price increase results. . . . But the now familiar qualification must again be made: The long-run trend rates of increase of money wage rates, of demand, and of the going price elsewhere expected by the firm figure as parameters in any such steady-state Phillips relation. As these expected trend rates adapt to perceived trends, the Phillips relation floats upward. (Ibid.: 20)

Conceptually, these additional "parameters" *might* be capable of correcting the specification error. Unfortunately, expectations are not measurable and, thus, cannot be put into a statistical equation. The typical solution is to use past trends in actual magnitudes of the variable (Phelps 1972: 3–34). But Lipsey had shown in his original article that recent past magnitudes were notoriously inefficient

predictors of current magnitudes (Lipsey 1960: 7). The result of these econometric efforts to find the Phillips curve has been, at best, failure.[16]

The economics profession is slowly, reluctantly admitting this failure and accepting that the Phillips curve is truly a myth. In 1988, the Council of Economic Advisors to the President wrote:

> The observation of a shifting relationship between inflation and unemployment explains little, if most of the actual behavior of inflation and unemployment is attributed to unexplained shifts rather than to the purported relationship.
>
> Recent data provide little evidence of a tradeoff between inflation and unemployment.
>
> Wages and earnings also have shown little evidence of accelerating as the unemployment rate has declined during the current expansion.
>
> Recent experience in other countries also appears to contradict the notion of a stable tradeoff between inflation and unemployment. (U.S. Council 1988: 82–83)

The scatter diagram of inflation and unemployment for U.S. data from 1950 to 1986 (Figure 3.4) looks boringly familiar—points all over the place. This condition is the closest thing to a constant that has ever been found in economic data (Mises [1949] 1966: 56).

In summary, the Phillips curve does not exist. Furthermore, it cannot be derived from the theories offered to explain it. Even if it could, the data appropriate to confirm or falsify it, namely, raw data, have not been used for this task. Even with the favorable (aggregated) data, the estimation techniques used have not shown a consistent, significant relationship between inflation and unemployment.

NOTES

1. See also Jan Tinbergen, "The Significance of Keynes' Theories from the Econometric Point of View," in Harris (1948a: 219–31).

2. Neoclassical theories of the Phillips curve have attempted to explain this mechanism; for examples, see E. S. Phelps (1970).

3. For examples, see Hansen (1947: 234) and Samuelson and Solow (1960: 193–94).

4. For examples, see Harris (1948a: 232–42, 541–90).

5. Wassily Leontief, "Keynes' General Theory and the Classicists," in Harris (1948a: 232–42).

6. Keynes said that men are involuntarily unemployed if an increase in prices relative to wage rates would lead to more employment. See Keynes (1936: 15) and Harris (1948a: 47).

7. See also Jacob Viner, "Mr. Keynes on the Causes of Unemployment," in Hazlitt ([1960] 1977: 50–51).

8. See Hazlitt ([1959] 1973: 69–75) and Knight (1960: 91–95).

9. See Keynes (1936: 116–17) and Hazlitt ([1959] 1973: 138).

10. See Phelps (1970, 1972) and Brunner and Meltzer (1976).

11. Explanations of the Austrian theory of the business cycle can be found in Mises ([1949] 1966: 538–75) and in Rothbard ([1963] 1983a: 11–38).

12. For example, see Henri Theil (1971: 556–73). Also, significant theoretical problems exist with price indices. See Hazlitt ([1959] 1973: 288–318), W. H. Hutt (1979: 135–81), and Oskar Morgenstern (1979).

13. This error is committed by Phillips (1958: 285), Lipsey (1960: 4), and Samuelson and Solow (1960: 188).

14. Samuelson committed this error for estimates of the consumption function. See Samuelson, "Appendix: A Statistical Analysis of the Consumption Function," in Hansen (1947: 253).

15. This point was made by Lipsey (1960: 3).

16. See Robert Lucus (1981: 104–30).

Chapter 4

The Myths of the Multiplier and the Accelerator

by Jeffrey M. Herbener

THE MULTIPLIER

> On a market there are only individuals or groups of individuals acting in concert. What motivate these actors are their own concerns, not those of the whole market economy. If there is any sense in such notions as volume of trade . . . then they refer to the resultant of the individuals' actions. It is not permissible to resort to these notions in order to explain the actions of individuals.
>
> —Ludwig von Mises, 1966

Definition of Terms

Because human action is the basis for all economic knowledge, every meaningful term in economics must have a definitional link to the concept of human action. Spurious terms cannot advance the understanding of human action. Yet the *essential* of *The General Theory* is its arbitrary and shifting definitions of crucial terms.[1] The multiplier manifests this aspect of J. M. Keynes's work since it is built from his definitions of consumption (C), savings (S), investments (I), and income (Y).

Keynes defined income as "equal to the value of current output" (Keynes 1936: 63). He continued, "Expenditure on consumption during any period must mean the value of goods sold to consumers," and "any reasonable definition of the line between consumer-purchasers, and investor-purchasers will serve us equally well, provided that it is consistently applied" (ibid.: 61). Savings, he said, consist of the "excess of income over expenditure on consumption" (ibid.: 63). Investment is "the current addition to the value of capital equipment," which is "clearly equal to what we have just defined as saving. For it is the part

of the income of the period which has not passed into consumption'' (ibid.). These definitions allowed Keynes to write his famous identities: Y = C + I and S = Y − C, thus, S = I (ibid.). The equations, in turn, formed the foundation of his theory. Yet this foundation is shifting sand, since he also claimed that *S* does not equal *I* and that the operational definition of saving is hoarding, which he then turned into the villain of his story (ibid.: 210–11).[2]

In addition to shifting, Keynes's definitions disconnect his theory from the axiom of human action. In fact, *C*, *S*, *I*, and *Y* are ex post facto accounting categories (Hansen 1947: 31–40). Such constructs cannot explain human action because they are formed by the monetary outcomes of human action. Being sums of money, his foundational concepts cannot lead to a ''general'' theory; the theory cannot even explain, for example, a barter economy or a Robinson Crusoe situation.

Consider developing definitions of the concepts above for an isolated individual.[3] For Robinson Crusoe consumption is the enjoyment derived from the use of consumption goods. These goods are ready to provide immediate satisfaction of desires, while capital goods satisfy desires only in the future. As a consumption good is used, its ability to provide subjective value is exterminated.[4] Thus, to transfer consumption goods for use in the future, Crusoe must restrain himself from consuming his entire production of these goods. Saving is the term for such postponement of current consumption. It can be either plain saving (storing existing consumption goods) or capitalist saving (resulting in the production of capital goods). Investment is the process of creating capital goods, and thus, the amount of investment is determined by the amount of capitalist saving. Because these definitions come from the concept of human action they have universally applicable economic meaning and therefore provide the correct foundation for more complex situations in which individuals engage in cooperative action.

This analysis poses serious problems for several propositions that Keynes derived from his accounting definitions. One is the notion that Robinson Crusoe can enrich himself by engaging in consumption and avoiding saving. Current consumption exterminates the ability to enhance future consumption. The only path to greater future consumption is saving and investment today. Another problem is the belief that Crusoe determines his MPC (which simultaneously determines his MPS) and then engages in specific actions to fill up his consumption quota (C), out of his income (Y), leaving a residual (S). Crusoe, like everyone, ranks specific needs and applies specific means to satisfy them. His subjective value determines which needs he satisfies and how. In other words, he acts on the margin, not in lumps. Only after he engages in specific actions can he go back and assign each one either a consumption or an investment category. These accounting categories do not guide his actions; they have meaning only in tracing the effects of such action. Keynes even admitted that he could not understand Eugen von Böhm-Bawerk's presentation of these basic principles (Keynes 1936: 76).[5]

Moving to a money-exchange economy cannot alter these basic principles; market activity is human action. Keynes attempted to prove otherwise by arguing that both specialized production with exchange and using money can create economic problems. Even with these complexities, capital formation still requires capitalist saving and investment, and it still remains the path to greater future consumption. In a money-exchange economy, individuals can engage in a division of labor that greatly enhances both current and future productivity. Keynes disparaged specialization in capital formation, claiming that when the saving function and the investing function are performed by different people, the functions cannot be coordinated through exchange (ibid.: 182–85). Yet it is a great achievement of economic theory to demonstrate exactly how coordination arises among individuals in specialized production and exchange (Mises [1949] 1966: 143–70, 232–84). If such coordination were impossible, Keynes's criticism would apply to any market activity. For example, demanders of shirts are different people from suppliers of shirts. They are motivated differently, with no apparent harmony of interest. Thus, according to Keynesian thinking, their activities should be systematically uncoordinated despite the pricing mechanism. (This implies that the Keynesian problem is a *coordination* problem, not one of aggregate demand or effective demand.) Economic theory demonstrates how entrepreneurship based on economic calculation using market prices coordinates demanders and specialized suppliers of any good. There is no *economic* reason to single out one good for special problems in this area.

Keynes provided a psychological reason instead, with his operational definition of saving as hoarding money, namely, liquidity preference (Keynes 1936: 174, 208). For Crusoe, hoarding corresponds to plain saving. Since Crusoe prefers to save in this way, hoarding creates no problems for the isolated individual. Even in a market economy, hoarding in goods other than money does not create economic problems. In fact, at any point in time, all goods may be hoarded, that is, owned as part of an individual's stock of goods. It is impossible to define, in a meaningful way, hoarding for Crusoe or for individuals in a barter economy. Finally, in the free market, where money is a commodity (e.g., gold), if individuals hoard gold, it simply calls forth greater production of gold in a fashion similar to increased demand for any commodity. It does not create underconsumption. Neither can obtaining and hoarding existing gold create underconsumption. If it could, so would the purchase of any used (i.e., existing) good. In this case, Keynes argued that spending power is transferred (ibid.: 81–82). However, that is always true in any exchange. Spending power does not depend upon hoarding but upon the ability to find someone willing to exchange something for money. Even in the case of widespread hoarding, spending power is transferred, as prices fall in general, to those who continue to use money in exchange. Thus, Keynes's theory can apply only to a hampered market economy, where government creates coordination problems with intervention in the form of fiat paper money and price controls.

A second criticism arises from the way that Keynes attempted to sidestep the

fact that his terms are not linked to the categories derivable from human action. To avoid appearing arbitrary, he claimed that his categories depend on the "psychology of the community" (ibid.: 27). But if we are to define basic economic concepts by psychological principles, why should we accept Keynes's pronouncements? At best, he is a rank amateur psychologist. Why not consult Sigmund Freud? At least he has credentials. Freud might restate Keynes's categories as: *X*—spending on goods for sexual gratification, *G*—spending on goods not related to sexual gratification, and *O*—income not spent on sexual gratification. Thus, Y = X + G, and O = Y − X, so G = O. By construction, *X* must be a large and stable percentage of *Y*, implying a huge nonsex multiplier. But none of this has anything to do with economics. Psychological terms cannot form the basis of a meaningful economic theory (Mises [1949] 1966: 123–27). Even if psychology could form the basis of economic theory, no meaningful psychological statement can be made about the "community." Only individuals have minds, and therefore, psychology can make meaningful statements only about individuals.[6] Thus, Keynes's aggregation system falls apart. He could aggregate dollars but not minds or actions.

MPC

Keynes built the multiplier from his "fundamental psychological law" (1936: 90). He said, "The psychology of the community is such that when aggregate real income is increased aggregate consumption is increased, but not by so much as income" (ibid.: 27). This assumption allowed Keynes to divide changes in income arbitrarily into two accounting categories, ensuring that changes in income must always be less than changes in consumption. Having thus created "underconsumption," Keynes wrote most of the rest of *The General Theory* to solve this problem (Hazlitt [1959] 1973: 51).

Assuming some skepticism for Keynes's pronouncements about psychology, can this division be demonstrated theoretically? Since he is describing accounting categories, perhaps this relationship can be supported by some necessary accounting rule. For example, one could define the dollar value of the entire *stock* of goods in existence at any point in time and then split that amount into two subcategories: the dollar value of consumption goods and the dollar value of investment goods. Provided that some of both goods exist, the value of the stock of consumption goods must be less than the value of the entire stock. However, the Keynesian categories of *Y*, *C*, and *I* are *flows*, that is, amounts measured over a period of time. If these flows are defined in relation to the stocks, then *Y* would be equal to the *change* in the value of the entire stock, *C* would be the *change* in the value of all consumption goods, and *I* the *change* in the value of all investment goods. As long as some stock of goods exists, the flow of consumption goods does not have to be less than the change of the stock. *C* could exceed *Y*, even for the entire economy, by consuming part of the existing stock. Also, if *C* were equal to *Y*, then *I* would be negative because of depreciation.

Since this set of definitions does not demonstrate the Keynesian case, perhaps another set will.

Ignoring the stock of goods, a fixed accounting relationship between *Y*, *C*, and *I* can be defined. Income (Y) is the dollar value of newly produced goods over some period of time (still a flow). *C* is the value of newly produced consumption goods, out of *Y*, and *I* is the value of newly produced investment goods, out of *Y*. With these definitions, *Y* must add up to *C* plus *I*. However, this relationship tells us nothing about the stock of goods and thus, is divorced from the accounting categories that give individuals meaningful indicators of their wealth. Furthermore, Keynes's assumption that increases in *Y* result in smaller increases in *C* is still not valid. It is possible to have increases in *Y* (producing faster) and decreases in *C* (consuming slower) over the same period, or *C* can increase more than the increase in *Y* (see Table 4.1). Thus, the condition that Keynes set forth as the foundation of the multiplier is arbitrary.

The construction of the multiplier required several steps from this foundation. As Henry Hazlitt said, "It is amazing how many fallacies and inversions Keynes can pack into a small space, and especially how many fallacies, like a set of Chinese boxes, he can pack inside other fallacies" (Hazlitt [1959] 1973: 132). He transformed his fuzzy psychological law into a precise mathematical expression, which he called the (marginal) propensity to consume. Keynes said, "We will therefore define what we call the propensity to consume as the functional relationship between Y_w, a given level of income in terms of wage-units, and C_w, the expenditure on consumption out of that level of income" (Keynes 1936: 90). He completed his thesis by saying, "[the change in] C_w has the same sign as [the change in] Y_w but is smaller in amount, i.e., [the change in consumption divided by the change in income] is positive and less than unity" (ibid.: 96). But *Y* and *C* cannot be levels (amounts of a stock at a point in time) since they are flow variables (rates over a period of time). And, as shown above, no accounting relationship exists between changes in the *rates* of accounting categories. Furthermore, no mathematical function can exist between two accounting categories. This would be equivalent to saying that liabilities are a function of assets since assets equal liabilities plus net worth. These are accounting identities, not functional relationships. At best, *C* and *Y* are "functions" of a third variable, "the psychology of community." But even under Keynes's assumptions, this process is not a mechanical function unless the community really has no mind, but is a machine. If so, there is no reason to camouflage this view of man by saying that the law is psychological. Actually, what generates the data for *C* and *Y* is an infinitely complex process of interaction among millions of individuals (Mises [1949] 1966: 30–32).

Multiplier

Keynes ignored this complexity in social action and assumed a precise, fixed multiplier process. Keynes described his multiplier as follows:

> In given circumstances a *definite ratio*, to be called the multiplier, can be established between income and investment, subject to certain simplifications, between the total employment and the employment directly employed on investment. This further step is an integral part of our theory of employment, since it establishes a *precise relationship*, given the propensity to consume, between aggregate employment and income and the rate of investment. (Keynes 1936: 113 [emphases added])

Furthermore, he claimed that the MPC "is of considerable importance because it tells us how the next increment of output *will have to be* divided between consumption and investment" (ibid.: 115 [emphasis added]). The multiplier (k) equals 1/1–MPC, and thus, he concluded, "it tells us that, when there is an increment of aggregate investment, income *will increase* by an amount which is k times the increment of investment" (ibid. [emphasis added]).

To use k in support of "public works," the multiplier must have the mathematical precision Keynes gives it (ibid.: 116). Yet this precision leads to logical absurdities. Three absurd cases exist, corresponding to three violations of Keynes's pronouncement that $0 < \text{MPC} < 1$. As shown above, there is no accounting principle that the MPC be bound in this way, and there is ample evidence that the MPC is not so bound (see Table 4.1).

One absurdity exists when the MPC = 1 since, in this case, k is infinitely large. Thus, any additional expenditure on "public works" would end scarcity! Keynes tried to avoid this absurdity by claiming that "prices will rise without limit" (ibid.: 117). This was nothing but a rhetorical trick since Keynes had defined his theory in real terms (wage-units). If prices are important in his equations, then he should put them in and explain their role in the multiplier process. Keynes could not do that because his entire theory falls apart as soon as changing relative prices are recognized (Hazlitt [1959] 1973: 288–318).

Even more damaging is the case where the MPC exceeds one (see Table 4.1). In this case, the multiplier is negative![7] But Keynes claimed that more spending always means more prosperity, not less. The final case is no less absurd. If the MPC is negative (see Table 4.1), then k will be a positive fraction. Thus, an increase in spending for "public works" gets partially consumed somewhere in the aggregate economy. But Keynes claimed that failure to spend leads to recession. His formula does not concur, nor can it be reconciled with his verbal pronouncements. Keynesians cannot have it both ways: either they must give up mathematical precision (rendering the theory null) or they must reconcile these absurdities with general economic theory (not possible).

Furthermore, granting that a multiplier exists, why should it equal 1/1–MPC? Why does the MPC determine additional spending in response to changing income? Even Keynes assumed that, when income increases, some of the additional saved funds go into investment spending. Since this additional investment is *reacting* to income, it should be included with the MPC. Moreover, given Keynes's accounting assumptions ($Y = C + I$), *all* spending comes out of income. Thus, no source of funds exists to initiate the multiplier process except

hoards (or fiat money). This result applies with equal force to government expenditures. There is no reason to treat them as initiating the multiplier process since they must also come out of income. Finally, there is no direction of cause and effect in the equation. And his system of equations ($Y = C + I$; $C = a + bY$; $I = d$) is recursive, that is, it is impossible to tell, mathematically, which variable changes first and which ones follow.

Even if these criticisms could be overcome, the multiplier could not be initiated without assuming unemployed resources and inflexible wages and prices (Hazlitt [1959] 1973: 149–52). Without unemployed resources, any increased spending in one area must draw resources out of other production. This process normally takes place even in the face of "unemployed" resources. Thus, a positive multiplier process in the industry receiving the spending would be offset by a negative multiplier process in the receding industry. More generally, even if created money stimulates production temporarily, it does so only by drawing resources out of some (previously preferred) alternative. In Keynesian terms, we might call these alternatives hoards of capital (excess capacity) or hoards of labor (leisure).

Finally, hoarding of money (lack of spending, for Keynes) cannot cause a multiplier effect in the absence of inflexible wages and prices. With flexibility, the only effect of hoarding money (an increase in money demand) or dispersing money (a decline in money demand) is a change in the general level of market prices. Because of this flexibility, any amount of money serves the entire medium of exchange function (Rothbard [1962] 1970: 661–719). Assuming wage and price inflexibility assumes away the desire individuals have to cooperate through the market. Prices and wages are terms of contracts used by individuals to bring about this cooperation. Even if the wage and price components of these contracts are inflexible, they may have other, flexible components. Employers could reduce fringe benefits or increase work loads to effectively circumvent fixed money wages, and suppliers could use rebates or giveaways to put flexibility into prices.

In summary, the multiplier is nonexistent for the whole economy. It is constructed from arbitrary and erroneous definitions of terms. Thus, the multiplier cannot be defined for human action generally, but only in a fiat-money, hampered economy. Furthermore, the multiplier requires assumptions about the "psychology of the community" that Keynes then turned into precise, fixed mathematical functions. These functional equations, in turn, expose contradictions within the multiplier. Even granting the existence of a multiplier, Keynes still did not demonstrate its functional relationship to the MPC or explain why it depends upon the existence of unemployed resources and inflexible wages and prices.

THE ACCELERATOR

> The characteristic mark of this third group [of mathematical economists] is that they are openly and consciously intent upon solving catallatic problems without

> any reference to the market process. Their ideal is to construct an economic theory according to the pattern of mechanics. They again and again resort to analogies with classical mechanics which in their opinion is the unique and absolute model of scientific inquiry. There is no need to explain again why this analogy is superficial and misleading and in what respects purposive human action radically differs from motion, the subject matter of mechanics.
>
> —Ludwig von Mises, 1966

Keynes coupled his mechanical multiplier with his psychological assumptions about businessmen to create a theory of the business cycle (Keynes 1936: 313–22, 249–54). He claimed that businessmen are driven by their "animal spirits" when making investment expenditures (ibid.: 314, 317, 322).[8] Their overoptimism generates too much spending, which, in turn, is multiplied throughout the economy into a boom. The bust begins when the mood of businessmen switches to overpessimism, leading to less investment spending and multiple declines in economic activity. The multiplier was the key element in Keynes's explanation of how small initial changes in spending could lead to significant economy-wide changes in output and employment. This left Keynes with an odd dichotomy: psychotic businessmen initiate the phases of the cycle, but robotic consumers fulfill it. Consumption spending suffers multiple declines, falling round after round, but investment spending falls once at the beginning of the process. This theory is not necessarily consistent with the empirical observation that investment spending moves more violently over the cycle than consumption spending.

Economists writing just prior to *The General Theory* were focusing on this phenomenon, from which they conceived the accelerator principle (Knox 1952: 264–70, 273). The Keynesians then fused multiplier and accelerator into a new theory of the business cycle. On this effort, A. D. Knox said, "The main body of literature centers on the acceleration principle and the trade cycle. Here the popularity of the principle dates from the development of the multiplier and the realization that neat models could be based on the interaction of these two theories" (ibid.: 269).[9] While interest in the trade cycle stimulated development of the acceleration principle, it is fundamentally a theory about the use of capital goods in the production of consumption goods. Thus, before analyzing the accelerationist doctrine, a theory of production is briefly reviewed below (Rothbard [1962] 1970: 40–61, 273–308).

The production of consumption goods on the free market occurs in stages where factors of production are mixed together to create capital goods in one stage that are then used in a subsequent stage to create other capital goods until, eventually, a consumption good is produced. The factors of production necessary to create capital along the stages come from setting aside wealth (saving) out of current production. The amount of capitalist saving, and thus the amount of created capital goods (investment), is determined by time preference—the desire for consumption goods sooner as opposed to later. When individuals have a lower time preference, they save and invest relatively greater amounts and thus

make larger additions to the size of the production structure, which, in turn, allows for greater future amounts of production and consumption. On the free market, this process of saving and investing is greatly enhanced (as all productive processes are) by specialization and the use of money. Those who specialize in saving are coordinated with those who specialize in investing by entrepreneurial arbitrage. This activity accurately moves the pure rate of interest as a reflection of the time preference of individuals.

Not only does entrepreneurial arbitrage lead to the amount of saving and investing that individuals desire, it also allocates this saved wealth into the highest-valued investment projects. This results from the feasibility of making meaningful profit/loss calculations and from the fact that action based on such calculations will earn a profit or suffer a loss. Economic calculation also allows individuals to fit different production processes (within each stage and between stages) together into an orderly structure.

Finally, because of free exchange based on private property, this structure of production is both flexible and complex. Flexibility (both within and between stages) comes from the fact that when individuals, as consumers or resource owners, change their valuations, entrepreneurs can profit by changing the structure to satisfy them. Complexity occurs because each entrepreneur needs to plan production only with regard to the part of the structure that directly influences his profit. Thus, the structure can extend far beyond the ability of a single mind to plan its detail. That the structure is flexible and complex should be apparent from even cursory observations of a market economy.

In contrast, the acceleration principle envisions the role of capital in production as simple, fixed, and mechanical. Knox characterized this relationship by the equation: $C_t = K_t - K_{t-1} = a(O_t - O_{t-1})$, which relates the current production of capital (C_t) to a firm's current increase in the stock of capital ($K_t - K_{t-1}$) to the constant ratio (a) between that amount and the current increase in production of consumption goods ($O_t - O_{t-1}$). According to the equation, there are two parts to the acceleration principle: one is the identity between capital produced and a change in the stock of capital; the other is a theory of investment: that there is a fixed ratio between changes in capital stock and changes in output (Knox 1952: 271).

From the first part of the theory, Knox derived two important implications of his assertion that the stock of capital exceeds the current output of capital. The first, Knox stated, is the possibility that "the stock of equipment is rising, but not at a sufficiently fast rate to prevent a decline in the output of the capital goods industries" (ibid.: 272). Second, "a given percentage fluctuation in stock means a more than proportionate fluctuation in output; and the more durable the stock the greater is the relative violence of the movements in output" (ibid.). Knox continued:

> The effects of this purely technical relationship in matters of timing and amplitude are very useful in the analysis of business cycles; and its validity is unquestionable. This paper, therefore, is concerned with the second part of the acceleration principle: the theory

of investment. So long as the accelerator is constant, the conclusions about the relationship between K and C apply also, once due allowances have been made for lags, to the timing and amplitude of fluctuations in K and in O. The crucial problem of the acceleration principle is whether the accelerator is constant. . . . The equation $K_t - K_{t-1} = a(O_t - O_{t-1})$ states the acceleration principle in its most uncompromising form: net induced investment is solely a function of the rate of growth of final output. (Ibid.: 273)

Furthermore, this relationship is assumed to hold for an entire economy. As Paul Samuelson and William Nordhaus explain:

According to this law, society's needed stock of capital, whether inventory or equipment, depends primarily upon the level of income or production. Additions to the stock of capital, or what we customarily call net investment, will take place only when income is growing. As a result, a prosperity period may come to an end, not simply because consumption sales have gone down, but merely because sales have leveled *off* at a high level (or have continued to grow but at a lower rate than previously). (Samuelson and Nordhaus 1989: 215)

On this last contention, they continue:

A simplified arithmetical example will make this clear. Imagine a typical textile-manufacturing firm whose stock of capital equipment is always kept equal to about two times the value of its yearly sales of cloth. Thus, when its sales have remained at $30 million per year for some time, its balance sheet will show $60 million of capital equipment, consisting of perhaps 20 machines of different ages, with one wearing out each year and being replaced. Because replacement just balances depreciation, there is no *net* investment or saving being done by the corporation. *Gross* investment takes place at the rate of $3 million per year, representing the yearly replacement of one machine. (The other $27 million of sales may be assumed to be wages and dividends.) . . . Now let us suppose, that, in the fourth year, sales rise 50 percent—from $30 million to $45 million. Then the number of machines must also rise 50 percent, or from 20 to 30 machines. In the fourth year, instead of one machine, eleven machines must be bought—ten new ones in addition to the replacement of the worn-out one. (*Ibid.*, p. 216)

According to the acceleration principle, consumption has to continue to keep increasing in order for investment to stand still. (Ibid.: 215–16)

This result renders a more robust theory of recessions and expansions than Keynes offered and gives further justification for corrective fiscal and monetary policy designed to continue the boom period. Yet both parts of the accelerator principle described by Knox are subject to criticism (Hutt 1963: 289–339).

The first part of the accelerator principle maintains that the current production of capital is identical to the current increase in the stock of capital. Yet this identity never holds when the stock of capital goods depreciates. The left-hand side of Knox's equation is gross investment, while the right-hand side is net investment. To create the identity, depreciation must be added to the right-hand side, which, in turn, destroys the second part of the equation. Moreover, Knox's

equation is stated in physical terms and is intended to describe the entire economy. But using physical amounts for this purpose is absurd because different types of capital goods cannot be added together. If one uses money as a common denominator and adds the monetary value of different capital goods, the meaning of the second part of the equation is destroyed. The only alternative that allows adding up capital (and output) is to assume homogeneous capital goods (and output). However, this assumption denies reality, that is, the existence of the production structure (Mises [1949] 1966: 200–211).

Granting the existence of the identity, Knox derived his two implications from the assertion that the stock of capital goods exceeds the current production of capital goods. Yet merely writing down the identity does not make it so. When a group of individuals first begins the process of capital formation (and thus, civilization), it is not impossible for current saving and investing to exceed the existing amount of capital. In general, this claim could stem from the fortunate occurrence of a relatively large degree of past saving and investing or the unfortunate one of a relatively small degree of current saving and investing.

The first implication that Knox derived from this claim misstates the time sequence of the process of capital formation. The degree of current saving and investing is determined by time preference, which, in turn, leads to a change in the stock of capital goods. Individuals desire as an (intermediate) end a stock of capital (and its efficient allocation); they use saving and investing as means to that end. If individuals desire a smaller capital stock (or a slower increase in the stock), then it is beneficial to reduce capital production. The acceleration principle turns this around, implying that the end is an increasing amount of capital production, which, in turn, is determined by the stock of capital "necessary" to produce output. Additionally, the process of producing capital (C_t) is carried out by firms specializing in that activity, who thus are separate from those firms adding this capital to their stock ($K_t - K_{t-1}$). If additions to the stock of capital are mechanically linked to additions to final output, what happens to capital goods created to produce other capital goods? Because most capital goods are devoted to the higher stages of production, C_t in Knox's equation applies only to a small segment of the production structure, that is, the first stage. If C_t is meant to include all capital, then the second part of the equation is destroyed.

The second implication that Knox derived from the first part of the acceleration principle is subject to the same criticisms made above. The acceleration principle reverses cause and effect; individuals change their degree of saving and investing in order to change their stock of capital goods, not vice versa. Furthermore, no significance can be attached to the fact that the percentage change in the stock is smaller than the percentage change in the amount of current capital production. The only meaningful calculation in capital formation is profit and loss. If entrepreneurs anticipate that changing production of some good to match the variation in its demand will be less profitable, then they will even out production over time by "overproducing" in periods of low demand to provide more of that good in periods of high demand. This entrepreneurial arbitrage over time is much

easier for durable goods, such as capital goods, than for nondurable ones. Finally, if Knox's implication has significance, why not develop an accelerator for all goods where the existing stock exceeds the level of current production? Why limit the principle to first-order capital goods?

Contrary to Knox's belief, the first part of the acceleration principle—the identity between capital produced and a change in the stock of capital—is not "unquestionable." It is insignificant, and thus his two implications have no usefulness in analyzing the business cycle. The fact that investment varies more than consumption over the business cycle is not a consequence of the acceleration principle, but can be explained by the Misesian theory of the business cycle (Mises [1949] 1966: 538–86; Rothbard [1963] 1983a: 11–38).

Regarding the second part of the acceleration principle—the theory of investment—two general criticisms can be made. First, the addition to the capital stock, net investment, is not a function (solely or partially) of the rate of growth of final output. It is the means by which individuals increase the production of future consumption goods at the expense of the production of current consumption goods (as well as changing the numbers of specific consumption goods across time). Stated differently, current net investment causes the number of future consumption goods to increase because individuals use capital formation to accomplish exactly that outcome. Second, contrary to the accelerator principle, no relationship exists, in either direction, between current changes in output and current changes in the stock of capital. In a world of scarcity, one must precede the other. Thus, the later one can only bring about future changes in output. And the increase in current output (from existing factors of production) can lead only to a future increase in the capital stock. If existing factors of production are used to increase current output, they cannot simultaneously be used to increase the current capital stock.

In addition to these general criticisms of the basic statement of the theory of investment, the presentation of the principle by Samuelson and Nordhaus (1989) faces specific criticisms. First, society has no "need" for a certain stock of capital. Individuals choose the amount of capital that they prefer—more with low time preference and less with high time preference. Second, prosperity is not equivalent to growing consumption sales. Prosperity means fulfilling valuable ends, one of which may be reducing current consumption to create capital goods for greater future consumption.

Third, why would a firm always keep a stock of capital goods equal to two times the value of yearly sales? By this statement Samuelson and Nordhaus must mean the value of the stock since the physical amount of capital cannot be compared with the value of output. However, the fixed mechanical accelerator is understandable only in physical terms. This fact is illustrated by their statement that a 50 percent increase in sales requires a 50 percent increase in the number of machines. But they must either compare the value of output with the value of the machines or the amount of output with the amount of machinery. If they mean the former, then they must demonstrate why the market process of imputing

value to factors of production would lead to equal proportional changes in the values of output and capital. It is certainly true that if an increase in demand for the consumption good leads to greater profit, entrepreneurs will bid more intensely for the factors (including capital) used to produce this good. But the resulting changes in prices (and total market values) are determined by the highly complex set of interactions among individuals. No implication of equal proportional changes in value can be derived. On the other hand, if Samuelson and Nordhaus mean to compare amounts of capital with amounts of output, then they must disprove the existence of the production structure. As demonstrated above, the production of any particular consumption good is flexible since many different ways exist to combine factors of production. Entrepreneurs will gain profit by continually adjusting the production technique as subjective values change. Firms which refuse to alter their methods will take losses and eventually disappear. Furthermore, even with a given set of capital goods, every level of sales from zero to maximum capacity can be produced. Thus, the acceleration principle cannot exist with unused capacity.

Fourth, even if a fixed relationship exists, as Samuelson and Nordhaus believe, they have not made a case for the fixed accelerator. In their example, when sales of output increase by 50 percent, it implies nothing certain about the amount of output sold. Typically, as demand for a good increases, both price and quantity increase. Since the amount of output increases by less than 50 percent, the number of machines used to produce the additional output will increase by less than 50 percent. In fact, if the 50 percent rise in sales came solely from a higher price (not likely), the percent change in the number of machines would be zero since no additional output would be produced. Additionally, Samuelson and Nordhaus's selection of a 50 percent increase appears to be a deliberate exaggeration designed to make their case seem more plausible. They surely do not mean to imply a 50 percent increase in aggregate consumption, yet they do imply that the accelerator is an aggregate concept. Selecting a more reasonable 10 percent increase in sales for a single firm, or perhaps 3 percent for the entire economy, makes producing this additional amount from unused capacity appear quite feasible. Even if a firm actually had a 50 percent increase in the *amount* of output sold, that still would not imply a proportionate increase in the number of new machines produced. Such a firm could use the existing capacity of other firms by subcontracting the work or by purchasing used capital goods, and so on. Even if the increase in sales could only be satisfied by an increase in the production of new machinery, the acceleration principle would not apply to an entire economy. Increasing the amount of textile machinery requires resources which, in the absence of additional savings, must be transferred from the production of other capital goods. The total production of all capital goods can only increase when total consumption falls, that is, when saving increases.

Fifth, if the resources needed to produce more capital goods in total can be acquired out of thin air, then Samuelson and Nordhaus understate the acceleration principle. Since the production of each capital good is linked to others in the

structure of production, the accelerator must proceed from stage to stage in a fashion similar to the multiplier. However, with the accelerator, each "round" can potentially become larger instead of smaller, as with the multiplier. In their example, a 50 percent increase in the sale of cloth causes a 1000 percent increase in the production of textile machinery at the first stage of production. What percentage increase is dictated for the capital goods "needed" to produce the textile machinery, that is, second-stage capital goods? Depending on the size of the accelerator coefficient (a) for the relationship between second-stage and first-stage capital goods, second-stage capital production could increase by more than 1000 percent. And so would the process go for the other stages of production. Simply writing down the accelerator equation does not preclude this possibility; the equation cannot tell if O_t stands for a consumption good or an intermediate capital good. If C_t is meant to stand for all capital goods, then the equation is nonsense since there is no method by which to add different types of capital goods together. If the equation implicitly assumes that all capital goods are homogeneous (and thus, can be added up), then it denies the existence of the production structure.

Sixth, even if the acceleration principle operates just as Samuelson and Nordhaus state, it is only temporary. In the third year, one additional machine is produced and used to replace the one machine out of the total twenty that wears out. Then in the fourth year, when sales increase by 50 percent, eleven machines are produced—ten new ones plus one for replacement (a 1000% annual increase in gross investment). But in the fifth year, with sales the same as in the fourth year, the firm will need only one and one-half machines for replacement and no new machines. Thus, except for the fourth year, the production of capital increases by 50 percent, the same percentage increase as in sales. This effect is not only not accelerated, it is not even an upward trend, but just a one-year blip. Furthermore, entrepreneurial activity would smooth out this blip in capital-goods production over time, if it were profitable. Thus, Samuelson and Nordhaus's final contention—that consumption must continue to increase in order for investment to stand still—is incorrect.

Seventh, their comments about gross investment, net investment, and saving are irrelevant for the acceleration principle. The number of capital goods produced depends only on gross investment and not at all on net investment. Also, the fact that net investment is zero implies nothing about the level of saving attained by the firm. Since saving can be a specialized process separate from investing, the firm does not (and probably would not) have to save in the form of the capital it uses in production. However, most firms are net savers because they save in the process of production by supplying current wealth to resource owners in advance of receiving wealth from the sale of output (Rothbard [1962] 1970: 273–312).

Finally, Samuelson and Nordhaus do not explain where the funds come from to increase the sales of cloth. If they are transferred from the sale of other consumption goods, then a negative acceleration would occur there, and it would

Table 4.1
(Billions of 1982 Dollars)

	Y	C			
Year	*Income*	*Consumption*	*Change in Y*	*Change in C*	*MPC*
1939	716.6	480.5			
1940	772.9	502.6	56.3	22.1	0.39
1941	909.4	531.1	136.5	28.5	0.21
1942	1080.3	527.6	170.9	−3.5	−0.02
1943	1276.2	539.0	195.9	11.4	0.06
1944	1380.6	557.1	104.4	18.1	0.17
1945	1354.8	592.7	−25.8	35.6	−1.38
1946	1096.9	655.0	−257.9	62.3	−0.24
1947	1066.7	666.6	−30.2	11.6	−0.38
1948	1108.7	681.8	42.0	15.2	0.36
1949	1109.0	695.4	0.3	13.6	45.33
1950	1203.7	733.2	94.7	37.8	0.40
1951	1328.2	748.7	124.5	15.5	0.12
1952	1380.0	771.4	51.8	22.7	0.44
1953	1435.3	802.5	55.3	31.3	0.56
1954	1416.2	822.7	−19.1	20.2	−1.06
1955	1494.9	873.8	78.7	51.1	0.65
1956	1525.6	899.8	30.7	26.0	0.85
1957	1551.6	919.7	25.5	19.9	0.78
1958	1539.2	932.9	−11.9	13.2	−1.11
1959	1629.1	979.4	89.9	46.5	0.52
1960	1665.3	1005.1	36.2	25.7	0.71

Source: Economic Report of the President, 1988, Table B–2, Pg. 250.

offset the positive acceleration in cloth. If the funds come from reduced saving, then fewer resources exist to produce capital goods and no acceleration can occur. If they come from monetary inflation via credit expansion, then capital production increases before the funds become available for consumption purchases. This latter case is part of the Misesian theory of the business cycle and fully explains why capital-goods production varies more over the cycle than the production of consumption goods (Mises [1949] 1966: 538–86).

In summary, the acceleration principle misconceives the economic process of capital formation. Its mathematical premises lead only to fallacious inferences that are inconsistent with the theory of production and, thus, are unable to advance our understanding of business cycles.

NOTES

1. Hazlitt wrote: "The whole of *The General Theory* might be described as an exercise in obfuscation" ([1959] 1973: 44); "this flagrant misuse of terms is one of the central fallacies of the whole Keynesian system" (ibid.: 52); "in fact, the so-called 'general theory' rests on an arbitrary division and on a verbal trick" (ibid.: 122); and, "one of the chief defects in Keynes's analysis . . . is his failure to adhere to any fixed meaning for his terms" (ibid.: 169; see also 20, 60, 78, and 98).

2. See also Hazlitt ([1959] 1973: 91).

3. This analysis follows Rothbard ([1962] 1970: 1–66).

4. This point was made by J. B. Say, "Of Demand or Market for Products," in Hazlitt ([1960] 1977: 21).

5. Also, Keynes does not include wealth created by capital formation as a motive to save. See Keynes (1936: 107). The explanation of capital formation can be found in Eugen von Böhm-Bawerk ([1889] 1959: vol. 2).

6. See Thomas Szasz, *Law, Liberty and Psychiatry* (1963) and *The Myth of Mental Illness* (1972).

7. Paul Samuelson illustrates the difficulty Keynesians have in dealing with these absurdities. After finding an MPC equal to 1.06, he claimed that the resulting multiplier would be "unlimited." In reality, the multiplier would be approximately − 17. See Samuelson, "Appendix: A Statistical Analysis of the Consumption Function," in Hansen (1941: 257).

8. See also Joseph Lawrence, "Lord Keynes and the Financial Community," in Hazlitt ([1960] 1977: 273).

9. See also Paul Samuelson, "A Synthesis of the Principle of Acceleration and the Multiplier" (1939).

Chapter 5

Keynes and the Anti-Saving Mentality

by Mark Skousen

> What is prudent in the conduct of every private family, can scarce be folly in that of a great kingdom.
>
> —Adam Smith

One of the unfortunate events of the postwar period was the adoption by the West of Keynes's anti-saving mentality. His "general" theory caused tax policies favoring consumption over saving, and debt over equity, and it encouraged governments to stimulate public spending instead of private investment. Consequently, Western nations under the influence of Keynesianism have suffered from relatively low rates of economic growth following the end of the Second World War and, in some cases, of capital consumption.

Traditionally, economists have recognized the virtue of thrift as an essential ingredient for capital formation, economic growth, and the rapid rise in the standard of living during the twentieth century. Adam Smith correctly expressed the classical view when he wrote, "Every prodigal appears to be a public enemy, and every frugal man a public benefactor" (Smith [1776] 1976: 362). However, a small group of radical thinkers, known generally as underconsumptionists, have dissented from this traditional endorsement of savings. They include J.-C.-L. Simonde de Sismondi, Karl Rodbertus, J. A. Hobson, Karl Marx, Major C. H. Douglas, and William T. Foster and Waddill Catchings (Bleaney 1976). For a period of time, even Thomas Malthus adopted an anti-saving mentality when, in his *Principles of Political Economy*, he raised the possibility that "saving, pushed to excess, would destroy the motive to production," and argued

that there needs to be a balance between "the power to produce and the will to consume" (Malthus 1836: 6–7).

But the radical reformers have been harsher than Malthus in condemning thrift. According to them, increased savings reduced the demand for final consumer goods, decreased profits, and doomed capitalism to experiencing frequent economic crises. Foster and Catchings, inflationists popular in the 1920s, denounced the capitalist system as inherently deficient because consumers do not have the means to buy the goods they produce, "for every dollar which is *saved and invested*, instead of *spent*, causes one dollar of deficiency in consumer buying unless that deficiency is made up in some way" (Foster and Catchings 1927: 48). As recommended by Foster and Catchings, that "way" was to issue new money-credits to consumers. E. F. M. Durbin summarizes the underconsumptionist attack on savings as follows:

> Saving is a peculiarly dangerous and self-defeating process, for it withdraws money from the purchase of finished commodities and makes their production less profitable, while at the same time it seeks to set up still further capital resources with which the production of finished commodities is to be increased. It is this paradoxical process which makes a deficiency of purchasing power inevitable. It increases the supply of and diminishes the demand for the products of the industrial system to the point at which production cannot be continued any longer with profit and at that point crisis and depression begins. Hence depression can always be prevented and relieved either by reducing the amount of saving or by stimulating consumption by the issue of new money. (Durbin 1933: 22)

KEYNES'S LIFETIME ASSAULT ON SAVINGS

As a heretic, John Maynard Keynes frequently expressed antipathy and cynicism toward traditional values throughout his writings, rejecting the classical views favoring the gold standard, balanced budgets, and limited government. The lord of Cambridge also denigrated the virtues of frugality and thrift, not just during the Great Depression, but throughout his lifetime.

In his first major work, *The Economic Consequences of the Peace*, published in 1920, Keynes acknowledged that the tremendous rise in the world's standard of living before the First World War was the result of immense accumulations of capital. Keynes identified the principal cause of capital formation as the high savings rates of wealthy investors. But Keynes's tone is begrudging: "If the rich had spent their new wealth on their own enjoyments, the world would long ago have found such a regime intolerable. But like bees they saved and accumulated, not less to the advantage of the whole community because they themselves held narrower ends in prospect" (Keynes 1920: 19). In a sardonic tone, he equated the building of the world's railroads, investment projects of great benefit for the living, to the pyramids of Egypt, shrines for the dead (ibid.).

The Cake That Is Never Consumed

For Keynes, savings are like a cake which can never be eaten. At first, he did not disparage the thrifty practices of his ancestors: "The cake was really very small in proportion to the appetites of consumption, and no one, if it were shared all around, would be much the better off by the cutting of it" (Keynes 1920: 20–21). But, by the time of Keynes's progressive era, the puritanism of the past had become a means of brainwashing the masses. The laboring classes "were compelled, persuaded, or cajoled by custom, convention, authority, and the well-established order of Society into accepting" thrift. "Saving was for old age or for your children; but this was only in theory,—the virtue of the cake was that it was never to be consumed, neither by you nor by your children after you" (ibid.: 20).

Savings versus Investment

In *A Treatise on Money*, published in 1930, Keynes raised the likely possibility that savings and investment could grow apart, creating a business cycle. In modern society, as Keynes emphasized, saving and investing are done by separate groups. Saving, according to Keynes, is a "negative act of refraining from spending," while investment is a "positive act of starting or maintaining some process of production" (Keynes [1930] 1971: 155). The interest rate is not an "automatic mechanism" that can keep the rate of savings and the rate of investment equal—they can "get out of gear" (Keynes 1931a: 393). Savings can be "abortive" if not invested. If investment exceeds savings, a boom occurs; if savings exceed investment, a slump happens.

Keynes used an analogy of bananas to prove his point. Suppose a community devoted entirely to banana production engages in a thrift campaign at a time when the plantation needs no additional investment capital. The same number of bananas is produced, but because of lower final demand, the price of bananas falls. The total crop is sold, but the banana producers suffer an abnormal loss. (Wages and other costs remain the same, but total revenue has fallen.) The plantation owners will be forced to reduce wages or lay off workers, either of which will further reduce the spending power of the public. This vicious cycle will continue until there is no banana production at all and the community starves to death, unless it calls off the thrift campaign (Keynes [1930] 1971: 158–60).

During the Great Depression of the 1930s, Keynes lashed out at frugal savers and hoarders. The conventional wisdom in bad times had been to cut costs, get out of debt, build a strong cash position, and increase savings. But Keynes was opposed to this "old fashioned" approach. In a radio broadcast in January 1931, he asserted that such thriftiness would cause a "vicious circle" of poverty, "for the object of saving is to release labour for employment on producing capital-goods such as houses, factories, roads, machines, and the like. But if there is

a large unemployed surplus already available for such purposes, then the effect of saving is merely to add to this surplus and therefore to increase the number of unemployed." The British economist bluntly told his audience that if "you save five shillings, you put a man out of work for a day." He encouraged housewives to go out on a buying spree and government to engage in massive public works to stimulate the economy. He intoned, "Why not pull down the whole of South London from Westminster to Greenwich, and make a good job of it. . . . Would that employ men? Why, of course it would!" (Keynes 1931b: 151–54).

According to Keynesian doctrine, savings could be bad, but investment, whether from private or public sources, was always good. There never could be any economic waste or malinvestment, as the Austrians argued (Hayek [1935] 1967). Keynes felt the creation of new government credits to be just as genuine as private savings or investment (Keynes 1936: 82–84). Thus, Keynes saw no problem with governments engaging in mammoth "investment" projects, whether there was real demand for their use or not. If a Latin American dictator wanted to build a four-lane highway into the jungles, Keynes would not object. If a Communist state wished to build a huge cement factory, even though cement could be imported more cheaply, Keynes would endorse local production. Thus, vast resources were often wasted under the guise of the "new economics."

Keynes's bias against thrift reached a zenith in his magnum opus, *The General Theory of Employment, Interest and Money*, published in 1936. He referred to traditional views of savings as "absurd" (ibid.: 111). He boldly wrote, "The more virtuous we are, the more determined by thrift, the more obstinately orthodox in our national and personal finance, the more our incomes will fall when interest rises relatively to the marginal efficiency of capital" (ibid.: 211). Keynes praised the heterodox notions of underworld figures and monetary cranks, such as Bernard de Mandeville, J. A. Hobson, and Silvio Gesell, who held anti-thrift views (ibid.: 333–71).

THE PARADOX OF THRIFT

Keynes's anti-saving mentality was not new, but until the Keynesian revolution it was considered reactionary and heretical to mainstream, orthodox economics. But after World War II, Keynes's unorthodox views on savings, consumption, and government spending were integrated into the grand "neo-classical synthesis." For example, Professor Lorie Tarshis declared in his introductory textbook of 1947, *The Elements of Economics*, "Since, as consumers, we are willing to purchase only five-eighths of our full-employment output, we have a low-consumption economy. And that, from our point of view at any rate, is one of the main sources of our difficulty" (Tarshis 1947: 521). Tarshis suggested that one of the goals of the federal government should be "reducing incentives to thrift" (ibid.: 522).

Part of this standard textbook analysis is the so-called paradox of thrift, which

was introduced in Keynesian textbooks after World War II. While this anti-saving doctrine is no longer given the universal blessing it once enjoyed several decades ago, it is still considered applicable during times of unemployment. Most economists apparently still adhere to its implications, namely, that increased savings during an economic downturn could exacerbate a recession. As Paul Samuelson and William Nordhaus state, "Under some circumstances, private prudence may be social folly" (Samuelson and Nordhaus 1989: 170). William Baumol and Alan Blinder are more blatant in their condemnation of saving: "While savings may pave the road to riches for an individual, if the nation as a whole decides to save more, the result may be a recession and poverty for all" (Baumol and Blinder 1988: 192). Even today, conservative economists sometimes advocate a similar stance. As Alan Reynolds recently observed sardonically, "American consumers are told that they must save a larger share of their current incomes. They should buy fewer cars, so manufacturers can build more auto factories" (Reynolds 1990: 129).

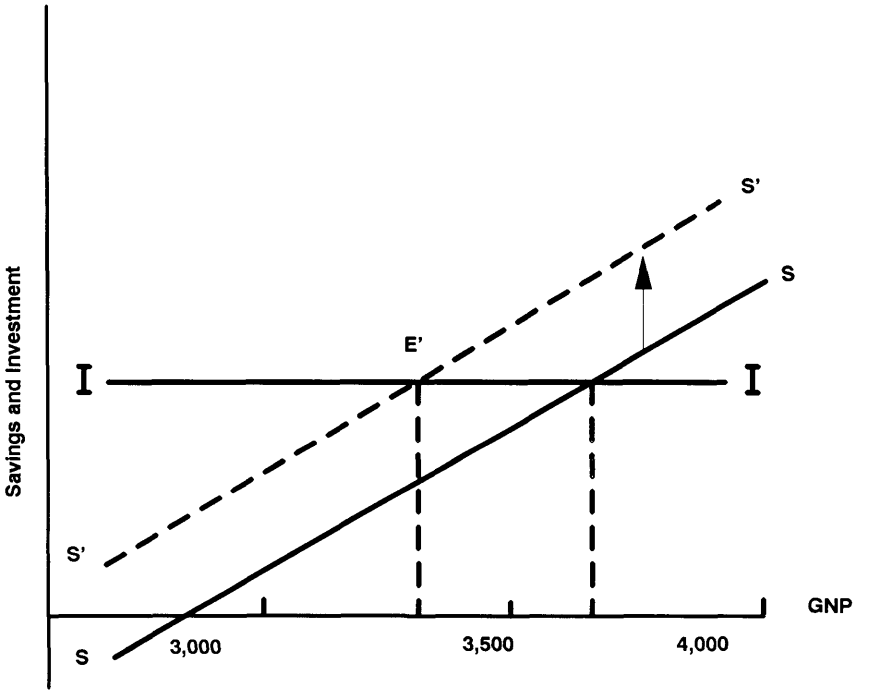
Many economists, following Keynes's lead, have encouraged consumers to "go on a spending spree" during a recession to get the economy "moving again," despite the real risk of personal bankruptcy. (Keynes in Britain and Frank Taussig in America both advocated increased spending by consumers during the Great Depression.) Economists invoke the "fallacy of composition" in justifying their view that savings may be good for individuals, but are a disaster for the country as a whole. "Under some circumstances, private prudence may be social folly" (Samuelson and Nordhaus 1989: 170).

How does the paradox of thrift work? According to the textbook Keynesian theory of aggregate demand, an increase in savings means a reduction in consumer spending. This in turn reduces the demand for investment or capital goods, which are used to produce consumer goods. The decline in investment forces employers to reduce wages and salaries paid to workers. Consequently, workers and capitalists have less income, which forces them to reduce spending as well as savings. Hence, an increase in savings ultimately results in a decline in savings and the standard of living: the paradox of thrift!

The paradox of thrift is best illustrated by Samuelson, who popularized the concept in his bestselling textbook, *Economics* (see Figure 5.1). Samuelson captions this graph, "Savings-and-investment diagram shows how thriftiness kills off income." He explains: "In an underemployed economy, desire to consume less at every income level will shift the savings schedule upward. With the II curve unchanged, equilibrium drops to the E′ prime intersection. Why? Because income has to fall—and fall in a *multiplied* way—until people feel poor enough so that they again want to save the amount of planned investment at II" (Samuelson and Nordhaus 1989: 184). Samuelson "resolves" the paradox by arguing that the only time thrift is a virtue is during full employment, when "output could be assumed to be always at its potential" (ibid.: 184).

The impact of a generation of Keynesian bias against thrift has been tremendous. The United States, Great Britain, and many Third World nations have

Figure 5.1
Samuelson's "Paradox of Thrift"



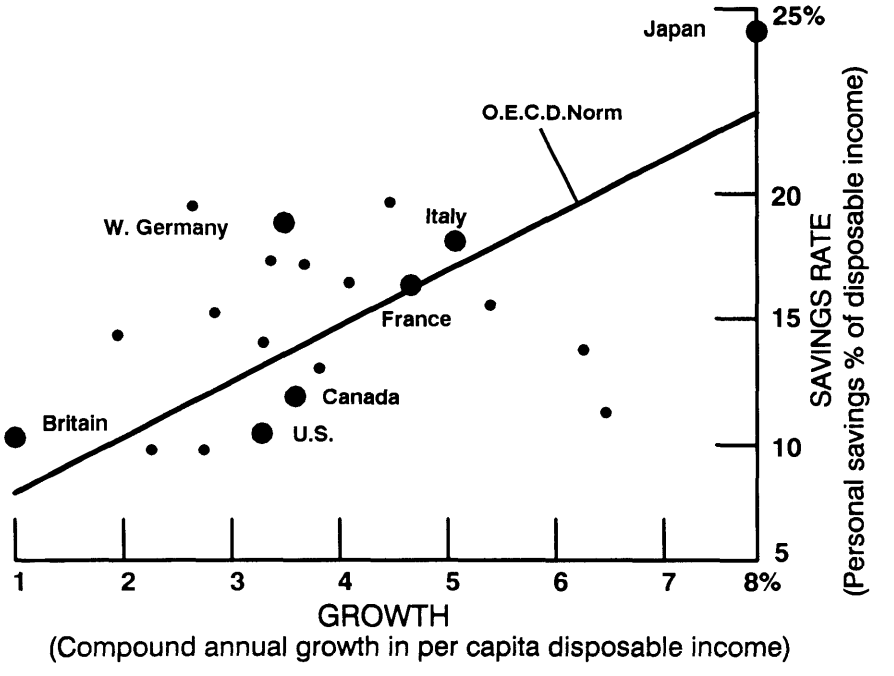
Source: Paul A. Samuelson and William D. Nordhaus, *Economics* (New York: McGraw-Hill, 1989), p. 184.

been encouraged by Keynesian theory to promote consumption at the expense of saving through tax policy and to expand the size of government through large public-works projects and monetary inflation. It is not surprising that these nations have suffered from low rates of economic growth and even negative growth.

ANTI-THRIFT THEORY CONTRADICTS ECONOMIC EVIDENCE

There are serious flaws in the textbook Keynesian model. First, it contradicts the historical evidence directly linking high economic growth rates with high savings rates. According to the Keynesian theory, one would expect nations with high consumption expenditures and low savings rates to have the highest growth rates. As Henry Hazlitt notes, "What Keynes is saying, among other things, is that the more a community *spends* of its income, and the *less* it saves, the faster will its real income grow!" (Hazlitt [1959] 1973: 137). Hyman Minsky expresses the standard Keynesian prognosis when he states that "the policy emphasis should

Figure 5.2A
Historical Relationship between Savings and Economic Growth



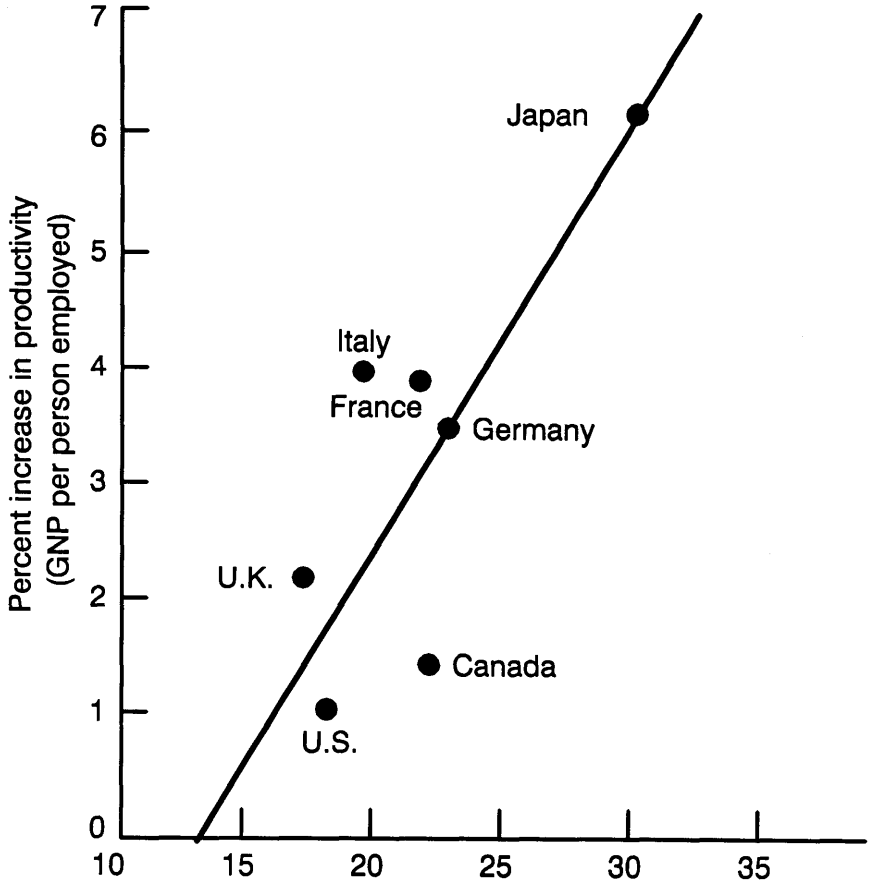
Source: Franco Modigliani, "Life Cycle, Individual Thrift, and the Wealth of Nations," Nobel Lecture, *American Economic Review*, June, 1986, p. 303. © Copyright The Nobel Foundation.

shift from the encouragement of growth through investment to the achievement of full employment through consumption production" (Minsky 1982: 113).

Historically, however, economic growth has been directly and positively linked to genuine investment. Countries with "excessively" high savings rates, such as West Germany, Japan, and many Far Eastern nations, have the highest rates of capital formation and economic growth (Modigliani 1986: 303; McConnell 1987: 446). Figures 5.2 A and B, reproduced from Modigliani and McConnell, demonstrates the close relationship between productivity and investment (savings) as a percentage of GNP.

Second, the Keynesian model relies on several fallacious assumptions about the economy: (1) There is no link between savings and investment; (2) the interest rate is constant; and (3) time is ignored in the production process. Let us examine each of these assumptions in more detail. First, the Keynesian model assumes that investment is unrelated to savings and that interest rates are unchanging. In the crude Keynesian "depression" model, all savings are "leaked" out of the system and are never invested. (In more sophisticated Keynesian models, savings may be fully invested in the long run, but investment is often fickle and unpre-

Figure 5.2B
Investment and the Growth of Productivity

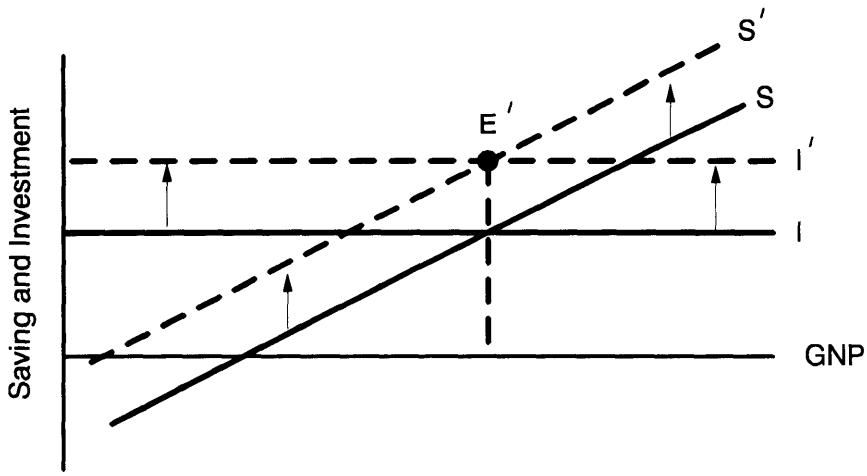


Source: Campbell R. McConnell and Stanley L. Brue, *Economics*, 10th ed. (New York: McGraw-Hill, 1987), p. 446.

dictable in the short run.) The interest rate is assumed to be constant. However, under normal conditions, savings are always invested. Even during a recession, increased savings will increase the size of the pool of capital, causing interest rates to decline, and thereby expanding the number of investment projects available. Thus, in the Samuelson diagram (Fig. 5.1) when the SS line shifts outward to S′S′, the investment schedule II should also shift upward to I′I′, as my diagram (Figure 5.3) demonstrates.

Even then, the Keynesian model does not fully recognize what is happening in the economy. An increase in voluntary savings normally results in a rise in

Figure 5.3
Increase in Savings Increases Investment Schedule



the standard of living, so real income E′ should expand over time. Why? Because expanding the investment pool and lowering interest rates mean that entrepreneurs have more money to invest in research and development, to replace old equipment, to adopt new technologies and new production processes, to invest in education and new skills, and to engage in other productive projects not possible before. Unfortunately, the Keynesian theory makes no allowance for technological advancement and more roundabout production processes that will ultimately cut costs, reduce prices, and expand the quality and quantity of goods and services.

In this regard, Keynes's banana illustration is flawed. He assumes that the community's decision to increase thrift is simply a "negative" act of austerity. He ignores the normal reason why a business (in this case, the entire community is in the business of producing bananas) saves more—because it wants to invest in new machinery, tools, or technology that will reduce costs, increase its market, and expand its profitability. When the community saves more and invests in the banana plantation, it ultimately benefits from the new production plans.

Alan Reynolds's case, referred to earlier (Reynolds 1990), is also flawed. He asks whether it make sense for manufacturers to build more auto factories when consumers cut back on auto purchases. Reynolds's example is based on static thinking. Saving, however, must be examined dynamically. Increased saving lowers interest rates, expands the pool of capital, and allows auto (and other) manufacturers to adopt new production processes and technology so that they can build better automobiles at a lower price. Thus, we see that consumers' cutting back on auto purchases and saving more does not, ceteris paribus, cause a net increase in unemployment, but allows better-quality products to be made at lower prices.

One more illustration may help to clear up the critical roles that saving and investment play in society. Suppose a community is divided by a river and the only transportation between the two sides is by barge. Travel between the two sides of town is expensive and time-consuming. Finally, the town leaders call a meeting and recommend the building of a bridge. Everyone agrees to cut back on current spending and put his savings to work to build a bridge. In the short run, there is a decline in retail sales, which may temporarily reduce the profits and employment in local department stores. Yet new workers are assigned to build the bridge. In the aggregate, there is no reduction in output and employment at all. Moreover, once the bridge has been built, the community benefits greatly from lower travel costs and increased competition between the two sides of town. In the end, the community's sacrifice has been transformed into a higher standard of living. (Note also that the bridge is built and economic growth takes place even if the town is suffering from unemployment.)

TIME AND STAGES OF PRODUCTION

The Keynesian theory also makes the fundamental mistake of ignoring time and the lengthy stages of processing that all goods and services undergo before reaching their ultimate users. The crude Keynesian system assumes interest rates to be constant, thus rendering time inconsequential. It also divides the complex economy into only two sectors, the consumption-goods industry and the capital-goods industry. Again, no time elapses between changes in the demand for consumer goods and the production of capital goods. As Samuelson states, "High consumption and high investment are then hand in hand rather than opposed to each other" (Samuelson 1970: 224). Keynes argued similarly that "an increased propensity to save will *ceteris paribus* contract incomes and output; whilst an increased inducement to invest will expand them" (Keynes 1936: xxxiii). But there is a problem with this diagnosis. As Böhm-Bawerk explained in a rebuttal to the anti-savings doctrine at the turn of the century, "If every attempt to curtail consumption must actually result in an immediate and proportionate curtailment of production, then indeed no addition to accumulated wealth of society could ever result from savings" (Böhm-Bawerk 1901: 61–62).

In reality, however, the economy is much more complex than the Keynesians configure it in their simplified apparatus. The economy is made up of a long series of stages of production, as raw commodities are processed, manufactured, inventoried, wholesaled, and ultimately brought to the final user. It takes time, often lengthy periods of time, to produce as well as to consume goods and services. The Keynesians blunder in lumping all investment goods into a single, homogeneous factor, when in fact they comprise a kaleidoscopic variety of raw commodities, semi-processed goods, manufactured products, wholesale goods, and final consumer goods and services, with built-in inventories at each stage. In a modern developed economy, high consumer spending and high investment do not necessarily go hand in hand. Some countries may be consuming their

capital, so high consumption may be accompanied by a low rate of investment. Other countries may be growing rapidly, characterized by relatively low consumption and high saving rates. Another community may be willing to forgo immediate consumption in order to fund a valuable investment project which, when completed, will raise the living standards of the entire community.

Mainstream economists need to reestablish the virtues of thrift in their textbook models. Saving/investing should be viewed as another form of spending, albeit a more productive use of expenditures. I say "reestablish" because clear-thinking economists recognized this correct view long ago and demolished the anti-savings arguments propounded by the heretics. For example, J. B. Say responded in 1821 to the "notion extremely false, though very much in vogue—namely, that saving limits and injures consumption. No act of saving subtracts in the least from consumption, provided the thing saved be re-invested or restored to productive employment. On the contrary, it gives rise to a consumption perpetually renovated and recurring" (Say [1821] 1971: 110). At the turn of the century, Böhm-Bawerk debated anti-savings advocate L. G. Bostedo and made this point:

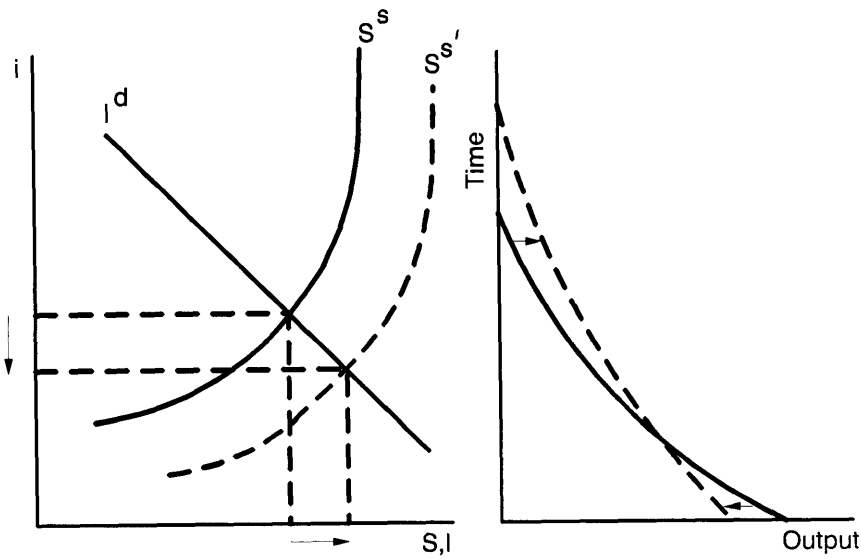
> The truth is that a curtailment of consumption involves, not a curtailment of production generally, but only, through the action of the law of supply and demand, a curtailment in certain branches. If in consequence of saving, a smaller quantity of costly food, wine and lace is bought and consumed, less of these things will *subsequently*—and I wish to emphasize the word—be produced. There will not, however, be a small production of goods generally, because the lessened output of goods ready for immediate consumption may and will be offset by an increased production of "intermediate" or capital goods. (Böhm-Bawerk 1901: 62)

Hayekian triangles (Figure 5.4) are a much better tool than the Keynesian apparatus for illustrating the effects of a change in the rate of saving. As Figure 5.4 indicates, an increase in savings causes the interest rate to decline. As a result, final consumer demand may temporarily decline as research and development, higher education, and higher-order capital-goods industries are stimulated. (In fact, consumer demand may not decline at all if new savings are derived from increased income during a period of economic growth.) Note also how the time structure of the economy lengthens, as more roundabout processes are undertaken, as firms adopt new technologies, and as inventories expand at each stage. (None of these characteristics of growth can be demonstrated in Keynesian models.) Using the standard supply-and-demand model for investment, also shown in Figure 5.4, we can see how the increased supply of savings permanently reduces the interest rate.

SAVING, HOARDING, AND RECESSION

One further question regarding the debate over thrift remains: Are not the Keynesians correct to state that, in times of high unemployment and economic

Figure 5.4
Increased Savings Lowers Interest Rate and Expands the Production Process



contraction, increased savings would make matters worse? To answer this question, we must examine the nature of most business cycles. Business cycles are primarily caused by monetary inflation, which lowers interest rates below their natural rate. As a result, capital-goods industries, which are particularly interest sensitive, tend to be stimulated more than consumer-goods industries during the expansionary phase of the business cycle (Valentine 1987). During the contractionary phase, the recession tends to hit the producer-goods sector much harder. Thus, the capital-goods industries, not consumer spending, suffer the most during an economic downturn. Therefore, an increase in savings injects a certain degree of liquidity into the depressed investment markets, reversing the relative trend of falling producer-goods demand in relation to the consumer-goods industries. In short, increased savings would have the effect of reversing the recessionary forces.

But what if savings are merely hoarded and held in excess reserve by the banks, as occurred during the 1930s depression? Again, we must first analyze the cause of this liquidity crisis. Hoarding and excess reserves occurred, not because of a dearth of investment opportunities, but because of a legitimate fear of a banking crisis and expectations of lower prices in the future. But such uncertainty would not have occurred if the government had established a sound financial system in the first place. Unfortunately, the monetary system developed by the West in the twentieth century has been fragile, precariously built on a

fractional-reserve banking system and monetary inflation while maintaining a gold standard at fixed exchange rates. If banks had adopted a sound, 100 percent reserve system on liquid funds, and if governments had maintained a strict gold standard, the banking system would not have failed and the money supply would not have declined by a third.

Once deflation struck the financial system, the U.S. government made a series of political blunders which prolonged the depression, including raising taxes, imposing exorbitant tariffs, propping up failed industries, and encouraging excessive wage rates. On the other hand, if the government had lowered taxes, reduced tariffs, slashed unnecessary public works, encouraged market prices and wages, and adopted a genuine gold standard both domestically and abroad, the country would have responded favorably, the hoarding would have disappeared, and bank reserves would have returned to normal levels. But blaming the depression on "evil" savers who hoarded their money is like blaming a fire in a theater on the audience members who are trying to escape. (For a detailed discussion of these issues, see Skousen 1990: chapter 7.)

CONCLUSION

In summary, Keynes's bias against thrift was not just a depression-era phenomenon, but one that lasted throughout his writing career. Unfortunately, the severity of the 1930s depression gave undue support for Keynes's underconsumptionist theories, which the economics profession adopted wholeheartedly and from which the Western world has suffered ever since.

Since the depression, many Western countries and the Third World have promoted the consumer society, the welfare state, and inflation at the expense of genuine savings and investment. Consumer debt has been subsidized, while investment has been penalized. Those countries which somehow escaped the spell of Keynesianism (mainly in the Far East and some parts of Europe) have been able to grow at a much faster pace and are now threatening to take over the financial and economic world. They have done so primarily by adopting a very un-Keynesian strategy: a small but rule-oriented government, high rates of saving and capital formation, an emphasis on technological advancement and education, and low taxes on investment. It is time for the Western world to throw off the excess baggage of Keynesian policies and reenthrone the virtues of savings and investment.

Chapter 6

Keynesian Policy and Development Economics

by Bruce R. Bartlett

Development economics as it exists today is a relatively recent creation. Prior to World War II, economics did not differentiate between the economics of developed and less developed countries (LDCs). In part, this was because industrialization was a more recent phenomenon. The Industrial Revolution had started in England only in the late 1700s, and major nations, such as the United States, had really achieved industrialization only in the previous 100 years. Thus, to economists, the condition of developing nations simply put them in the same state experienced by industrialized nations before industrialization.

The Great Depression, however, had a profound effect on economic thinking. Most economists came to believe that state intervention in the macroeconomy was necessary to sustain growth. John Maynard Keynes was the principal spokesman for this view. Although he never really dealt with the specific problems of LDCs, his theories were an important influence on development economics. As Deepak Lal puts it, "The analytical and empirical bases of development economics were provided by the Keynesian 'revolution' in economic thought and the experience of the developing countries during the Great Depression of the 1930s" (Lal 1985: 7–8; see also Meier 1984: 14). Similarly, David Landes observes that modern development economics "owed much to the state planning tradition developed by the Soviets . . . but was also readily compatible with . . . Keynesian economics" (Landes 1989: 24).[1]

The Keynesian approach to development was embodied in the so-called Harrod/Domar model, named for Roy Harrod (1939) and Evsey Domar (1946), whose early articles provided the basis for development economics.[2] Harry G. Johnson explains what the model says:

The equation states, briefly, that the growth of fixed capital will generate just sufficient increased sales and profits to justify the investment involved in increasing the capital stock if . . . the growth rate is equal to . . . the proportion of full-employment-of-capital output saved, divided by . . . the normal ratio of capital stock to output. (Johnson 1978: 230).[3]

The importance of the Harrod/Domar model is twofold. First, it implies that growth is almost exclusively a function of the capital stock. Thus, all that developing nations need to grow is a sufficient stock of capital, provided either by domestic savings or foreign capital transfers. Efficiency and incentives are entirely neglected. Second, the model implicitly supports central planning. As Johnson puts it, "The equation provided a framework for planned economic growth, since the attainable growth rate would depend on the proportion of total production that the planners could extract from the economy as saving, and the amount of additional output that could be obtained per unit of investment by the planners' choice of projects (the capital-output ratio)" (ibid.; see also Johnson 1975: 284; Myint 1987: 110).

The Keynesian approach to development coincided with both the rise of planning in the Western nations, following the war, and the perceived success of the Marshall Plan in stimulating reconstruction in Europe. The rise of socialist governments in Britain and France naturally spilled over into the administration of their many colonies, firmly planting the seed of socialism in the Third World, where it remains to this day. The Marshall Plan led logically to the development of foreign aid.

The Keynesian influence on LDCs may also be seen in their continuing antipathy toward free trade and in the operations of the two major multilateral development institutions, the World Bank and the International Monetary Fund, both of which Keynes himself had a major role in creating. These and other aspects of Keynesian economics and development will be examined below.

THE MARSHALL PLAN AND FOREIGN AID

The Marshall Plan, announced by Secretary of State George Marshall at Harvard University on June 5, 1947, provided billions of dollars of U.S. aid to the war-torn nations of Europe. Although its principal purpose was political—to prevent the encroachment of communism on Europe—its success quickly led to extending the concept to Third World development. Within two years President Truman had announced the establishment of the Point IV program, which formed the basis for U.S. foreign aid to LDCs (Price 1955: 367–93; Kennedy and Ruttan 1986: 297; Wood 1986: 29–60). In fact, the lesson of the Marshall Plan was completely misunderstood and, therefore, misapplied to the case of LDCs. It was not the major source of European recovery. Those nations that recovered most rapidly did so largely by adopting free-market policies, as in the case of Ludwig Erhard in West Germany (Cowen 1985: 63–66; Röpke 1964: 187–98).

Nor did the recoveries owe anything to Keynesian economics, as Gottfried Haberler points out:

> In all developed industrial countries policies of economic recovery, stabilization, and growth have been much more successful after the second World War than after the first. But it is difficult to attribute this to the spread of Keynesian thinking. It so happens that none of the economists and economic statesmen who were largely responsible for the assorted postwar economic miracles can be called a Keynesian: not Camille Gutt in Belgium, nor Luigi Einaudi in Italy, nor Ludwig Erhard in Germany, nor Reinhard Kamitz in Austria, nor Jacques Rueff in France. The greatest economic miracle of all, the Japanese, seems to have been performed by conservative Japanese governments and statesmen with the help of some ultraconservative American advisers, while the numerous Keynesians and Marxo-Keynesians had to look on in impotent opposition. (Haberler 1964: 295)

More importantly, aid to Europe was largely aimed at restoring capital, which had been destroyed by the war, within an institutional, cultural, political, and economic environment that was already hospitable to growth. In particular, Europe already had a tradition of private property and legal institutions with which to protect itself. By contrast, aid to LDCs aims to create new capital in countries that still lack the fundamental attitudes, institutions, and knowledge for utilizing such capital. Thus, in the case of Europe aid may well have assisted recovery, albeit modestly, while in the case of LDCs the aid has been almost entirely wasted.

Although many analysts argue that there is nothing in the experience of the industrialized countries which is applicable to the LDCs, this overlooks the fact that the industrialized nations were not always industrialized. Prior to the Industrial Revolution, England, the United States, and the European nations were in a position not dissimilar to the LDCs' today. Thus, it is useful to reexamine how the Western industrialized nations achieved success and, therefore, why the influx of capital to Europe after World War II aided development, while foreign aid to LDCs has been a failure.

THE INDUSTRIAL REVOLUTION

The Industrial Revolution began in England in the late 1700s. There is still debate about its precise origins, but there is little question that the intellectual climate of laissez-faire contributed to ridding the nation of stifling regulations, tariffs, and other barriers to economic growth. As Ludwig von Mises puts it, "The laissez-faire ideology . . . blasted the ideological barriers and institutional barriers to progress and welfare" (Mises [1949] 1966: 620).

The economists of that period were not opposed to government per se, attributing an important role to the state in protecting property rights and providing necessary roads, harbors, and other types of public infrastructure. And they were as concerned about the stifling effect of private monopolies in restraining growth

as they were of government (Sowell 1974: 20–24). Nevertheless, it is true that the classical economists did not attribute a positive role to the state in stimulating growth, other than that of dismantling its own barriers to growth (Rabushka 1985: 5–15; Spengler 1959).

Classical economists shared the view that people would invariably find ways of getting around most state barriers to wealth creation if the state could be restrained from extending its domain into new areas. "The natural effort of every individual to better his own condition . . . is so powerful a principle," Adam Smith wrote, "that it is alone, and without assistance, not only capable of carrying on the society to wealth and prosperity, but of surmounting a hundred impertinent obstructions with which the folly of human laws too often incumbers its operations" (Smith [1776] 1976: vol. 2, 49–50). The growth of the cotton industry in England in the eighteenth century is a case in point. Since it was an entirely new industry, it was untouched by existing laws and regulations. As historian Paul Mantoux notes, by the very fact of its novelty any recently created industry is beyond the government's grasp. Unless it becomes the object of special laws or regulations, it can thus grow in complete freedom (Mantoux [1928] 1983: 260). Indeed, just keeping up with the changes in a rapidly growing industry like cotton was beyond government's ability to do. As Mantoux explains:

> It was hard enough to maintain the old regulations, and it was becoming quite impossible to set up new ones. Thus, from its birth, the cotton industry was free of the heavy yoke which weighed on the older industries. No regulations prescribed the length, the breadth or the quality of its materials, or imposed or forbade the methods of manufacture. There was no control save that of individual interest and of competition. Because of this, machinery quickly came into general use, bold ventures were made and many kinds of goods were manufactured. There was the same freedom with regard to labor. Neither the trade guild, with its time-honored traditions, nor the system of apprenticeship with its strict rules, ever existed in the cotton industry. (Ibid.: 260–61)

As the scope of new industries expanded, the share of the economy which was free of restriction also expanded. Continuing pressure from the advocates of laissez-faire eliminated many old restrictions as well. "The State came to play a less active, the individual and the voluntary association a more active, part in affairs," as T. S. Ashton puts it. "Ideas of innovation and progress undermined traditional sanctions: men began to look forward, rather than backward, and their thoughts as to the nature and purpose of social life were transformed" (Ashton [1947] 1972: 4). Thus, the concept of freedom went beyond freedom from state coercion to freedom from outmoded thinking and cultural restraint as well. This too contributed to the atmosphere of innovation and invention which characterized the Industrial Revolution (Rosenberg and Birdzell 1986).

THE ROLE OF INFLATION

Another factor which is sometimes cited as important to the rise of the Industrial Revolution was the role of inflation. According to Earl J. Hamilton, the influx of gold and silver from the New World caused a rise in European prices. Beginning in the late 1700s price inflation accelerated, with wages lagging far behind. This led to an enormous increase in profits, which, in turn, fueled the Industrial Revolution (Hamilton 1942).

The importance of this argument is that John Maynard Keynes was greatly impressed by it. In *A Treatise on Money* (1930), Keynes wrote at length on the thesis that profit inflation stimulates growth, relying heavily on some of Hamilton's early work. Indeed, he stated that "it is the teaching of this treatise that the wealth of nations is enriched . . . during profit inflations—at times, that is to say, when prices are running away from costs" (Keynes 1930a: vol. 2, 137). Keynes went so far as to attribute virtually all of the great increase in wealth in France and England by the 1700s to profit inflation: "It is unthinkable that the difference between the amount of wealth in France and England in 1700 and the amount in 1500 could ever have been built up by thrift alone. The intervening profit inflation which created the modern world was surely worthwhile if we take a long view" (ibid.: 145).

While Keynes did not elaborate this view with regard to developing nations, it is certainly clear that there is a strong inflationary bias in Keynesian economics generally. As Jacob Viner pointed out in an early review of *The General Theory*:

> Keynes' reasoning points obviously to the superiority of inflationary remedies for unemployment over money-wage reductions. In a world organized in accordance with Keynes' specifications there would be a constant race between the printing press and the business agents of the trade unions, with the problem of unemployment largely solved if the printing press could maintain a constant lead and if only volume of employment, irrespective of quality, is considered important. (Viner 1936: 149)

This is especially evident in the so-called Phillips curve, which posits a trade-off between inflation and unemployment: inflation reduces unemployment and unemployment reduces inflation (Phillips 1958). However, as Milton Friedman has pointed out, no such trade-off really exists: efforts to reduce unemployment through inflation will only lead to higher inflation *and* higher unemployment (Friedman 1977).

THE INTERNATIONAL MONETARY FUND (IMF)

To a large extent the inflationary bias in Keynesian economics became institutionalized through the International Monetary Fund (see *International Currency*

Review 1982). As noted earlier, Keynes participated in the negotiations establishing the IMF in 1944.

Initially, the role of the IMF was limited to the maintenance of exchange-rate stability. The dollar was pegged to gold at $35 per ounce and other nations pegged their currencies to the dollar. The IMF had a large reserve of gold and foreign exchange, and its job was to moderate short-run fluctuations in exchange rates in order to maintain stability. From the beginning, however, there were economists who argued that only a true gold standard would work and that the Bretton Woods system would ultimately break down (Hazlitt 1947; Heilperin 1968; Rueff 1972).

As early as 1965, it became clear that the IMF was incapable of dealing with the growing problem of worldwide inflation. This led it to concentrate an increasing number of resources on the problems of developing countries (Mundell 1969), a trend that greatly accelerated with the complete abandonment of fixed exchange rates by the major industrialized countries in 1971. Henceforth, currencies would simply "float" or adjust automatically to changing market conditions. Since the IMF's principal purpose was now gone, it turned its attention to balance-of-payments and debt problems, mainly in the LDCs (Vaubel 1983: 292).

The essence of the IMF approach to balance-of-payments problems is that adjustment is primarily, although not exclusively, a monetary issue. The IMF approach is embodied in a financial programming model which dates back to the 1950s (Polak [1957] 1977; Alexander [1952] 1968; IMF 1987). It is an outgrowth of Keynesian models of foreign exchange rates, which basically saw exchange-rate stability as subordinate to domestic growth and employment (Lerner 1944; Robinson 1950; Metzler 1968). E. Walter Robichek, one of the creators of the IMF model, recently described how an IMF adjustment program is derived from the model.

1. Levels for targets—net foreign assets, inflation and others—are picked.
2. Given (1), the exogenous components of the balance of payments (i.e., exports, interest payments, noncompensatory capital flows) are estimated.
3. From (2) a preliminary value of imports consistent with (1) is obtained.
4. If, as in most cases, the value of imports obtained from (3) differs from the historical trend, it is necessary to decide if exchange rate action is needed. If a devaluation is considered, steps (2) and (3) have to be redone in light of the new exchange rate level.
5. The quantity of money demanded is forecasted. This requires estimates of nominal income and velocity.
6. A preliminary decision on whether "interest rate action" is needed is made at this stage. If the answer is positive, step (5) is revised.
7. The relation between the country's monetary aggregates and the central bank monetary aggregates is determined.
8. The sustainable level of central bank domestic credit is derived.

9. The domestic credit target determined in (8) is checked for consistency and realism. This is done by analyzing in detail the demand sources for domestic credit. The key element here is the potential demand for credit by the public sector. This step, thus, includes a difficult and detailed analysis of government finances.
10. If the public sector borrowing requirements are inconsistent with the maximum expansion of domestic credit, new sources of adjustment are sought. These include demand management, supply-oriented policies, and policies geared to the financial side.
11. After the new measures are devised, steps (1) through (10) are repeated and the exercise is iterated until consistency is achieved.
12. Once an "equilibrium" program is achieved, the performance criteria that will guide the monitoring of the program are determined.
13. The program is then negotiated with the country's authorities. (Edwards 1989: 11–12)

It can be seen that the entire approach is macroeconomic in the extreme and almost entirely demand-oriented. This is what makes it essentially Keynesian. Basically, the whole exercise is designed to estimate a bottom-line level of external resources necessary to make the other pieces fit. This amount is what the IMF provides.

IMF Conditionality

LDCs complain bitterly about IMF "conditionality"—the conditions they must meet before IMF assistance will be forthcoming. In many cases, compliance with an IMF adjustment program is a condition for nations to be able to obtain private capital; thus the pressure to comply is very strong (Williamson 1983). Among the major policy reforms which are usually necessary to achieve compliance with the IMF are a devaluation of the currency and a reduction in the budget deficit.

Devaluation is the most controversial element of any adjustment program. This is because most LDCs deliberately maintain overvalued exchange rates in order to allow elites with access to foreign exchange at official rates to obtain foreign goods at low prices. In such cases, it is clearly necessary and desirable for the exchange rate to be revalued at a lower, more realistic level. However, at times the IMF appears not to differentiate between devaluation of an overvalued exchange rate and devaluation for the sake of devaluation. In the latter case, the effects can be very negative in terms of inflation and reduced growth, with negligible improvement in the trade balance (Katseli 1983; Edwards 1986; Miles 1979).

On the budgetary side, the exclusive focus on the deficit leads to a lack of differentiation between reductions in government spending and higher taxes. As one senior IMF official recently put it: "I must stress that, while the size and change of the fiscal deficit are crucial preoccupations of Fund advice, the absolute size of the public sector is not" (Tait 1989: 3; see also Tanzi and Blejer 1984:

133). Needless to say, politicians often prefer higher taxes to cuts in spending. Thus many LDCs now have extremely high tax rates, which discourage work effort, saving, entrepreneurship, enterprise, and many other things desperately needed for growth. High taxes are also responsible for a continuing "brain drain" from LDCs, as those with ability and skills leave the country (Rabushka and Bartlett 1985).

Countries may also adopt market-distorting measures which give the appearance of reducing the deficit while imposing higher costs on the economy. For example, many countries have agricultural marketing boards with monopolies on the export of agricultural products. Farmers must sell their produce to such boards at prices usually far below the world-market price. The produce is then resold on the world market at a large profit. These profits often account for a majority of the government's revenues. Thus, in many cases, governments simply reduce the prices paid to farmers still further in order to increase the revenue of agricultural marketing boards and, thereby, to reduce the deficit. The effect, of course, is to reduce the incentive of farmers to produce, thus leading to famine in some cases. In other cases, governments may reduce the deficit by granting trade protection or monopoly status to state-owned enterprises, or parastatals, in order to increase their profits (or cut their losses). In either case, the supposed benefits of a reduced deficit are more than offset by an increased burden on the private sector. The net result could well be worse than doing nothing.

TAXATION IN LDCS

Another element of the Keynesian/IMF approach to development is the treatment of taxation. In the Keynesian model, taxes affect the economy only through their impact on aggregate demand. Thus, all that matters is the aggregate amount of tax revenue relative to spending; it does not really matter what the marginal tax rates are or what the structure of taxation is, except to the extent that progressive tax rates are preferred to regressive ones because those with higher incomes might be inclined to save some of their income, thus depressing aggregate spending. (Conversely, increases in government spending are almost always preferred to tax cuts, temporary tax cuts are preferred to permanent ones, and tax credits are favored over tax-rate reductions.) If one reviews the IMF's research on taxation, one sees that virtually all of it is concerned solely with aggregates, with virtually no discussion of tax rates, tax structure, or tax incentives.[4]

Of course, in this respect the IMF is simply reflecting conventional wisdom among development economists, most of whom are Keynesians. The following are some representative views.

Lord Kaldor: "The shortfall in revenue [in LDCs] is . . . largely a reflection of failure to tax the wealthier sectors of the community effectively" (Kaldor [1963] 1975: 31).

Richard Goode: "An underdeveloped country that is determined to avoid stagnation and inflation will have to find ways of raising large and growing amounts of tax revenue" (Please [1967] 1975: 40).

Walter Heller: "A personal income tax with a narrow base but high rates on large incomes, buttressed by administrative efforts concentrated on this area, may be a suitable instrument for achieving some of the ends of economic policy and distributive justice" (Heller 1975: 27).

Barbara Ward: "One thing . . . is certain. No nation has even halfway peacefully entered the modern world without a progressive income tax" (Ward 1977).

As a consequence, virtually all LDCs have extremely high marginal tax rates, beginning at relatively low levels of income. Apparently, such countries simply adopted the tax systems of their colonial rulers wholesale, without taking into account the important differences between an advanced industrial country, which may well be able to afford a heavier burden of taxation, and the status of a developing nation desperately in need of work, savings, and investment. Moreover, the industrial nations, in many cases, had abnormally high tax rates themselves, as a legacy of World War II. In the United States, for example, the wartime tax rates were not reduced until 1964, when the top rate was reduced from 91 percent to 70 percent. Lastly, most LDCs have suffered from enormous inflation since independence and have seldom adjusted their tax systems accordingly. Thus, a tax system which at one time may have had high rates only for those with very large incomes now may impose rates reserved for the rich on those with moderate and even low incomes.

Unfortunately, a major element of an IMF adjustment program usually involves increased administrative efforts to collect taxes. As is the case in most LDCs, and even in most industrialized nations, excessive tax rates have led to tax cheating and the growth of an underground economy. Thus the effect of increased enforcement with no adjustment of tax rates often means that people who have managed to be productive by evading taxation now come under its yoke. The result is a reduction of growth and very little increase in revenue, as workers and entrepreneurs retreat into subsistence agriculture or simply leave the country altogether.

FOREIGN AID

As noted earlier, the basis of the Keynesian approach to development is increasing the capital stock. Since LDCs have little capacity to raise capital through domestic saving, their only way to increase growth is through foreign transfers. Such transfers occur in three forms: private direct investment, borrowing from private sources, and official aid, either bilateral or multilateral, which may take the form of either outright grants or long-term loans at below-market rates.

For many years, developing nations favored foreign aid and bank loans, scorning direct foreign investment as "neo-imperialist." A small band of economists, however, warned that foreign aid was not only unlikely to promote growth, but might well retard it. As early as 1953, F. A. Hayek warned that it was virtually impossible for governments to allocate funds efficiently (Hayek 1953). In 1958, Milton Friedman argued that, because foreign aid was a government-to-government transfer, it inevitably strengthened the government at the expense of the private sector, thus inhibiting growth. "Foreign economic aid," he said, "far from contributing to rapid economic development along democratic lines, is likely to retard improvement in the well-being of the masses, to strengthen the government sector at the expense of the private sector, and to undermine democracy and freedom" (Friedman 1958: 516). P. T. Bauer, Basil Yamey, and Gottfried Haberler, among others, were also voices of dissent on this subject (Wiggins and Schoeck 1958).

Interestingly, there is little, if any, empirical evidence that foreign aid increases growth. Even the supporters of foreign aid have been forced to accept this reality. As a recent study concluded:

> Empirically, we have found it impossible to establish any statistically significant correlation between aid and the growth rate of GNP in developing countries, the presence of published results to the contrary notwithstanding. . . . The apparent inability of development aid over more than twenty years to provide a net increment to overall growth in the Third World must give the donor community, as it gives us, cause for grave concern.[5] (Mosley, Hudson, and Horrell 1987: 636)

Ironically, the onset of the debt crisis in 1982, which stopped private-bank lending to LDCs, and the budgetary problems of most Western governments, which have limited both bilateral and multilateral aid, have at long last finally forced many LDCs to turn to foreign investment and the private sector for growth. There is considerable evidence that countries which had previously scorned multinational corporations as agents of neo-imperialism are now welcoming them with open arms.[6] Nations which had relied heavily on state-owned enterprises to generate growth are turning to privatization.[7] States which had followed import-substitution strategies are now adopting export-oriented strategies.[8] And nations which had followed socialism and economic planning now embrace the free market.[9]

Another irony is that the IMF, which was supposed to help developing countries escape from their debt problems, has been a net recipient of funds from such countries. In other words, debt repayments to the IMF have exceeded new lending by the IMF. In 1986 the IMF withdrew $2.7 billion from LDCs; in 1987 it withdrew $6.1 billion; and in 1988 it received $5.5 billion. Even the poorest of the poor in Sub-Saharan Africa paid more to the IMF in these three years than they received (International Monetary Fund 1989: 184).

JAPAN'S ANTI-KEYNESIAN POLICY

It is worth digressing briefly on the explicitly anti-Keynesian approach to development taken by Japan following World War II. Since Japan has had the most extraordinarily successful economy of the postwar period, the lessons of its success have been carefully studied. For the most part, people have tended to focus on Japan's industrial policy (Johnson 1982). Of vastly greater importance, however, has been Japan's anti-Keynesian tax policy.

Even today, Japan's tax system is essentially an outgrowth of the structure imposed by General Douglas MacArthur during the time when he was Supreme Commander of the Allied Powers in Tokyo. In the summer of 1949, he asked a group of American economists and tax specialists, led by Professor Carl Shoup of Columbia University, to study Japan's tax system and make recommendations for improvement. These recommendations were enacted virtually intact in 1950. Among the reforms were:

- A reduction in the top personal income tax rate from 85 percent to 55 percent;
- An increase in the personal exemption;
- Indexation of capital gains and full deduction for capital losses;
- Repeal of the excess-profits tax on corporations;
- Repeal of the withholding tax on dividends;
- Indexation of depreciation. (Shoup 1989, Bronfenbrenner and Kogiku 1957)

During the 1950s and 1960s, taxes in Japan were cut almost annually. Between 1954 and 1974 individual income tax exemptions were increased in all but three years, individual income tax rates were reduced eleven times, and corporate tax rates were lowered six times (Pechman and Kaizuku 1976; Aoki 1985). Japan was able to accomplish this because its strong growth led to a surge in government revenues. Whereas in the United States and other countries increased revenues resulting from economic growth were largely spent, Japan returned such revenues to the taxpayer. The result was faster growth and even more revenues for the government. Amazingly, between 1965 and 1986 Japan's share of total OECD tax revenues rose from 4.6 percent to 16.1 percent, despite its having the lowest percentage of taxation as a share of GNP of any major industrialized country (OECD 1988: 93, 98).

Moreover, until the recent tax reforms in Japan, there was essentially no tax on interest. Capital gains were largely free of tax and dividends were lightly taxed. In addition, Japan discourages debt accumulation. In Japan, only interest on borrowing for business purposes is deductible; even interest on home mortgages is nondeductible. By contrast, until recently virtually all interest payments in the United States were deductible (Makin and Shoven 1987).

Lastly, Japan has a far more modest social security program than the United States or any of the other Western industrialized nations. In 1980, the average

social security benefit in Japan was just $2,107 per year compared to $4,097 in the United States (Heller et al. 1986; Social Security Administration 1988). This is important because there is considerable evidence that high social security benefits discourage people from saving for retirement (Feldstein 1974, 1983; Darby 1979).

Thus, we can see that Japan's fiscal policy has been very much anti-Keynesian. Whereas Keynesian doctrine favored high tax rates in order to discourage saving, Japan adopted low tax rates and large incentives to save. Whereas Keynesian doctrine favored government spending over tax reduction as a greater stimulus to demand, the Japanese ploughed increased revenues into tax cuts instead of higher spending. And whereas Keynesian doctrine favored large social security programs to discourage saving and stimulate consumption, Japan adopted a modest social security program.[10] Similar policies were adopted by the other East Asian "tigers": Hong Kong, Taiwan, South Korea, Singapore, and Malaysia, explaining much of their economic success in recent years (Rabushka 1987).

CONCLUSION

We have seen that Keynesian economics supported the growth of state planning and socialism in LDCs. This was reinforced by foreign aid. The principal agent for the spread of Keynesian economics in LDCs was the International Monetary Fund, which has long followed a Keynesian approach to adjustment enforced through conditionality. Although we cannot place all the blame for the dismal condition of LDCs on Keynesian economics, it bears a heavy responsibility for much of the pain and suffering in the Third World.

There have always been those LDCs that for one reason or another rejected the Keynesian approach. For the most part, they have been centered in East Asia. The success of Japan, Hong Kong, Taiwan, Singapore, and South Korea stands as a testament to the power of open economies, export-oriented growth, foreign investment rather than foreign aid, and conservative fiscal policies (Berger and Hsiao 1988; Streeten 1988).

The failure of government-oriented development policies, whether Keynesian or Socialist, has now been proven almost beyond question (Landau 1983, 1985a, 1985b, 1986). Even the Communist Bloc is turning away from socialism with astonishing speed. For many years, some critics maintained that capitalism and free markets could in fact provide a superior rate of economic growth, but at the cost of greater inequality and, in many cases, a repressive political regime. Now, even this last line of defense against the market has broken down, as evidence from countries like Chile and China, among others, shows that economic freedom invariably leads to demands for political freedom as well. Indeed, empirical research now demonstrates clearly that the free market is the economic system most compatible with political liberty, whereas socialism is the least

compatible (Scully 1988; Vorhies and Glahe 1988; Dye and Zeigler 1988; Kohli 1986).

For those familiar with the work of Milton Friedman, F. A. Hayek, and Ludwig von Mises, these conclusions may seem obvious. However, there are many people in this world for whom logic and reason are unpersuasive, but who can and do learn from mistakes. We now have forty years of mistakes in the Third World, where many people are worse off today than during the colonial period.

The recognition that everything else has failed is, more than anything else, responsible for the growing trend toward free markets throughout the world. While the example of East Asia is often dismissed as an aberration, it has also given hope to a few nations that are trying to replicate the economic success of Hong Kong, Singapore, and the others. A few more examples of such success in Africa or Latin America may be all that is needed to turn the strong current flowing toward free markets into a tidal wave.

NOTES

1. It is worth noting that Keynes himself believed his economic theories to be more compatible with planned economies than with free-market economies. As he wrote in the forward to the German edition of *The General Theory of Employment, Interest and Money*: "The theory of output as a whole, which is what the following book purports to provide, is much more easily adapted to the conditions of a totalitarian state, than is the theory of production and distribution of a given output produced under conditions of free competition and a large measure of laissez-faire" (Keynes [1936] 1973: xxvi). Indeed, no less an authority than John Kenneth Galbraith argues that Hitler "was the true protagonist of the Keynesian ideas" (Galbraith 1977: 221).

2. Incidentally, Keynes himself did not agree with Harrod's initial article, even though, as editor of *The Economic Journal*, Keynes accepted the article for publication! As Keynes told A. C. Pigou: "As regards Harrod's article, please do not include this amongst those which I have accepted because I agree with it! I do not think there has ever been an article about which I have corresponded with the author at such enormous length in the effort to make him clear up doubtful and obscure points and reduce its length. I produced a little effect, but not perhaps very much in proportion to the effort. In the final result, I do not find myself in agreement." Pigou indicated that he would have rejected the article (Keynes 1973b: 320).

3. The Harrod/Domar model is still embedded in textbooks on development. See, for example, M. Gillis, D. H. Perkins, M. Roemer, and D. R. Snodgrass (1987: 44–48); B. Herrick and C. P. Kindleberger (1983: 28–32).

4. International Monetary Fund (1981); Tait, Gratz, and Eichengreen (1979); Chelliah, Baas, and Kelly (1975: 187–205); Bahl (1971); Chelliah (1971); Lotz and Morss (1967); and Wai (1962). It should be noted that in recent years the IMF has made more of an effort to incorporate incentive effects in its analysis (see Gandhi et al. 1987). However, it is not clear that this improved analysis has yet worked its way into the IMF's operating procedures.

5. Paul Mosley has taken a somewhat softer position on the failure of foreign aid in

his other writings. Nevertheless, they provide powerful evidence for reform of foreign aid. See Mosley (1987, 1985, 1980).

6. See "Come Back Multinationals," *The Economist* (26 November 1988): 73; Steven Globerman, "Government Policies toward Foreign Direct Investment: Has a New Era Dawned?" *Columbia Journal of World Business*, 23 (Fall 1988): 41–49; "An Offer the Third World Can't Refuse," *Business Week* (29 June 1987): 65; Richard House, "Brazil Ready to Embrace Foreign Investor Strategy," *Washington Post* (28 June 1987): 71; Christian Tyler, "Developing Nations and Foreign Investment: Learning to Live with Capitalism," *Financial Times* (13 February 1987); Marc Levinson, "Yanqui Come Back!" *Across the Board* (October 1986): 22–29; "Turning from Bankers to Investors," *The Economist* (15 March 1986): 67; Tyler Bridges, "Andean Pact to Relax Rules on Investment," *Washington Post* (18 February 1986): D6–7; Nicholas D. Kristof, "Curbs Give Way to Welcome for Multinational Companies," *New York Times* (11 May 1985): 1, 33. For background, see *Foreign Private Investment in Developing Countries* (International Monetary Fund 1985); Mario I. Blejer and Mohsin S. Khan, "Government Policy and Private Investment in Developing Countries," *IMF Staff Papers*, 31 (June 1984): 379–403; and David J. C. Forsyth and Robert F. Solomon, "Restrictions on Foreign Ownership of Manufacturing Industry in a Less Developed Country: The Case of Ghana," *Journal of Developing Areas*, 12 (April 1978): 281–96.

7. Killick and Commander (1988); World Bank (1988); Vernon (1988); Hemming and Mansoor (1988); Berg and Shirley (1987); Aylen (1987); Hanke (1987); Shackelton (1986); Glade (1986); Asian Development Bank (1985).

8. For recent developments, see Kelly et al. (1988); World Bank (1987). For background on the benefits of an outward-oriented policy, see Balassa (1987, 1978); Ram (1987); Tyler (1981); Michaely (1977).

9. Wolf (1988: 177–89); Greenhouse (1987); *Time* (28 July 1986: 28–39); Silk (1985); Farnsworth (1985).

10. An indication of the extent to which Keynesian ideas played no role whatsoever in the Japanese miracle is shown by Eleanor Hadley's failure to find any meaningful Keynesian influence despite a strenuous effort to do so. She concludes that this is because economists played no role in the miracle. Rather, it was created by businessmen and bureaucrats with no knowledge of Keynesian economics (Hadley 1989).

Chapter 7

The Fork in the Keynesian Road: Post-Keynesians and Neo-Keynesians

by Don Bellante

KEYNES AND DEPRESSION ECONOMICS

If there had been no Great Depression of the 1930s, there would have been no Keynesian revolution. The world of economists, at least the English-speaking part of it, was thrown into a state of crisis as a result of the economic collapse of that time. The prevailing paradigm of British neoclassical economics was best suited for the analysis of long-term problems of economic growth rather than problems of discoordination. In today's conventional wisdom, it is customary to assert that the analysis by the British neoclassical school led to the conclusion that recessions could not occur. Serious students of the history of thought know this to be a gross oversimplification. But it is not at all unfair to claim that the prevailing orthodoxy of British neoclassicism established a framework of economic thought incompatible with disturbances other than those of short duration, wherein self-correcting mechanisms would quickly be apparent and effective. The depression of the 1930s did not cause a crisis for theory because it was severe; the crisis arose because the contraction appeared to exhibit no self-correcting tendencies. In short, the economies of Europe and America were not only depressed, but appeared to be in a state of equilibrium to the economists of that day. This appearance of equilibrium was what created the dissonance between the apparent state of the world and perceptions engendered by the prevailing orthodoxy. Economists and those who listened to them were in search of an explanation for how such a collapse could take place and what could be done about it.

Keynes offered such an explanation. More importantly, the analytical appa-

ratus that he offered led to some simple and direct conclusions as to what could be done collectively to remedy the depression. After a while, the Keynesian vision of the way in which an economy functions became the prevailing orthodoxy. Over the succeeding five decades, Keynes's depression economics created an unconscious depression myopia that has constrained the abilities of mainstream economists in their analyses of the economy's workings and has led to the substantial failures of misguided policies. Just as Keynes once envisioned himself as trying to free economists from what he saw as the intellectual straitjacket of the pre–Keynesian worldview, economists now are faced with the necessity of unshackling themselves from a Keynesian worldview that is unsuitable for analyzing the functioning of the real-world economy in which we live.

Granted that the Great Depression was the event that spawned the Keynesian worldview, the ascendancy of Keynesian economics was by no means inevitable. The early twentieth-century development of what we now call macroeconomics, at the hands of the Austrian school, most particularly Ludwig von Mises and later Friedrich Hayek, provided an analytical apparatus that could have been the source of answers for which the profession was searching. This outcome might have come to pass, one can speculate, had Anglo-Saxon economics not evolved so much in isolation from the very rich development of the Austrian tradition, particularly with respect to capital theory. It is indeed the case that most students of economics of the last four decades are unaware of what John Hicks reminds us: in the early 1930s the "new" theory of Hayek rivaled the new theory of Keynes, and it was by no means clear which perspective would prevail (Hicks 1967: 203). Of course, Austrian cycle theory was a lot "newer" to British economists than to European ones. While much of Keynes's theory was slapped together in response to the economic collapse, the theories of Mises and Hayek, as elucidated during the 1920s, were built upon the earlier works of Knut Wicksell and Eugen von Böhm-Bawerk and were capable of predicting the 1930s collapse before the fact. Even Keynesian economists must admit that Keynes's theory can at best explain why a depressed economy cannot recover quickly, but it cannot even pretend to explain why the collapse of aggregate demand takes place. Explaining a depression by a collapse of aggregate demand is to use a depression to explain a depression—a very circular type of reasoning. Likewise, to resort to speculative market collapses and "animal spirits" for explanation is to take intellectual refuge. Ironically, the ethnocentricity of Anglo-Saxon economics rendered the simplistic Keynesian mechanisms easier to understand, at least for economists reared in the Marshallian tradition, than the richer, much more complete Austrian analysis, despite the fact that the Austrian analysis was much more consistent with the fundamental microeconomic principles that formed the basis of pre–Keynesian neoclassical economics.

It is clear that the general lack of familiarity with the Austrian mode of analysis made the contest difficult for Hayek to win. But the most important reason for the eventual prevalence of the Keynesian perspective is more fundamental. The psychological trauma associated with the collapse led to an intense desire for a

policy prescription—a collective action that would end the depression. Bureaucrats and politicians intensely wanted intellectual support for their desire to direct the economy. Keynes provided academic respectability to governmental actions (such as the New Deal) that were already under way and that officeholders would have taken, with or without academic respectability. Austrian cycle theory could not possibly have rationalized Keynesian-type policy prescriptions. As Joseph Schumpeter put it: "There cannot be any doubt that it [*The General Theory*] owed its victorious career primarily to the fact that its argument implemented some of the strongest political preferences of a large number of modern economists. . . . Politically, Hayek swam against the stream" (Schumpeter 1954: 1121). The contention that there was a demand for Keynesian theory that was derived from a demand for Keynesian conclusions is an important one. It is important not only as an explanation for how Keynesianism came into its original dominating position, but also as an explanation for much of the subsequent history of twists and turns in the development of Keynesian reasoning. It is particularly important in explaining the reaction of Keynesian economists to their own intellectual crises during the 1970s and 1980s, and that reaction is at the core of much of what follows in this chapter.

KEYNESIAN ECONOMICS AFTER KEYNES

Following Keynes, Keynesian economics developed along two lines that, although linked by a common ancestry to Keynes, have evolved so distinctly as to be incompatible with one another. One of these is the school that in time came to label itself Post-Keynesian. Because that school of thought essentially rejects marginalism, its evolution has been cut off and isolated from the subsequent development of virtually all other economic thought, as the acceptance of marginalism is so systematic and otherwise universal. The second line of development is that with which most American students of economics are familiar. As that second line emerged and passed through various phases, different labels were attached to it. Stemming from Hicks's development of the IS-LM analysis, this second line has sometimes been labeled "Neo-Classical," other times "Bastard Keynesian." I would prefer to use the label "Orthodox Keynesian" to distinguish it from the most recent evolutionary strain of Keynesian economics to which the label "Neo-Keynesian" or "New Keynesian" applies. The "Orthodox Keynesian" approach is characterized by an adherence to the IS-LM apparatus, an inflation-unemployment trade-off (the Phillips curve), and an intertemporally persistent "structure" of the economy that permits the use of monetary and fiscal policies as devices for stabilizing, or "fine-tuning," the economy. Orthodox Keynesianism is also associated with the notion of quantity adjustments (and thus, income) as the principal equilibrating mechanism of the economy. Most importantly, it is associated with the potentiality of a macroeconomic equilibrium of less than full employment. A distinction needs to be made between Orthodox Keynesianism and the Neo-Keynesian school now

emerging as the dominant strain. The essential distinction is that, while the Neo-Keynesian school maintains an essentially Keynesian flavor, it has been very much influenced by the challenge raised in the 1970s by the Rational-Expectations/New-Classical critique of Orthodox Keynesianism. At one and the same time, Neo-Keynesian analysis incorporates some aspects and reacts against other aspects of the New-Classical economics. For example, the Neo-Keynesians accept the long-run nonexploitability of an inflation-unemployment trade-off, unlike earlier Keynesians. On the other hand, despite being influenced by the Rational Expectations school, Neo-Keynesian analysis maintains a stabilizing role for monetary and fiscal policy.

It is probably safe to say that Orthodox Keynesianism is in a state of eclipse, but that Keynesian policy conclusions have reemerged through the Neo-Keynesian response to the intellectual demise of Orthodox-Keynesian analysis. However, there is an obvious geographical dimension to the current state of Keynesian economics. Post-Keynesianism seems to be most prominent in Great Britain and to some degree in Europe, whereas Neo-Keynesianism to date has to developed almost entirely in the United States. To be sure, there are American adherents to the Post-Keynesian paradigm (Alfred Eichner and John Kenneth Galbraith, for example), but their influence among academics on this side of the Atlantic is slight. I suspect that one reason for this geographically based difference has to do with the fact that Post-Keynesian analysis revolves around the distribution of income, and European economists, the British in particular, always seem to be obsessively concerned with distributional issues. Efficiency, at least in technical analysis, is the primary focus of Neo-Keynesian economists. While the most modern Neo-Keynesians reject the standard IS-LM apparatus, it is clear that the primary agenda of Neo-Keynesian economists is to rationalize some of the ad hoc mechanisms of more primitive Keynesian forms in order to preserve the major policy conclusions. The earlier Keynesian chain of logic was most vulnerable in its analysis of the labor market, wherein workers react to the money wage only, not to the real wage, and where that money wage is exogenously (and mysteriously) determined. The Orthodox-Keynesian solution to this problem was to ignore Keynes, but to substitute the equally ad hoc mechanism of "sticky wages." The Post-Keynesian solution was to deny the existence of a labor market. But the Neo-Keynesian solution is to try to portray the appearance of sticky wages and other Keynesian aspects of the labor market as the result of individual-optimizing behavior which is nonetheless inconsistent with a social optimum (i.e., full employment). In other words, it is the outcome of a market failure, and market failure always provides the statist with all the justification he deems necessary for government intervention.

The identification of acceptance of the IS-LM apparatus with Orthodox Keynesians but not with the most recent collection of Neo-Keynesians is, I believe, correct but potentially confusing. The IS-LM apparatus was accepted, after all, by Milton Friedman and like-minded Monetarists, but was thoroughly rejected by the New-Classical economists. It is just as thoroughly rejected by Post-

Keynesians. (For anyone wanting a way out of this taxonomical confusion, I recommend a book by Warren Young [1987].) Although I don't want to trespass too far into the territory assigned to others in this volume, a bit more trespass is necessary in order to convey the historical setting of the present state of the Keynesian episode now entrenched in the schools of Post-Keynesian and Neo-Keynesian economics. For this purpose, I find the classification by Peter Sinclair (1987: vii–xxiv) of each of the five decades since *The General Theory* to be highly useful, although I interpret much of the historical detail differently. Sinclair labels 1936 to 1946, the first decade after Keynes, the "Decade of Distilling." This was the period of the Keynesian model's mechanization and the mislabeled "neo-classical synthesis" that produced the IS-LM apparatus as the main analytic tool of Orthodox Keynesianism. The years 1946–56 are identified as the "Decade of Data and Dispute." Much of what went on during this decade dealt with the empirical realization that the Keynesian consumption function could not hold as a long-run proposition. James Duesenberry's (1949) relative-income hypothesis, Franco Modigliani's (1954) life-cycle hypothesis, and Milton Friedman's (1957) permanent-income hypothesis all emerged as alternatives to the primitive Keynesian consumption function, although Friedman did the best job of reconciling the short-run Keynesian function with the statistical relative constancy of the long-run average propensity to consume. None of this caused any "crisis" for Keynesian economics, although it did bury the stagnation thesis of Alvin Hansen, which took the Keynesian consumption function as a serious long-term proposition. Otherwise, these developments were seen as refinements of the basic Keynesian model, and to this day macroeconomic textbooks tend to employ the primitive Keynesian consumption function in their expositions, relegating Friedman, Modigliani, and Duesenberry to separate and separable chapters or appendices.

The next decade (1956–66) is labeled by Sinclair the "Decade of Dynamics." It was during this period that a fork clearly appeared in the road leading from Keynes, with one path eventually heading in the Post-Keynesian direction, the other in the Neo-Keynesian. Robert Solow's (1956) so-called neoclassical growth model brought relative factor prices into play and gave a place to capital-labor substitution within a one-sector model. In significant contradistinction to Austrian capital theory, capital was treated as homogeneous, much as it was by Frank H. Knight. Knight, however, did not conceive of an aggregate production function, which in Austrian analysis is a logical impossibility. Impossible or not, the aggregate production function has become a mainstay of mainstream dynamic economics. There developed another strain of growth models in the Cambridge (England) tradition that forms the basis of Post-Keynesian dynamics. This strain includes the models of Nicholas Kaldor (1956) and others who share a common ancestry going back to Michael Kalecki (1937). Eschewing any role for substitution, these models are driven entirely by income effects, and they render determinate the distribution of income between the owners of capital and labor. The absence of substitution effects from these models makes the concept of an

aggregate production function meaningless in Post-Keynesian analysis, and Post-Keynesians have remained true to this doctrine. But their rejection of the concept of an aggregate production function is based on the alleged nonexistence of factor markets as conventionally perceived, not on problems of aggregation over homogeneous capital goods, which problems form part of the basis for the Austrian rejection of an aggregate production function. In any event, this was the decade when Keynesian economics split into mutually contradictory paradigms and when today's distinction between Post-Keynesians and Neo-Keynesians was formulated.

The ten years of 1966 to 1976 are labeled by Sinclair the "Decade of Disillusion." The disillusion stemmed from the inability of the Orthodox-Keynesian model to explain what was going on in the world at that time. The most primitive Keynesian models assumed fixed prices; hence the models were inapplicable to questions about inflation except at full employment, anything beyond which the so-called classical model, involving a crude "Quantity Theory" of prices, held to be a "special case." The introduction of the Phillips curve in the early sixties, at first as a deus ex machina, supposedly provided the missing link between the real sector and the price level. In time, Phillips-type phenomena were incorporated into the most sophisticated Keynesian-based econometric models, some of which ran into hundreds of equations. Even with the assistance of the Phillips curve, however, the existing varieties of Orthodox-Keynesian models were utterly inconsistent with the real-world phenomenon of stagflation, or more precisely, the breakdown of any apparently systematic, unidirectional movement between the level of economic activity and the rate of inflation. In truth, there were other difficulties that rendered Keynesian analysis inconsistent with the facts of the real world, but the incompatibility with stagflation was perhaps the key issue leading to the crisis for Keynesian orthodoxy and the demise of its mechanistic worldview. The seeds of this intellectual crisis were sown by Milton Friedman's (1968c) well-known presidential address, in which he described the transitory nature of the Phillips curve. His depiction of labor market processes argued that the money illusion, the key ingredient in Keynes's weakest link, was a disequilibrium phenomenon, the effects of which would dissipate so that in the long run there could be no inflation-unemployment trade-off.

There were several responses among mainstream economists to the intellectual crisis associated with the demise of Orthodox Keynesianism. One such response was the growing popularity of Post-Keynesian economics. In many respects, this response was a return to the most primitive version of Keynesian economics, wherein output determination is the subject of economic analysis, but money-wage and price-level movements are seen as sociologically determined (in a tussle over the distribution of income). Hence, the crisis in Keynesian theory over the incompatibility of rising inflation coupled (sometimes) with rising unemployment was resolved by ignoring it, in effect, through seeking refuge in what is really a noneconomic theory of inflation.

The most dramatic mainstream response to the crisis in Keynesian economics

was the development of the "Rational Expectations" approach to macroeconomics. In the hands of Robert E. Lucas (1972), Thomas Sargent and Neil Wallace (1975), Robert Barro (1976), and others, the Rational-Expectations story was at once a critique of Orthodox-Keynesian reasoning as well as an alternative to it. The grounds on which early Rational-Expectations proponents criticized Orthodox-Keynesian models were quite sound. In its simplest form, their argument was that Keynesian models, and particularly Keynesian policy conclusions, were based on the illogical proposition that economic agents, in reacting to fiscal and monetary variable changes, will make systematic errors. Rather than learning from the experience of past policy, they will react the same way each time to, say, countercyclical changes in the money supply. It would be impossible to gauge the amount of stimulus or restraint needed in a given situation if agents reacted differently with learning, but Orthodox-Keynesian models, even the most complicated, were based on the assumption of an intertemporally stable behavioral structure of the economy. As Roger Garrison and I have pointed out, this basic truth of the Rational Expectations school was anticipated by Mises as early as 1953 (Bellante and Garrison 1988).

The response of Orthodox Keynesians during the "Decade of Disillusion" was essentially defensive. The presidential address of Franco Modigliani (1977), presented at the end of that decade, is a good example, but probably the best way to get the flavor of the response by established Orthodox Keynesians is to read the sections on James Tobin and Robert Solow in Arjo Klamer's *Conversations with Economists* (1983: 97–113, 127–48). What comes across quite clearly is their belief that the Rational-Expectations/New-Classical approach is not only entirely too abstract and overly mathematically formalized, but also highly unrealistic in its basic assumptions. Allegedly, it is the mathematical elegance of the New-Classical economists that accounts for their widespread appeal to the mainstream of technically trained young economists. This observation is entirely correct but ironic. The cult of admiration for mathematically elegant economic models is the product of the so-called Keynesian revolution. Rivals to Keynesian orthodoxy had always been scoffed at because they lacked such mathematical rigor. It seems that Orthodox Keynesianism has died upon the sword by which it once lived. To Austrian economists, of course, the irony is hardly comforting: the Rational-Expectations/New-Classical school may have beaten the Orthodox Keynesians at their own game, but the game was not worth playing. Moreover, the game itself distracts from the serious task of building an understanding of economic events.

Sinclair labels his last period (which I believe can be extended from 1976 to the present) the "Decade of Debt, Doubt, and Deflation." I am not concerned here with the "Debt" or "Deflation" aspect, and in any event, "disinflation" would have been a more appropriate term. The "doubt" to which Sinclair refers is the exceedingly unsettled state of affairs in macroeconomic analysis, particularly the present disagreements between the New-Classical and Neo-Keynesian economists.

This last period is also characterized by the coalescence of the Neo-Keynesian (or, as its adherents like to label it, New-Keynesian) school. Neo-Keynesians, particularly during the 1980s, have not been content to react defensively to the New Classicists, but have in a sense gone on the offensive. They have incorporated what they can of the Rational-Expectations perspective and have attempted to derive from individual maximization the behavioral postulates that were ad hoc mechanisms in Keynes. Most significantly, they have directly confronted the policy ineffectiveness conclusion of the New-Classical economics. So at present the Keynesian paradigm no longer commands the adherence that it once did. And that paradigm is now represented by two schools, Post-Keynesian and Neo-Keynesian, which are analytically distinct from one another and from Keynes. However, these two subspecies of Keynesianism, like their progenitor species, continue to provide the academic rationale for government control and manipulation of the economy, based on a nearly religious belief in an inherently unstable private economy and in the ability of centralized authority to improve its workings. Thus, these schools and their associated casts of characters merit a closer inspection.

POST-KEYNESIANS AND THE NONEXISTENCE OF FACTOR MARKETS

The Post-Keynesian model has several distinctive critical elements. The first of these is what I would call a Leontief view of production. In this perception, fixed technical coefficients connect labor and capital, and this technical fixity removes any possibility of varying the proportions in which inputs are used. Hence, relative prices of capital and labor have no role, in Post-Keynesian analysis, in determining the techniques of production. Moreover, as a consequence of this view of production, per-unit variable costs do not increase as output expands. Thus, the standard conception of an upward-sloping marginal cost curve (and the derivative concept of an upward-sloping industry supply curve) is seen by Post-Keynesians as mythical. The Post-Keynesian view of production is most comprehensively stated by Piero Sraffa (1960), and his work on this topic has become the standard reference for the paradigm. He has taken this view of production to its logical conclusion in value theory, that is, that relative product demand has no effect on relative prices. Relative prices of inputs and the techniques of producing various products determine relative product prices. The value theory that emerges is very much like the early nineteenth-century labor theory of value except that a composite called the *basic commodity* replaces labor as the origin of all value. (Perhaps it is this connection that leads some Post-Keynesians to describe themselves as Neo-Ricardians.) While the story of "production of commodities by means of commodities" cannot be easily told within a limited space, the details of the story are not necessary for a general overview of Post-Keynesian economics. It is sufficient to note that Sraffa's contribution makes national output independent of wages and prices.

Wages and prices determine the distribution of income, and that distribution depends on the struggle between organized labor and capitalists, on government efforts to alter that distribution, and on the rate of private investment. Thus, J. S. Mill's contention (which I believe to be the silliest ever made by a man alleged to have been a genius) that distribution is totally divorced from the laws of production has reemerged. Post-Keynesians can pursue their grandest redistributive schemes without any fear (on their part) of its consequences for the well-being of mankind. Post-Keynesians also subscribe to a mark-up theory of pricing. Having determined that price has nothing to do with demand, they contend that the oligopolistic firms dominating the economy determine prices, not in response to demand conditions, but rather in order to achieve a targeted level of profits. That targeted level is determined by whatever amount of funds is needed to undertake the firms' investment plans, which in turn are determined by their perceptions of the capital necessary to meet future product demands. The Post-Keynesian perception of production and pricing also divorces inflation from any demand considerations. Most particularly, the basic truth of the quantity theory is emphatically denied. With mark-up pricing, inflation is all of a cost-push variety and is determined, nebulously, by the struggle over the distribution of income. Money is seen as endogenous, but in a peculiar way. The causal relationship between money and prices, as seen by Monetarists, is reversed by Post-Keynesians. As costs rise, businesses apply their markup to prices. The higher prices may create a higher demand for credit, which causes the banking system to expand the money supply out of excess reserves. If these run out, there are other sources of credit, such as extending the repayment term. In most situations this won't be necessary, as the central banking system will usually expand the system's reserves. If it doesn't, a liquidity crisis may result, but even then the effect is on output exclusively. Within very broad limits, though, monetary policy really doesn't matter at all.

As mentioned before, the Post-Keynesian view of the labor market, as conventionally defined, is that it does not exist. In the words of one Post-Keynesian, "Neither the demand for labor nor the supply of labor depends on the real wage. It follows from this that the labor market is not a true market, for the price associated with it, the wage rate, is incapable of performing any market-clearing function, and thus variations in the wage rate cannot eliminate unemployment" (Applebaum 1979: 100). Money wages, on the other hand, are determined by the relative power of unions and oligopolistic corporations. This relative power can be affected somewhat by the degree of slack in the labor market, but public policy and social custom are seen as much more important determinants of that power. In any event, mark-up pricing dictates that prices will move with money wages. With wages (money and real) as well as prices playing no role in employment determination, it is simply aggregate demand variations (usually investment variations) that, given fixed proportions, determine the level of employment.

There is a great deal more, of course, to Post-Keynesian economics than can

even be touched upon here, including an interesting extension of Post-Keynesian mark-up theory (Rousseas 1985) and a more general treatment of mark-up pricing (Goldstein 1985). There are also two important surveys by Post-Keynesians that are fairly comprehensive. One is an article by Alfred Eichner and J. A. Kregel (1975) and the other a book edited by Eichner (1979). The articles by Peter Kenyon, J. A. Kregel, Eileen Applebaum, and Basil Moore in the Eichner volume are particularly useful. An important source for particulars of the Post-Keynesian framework is provided by the articles published since 1978 in the *Journal of Post Keynesian Economics*. The methodological piece by Galbraith (1978) in the inaugural issue is particularly noteworthy. While there is an internal consistency to the Post-Keynesian model, it is clearly built on a set of ad hoc assertions and on ideological jargon. As such, Post-Keynesian economics appears to be a collection of non sequiturs to most other economists, even to other Keynesians. It has no microeconomic foundations, except for primitive, pre–marginalist ones, and serves mostly to rationalize a collectivist control of the division of income according to class. With Marxism falling in credibility, the Post-Keynesian effort to justify government control of investment decisions and perpetual wage and price controls provides the next best hope for those who cannot accept economic individualism.

NEO-KEYNESIANS AND THE SEARCH FOR MICROFOUNDATIONS

Post-Keynesians like to think of their perspective as a direct outgrowth of the line of thought initiated in *The General Theory*, and they tend to view Orthodox Keynesianism as a distortion of Keynes's "message." There have been so many interpretations of what that message was that it is no simple matter to determine the correctness of the Post-Keynesians' ancestral claim. What is easily established is that the Post-Keynesian system is quite distinct from Orthodox-Keynesian thought. The distinction between Neo-Keynesian and Orthodox-Keynesian strains, however, is far less apparent. For one reason or another some economists whom I consider Orthodox Keynesians are sometimes referred to, without their objection, as New-Keynesian, for example, Tobin and Modigliani. My basis for distinguishing between them is the identification of certain characteristics that mark a distinct Neo-Keynesian strain. These characteristics are individual-optimizing behavior, implicit contracting, asymmetric information in the labor market, and efficiency wages. All of these elements, when put together, are used to arrive at Keynesian conclusions—persistent involuntary unemployment and an effective role for demand management.

Put in the simplest terms possible, the task that Neo-Keynesians see themselves facing is to explain equilibrium in markets, particularly labor markets, without market-clearing. The principal device for doing so is reliance on the concept of implicit contracting and the related concept of efficiency wages. The basic notion of implicit contracts is that both firms and workers would prefer wage stability

to employment stability (Azariadis 1975; D. Gordon 1974). Hence, a firm will respond in the short run to economic disturbances by reducing output and employment rather than wages. To reduce wages in response to transitory demand decreases would weaken the long-run profitability of the firm. Moreover, a firm may find that paying higher-than-market wages (and by an inference that does not logically follow, non-market-clearing wages) will increase productivity and profits. The notion of higher-than-market-clearing wages, called "efficiency wages," has been the subject of extensive empirical investigation by one of the major contributors to Neo-Keynesian thought, Lawrence Summers (1988; see also Kruger and Summers 1988; Raff and Summers 1987). Even when firms regard a change in demand as permanent, their workers do not know this. Due to this "asymmetric information," the only way that labor, especially if organized, can be persuaded to accept a wage reduction over the long run is for the firm *not* to attempt an immediate wage cut but first to cut output and employment. Anything less blunt apparently won't be believed, and the workers displaced by the flaw of asymmetric information in one firm won't find employment at lower wages elsewhere because other firms have implicit contracts with their own workers which prevent absorption. (This argument is spelled out in chapter 10, "Equilibrium Recessions," of Frank [1986].) Because these propositions are derived from models of utility-maximizing workers and profit-maximizing firms, subject to rational expectations, Neo-Keynesians see themselves as having completed the task of providing a sound microeconomic foundation to Keynesian notions of how the world works. Moreover, Keynesian rigidities, as explained by imperfect markets with asymmetric information, are easily extended to other markets. Joseph Stiglitz, one of the most important Neo-Keynesians, has done so for product and credit markets (Stiglitz 1984; Stiglitz and Weiss 1981).

Neo-Keynesians should perhaps be applauded for their efforts to undermine the "equilibrium always" mind-set of the Rational-Expectations/New-Classical school. But the Neo-Keynesians' own mind-set seems to suggest that if they can convincingly argue that markets do not clear continuously and that unemployment is not necessarily a disguised form of voluntarily chosen vacation, then they can conclude that the basics of Keynesian economics, including its policy prescriptions, are maintained intact. But that conclusion does not follow. The literature on implicit contracts, at the basic level, provides some insights into the complexity of real-world labor markets, which are characterized by uncertainty. But the contention that a perpetually inefficient labor market results is simply erroneous. In the real world, workers face an *array* of implicit contracts, offering a wide range of opportunities to trade off earnings stability for employment stability (Bellante and Link 1982). The existence of such a range is welfare-enhancing, not a market imperfection. Labeling the institutions that arise to cope with uncertainty "inefficient" is as pointless as observing that, given how scarce fertilizer is, farmers will produce less wheat than they would if fertilizer were a free good. The implicit-contracting idea may be quite incompatible with the continuous market-clearing approach of New Classical economics, but it com-

plements Hayek's explanations of the business cycle's prolongation. Indeed, Hayek's (1967a) thoughts on the evolution of rule-following behavior are quite amenable to the basic notions of implicit-contracting theories. We know that we live in a world of uncertainty and imperfect information and that this affects behavior. If some want to label the resulting behavior a "market imperfection," so be it. But to conclude that a case is thus made for government intervention into markets as improving the overall performance of the economy is wrong. It is a conclusion that does not follow from the fact that we live in a complex, uncertain world. The whole thrust of modern Austrian analysis points to the conclusion that complexity and uncertainty make it impossible for government to improve on the coordinating tendencies that underlie market activity.

KEYNESIAN ECONOMICS TODAY

Keynesian economics today is in some important respects where it was fifty years ago, although it has a more elegant appearance. More than five decades after *The General Theory*, Keynesians are still in search of first principles. The five-decade research agenda has remained one of searching for a foundation to the Keynesian result—for a basis on which to support conclusions that have remained very much the same. Yet it is easy to suspect that this search for a microfoundation is a sideshow that Keynesians of all stripes have put on for the purpose of blunting criticism and not because they believe it otherwise useful. In fact, an important part of the Keynesian religion is the conviction that aggregates interact among themselves. This widespread methodological conviction, which may be the longest lasting legacy of Keynes, certainly describes Monetarists equally well. Nonetheless, what we see today is still a back-to-fore application of reasoning, going from conclusion to analytical apparatus to underlying individual behavior, although the reverse is necessary for logical validity. On the one hand, the Post-Keynesians have taken that reverse logic all the way back to David Ricardo in order to deny all that we have learned from the marginalist revolution and from microeconomics in general. On the other hand, we have the Neo-Keynesians, who have picked and chosen from among insights developed by other economists in order to try to put together an intellectually respectable underpinning to the basic conclusions put forth by Keynes. Thus, Neo-Keynesians have succeeded in replacing the mere assumption of rigidities with rigidities that follow from certain assumptions about individual behavior. Along the way, much of the analytical apparatus (e.g., the IS-LM diagrams) has been of necessity jettisoned, but not the policy conclusions. No matter what the Neo-Keynesians think, they have not reestablished the case for centralized management of the economy. That case was based on an overly simplistic view of human interaction. It is certainly true that Neo-Keynesians have gone a long way toward blunting the particular policy-ineffectiveness conclusion of the Rational-Expectations/New-Classical economists. The world we live in may not be as mechanical as the early Keynesians would have had it,

but neither is the world we live in characterized by continuous market-clearing, so any theory based on such market-clearing can do little more than provide an occasional insight. In any event, Neo-Keynesians have shown that the policy-ineffectiveness conclusion and the denial of involuntary unemployment stem from the continuous market-clearing assumption, not from the rational-expectations assumption. The two are quite distinct. Among other New-Keynesians, John Taylor has shown that when rational expectations are imposed on a Keynesian model, Keynesian conclusions result. Particularly interesting in this regard is the conversation with Taylor in Klamer (1983: 170–76). But we didn't need Neo-Keynesians in order to see that the world is not in continuous market-clearing equilibrium. We still need to counter the Keynesian perception of markets in equilibrium without market-clearing. It seems that the New-Classical economists have shown us that the world of human action is not as simple as Orthodox Keynesians saw it, while the Neo-Keynesians have shown us that the world is not as simple as the New-Classical economists see it. If the Neo-Keynesians fully appreciated the significance of some of their more important insights, they would probably see that they have weakened the case for interventionist policy, not strengthened it. It is certainly true that Neo-Keynesians have abandoned the idea that demand management can permanently reduce the rate of unemployment. But as long as the visible hand of government can affect the economy, Neo-Keynesians believe that hand should be used. To quote a leading Neo-Keynesian, Alan Blinder:

> The prevailing (Neo) Keynesian view posits a temporary trade-off between inflation and unemployment, but no permanent one. . . . That the trade-off is "only" transitory, however, does not make it either fleeting or unimportant. . . . The case for limiting the length and severity of recessions and keeping the economy operating closer to its potential remains as strong today as it was in Keynes's day. (Blinder 1987: 107)

This is a call for a return to fine-tuning, no matter how much the Neo-Keynesians may try to avoid the term. No matter how much the Neo-Keynesians have learned, in a fundamental sense they have learned very little.

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Chapter 8

Is Milton Friedman a Keynesian?

by Roger W. Garrison

HE ISN'T BUT HE IS

There is a story about a young job candidate interviewing for an entry-level position in the geography department of a state university. One senior faculty member, whose opinion of our modern educational system was not especially high, asked the simple question, "Which way does the Mississippi River run?" In ignorance of the biases of this particular geography department and in fear of jeopardizing his employment prospects, the candidate boldly replied, "I can teach it either way."

When the question "Is Milton Friedman a Keynesian?" was first suggested to me as a topic, I couldn't help but think of the uncommitted geographer. But in this case, opposing answers can be defended with no loss of academic respectability. When teaching at the sophomore level to students who are hearing the names "Keynes" and "Friedman" for the first time, I provide the conventional contrast that emerges naturally out of the standard account of the "Keynesian Revolution" and the "Monetarist Counter-Revolution." In the context of this introductory treatment, Monetarism is the antithesis of Keynesianism. To claim otherwise would come close to committing academic malpractice. Either a casual survey or a careful study of the writings of Keynes and Friedman reveals many issues on which these two theorists are poles apart.

Yet, one can make the claim that Friedman is a Keynesian and remain in good scholarly company. Both Don Patinkin (in R. Gordon 1974) and Harry Johnson (1971) see Friedman's monetary theory as an extension of the ideas commonly associated with Keynes. Some of their arguments, however, run counter to those

of the Austrian school, which serve as a basis for this chapter. And while Friedman, by his own account, was quoted out of context as saying, "We're all Keynesians now," his in-context statement is thoroughly consistent with an Austrian assessment. More than two decades ago, during an interview with a reporter from *Time* magazine, Friedman commented that "in one sense, we are all Keynesians now; in another, no one is a Keynesian any longer." The two senses were identified in his subsequent elaboration: "We all use the Keynesian language and apparatus; none of us any longer accepts the initial Keynesian conclusions" (Friedman 1968b: 15).

Patinkin and Johnson have each argued that Friedman's attention to the demand for money, and particularly his inclusion of the rate of interest as one of the determinants of money demand, puts him closer to Keynes than to the pre–Keynesian monetary theorists. Friedman has responded by insisting that the inclusion of the interest rate in the money-demand function is a minor feature of his theoretical framework (R. Gordon 1974: 159). Austrian monetary theorists, who pay more attention to the interest rate than does Friedman and as much attention to it as did Keynes, have a different perspective on the interest-rate issue. Both Keynes and Friedman have neglected the effects of changes in the interest rate on the economy's structure of capital. From an Austrian viewpoint this sin of omission, which derives from a common "language and apparatus," makes both Keynesianism and Monetarism subject to the same Austrian critique.

KEYNESIANISM: FROM THE *TREATISE* TO *THE GENERAL THEORY*

It is important to note, then, that the sense in which the statement "We're all Keynesians now" is true—from both a Monetarist and an Austrian perspective—involves a circumscribed "all." Monetarists are included; Austrians are not. Drawing out the essential differences among these schools of thought requires that we begin by considering the common "language and apparatus" that predates Friedman's (1969a) restatement of the quantity theory of money and that predates even Keynes's *General Theory*. The Austrians can be identified as Keynesian dissenters on the basis of Keynes's earliest macroeconomics.

Keynes's two-volume *Treatise on Money*, which appeared in 1930, was not well received by economists who drew their inspiration from Carl Menger and Eugen von Böhm-Bawerk. Although the macroeconomics found in Keynes's *Treatise* is not readily recognizable today as Keynesian theory, the theoretical building blocks and methods of construction are largely the same. The macroeconomic aggregates of saving, investment, and output are played off against one another in a manner that establishes equilibrium values for the interest rate and the price level.

In an extended critique of this early rendition of Keynesianism, F. A. Hayek found many inconsistencies and ambiguities, but his most fundamental dissatisfaction derived from Keynes's mode of theorizing—from his "language and

apparatus": "Mr. Keynes's aggregates conceal the most fundamental mechanisms of change" (Hayek 1931a: 277). Keynes had argued that changes in the rate of interest have no significant effect on the rate of profit for the investment sector as a whole. Hayek's point was that profit reckoned on a sector-wide basis is not a significant part of the market mechanism that governs production activity. A change in the rate of interest means that profit prospects for some industries rise, while profit prospects for others fall. The systematic differences in profit rates among industries, and not the average or aggregate of those rates, are what constitute the relevant "mechanisms of change."

There were fundamental shifts in Keynes's thinking during the six years between his *Treatise* and his *General Theory*, but none that could be considered responsive to Hayek's critique. In *The General Theory*, impenetrable uncertainty about the future clouded the decision processes of investors and wealth holders; the interest rate became a product of convention and psychology, largely if not wholly detached from economic reality; changes in market conditions were accommodated by income adjustments rather than price or interest-rate adjustments; and unemployment equilibrium became the normal state of affairs.

Selective readings of what Keynes actually wrote—as well as creative readings of what he may have intended to write—have given rise to conflicting interpretations of Keynes's message. In many instances, disagreements about Keynesian answers to macroeconomic questions derive from disagreements about what the relevant macroeconomic questions are. Is Keynes asking: How, in particular, do markets actually work? Or is he asking: Why, in general, do they not work well? More specifically, does the interest-inelastic demand for investment funds enter importantly into his theory, or does the instability of investment demand, driven as it is by the "animal spirits" of the business world, swamp any consideration of interest inelasticity? Does the highly interest-elastic demand for money enter importantly into his theory, or does the instability of money demand, based as it is on the "fetish of liquidity," swamp any consideration of interest elasticity?

Interpreters such as G. L. S. Shackle (1974) and Ludwig M. Lachmann (1986: 89–100 et passim), who focus on the pervasive uncertainty that enshrouds the future and the utter baselessness of long-term expectations, impute great significance to the animal spirits, as they affect the bulls and bears in investment markets, and to the fetish of liquidity, as it affects their willingness to make a commitment to either side of any market. Wealth holders are sometimes more willing, sometimes less willing, to part with liquidity; speculators are sometimes bullish, sometimes bearish, in their investment decisions. Such behavior gives rise to continuously changing market conditions and to a continuously changing pattern of prices. The sequential patterns of prices in a market economy, predictable by neither economist nor entrepreneur, are likened to the sequential patterns of cut glass in a kaleidoscope.

There certainly is no reason to expect, in this vision of the market process, that prices, wage rates, and interest rates will be consistent with the coordination

of production activities over time or even that they will be consistent with the full employment of labor at any one point in time. "Keynesian kaleidics," as this strand of Keynesianism is sometimes called, is not so much a particular understanding of the operation of a market economy as a denial that any such understanding is possible. Clearly, Friedman is not a Keynesian in this sense.

Interpreters such as John Hicks (1937) and Alvin Hansen (1947), whose focus penetrated Keynes's cloud of uncertainty, have identified a set of behavorial relationships which, together with the corresponding equilibrium conditions, imply determinate values of total income and the interest rate.[1] In the most elementary formulation, net investment (I) must equal net saving (S), and the demand for liquidity (L) must be accommodated by the supply of money (M). This IS-LM framework, more broadly called income-expenditure analysis, has in many quarters—but not in Austrian ones—come to be thought of as the analytical apparatus common to all macroeconomic theories. Appropriate assumptions about the stability of investment and money demand, interest elasticities, and price and wage rigidities allow for the derivations of either Keynesian or Monetarist conclusions.

FRIEDMAN VS. KEYNES

Within the context of income-expenditure analysis, it is appropriate to think of Friedman's Monetarism as being directly opposed to Keynesianism. Although both Keynesians and Monetarists accept the same high level of aggregation, one which closes off issues believed by the Austrians to be among the most important, they have sharp disagreements about the nature of the relationships among these macroeconomic aggregates. Several such disagreements, many as reported or implied by Friedman (1970), are included in the following list.

1. Keynesians believe that the interest rate, largely, if not wholly, a monetary phenomenon, is determined by the supply of and demand for money. Monetarists believe that the interest rate, largely a real phenomenon, is determined by the supply of and demand for loanable funds, a market which faithfully reflects actual opportunities and constraints in the investment sector.

2. In the Keynesian vision, a change in the interest rate has little effect on (aggregate) investment; in the Monetarist vision, a change in the interest rate has a substantial effect on (aggregate) investment. This difference reflects, in large part, the short-run orientation of Keynesians and the long-run orientation of Monetarists.

3. Keynesians conceive of a narrowly channeled mechanism through which monetary policy affects national income. Specifically, money creation lowers the interest rate, which stimulates investment and hence employment, which, in turn, give rise to multiple rounds of increased spending and increased real income. The nearly exclusive focus on this particular channel of effects, together with the belief that investment demand is interest-inelastic, accounts for the Keynesian preference for fiscal policy over monetary policy as a means of stimulating or

retarding economic activity. Government spending has a direct effect on the level of employment; money creation has only an indirect and weak effect. Monetarists conceive of an extremely broad-based market mechanism through which money creation stimulates spending in all directions—on old as well as new investment goods, on real as well as financial assets, on consumption goods as well as investment goods. Nominal incomes are higher all around as a direct result of money creations, but with a stable demand for money in real terms, the price level increases in direct proportion to nominal money growth so that real incomes are unaffected.

4. Keynesians believe that long-run profit expectations, which have no basis in reality in any case, are subject to unexpected change. Economic prosperity is based on baseless optimism; economic depression, on baseless pessimism. Monetarists believe that profit expectations reflect, by and large, consumer preferences, resource constraints, and technological factors as they actually exist.

5. Keynesians believe that economic downturns are attributable to instabilities characteristic of a market economy. A sudden collapse in the demand for investment funds, triggered by an irrational and unexplainable loss of confidence in the business community, is followed by multiple rounds of decreased spending and income; Monetarists believe that economic downturns are attributable to inept or misguided monetary policy. An unwarranted monetary contraction puts downward pressure on incomes and on the level of output during the period when nominal wages and prices are adjusting to the smaller money supply.

6. Keynesians believe that in conditions of economy-wide unemployment, idle factories, and unsold merchandise, prices and wages will not adjust downward to their market-clearing levels—or that they will not adjust quickly enough, or that the market process through which such adjustments are made works perversely as falling prices and falling wages feed on one another. Monetarists do not believe that such perversities, if they exist at all, play a significant role in the market process. They believe instead that prices and wages can and will adjust to market conditions. The fact that such adjustments are neither perfect nor instantaneous is, in the Monetarists' judgment, no basis for advocating governmental intervention. A market process that adjusts prices and wages to existing market conditions is preferable to a government policy that attempts to adjust market conditions to existing prices and wages.

AN AUSTRIAN PERSPECTIVE ON THE COMMON LANGUAGE AND APPARATUS

The contrast between Keynesianism, as interpreted by Hicks and Hansen, and Monetarism, as outlined by Friedman (in R. Gordon 1974), is based upon their common analytical framework. The recognition of this common framework underlies the assessment by Gerald P. O'Driscoll and Sudka R. Shenoy (1976: 191) that "Monetarism . . . does not differ in its fundamental approach from the other dominant branch of macroeconomics, that of Keynesianism."[2] But the

Keynesian/Monetarist income-expenditure analysis, no less than the analysis in Keynes's *Treatise on Money*, is subject to Hayek's early criticism. The aggregates conceal the most fundamental mechanisms of change. While many of the conflicting claims can be reconciled in terms of the short-run and long-run orientation of Keynesians and Monetarists, respectively, and in terms of their constrasting philosophical orientations, neither vision takes into account the workings or failings of the market mechanisms *within* the investment aggregate.

Austrian macroeconomics[3] is set apart from both Keynesianism and Monetarism by its attention to the differential effects of interest rate changes within the investment sector, or—using the Austrian terminology—within the economy's structure of production. A fall in the rate of interest, for instance, brings about systematic changes in the structure of production. A lower interest rate favors production for the more distant future over production for the more immediate future; it favors relatively more time-consuming or roundabout methods of production as well as the production and use of more durable capital equipment. The "mechanisms of change" activated by a fall in the interest rate consist of profit differentials among the different stages of production. The market process that eliminates these differentials reallocates resources away from the later stages of production and into the earlier stages; it gives the intertemporal structure of production more of a future orientation.

The ultimate consequence of this capital restructuring brought about by a decrease in the rate of interest depends fundamentally upon the basis for the decrease. If the lower rate of interest is a reflection of an increased willingness to save on the part of market participants, then the capital restructuring serves to retailor the production process to fit the new intertemporal preferences. Continual restructuring of this sort—along with technological advancement—is the essence of economic growth. If, however, the lower rate of interest is brought about by an injection of newly created money through credit markets, then the capital restructuring, which is at odds with the intertemporal preferences of market participants, will necessarily be ill-fated. The period marked by the extension of artificially cheap credit is followed by a period of high interest rates when cumulative demands for credit have outstripped genuine saving. The artificial, credit-induced boom will necessarily end in a bust.

The Austrian theory of the business cycle identifies the market process that turns an artificial boom into a bust. The misallocation of resources within the investment sector requires a subsequent liquidation and reallocation. The more extensive the misallocation, the more disruptive the liquidation. After the prolonged period of cheap credit during the 1920s, for instance, a substantial reallocation of capital from relatively long-term projects to relatively short-term ones was essential for the restoration of economic health. A higher than normal level of unemployment characterized the period during which workers who lost their jobs in the over capitalized sectors of the economy were absorbed into other sectors.[4]

Accounting for the artificial boom and the consequent bust is not part of

Keynesian income-expenditure analysis, nor is it an integral part of Monetarist analysis. The absence of any significant relationship between boom and bust is an inevitable result of dealing with the investment sector in aggregate terms. The analytical oversight derives from theoretical formulation in Keynesian analysis and from empirical observation in Monetarist analysis. But from an Austrian perspective, the differences in method and substance are outweighed by the common implication of Keynesianism and Monetarism, namely, that there is no boom-bust cycle of any macroeconomic significance.

In *The General Theory*, the interest rate is sometimes treated as if it depends on monetary considerations alone, such as in chapter 14, where Keynes contrasts his own theory of interest with the classical theory. The supply of and demand for money (alone) determine the equilibrium rate of interest, which in turn determines the level of investment and hence the level of employment. The essentially one-way chain of determinacy makes no allowance for the pattern of saving and investment decisions to have any effect upon the rate of interest. While this rarified version of Keynesian macroeconomics has not survived the translation from *The General Theory* to modern textbooks, it can be easily represented as a special case of the IS-LM construction, one in which the LM curve is a horizontal line that moves up or down with changes either in liquidity preferences or in the supply of money. Using more formal terminology, the system of equations is recursive, such that the rate of interest can be determined independently of the other endogenous variables. Within this framework, there is simply no scope for a boom-bust cycle as envisioned by the Austrians.

In the more general IS-LM framework, the rate of interest and the levels of investment, saving, and income are determined simultaneously rather than sequentially, but Keynes downplays any cyclical movements in these magnitudes that might result from the two-way chains of causation. He emphasizes instead the possibility of economic stagnation—of enduring secular unemployment. In chapter 18 of *The General Theory*, his stocktaking chapter, Keynes envisions an economy in which there are *minor* fluctuations of income—and hence of employment—around a level of income *substantially* below the economy's full-employment potential. Only in his "Short Notes Suggested by the General Theory" does Keynes attempt to account for the cyclical fluctuations considered inherent to the nature of capitalism. The crisis, or upper turning point, is caused by a change in long-term profit expectations that motivate the business community—expectations that are "based on shifting and unreliable evidence" and are "subject to sudden and violent changes" (Keynes 1936: 315). The recovery, or lower turning point, is governed by the durability of the capital in existence at the time of the crisis. But in the Keynesian vision, the economy recovers only to some equilibrium level of unemployment, not to its full-employment potential.[5]

More tellingly, Keynes perceives a one-way chain of causation from the money supply as a policy variable to investment (and hence employment) as a policy goal. The monetary authority increases the money supply; the interest rate falls until money demand exhausts supply; investment increases, as does employment.

A new equilibrium is established in which the rate of interest is permanently lower and the levels of investment and employment are permanently higher. In the income-expenditure framework, the temporal pattern of investment does not enter into the analysis, and the distinction between a genuine boom and an artificial boom is itself an artificial distinction.

FRIEDMAN'S PLUCKING MODEL

Keynesian analysis does not disprove the Austrian idea that a credit-induced boom leads to a bust. By adopting a high level of aggregation, it simply fails to bring this issue into focus. Nor is the Austrian idea disproved by the Monetarists, who rely on a highly aggregated statistical analysis for clues about the relationship between booms and busts. Levels of aggregate output that characterize a typical downturn do not correlate well with a preceding upturn, but the magnitude of the downturn does seem to be related to the magnitude of the *succeeding* upturn. In the Monetarists' empirical analysis, there appears to be a bust-boom, rather than a boom-bust, cycle.

Friedman ([1964] 1969b: 271–77) has offered what he calls a "plucking model" of the economy's output over the period 1879–1961.[6] Imagine a string glued to the underside of an inclined plane. The degree of incline represents long-run secular growth in output. If the string were glued at every point along the inclined plane, it would represent an economy with no cyclical problems at all. Cyclical problems of the type actually experienced can be represented by plucking the string downward at random intervals along the inclined plane. In this representation of the economy's actual growth path, the economic process that gives us healthy secular growth occasionally comes "unglued." While the consequent sagging of economic performance is unrelated to the previous growth, recovery to the potential growth path is necessarily related to the extent of the sag. But for the slight degree of incline, there would be a one-to-one relationship between downturn and subsequent recovery.

On the basis of this Monetarist representation, the Austrian ideas are rejected, not so much on the basis of the answers offered, but on the basis of the questions asked. What is the market process that turns a boom into a bust? There is no empirical evidence that suggests any such process to be at work. What is the market process that turns a slump into a recovery? This is the empirically relevant question, in the Monetarists' view. The suggested answer, which has the flavor of textbook Keynesianism, involves the conventional operation of market forces in the face of institutional price and wage rigidities (ibid.: 274).

As Friedman clearly recognizes, the dismissal of the possibility of a boom-bust cycle and the empirical identification of the bust-boom cycle both derive from the inherent asymmetry of deviations from the potential growth path. The economy's output can fall significantly below its potential level, but it cannot rise significantly above it. The fact that Friedman's formulation is in terms of aggregate output, however, suggests that the Austrian critique of early Keyne-

sianism is equally applicable to modern Monetarism: Professor Friedman's aggregates conceal the most fundamental mechanisms of change.

The economy's output consists in the output of consumer goods plus the output of investment goods. An artificially low rate of interest can shift resources away from the former category and into the latter. More importantly, it can skew the pattern of investment activities toward production for the more distant future; it can overcommit the investment sector to relatively long-term projects. Such money-induced distortions are wholly consistent with the changes in *aggregate* output over the nine-decade period studied by Friedman.

In terms of the plucking model, the Monetarists observe that some segments of the string are glued fast to the inclined plane and other segments are not. But in terms of their macroeconomic aggregates, there is nothing in the nature of the string—or the glue—as we move along a glued section toward an unglued one that explains why the glue fails. Monetarists instead conceive of the string as plucked down by some force (an inept central bank) that is at work only on the segments that constitute the downturn. The Austrians, working at a lower level of aggregation, examine the makeup of the string (the allocation of resources within the investment sector) and the consistency of the glue (the rate of interest and pattern of prices upon which resource allocation has been based during the boom). They conclude that if the interest has been held artificially low by monetary expansion, the intertemporal allocation of resources is inconsistent with actual intertemporal preferences and resource availabilities. The string is destined to become unglued.

CONTRASTING THEORIES OF INTEREST

Friedman's plucking model is more notable for the aspects of the market process it ignores than for the general movements of macroeconomic aggregates it represents. Movements in the rate of interest and consequences of those movements for the allocation of resources within the macroeconomic aggregates play no role in either Monetarism or Keynesianism. In fact, the very choice of a particular level of aggregation reflects a judgment about which aspects of the market process are significant enough to be included in macroeconomic theory. Relationships *between* the aggregates are significant; relationships *within* the aggregates are not. The aggregates chosen by Keynes were accepted by Friedman, indicating that the two theorists made the same judgment in this regard.

Their bases for judgment, however, are not the same. Opposing views about the nature and significance of the rate of interest and of changes in that rate underlie the decisions by Keynes and Friedman to neglect the considerations that are so dominant in Austrian macroeconomics. All three views can be identified in terms of the interest-rate dynamics first spelled out by the Swedish economist Knut Wicksell. The *natural* rate of interest, so called by Wicksell, is the rate consistent with the economy's capital structure and resource base. If allowed to prevail, it would maintain an equilibrium between saving and in-

vestment—and would also keep constant the general level of prices. The *bank* rate of interest, by contrast, is a direct result of bank policy. Credit expansion lowers the bank rate; credit contraction raises it. Macroeconomic equilibrium can be maintained, according to Wicksell, only by a monetary policy that keeps the bank rate equal to the natural rate.[7] Therefore, a banking system that pursues a cheap-credit policy (by holding the bank rate of interest below the natural rate) throws the economy into macroeconomic disequilibrium.

While the Austrians, beginning with Mises (1971), adopted Wicksell's formulation as the basis for their own theorizing, deviating from it only in terms of the consequences of a credit-induced macroeconomic disequilibrium, neither Keynesians nor Monetarists share Wicksell's concern about the relationship between the bank rate and the natural rate. In summary terms, Keynes denied that the concept of the natural rate had any significance; Friedman, who accepts the concept, denies that there can be deviations of any significance from the natural rate.

Although Keynes had incorporated a modified version of Wicksell's natural rate in his *Treatise on Money*, he could find no place for it in his *General Theory*. In the earlier work, full employment was the norm; and the (natural) rate of interest kept investment in line with available saving. In the later work, the rate of interest is determined, in conjunction with the supply of money, by irrational psychology (the fetish of liquidity), and the level of employment accommodates itself to that interest rate. Keynes argued that "there is . . . a *different* natural rate of interest for each hypothetical level of employment" and concluded that "the concept of the 'natural' rate of interest . . . has [nothing] very useful or significant to contribute to our analysis" (Keynes 1936: 242–43).

In Friedman's Monetarism, competition in labor markets gives rise to a market-clearing wage rate, which singles out from Keynes's hypothetical levels of employment the one level for which labor supply is equal to labor demand. The concept of the natural rate of interest, that is, the rate that clears the loan market and keeps investment in line with savings, fits as naturally into the Monetarists' thinking as it fit into Wicksell's. In fact, Friedman coined the term "natural rate of unemployment" to exploit the similarity between the Wicksellian analysis of the loan market and his own analysis of the labor market (Friedman 1976: 228). According to Wicksell, a discrepancy between the bank and the natural rates of interest gives rise to a corresponding discrepancy between saving and investment; according to Friedman, a discrepancy between the actual and the natural rates of unemployment reflects a corresponding discrepancy between the real wage rate, as perceived by employers, and the real wage rate, as perceived by employees. Macroeconomic disequilibrium plays itself out in ways that eventually eliminate such discrepancies in loan markets (for Wicksell) and in labor markets (for Friedman).

While the Wicksell-styled dynamics in labor markets have been of some concern to Monetarists, the corresponding loan-market dynamics play no role at all in Monetarism. The bank rate of interest never deviates from the natural

rate for long enough to have any significant macroeconomic consequences. Whatever effects there are of minor and short-lived deviations are trivialized by Friedman as "first-round effects" (R. Gordon 1974: 146–48). That is, the initial lending of money, the first round, is trivial in comparison to the subsequent rounds of spending, which may number twenty-five to thirty per year. Friedman summarily dismisses all such interest-rate effects, as spelled out by modern Keynesians (Tobin) and by Austrians (Mises), and affirms that his own macroeconomics is characterized by its according "almost no importance to first-round effects" (ibid.: 147).

Austrian macroeconomics is distinguished from the macroeconomics of both Keynes and Friedman by its acceptance of the Wicksellian concept of the natural rate and by its attention to the consequences of a bank-rate deviation from the natural rate. It is distinguished from Wicksellian macroeconomics, however, in terms of the particular consequences taken to be most relevant. For Wicksell ([1898] 1936: 39–40 et passim), a deviation between the two rates puts upward pressure on the general level of prices. If, for instance, the natural rate rises as a result of technological developments, inflation will persist until the bank rate is adjusted upward. A relatively low bank rate may create "tendencies" for capital to be reallocated in ways not consistent with the natural rate, but those tendencies do not, in Wicksell's formal analysis, become actualities. Real factors continue to govern the allocation of capital, while bank policy affects only the general level of prices (ibid.: 90, 143–44). But because both the Swedish and the Austrian formulations are based upon Böhm-Bawerkian capital theory, the particular "tendencies" identified by Wicksell correspond closely to the most relevant "mechanisms of change" spelled out by Hayek. Also, Wicksell's informal discussion, which accompanies his formal exposition, gives greater scope for actual quantity adjustments within the capital structure (ibid.: 89–92).

For the Austrians, the effects of a cheap-credit policy on the general level of prices is, at best, of secondary importance. If in fact the discrepancy between the two rates of interest is attributable to technological developments, as Wicksell believed it to be (ibid.: 118), then the resulting increase in the economy's real output would place downward pressure on prices, largely, if not wholly, offsetting the effect of the credit expansion on the price level. If, alternatively, the discrepancy is more typically attributable to inflationist ideology, as Mises (1978a: 134–38) came to believe, then, in the absence of any fortuitous technological developments, the credit expansion would put upward pressure on prices in general. Still, this general rise in prices, this fall in the purchasing power of money, is of less concern to the Austrians than the changes in relative prices that result from the artificially low bank rate of interest.

The "tendencies" for reallocation within the capital sector acknowledged by Wicksell become "actualities" in the Austrian view. The market process is not so fail-safe as to preclude any investment decision not consistent with the overall resource constraints. Newly created money put into the hands of entrepreneurs at an artificially low interest rate allows them to initiate production processes

that eventually conflict with the underlying economic realities (Hayek [1935] 1967c: 69–100). Where Wicksell claimed that tendencies toward reallocation do not become actualities, the Austrians claim that actual reallocations induced by credit expansion are unsustainable. The artificial boom ends in a bust.

In his discussion of Keynesian and Austrian concerns about interest-rate effects, Friedman claims that the importance of ultimate effects, as compared to first-round effects, is an empirical question (R. Gordon 1974: 147). The Austrians recognized that *ultimately*, after boom, bust, and recovery, empirical analysis would reveal no lingering effects of the initial credit expansion on the bank rate of interest relative to the natural rate. The economy overall would be less wealthy for having suffered a boom-bust cycle, and hence the natural rate itself might well be higher. But the relative magnitudes of the initial and ultimate effects is no basis for ignoring the market process that produced them. The first-round effects constitute the initial part of a market process that plays itself out within capital and resource markets; the loss of wealth and possible increase in the natural rate is the ultimate effect of that same market process.

THE DYNAMICS OF AN UNSUSTAINABLE BOOM

Although Friedman does not engage in process analysis in his treatment of the interest rate as it is affected by credit expansion, he does engage in process analysis in his treatment of the wage rate as it is affected by price-level inflation (Friedman 1976: 221–29). The first-round effects consist of a discrepancy between two wage rates, the rate as perceived by the workers and the rate as perceived by the employer. Such a discrepancy occurs in the early phase of an inflation because the employer immediately perceives the difference between the price he pays for labor and the newly increased price of the one product he produces, while workers perceive, but belatedly, the general increase in the prices they pay for consumer goods. The ultimate effect of price-level inflation is a rising nominal wage, which maintains a real wage—as perceived (correctly) by both employers and workers—consistent with the natural rate of unemployment.

Friedman could have made the claim, in connection with these labor-market dynamics, that "the importance of the ultimate effects in comparison to the first-round effects is an empirical question." Undoubtedly, direct empirical testing—if data could be obtained on the differing perceptions of wage rates—would show the ultimate effects to be dominant. But Friedman does not dismiss his own analysis with a rhetorical question about an empirical test. Instead, he sees the first-round effects as the initial part of a market process that plays itself out within labor markets, and he sees the reestablishment of the natural rate of unemployment as the ultimate effect of that same process.

There is empirical evidence consistent with both the Monetarist treatment of labor markets and the Austrian treatment of credit markets. The unsustainability

of an inflation-induced boom in labor markets and of a credit-induced boom in capital markets is suggested by a natural rate of interest and a natural rate of unemployment that are independent of monetary policy. Data on inflation rates and unemployment rates for the last several decades must be accounted for in terms of some market process through which monetary expansion has an initial effect, but not a lasting one, on real magnitudes. Whether the most relevant market process is one working through labor markets or one working through capital markets is a matter of logical consistency, plausibility, and historical relevance.[8] And, of course, Monetarist labor-market dynamics and Austrian capital-market dynamics can be seen as partial, complementary accounts of the same, more broadly conceived market process.

This comparison of Monetarism and Austrianism in the context of the dynamics of an unsustainable boom seems to create an alliance between these two schools against Keynesianism. The allied account of an artificial boom that contains the seeds of its own destruction stands in contrast to the Keynesian account of a bust attributable to a sudden and fundamentally unexplainable loss of confidence in the business community. But the alliance is only a tactical one. Any theory of a boom-bust cycle is inconsistent with Friedman's plucking model, which suggests that there are no such cycles to be explained.

The original context in which Friedman offered his account of the inflation-induced labor market dynamics makes the inconsistency understandable. Friedman was not attempting to identify a market process that fits neatly into his own Monetarism. Instead, he was demonstrating the fallacy of a politically popular Keynesian belief that there is a permanent trade-off between inflation and unemployment. Based upon the empirical study done by A. W. Phillips in the late 1950s, many Keynesians came to believe that the inverse relationship between rising nominal wages and unemployment constituted a menu of social choices and that policymakers should acknowledge the preferences of the electorate by moving the economy to the most preferred combination of inflation and unemployment.

Friedman was willing to do battle with the Keynesian optimizers *on their own turf*. Accounting for the inverse relationship in terms of a misperception of wages, he was able to show that the alleged trade-off existed only in the short run and therefore did not constitute a sound basis for policy prescription. There is no evidence, however, that he considered these labor-market dynamics to be an integral part of his own macroeconomics, although some Monetarists, notably Edmund S. Phelps (1970), and most textbook writers have taken them to be just that.[9] Neither Keynesianism, as represented by IS-LM analysis, nor Monetarism, as represented by Friedman's plucking model, acknowledges the boom-bust cycle as a part of our macroeconomic experience. Austrianism is set apart from the other two schools in this regard. And, by adopting a fundamentally different framework at a lower level of aggregation, the Austrians have been able to identify the capital-market dynamics essential to the understanding of such cycles.

A SUMMARY ASSESSMENT: THE WICKSELLIAN WATERSHED AND THE AUSTRIAN SIEVE

In the broad sweep of the history of macroeconomic thought, the Wicksellian theme, in which there can be a temporary but significant discrepancy between the bank rate and the natural rate of interest, constitutes an important watershed. A significant portion of twentieth-century macroeconomics can be categorized as variations on this Wicksellian theme. Included indisputably in this category are followers of Wicksell in Sweden: G. Cassel, E. Lindahl, B. Ohlin, and G. Myrdal; Wicksell-inspired theorists in Austria: Mises and, following him, Hayek; and British theorists working in the tradition of the Currency school: R. G. Hawtrey, R. M. Robertson, and, taking his cue from the Austrians, the early Robbins.

Excluded from this category are those theorists who deny, ignore, or downplay the Wicksellian theme, typically by adopting a level of macroeconomic aggregation too high for that theme, in any of its variations, to emerge. Exemplifying these theorists are Irving Fisher and, following him, Friedman. Even Patinkin, who draws heavily on Wicksell's ideas about the dynamics of price-level adjustments, belongs to this group. His chosen level of aggregation, which combines consumer goods and investment goods into a single aggregate called commodities, precludes from the outset any nontrivial consequence of the discrepancy between the bank rate and the natural rate.

Axel Leijonhufvud (1981: 123) bases his own interpretation of Keynes on a similar grouping of theorists. Wicksell and Fisher are at the headwaters of two separate traditions labeled "Saving-Investment Theories" and "Quantity Theory." Leijonhufvud makes Keynes out to be a Wicksellian, but he does so only by patching together a new theory with ideas taken selectively from the *Treatise* and *The General Theory*. This interpolation between Keynes's two books is designated "Z-theory" (ibid.: 164–69). Drawing from the first book, it allows for a natural rate of interest from which the bank rate can diverge, *and*, drawing from the second book, it allows for the resulting disequilibrium to play itself out through quantity adjustments rather than through price adjustments.

Leijonhufvud's hybrid Keynesian theory gives play to the Wicksellian theme and fits comfortably in the list of "Saving-Investment" theories. With the exposition of his "Z-theory," Leijonhufvud has clearly identified himself as a Wicksellian.[10] To claim, however, that Keynes himself was a Wicksellian is to engage in counter-factual doctrinal history. In the *Treatise*, the discrepancy between the bank rate and the natural rate did not have a significant effect on the savings-investment relationship; in *The General Theory*, significant disturbances to the savings-investment relationship were not attributed to a discrepancy between the two rates.

By offering his Z-theory in support of Keynes's candidacy as a Wicksellian, Leijonhufvud tacitly admits that Keynes had actually managed to skirt the Wicksellian ideas first on one side, then on the other. The categorization of theorists

defended in this chapter differs importantly from Leijonhufvud's in that Keynes is transferred—on the basis of what he actually wrote—to the other side of the Wicksellian watershed. Keynes's chosen level of aggregation, together with his neglect of Wicksellian capital-market dynamics, establishes an important kinship to Fisher, Friedman, and Patinkin.

Hayek's early "Reflections on the Pure Theory of Money" might well have been entitled "Is Keynes a Quantity Theorist?" Nearly half a century after his critique of the *Treatise*, Hayek explicitly categorized "Keynes's economics as just another branch of the centuries-old Quantity Theory school, the school now associated with Milton Friedman" (Minard 1979: 49). Keynes, according to Hayek, "is a quantity theorist, but modified in an even more aggregative or collectivist or macroeconomic tendency" (ibid.).

The Wicksellian watershed, as employed by Leijonhufvud, makes a first-order distinction between broad categories of theories on the basis of subject matter. In one category, the subject is saving and investment and the market process through which these macroeconomic magnitudes are played off against one another. In the other category, the subject is the quantity of money and the market process through which changes in the supply of or demand for money affect other real and nominal macroeconomic magnitudes.

An alternative first-order distinction, more in the spirit of Hayek's critique of Keynes, is one based on alternative levels of macroeconomic aggregation. The notion of a Wicksellian watershed might well be supplemented by the notion of an Austrian sieve. In one broad category of theories, the level of aggregation is low enough to allow for a fruitful exploration of the Wicksellian theme. In the other category, the level of aggregation is so high as to preclude any such exploration. Based on their high levels of aggregation, then, both Keynesianism and Monetarism fail to pass through the Austrian sieve. This is the meaning of Hayek's claim that Keynes is a quantity theorist and of the corresponding claim that Friedman is a Keynesian.

NOTES

1. This interpretation of Keynes is almost universally attributed to Hicks, on the basis of his early article, and to Hansen, on the basis of his subsequent exposition. Warren Young (1987) makes the case that, on the basis of the papers presented at the Oxford conference in September 1936, credit for the IS-LM formulation should be shared by John Hicks, Roy Harrod, and James Meade.

2. Friedman clearly recognizes his kinship to Keynes in terms of their fundamental approach: "I believe that Keynes's theory is the right kind of theory in its simplicity, its concentration on a few key magnitudes, its potential fruitfulness. I have been led to reject it not on these grounds, but because I believe that it has been contradicted by experience" (Friedman 1986: 48). Allan H. Meltzer identifies the type of theorist that produces Keynes's kind of theory: "Keynes was the type of theorist who developed his theory after he had developed a sense of relative magnitudes and of the size and frequency of changes in these magnitudes. He concentrated on those magnitudes that changed most,

often assuming that others remained fixed for the relevant period" (Meltzer [1968] 1988: 18). This method is not as laudable as it may seem. If subtle changes in credit and capital markets induce significant but difficult-to-perceive changes in the economy's capital structure, then Keynes's—and Friedman's—method is much too crude. Surely, the job of the economist is to identify market processes even when—or especially when—the relevant market forces do not have direct or immediate consequences for some macroeconomic aggregate.

3. Austrian macroeconomic relationships are spelled out in various contexts by Ludwig von Mises ([1949] 1966), F. A. Hayek (1967b), Murray N. Rothbard ([1962] 1970, [1963])1983 G. P. O'Driscoll (1977), Lionel Robbins (1934), and Roger W. Garrison 1989, 1986).

4. The aphorism "the bigger the boom, the bigger the bust" must be applied cautiously. The Austrian theory links the necessary, or unavoidable, liquidation to the credit-induced misallocations. It does not imply, as, for example, Gordon Tullock (1987) seems to believe, that all the actual liquidation during the Great Depression is to be explained with reference to misallocations that characterized the previous boom. Much, if not most, of the liquidation during the 1930s can be attributed, as Rothbard 1983 (1963) indicates, to misguided and perverse macroeconomic and industrial policies implemented by the Hoover and Roosevelt administrations.

5. The relative emphasis on secular unemployment, as compared to cyclical unemployment, is consistent with Meltzer's interpretation of Keynes (Meltzer [1968] 1988: 196–201). In most modern textbooks, involuntary unemployment is taken to *mean* cyclical unemployment. In Meltzer's view, which is more faithful to *The General Theory* and to Keynes's long-held beliefs about capitalistic economies, cyclical unemployment is a minor component of involuntary unemployment (ibid.: 126).

6. Although there is no explicit reference to Hayek or other Austrian theorists in this article, the plucking model is clearly intended as a basis for rejecting the general category of theories which account for the boom-bust cycle.

7. It is recognized both by modern Austrian theorists and by Wicksell's contemporaries that the equivalence of the bank rate and the natural rate is consistent with price-level constancy only in the special case of constant output. If the economy is experiencing economic growth, then maintaining a saving-investment equilibrium will put downward pressure on prices, and conversely, maintaining price-level equilibrium will cause investment to run ahead of saving.

8. An assessment of the logical consistency, plausibility, and historical relevance of these two perspectives on monetary dynamics is undertaken in Don Bellante and Roger Garrison (1988).

9. Friedman's Wicksell-styled analysis of labor-market dynamics stands in direct conflict with his fourth-listed Key Proposition of Monetarism, according to which "the changed rate of growth of nominal income [induced by monetary expansion] typically shows up first in output and hardly at all in prices" (Friedman 1970: 23). In his subsequent Phillips curve analysis, misperceived price increases *precede* and are the proximate cause of increases in output. For an extended discussion of this inconsistency, see Dan Birch et al. (1982); for an attempt at reconciliation, see Bellante and Garrison (1988: 220–21).

10. But "Leijonhufvud the Wicksellian" remains a puzzle to modern Austrian economists. In his exposition of the Wicksellian theme, Leijonhufvud grafted Wicksell's credit-market dynamics onto neoclassical capital theory and appended the following note: "Warning! This is anachronistically put in terms of the much later literature on neoclassical

growth. Draining the Böhm-Bawerkian capital theory from Wicksell will no doubt seem offensively impious to some, but I do not want to burden this paper also with those complexities'' (Leijonhufvud 1981: 156). Then, in his restatement of the critical arguments, Leijonhufvud reveals his own judgment on matters of capital theory: ''Like the Austrians, . . . I would emphasize the heterogeneity of capital goods and the subjectivity of entrepreneurial demand expectations.'' If Leijonhufvud *had* emphasized Austrian capital theory as the stage on which the Wicksellian theme was to be played out, he would have left Keynes in the wings and followed that theme from Wicksell to Hayek.

Chapter 9

Keynes's First Principles

by David Gordon

John Maynard Keynes is not usually viewed as a philosopher, but he had interesting and important things to say about ethics and the theory of knowledge. Further, to some extent his philosophical doctrines influenced the economic theories that constituted the Keynesian Revolution. I do not contend that Keynes's philosophy determined his economics; to do so would be to go far beyond the evidence. Nevertheless, significant parallels exist between Keynes's philosophy and economics, and an account of the former is valuable not only for its own sake but for its power to throw Keynesian economics into an unexpected light.

Perhaps the readiest entry into Keynes's philosophy is through his ethics. Although Keynes was not a major innovator in moral philosophy, he significantly modified the ideal utilitarianism of his Cambridge colleague G. E. Moore. By "utilitarianism," I do not intend the particular system of morals elaborated by Bentham and the Mills *père et fils*. Rather, I intend to use the term in a broad way to designate any ethical system that judges actions by their consequences in promoting the good. A utilitarian or consequentialist in this sense views "good," not "right," as the key ethical term (Ross 1930). In contrast to so-called absolutists, he will assess an action not by whether it conforms to a fixed set of principles but in terms of its results. When, for example, Keynes was asked if he favored laws that would ban gambling, he did not seek to judge whether gambling was right or wrong. He attempted instead to determine whether the consequences of such a ban were desirable or not (Keynes 1982: 398–412).

A consequentialist doctrine of this kind need not altogether oppose the use of rights in ethical and political theory. John Stuart Mill is famous for having attempted to provide a utilitarian basis for rights in the fifth chapter of his

Utilitarianism. But usually, consequentialists will acknowledge rights only if these are carefully circumscribed. Also, of course, theorists of this stripe will not recognize rights as ultimate. It is not at all self-evidently true, on this account, that people have rights to "life, liberty, and the pursuit of happiness." These rights, or compensating rights claims, will be advocated if and only if their consequences are deemed socially beneficial.

One can readily see here a reason for Keynes's opposition to laissez-faire capitalism. Many free-market adherents argue that people possess natural rights to liberty, including the right to own property. These rights forbid governmental intrusion, even when the aim of the government is to promote the welfare of society. An adherent of laissez-faire will often oppose proposals for taxation to aid the poor, not only because he deems a particular measure ill-judged, but also because the government cannot in his view violate the property rights of individuals.

Keynes dismissed the laissez-faire position as irrational. So alien is it to his own approach that nowhere does he, so far as I know, directly confront the view that rights exist independently of their role in promoting social utility. For example, in *The Economic Consequences of the Peace* he ridiculed the Victorian belief in the virtue of saving, comparing the parsimonious Victorians to bakers who bake a cake that continually gets bigger and bigger, never to be consumed (Keynes 1920: 18–22). What is the gravamen of Keynes's mockery of the Victorians? Here one can directly see the application of Keynes's utilitarian position. The Victorians believed it morally right to save, apart from savings' use in promoting consumption. They were guided by principle rather than results, a position Keynes finds not only wrong but laughable.

Another instance of the influence of Keynes's ethical doctrines emerges when one notes a significant omission. As everyone knows, in *The General Theory* and elsewhere Keynes advocated unbalanced budgets and heavy government spending to cure depressions. The position that these measures violate the individual rights of creditors by lowering the value of money is never addressed by Keynes. Once more, consequences are the be-all and end-all of ethics.[1]

THE INFLUENCE OF G. E. MOORE

But what sort of consequences? Here Keynes followed the teaching of G. E. Moore. In Moore's *Principia Ethica* (1903), certain states of affairs, such as the contemplation of beauty and friendship, are held to be the highest good. Keynes explicitly endorsed Moore's position and rejected the more common utilitarian system, which aims to maximize pleasure, as crude.

I do not contend that every philosophical doctrine held by Keynes had a direct impact on his economic approach. But the position just mentioned, although at first glance about as far from economics as possible, nevertheless had very striking implications for Keynes's way of regarding society. The states of affairs referred to above are ones that only members of an educated and aesthetically

sensitive elite can enjoy. To a common person, concerned with the care and feeding of himself and his family, such refinements mean nothing—so, at any rate, Keynes thought. If the masses cannot grasp the highest good, they are of little account. Keynes had little interest in ordinary people: democracy is not a word that existed in his vocabulary. Businessmen were also a class hardly worth bothering with. This view is evident in the complacency with which Keynes presents the "euthanasia of the *rentier*" in chapter 17 of *The General Theory*. No longer will businessmen decide for themselves what investments are desirable; instead, the elite in charge of the government will, by their financial power, render nugatory the fact that businesses are privately owned. I do not of course deny that Keynes presented an economic rationale for the socialization of investment. But there is more than a whiff of elitism and what Bernard Williams has termed "Government House Utilitarianism" in Keynes's account (Williams 1985: 108–10).

If anything, Keynes's contempt for the *canaille* is clearer still in his comments on the Bolshevik Revolution. Unlike many of his contemporaries who were "leftist" to one extent or another, Keynes displayed very little sympathy for Communism. The notion of a government run by the proletariat filled him with disdain. Although he admired Lenin's daring and his attempt to construct a society that held monetary gain in low esteem, Lenin too was a crude figure unsuited to membership in the genuine elite. A quite similar attitude toward Lenin, incidentally, is found in the work of Keynes's Cambridge colleague and friend Bertrand Russell (Russell 1920).

Let us examine one last example of Keynes's elitism. After the appearance of Friedrich Hayek's *Road to Serfdom* in 1944, Keynes sent Hayek a letter, declaring himself "not only in agreement, but in deeply moved agreement" with Hayek's book. He did not, however, agree with Hayek that the welfare state ought to be curtailed as a danger to liberty and the rule of law. Quite the contrary, the only possibility of avoiding the dangers of dictatorship lay in the rule of wise leaders (Keynes 1980: 386–87). A further remark Keynes made to Hayek shows that Keynes placed himself firmly within the favored group. When Hayek expressed his fear that Keynes's disciples would promote an overly inflationary policy after the Second World War, Keynes replied that "he would rapidly change the public opinion in the right direction" (Hayek 1984b: 44).

The picture I have so far given of Keynes's interest in ethics has been somewhat misleading. He was very much more than an uncritical disciple of G. E. Moore. On the contrary, in *A Treatise on Probability* he advanced an important criticism of Moore. In spite of his elitist view of what constitutes the highest good, Moore's attitude toward the rules of ethics was quite conservative. True enough, like any utilitarian, he denied that rules have moral weight apart from their consequences, but the consequences of events were virtually impossible to determine. (From a utilitarian view, it is not only an action's immediately foreseeable consequences that determine its goodness but the sum total of all its consequences, weighed against those of its competing alternatives.) In light of these difficulties in cal-

culation, one seems doomed to stab in the dark. Moore found a possible escape hatch in longstanding customs and rules. Their entrenchment provided at least some reason to think that, over a period of time, they had promoted the best results overall. In the absence of compelling reasons to the contrary, then, Moore felt that one ought almost always to follow the prevailing rules of society.

Keynes did not agree. Moore was no doubt correct that it is next to impossible to *know* the remote consequences of an action. But why is knowledge required for action? Is not probability enough? If so, Moore had given no argument that we cannot know the probable consequences of an action. His general argument for conservatism therefore failed, according to Keynes (1921: 309).

The argument just given bridges Keynes's views on ethics and his theory of knowledge. As will soon become apparent, Keynes's argument against Moore's position stands in some degree of tension with other, more skeptical aspects of his theory of knowledge.

Before attempting to describe Keynes's views on epistemology, I should like to discuss an interpretation of Keynes's approach which focuses on many of the key questions but arrives at skewed answers (Brown-Collier 1985). This interpretation correctly stresses the influence of *Principia Ethica*. It focuses on Moore's doctrine of organic unities—the view that the goodness of a whole can exceed the goodness of its parts. The doctrine, it is alleged, strongly influenced Keynes. He held that social wholes cannot be understood by reducing them to the behavior of their constituent parts. This explains Keynes's insistence on using such concepts as national income, consumption, and investment, and his lack of interest in microeconomics.

This view is just close enough to the truth to be misleading. Keynes did indeed reject an individualist approach to the economy. But he did not do so because of Moore's principle of organic unity. This principle concerns the *goodness* of wholes and parts: it has nothing to do with whether the behavior of an entity can be analyzed solely by reference to its constituent parts. The latter point is a matter of ontology, the study of the nature of existence. Moore's principle of organic unities is a doctrine about values.

The basis of Keynes's theory of knowledge does not lie in organic unity. He did, however, maintain that things needed to be studied in their full complexity and interdependence in order to be correctly grasped. Further, he held that many entities, including most economic systems, in fact consisted of so many interlocking variables that it was difficult to gain a full understanding of them. The interpretation criticized above goes too far, though, in suggesting that Keynes believed that a whole can never be fully grasped by a division into its parts. Keynes held that the extent to which analysis in a given case was possible could not be determined a priori.

To the extent that one can gain knowledge of a complex entity such as an economic system, how can this be done? And why will our grasp of a complex system turn out almost always to be limited? It does not follow, after all, that if something is complex, then it is too difficult to know. Keynes's argument in

support of limited knowledge rests on his most important contribution to philosophy, his conception of probability. As he pointed out, one cannot usually gain complete inductive knowledge of social facts (Keynes 1921: 220–21). If, for example, one observes a large number of transactions, one will note sooner or later that if the quantity demanded of a commodity increases, its price will rise. Does it strictly follow from these observations, however, that wherever the quantity demanded increases, the price rises?

Not at all. All that one strictly knows is that it has so far been the case that the quantity demanded and the price are related in the fashion indicated. But what about all future transactions or past transactions that have not been examined? It is interesting to note here a point of agreement between Keynes and his polar opposite in economics, Ludwig von Mises. Like Keynes, Mises argued that inductive evidence was limited to showing past historical configurations. It did not suffice by itself to prove laws of economics.

To Keynes's argument an obvious objection arises. Why must laws of economics be based on inductive evidence? What about deductions from self-evident axioms, in the style of Mises's praxeology? Keynes did not in principle rule out deductive knowledge of the world. Logical positivists maintain that all necessary propositions are analytic statements that tell us nothing of the empirical world, but Keynes was not of their number. He did not profess to know whether synthetic a priori propositions were possible; or, if they were, whether people could use them to acquire knowledge in certain disciplines. In particular, while he did not rule out deductive knowledge of economics and did believe some propositions to be self-evidently true, he advised extreme caution in claiming that a statement was known to be necessarily true. He would not, I think, have dismissed Mises's praxeology as impossible in principle. But even if, *per impossibile*, he did not object to Mises's economics, he would still have been wary of the Misesian claim to apodictic truth.

KEYNES'S PROBABILITY THEORY

What then was left, if one did not wish a complete surrender to skepticism? Keynes's response was the use of probability. As he saw matters, probability was a logical relation among propositions. The theory Keynes developed is not the approach most familiar to contemporary economists, so perhaps an example would be helpful.

Consider the standard syllogism: "All men are mortal; Socrates is a man; therefore, Socrates is mortal." The conclusion of the syllogism validly follows from the premises simply because the premises fit into a form that is always valid. Any syllogism of the form "All A is B; some C is A; therefore, some C is B" is valid. Suppose one now takes the following: "Whenever in the past the sun has risen, it has set; the sun has risen this morning; therefore, the sun will probably set." Obviously, the conclusion "the sun will set" does not follow from the given premises: perhaps today will be the day on which the sun explodes.

But most people will also think that the conclusion given actually does not follow logically from the premises. It may be right to think that the sun will set: this seems a paradigm of sound induction. It is not a matter of logic, however; the soundness of the induction depends on particular facts about the sun.

Keynes, as is frequently the case, rejected this commonsense view. He thought that probable inference was a matter of logic. Any inductive syllogism of the form: "All A's have been B's; this is an A; therefore, this is probably a B" is valid.

The position may seem obviously wrong, but it is much more defensible than at first appears. One might think that there are many cases in which the syllogism does not work. For example, "A has never been in an accident while driving under the influence; A is driving a car while drunk; therefore, A will probably not be in an accident." This conclusion hardly seems right. But Keynes does not contend that it is very likely that A will not be in an accident: it is not that he thought one could "fill in the numbers" on a purely logical basis. Rather, his contention is that the fact that something has always happened in the past gives rise to a purely logical relation with a present instance of the same kind. (The example just given involves an additional complication, since one can easily construct another inductive syllogism which concludes that A probably will be in an accident; but the problems of contradictory inferences and the choice of a reference class are remote from our purposes.)

On Keynes's account, the question at once arises: Why believe that there are probability relations between propositions? Keynes maintained that these relations followed from certain general truths about the world. In particular, there is a limitation on the variety of things that exist in the world. Events do not happen randomly but fall into certain patterns. It is this principle of limited natural variety that underlies the logical relations of probability discussed earlier (Keynes 1921: 258).

Once again, a question arises: What grounds are there for believing the principle of limited natural variety to be true? It would hardly be plausible to argue that, the principle having always held true in the past, it will therefore probably hold true in the future. This inference presupposes the validity of induction, while what is in question here is precisely the principle on whose truth induction depends. (There are philosophers who deny that this procedure is circular, but this is by the way.)

Keynes found himself unable to arrive at a satisfactory answer. He thought the principle might be a synthetic a priori truth, but of this he was unsure. He was, recall, not even certain that there were any synthetic a priori propositions at all. Thus Keynes faced a severe problem. The only means available to gain knowledge about the world, in his view, is inductive inference; but he could not establish its validity.

Some people would perhaps respond that theoretical difficulties of this sort have no practical importance. Induction "works": that is all the economist needs to know. Keynes strongly disagreed: beliefs without a sound basis were irrational.

Unlike Milton Friedman, Keynes was unwilling to view theories simply as tools whose sole purpose was predictive success (cf. Friedman 1953: 3–43).

Suppose, however, that one grants the validity of induction. Unless one proceeds in the deductive fashion of Mises, there is really no other choice; and Keynes himself used the inductive approach in his economic writing. There now arises another severe problem. In Keynes's view, it is very difficult, if not impossible, to arrive at numerical estimates of probability. In some instances, one can do so (if, e.g., a card is drawn from a deck of 52 well-shuffled cards, one can say that the chance of a card's being the ace of spades is 1/52). But this case is unusual, as here the various possible events can be readily divided into classes of equally likely outcomes. In most instances, this cannot be done: the proper classification of the possible outcomes is a task requiring considerable skills in judgment, which only with great difficulty avoids the entirely arbitrary.

Before exiting the rather arid realm of probability theory, one further difficulty to which Keynes drew attention should be mentioned. To return to the example of the deck of cards, I mentioned fifty-two equally likely possibilities. On what basis is it claimed that the drawing of any particular card is equally likely as any other? The reasoning, roughly, is that there is nothing special about any particular card. In the absence of a reason to think that, say, the king of clubs will be chosen more often than the ace of diamonds, one should take them as equally likely to arise. This assumption is the principle of insufficient reason: a properly chosen class has the same probability of occurrence as any similar class, in the absence of reason to the contrary. Keynes's difficulty with this principle will by now be anticipated: He did not know how to establish its truth. Successful induction rested on it, yet it is left hanging in the air.

Keynes's views on inductive inference decisively affected his economic writing. He was very unsympathetic to econometrics and generally conducted his arguments by verbal, rather than mathematical, means. Although there are equations in *The General Theory* and the *Treatise on Money*, they are relatively simple. The reason for Keynes's skepticism toward mathematical economics is obvious: the limitations of inductive inference radically restricted the precision one could hope to attain in this area. On one occasion, Keynes states the following: "Most 'mathematical' economics, especially such as increasingly disfigure the pages of contemporary journals, are mere concoctions which serve no purpose except to give non-mathematicians a spurious aesthetic satisfaction, aping that of mathematics proper" (Keynes 1973b: 511–12).

Keynes's very restricted view of induction helps to explain parts of *The General Theory*. Keynes maintains that a crisis can arise owing to a "liquidity trap": interest rates become stuck at a certain rate and remain fixed above the marginal efficiency of capital. In such conditions, new production will be unprofitable and the economy will fall into a slump. The effect of the views discussed above becomes apparent if one asks: Why does the interest rate remain "stuck"? The answer lies in the fact that there is no objective method of determining the future demand for and supply of money, in Keynes's view the determinants of the

interest rate. All then depends on speculation; and, if expectations are sufficiently pessimistic, money will not be demanded for investment beyond a certain amount, no matter how low the rate of interest. Looked at from the reverse perspective, suppliers of money, if sufficiently pessimistic, will not increase the amount of money offered for investment, no matter how great the demand: hence the "stickiness" referred to above. Owing to the limits of objective inductive inference, expectations come to the fore; and there is no reason to think that expectations will always be coordinated to secure full employment of all resources.

Keynes, in fact, went even further and tended to think of investors as irrational. He thought that they were governed by "animal spirits." Since they were unable to determine future prices in an objective way, resort to the "feel" of the situation was necessary. This could engender waves of optimism or pessimism, which would dislocate the economy. Additionally, the lack of objective knowledge resulted in attempts by speculators to outguess one another. In a famous passage, Keynes compares the stock exchange to a beauty contest in which each contestant attempts to guess the selection that most contestants will choose (Keynes 1936: 155–56).

The irrationality of this process, with its accompanying dislocative effects, was one of the main reasons that Keynes supported the socialization of investment. He hoped that centralizing investment decisions would reduce the chances of crisis.

A critic might object that Keynes's remedy will not cure the disease. If people do not know the future of the market, then shifting the onus of decision to the government will not change the outcome. But this objection misses Keynes's point. He did *not* assume that government planners could overcome the limits of inductive inference to which he drew attention. He was not *that* much of an elitist. His point, rather, was that if the government controlled most investment, it would no longer be necessary to predict the future of the market. The government can spend as much as it wishes and, by doing so, can always assure a level of aggregate spending sufficiently high to bring about full employment. Unlike the market, care does not have to be taken over the nature of the investments. Since the government need not satisfy consumer demand to remain in business, it is free to invest as it wishes: "Two pyramids, two masses for the dead, are twice as good as one; but not so two railways from London to York" (ibid.: 131). The government need not invest economically since it is not bound by market constraints.

Some economists emphasize the role of uncertainty in the Keynesian system to an even greater extent than I have done so far. According to G. L. S. Shackle (1972, 1974) and Ludwig Lachmann (1986), uncertainty in the economy is all-pervasive. One cannot even expect an equilibrium price for a single good to arise on the market. To the usual argument that gains or losses from trade will bring about a single price for each commodity, they reply that this too is uncertain (Mirowski 1989). The notion of equilibrium is banished: everything is uncertain.

Although these scholars are right to stress the importance of speculation and lack of knowledge for Keynes, they seem to me to be incorrectly ascribing their own position on uncertainty to Keynes. Rather than attempt a detailed exegesis of the Keynesian texts they cite to support their interpretation, I shall indicate a few of the essential differences between their position and that of Keynes.

For one thing, Shackle and Lachmann place great emphasis on uncertainty, in its technical meaning (often termed by economists "Knightian uncertainty"). In this sense of uncertainty, nothing at all is known about the odds of a future event. Keynes argued, rather, that one cannot usually determine the exact numerical chances of events; he did not contend that one cannot know anything at all about the chances of future events. Although Keynes was no doubt familiar with the distinction between risk and uncertainty, since Frank Knight's *Risk, Uncertainty, and Profit* had appeared in 1921 and aroused considerable attention, he did not so far as I am aware make much use of the distinction. (An exception is Keynes 1973a: 114, to be discussed below.)

Another dissimilarity between Keynes and Shackle/Lachmann is that, as mentioned earlier, the latter two economists place great stress upon uncertainties that confront single individuals and business enterprises. For reasons we shall soon see, Keynes was not much concerned with the individual in economics. He devoted little attention to microeconomics.

The most far-reaching difference between Keynes and the latter-day proponents of uncertainty has to do with knowledge of the future. For Lachmann and Shackle, the basis of their dissolution of conventional economic theory is their assertion that one cannot know the future. Keynes's doctrines about the limits of induction do not concern the future at all. He does *not* say that something special about the future forbids us from knowing anything about it: his qualms concern matters that are not at all dependent upon time. (Readers who find this surprising are invited to take each of the limits-of-induction views attributed to Keynes above and to ask: Does this limit apply to an induction that goes from a present event to another present event? From a present event to a past event?)

We may, I think, go even further. Not only was Keynes's position different from that of Lachmann and Shackle, but he would have actually rejected their principal thesis as fallacious. They argue that we cannot know the future and, on this basis, wish to reduce economics to uncertainty. Keynes expressly repudiated a parallel argument in ethics advanced by G. E. Moore. Since this has already been discussed, all that is needed here is a brief reminder of Keynes's argument. He held that it does not follow from the fact that we cannot *know* the future with certainty that we cannot obtain any probable knowledge about it. Keynes thought that such probable knowledge *was* in principle possible (Keynes 1921: 309). Shackle and Lachmann deny this.

Keynes did indeed maintain that knowledge of the future is uncertain, especially when this concerns the growth of wealth many years from the present (Keynes 1973a: 114 [I owe this reference to Professor Mark Skousen]). But he considered this simply a matter of fact, not something required by logic. People,

given the way they are, just happen to be uncertain about the future; there is no special "logic of the future" ruling out such knowledge.

A final division between the two approaches is that Shackle and Lachmann claim that human decisions are in principle unpredictable, since they are the outcome of free choices. This argument depends in part on the ascription to human beings of indeterministic free will. I am unfamiliar with any extended discussion by Keynes of free will; certainly, though, he rested nothing in economics on the position that Lachmann and Shackle adopt. (For what it is worth, G. E. Moore, whose philosophical views greatly influenced Keynes, rejected indeterministic free will.)

Keynes's contributions to the theory of knowledge were not confined to the theory of induction. His view of causation had important implications for his way of looking at the economy. He believed that it was very difficult to isolate strands of causation for individual study. Generally, things and events are "all mixed together": we do not, for example, see individual firms isolated from all else but, rather, an entire economic system whose parts are constantly interacting (Keynes 1921: 275). Keynes did *not* hold that the world or the economy consisted of a single organic unity (which we have discussed in the section on ethics). He did, however, maintain that the economy should be studied on the aggregate level. To "build up" the economy from Crusoe economics, through simple sellers and buyers, to complex structures of production, as the Austrian school does, was to Keynes's mind a flawed method. This approach assumes that smaller units can first be studied in isolation and then "put together." But to Keynes, when one is faced with a complex system, one usually has no means of determining what the proper parts of the system are. One cannot simply take for granted that individuals are the elements of the economic system. For all one knows at the beginning, the actions of individuals may have little or no independent importance in affecting the economy. (We can see here once more the radical difference of Keynes from Lachmann and Shackle.)

Of course, I do not mean to suggest that Keynes favored ignoring individuals altogether. The difference between Keynesian and individualist approaches, such as the Austrian school's, lies rather in the extent to which the actions of individuals are taken as determining elements of the economy. To the Austrians, the individual is basic; to Keynes, the individualist position depends on an extravagant view of our capacity to know the basic parts composing an aggregate.

Another position was, in Keynes's view, closely associated with his emphasis on the aggregate. If the actions of individuals are under consideration, one should take these as wholes. One should not attempt to analyze actions into their parts, such as by reducing them to a specified list of motives. The importance of the aggregative approach for economics is obvious, so I shall first discuss the importance for economics of the view about human action just mentioned. Keynes rejected strongly the position that ascribed to people an interest in "real" as opposed to monetary prices. To say that a worker

who bargained for wages in monetary terms was "really" interested in something else is to claim precisely the analytic insight into human motives that Keynes was concerned to repudiate. Further, to claim that people could penetrate the "money illusion" would be to impute to them a sort of grasp of the economy's constituents.

This position helps to account for two of the essential positions of *The General Theory*. First, Keynes explained interest by the demand for and supply of money. He rejected the "natural" or "originary" view of the interest rate held by Knut Wicksell and Mises. Once more, to claim that interest was determined by something other than money was to claim to be able to grasp the constituents of human action. Instead, we must remain on the surface.

Again, Keynes's most famous economic doctrine, the possibility of curing unemployment by fiscal measures, depends upon raising prices relative to wages. (Keynes, as usual thinking in aggregates, prefers to say a rise in the price-level relative to the level of wages.) Critics of Keynes, such as Mises and Henry Hazlitt, have pointed out that Keynes's inflationary prescription depends upon an attempt to deceive workers and unions. If prices rise relative to wages, then real wages have fallen. Keynes, in the view of his critics, thinks that workers will not realize that their wages have decreased. According to Mises and Hazlitt, Keynes underestimated the ability of workers, particularly under the guidance of union leaders and labor economists, to discover the truth.

The argument these critics ascribe to Keynes is indeed present in *The General Theory*, and their criticism of it is cogent. But there is more to Keynes's argument than the speculative view that workers can be indefinitely bamboozled. Since wage bargains are generally conducted in monetary terms, Keynes is required by his view of method to hold that this is what concerns the bargainers. "Real" wages are an analytical category, not a surface category of the sort Keynes emphasized. (Since cost-of-living clauses are today often included in contracts, Keynes presumably would revise his position.)

The impact of the aggregative approach to knowledge on Keynesian economics is, as already noted, quite obvious. The system is constructed of elements that operate at the "macro" level: the propensity to consume, the marginal efficiency of capital, aggregate demand, and so forth. One might object that he falls victim to his own objection. He doubts that a complex whole can be reduced to its parts and thereby explained. But are not his variables an attempt to do precisely that? Keynes would, I think, respond that his variables remain on the surface.

In this chapter, I have not attempted to assess the validity of Keynes's views on either philosophy or economics. Those who find the Keynesian approach uncongenial should, in my view, investigate theories of knowledge that allow a more robust grasp of the nature of economic reality than Keynes thought possible. I recommend the Austrian school as the most promising alternative.

NOTE

1. Keynes does, however, make his position unmistakably clear. In *The End of Laissez-Faire* he states: "It is *not* true that individuals possess a prescriptive 'natural liberty' in their economic activities. There is *no* 'compact' conferring perpetual rights on those who Have or on those who Acquire" (Keynes [1951] 1972: 287–88).

Chapter 10

Keynes as a Speculator: A Critique of Keynesian Investment Theory

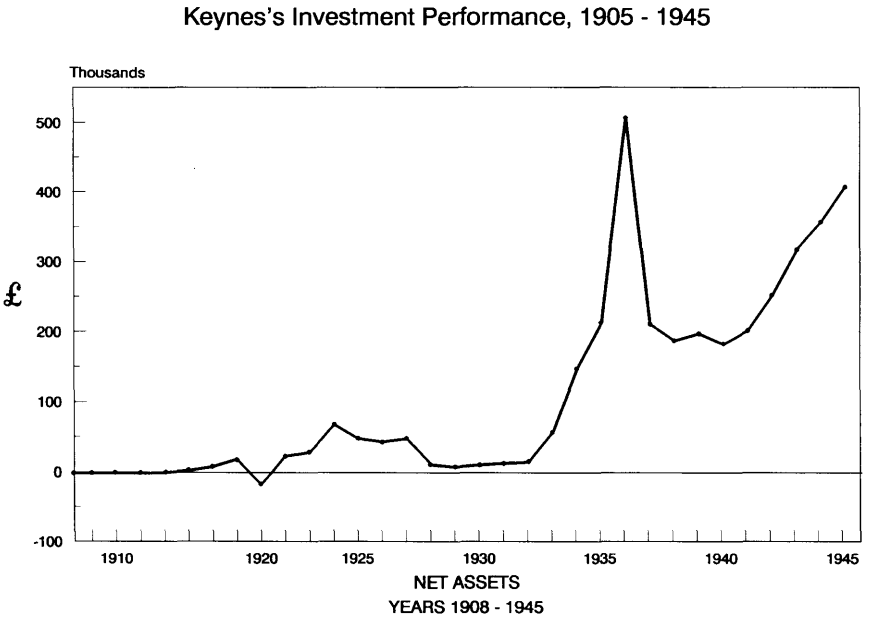
by Mark Skousen

> A speculator is one who runs risks of which he is aware and an investor is one who runs risks of which he is unaware.
>
> —J. M. Keynes, 1938

It is a widely accepted belief that John Maynard Keynes was not just a great theoretical economist but an ingenious practical economist, whose rare abilities also extended to the financial markets. Relying on an extensive study by Donald Moggridge, editor of Keynes's collected works, *Forbes* magazine writer Lawrence Minard called Keynes the "original contrarian," concluding that he "was a highly successful investor and speculator" (Minard 1983: 42). Indeed, as an extremely active investor in commodities, foreign currencies, and stocks, Keynes's net worth climbed from £16,315 in 1920 to £411,000 in 1946, the year he died (see Figure 10.1). That's an annual compounded rate of 13 percent, far better than most professional money managers produced in an era when there was little or no inflation and, in fact, much deflation. His performance as a money manager for various insurance companies and for King's College, Cambridge, showed similar results.

My own review of Keynes's financial history confirms his overall worldly wise ability to make money both for himself and as a professional money manager. However, the wizard of Cambridge was not a uniformly successful investor; he made his share of monumental blunders. With an uncanny ability to select stocks at cheap prices, he was nevertheless absolutely incapable of getting out at the top. Moreover, his economic theories failed him miserably at anticipating the major crises of the 1930s. My thesis is that his "general theory" of economic

Figure 10.1
Keynes's Investment Performance, 1905–1945



activity was highly influenced by his own inability to predict crashes and major short-term trends in the financial world.

KEYNES AND INSIDER TRADING

Roy Harrod, Keynes's official biographer, claimed that Keynes had virtually no capital and did not begin speculating until September 1919 (Harrod 1957). In fact, Keynes had become rather well-to-do by this time, much of his wealth the result of timely investments in the stock market. Keynes began investing on the London stock exchange when he purchased four shares of Marine Insurance Company in 1905. He speculated briefly in U.S. Steel and Canadian Pacific right before the First World War. His net position in securities increased dramatically from £197 in 1908 to £4,617 in 1914, at the beginning of the war, and had reached £14,453 by 1919.

Harrod failed to report these securities transactions because of accusations that Keynes had profited from inside information while working for the Treasury (1915–1919). A review of Keynes's financial position before 1920 indicates that his dealings were almost exclusively limited to purchases of securities. However, there is no explanation of how Keynes more than tripled his net worth during the war. Thus, the debate over Keynes's insider-trading activities during the First World War continues (Skidelsky 1983: 286–88).

THE ROARING TWENTIES

It appears that Keynes did not become a serious trader in the markets until he left His Majesty's Treasury in 1919 and plunged into the foreign-exchange markets. If Keynes used inside information at this time, it was hardly to his advantage. By 1920, less than a year after he had started trading, his leveraged position was completely wiped out when the European currencies recovered. After this unexpected turn of events, he borrowed £5,000, secured an advance from Macmillan for *Economic Consequences of the Peace*, and jumped back into the foreign-exchange markets, where he was able to recoup his losses, turning an £8,587 deficit into a £21,588 net profit.

Another rumor circulated about Keynes, that he conducted his financial affairs from his bedroom, was apparently true. Biographer Charles Hession writes, "Some of this financial decision-making was carried out while he was still in bed in the morning; reports would come to him by phone from his brokers, and he would read the newspapers and make his decisions" (Hession 1984: 175).

Throughout the 1920s, the British economist was a heavy trader in currencies and commodities. However, by the mid–1920s, noticing the burgeoning stock market boom in America and Europe, he became keenly interested in buying securities for himself and for several institutions he represented. He was chairman of the National Mutual Life Insurance Company and Bursar of King's College, Cambridge. His personal account included a heavy commitment to several British automobile stocks, such as British Leland and Austin Motor Company.

KEYNES MISCALCULATES THE CRASH

According to Felix Somary, a Swiss banker as well as an Austrian economist, Keynes came to Germany during the mid–1920s eager to ask Somary for some stock recommendations. But Somary refused, warning Keynes of a speculative bubble developing on Wall Street and predicting an impending crash. Keynes responded, "There will be no more crashes in our lifetime" (Somary [1960] 1986: 146–47).

Keynes believed the conventional wisdom that the central banks, particularly the Federal Reserve Board, could properly manage the monetary system and prevent any crash or deflation. Why he would think so, in the face of Britain's disastrous policy of returning to the gold standard at an overvalued sterling exchange rate in 1925, is difficult to explain. Keynes correctly predicted the British depression, caused by the overvaluation of the pound, but he had no such luck in prognosticating the economy across the Atlantic. He hailed the management of the dollar by the Federal Reserve Board from 1923 to 1928 as a "triumph" of central bank management and remained unconcerned about the huge rise in stock prices on Wall Street.

In late 1928, Oswald T. Falk, one of the members of the board of National Mutual Life Insurance Company, became alarmed at the "dangerous inflation"

in the United States, suggesting that the company liquidate most of its American holdings. But Keynes wrote two papers disagreeing with Falk. In the second paper, dated September 1, 1928, "Is There Inflation in the United States?" he reviewed the data on the cost of living and business credit and concluded that there was "nothing which can be called inflation yet in sight." Referring to real estate and stock values in the United States, Keynes added: "I conclude that it would be premature today to assert the existence of overinvestment. . . . I should be inclined, therefore, to predict that stocks would not slump severely (i.e., below the recent low level) unless the market was discounting a business depression." Such would not be probable since, he asserted, the Federal Reserve Board would "do all in its power to avoid a business depression" (Keynes [1928] 1973e: 52–59; Hession 1984: 238–39). By the time he had completed his *Treatise on Money* in 1930, however, the Cambridge economist had admitted having been misled by stable price indices in the 1920s, and that a "profit inflation" had developed in 1928 (Keynes 1930a: 190–98).

How did Keynes fare personally during the 1929 crash? According to Moggridge, he lost three-quarters of his net worth between 1928 and 1930, primarily due to commodity losses. He was long rubber, corn, cotton, and tin when the markets suddenly turned against his position in 1928. He also lost heavily on his British automobile stocks during the stock market crash in 1929. He tenaciously refused to sell on the way down. In short, he was almost wiped out during the crash. (Moggridge 1983:15–17)

However, Keynes was a stubborn investor, and he held onto his stocks and added substantially to his portfolio starting in 1932. Although he failed miserably at getting out at the top, he had a canny ability to acquire stocks at the bottom of the market. In 1944, he wrote a fellow money manager, "My central principle of investment is to go contrary to general opinion, on the ground that, if everyone is agreed about its merits, the investment is inevitably too dear and therefore unattractive" (Keynes [1944] 1983: 111).

In the early 1930s, he played the commodity markets (where his success record was checkered) less and the stock markets more. During the panic period of the Great Depression, he took a contrarian position by acquiring the preferred shares of the big utility holding companies in the United States. "They are now hopelessly out of favor with American investors and heavily depressed below their real value" (ibid.: 61). He bought National Power and Light Preferred, which, he noted, yielded 15 percent, was awash in cash, and whose earnings were rising again.

KEYNES AS THE ORIGINAL GOLD BUG?

For years, hard-money investors have debated the question, "Who is the original gold bug?" Unconventional Wall Street analysts who recommended gold and gold stocks early have included Jim Dines, Harry Schultz, Dick Russell, Joe Granville, William Baxter, and E. C. Harwood. But, amazingly, Keynes—

one of the most vociferous opponents of gold as a monetary standard, calling it a "barbarous relic"—was one of the first to buy gold stocks in the early 1930s. His opposition to the gold standard did not prevent him from taking advantage of an undervalued opportunity when South Africa went off the gold standard in December 1932 and before the United States raised the price of gold to $35 an ounce. He bought South African gold mining shares in January 1933, for the first time for both his personal account and an insurance company he represented. This gamble startled some of his associates, but he justified his speculation, saying, "I regard recent developments as not really primarily within the mining sphere itself, but an adjustment to a new exchange situation . . . and not a speculation about the contents of a prospective hole in the ground" (ibid.: 54). Keynes wrote an article on the subject for the *Daily Mail* (7 February 1933), concluding, "*Auri sacra fames!* Gold has its special glamour, its age-long appeal to the grasping palm, to those who would be safe and greedy at the same time. This may be an evil way in which to run our economic life. But seen realistically, it is by such tokens in the world as it is, that prosperity waxes and wanes" (Keynes [1933] 1982: 229). In Keynes's case, his prosperity waxed considerably, as the South African mining shares soared during the 1930s.

KEYNES'S BOOM AND BUST OF THE THIRTIES

Keynes was also optimistic about Franklin D. Roosevelt's New Deal, which he felt would be favorable toward the stock market. In fact, he was so convinced of the American recovery that he leveraged his position to the hilt. In 1929 his margin debt was £14,000; by 1936 it was £300,000! Frequently, over half of his securities were in borrowed money. Yet his stock selections were so successful that his net worth rose to £500,000 in 1936.

However, as in 1929, Keynes was totally unprepared for the 1937 recession. Encumbered by his highly margined position, by 1938 he had lost nearly two-thirds of his net worth, which fell to £180,000. After the 1937 debacle, his portfolio recovered along with the general market as war engulfed the world, reaching £400,000 at the end of the war, but Keynes never regained his 1936 high-water mark.

A SUMMARY OF KEYNES'S FINANCES

In summary, Keynes was a superior, albeit erratic, investor. In terms of his personal investment portfolio, he became fabulously wealthy, but he suffered through three devastating financial crises (1920, 1928–29, and 1937–38) on his road to success, as Figure 10.1 demonstrates.

His performance as a money manager for various insurance companies and for King's College showed a similar pattern. According to a study by J. H. Chau and R. S. Woodward, Keynes was an outstanding portfolio manager of the Chest Fund at King's College, Cambridge. Between 1927 and 1945, he beat the U.K.

Table 10.1
Keynes's "Chest Fund" Performance at King's College, 1927–1945

Year	*Chest Fund Index*	*Chest Fund Return*	*U.K. Market Return*	*Treasury Bill Rate*
1927	100.0	—	—	—
1928	96.6	−3.4%	7.9%	4.2%
1929	97.4	0.8	6.6	5.3
1930	65.8	−32.4	−20.3	2.5
1931	49.6	−24.6	−25.0	3.6
1932	71.8	44.8	−5.8	1.5
1933	97.0	35.1	21.5	0.6
1934	129.1	33.1	−0.7	0.7
1935	186.3	44.3	5.3	0.5
1936	290.6	56.0	10.2	0.6
1937	315.4	8.5	−0.5	0.6
1938	188.9	−40.1	−16.1	0.6
1939	213.2	12.9	−7.2	1.3
1940	179.9	−15.6	−12.9	1.0
1941	240.2	33.5	12.5	1.0
1942	238.0	−0.9	0.8	1.0
1943	366.2	53.9	16.5	1.0
1944	419.2	14.5	5.4	1.0
1945	480.3	14.6	0.8	1.0

Source: Jess H. Chau and Richard S. Woodward. 1983. "J. M. Keynes's Investment Performance: A Note." *Journal of Finance* 38:1 (March), p. 233.

market by a large margin, with an annual mean return of 13 percent, compared to 0 percent for the U.K. market as a whole (see Table 10.1). But the return-on-investment strategy was much more volatile than that of the general market; he lost more during bear markets (down by 48% in 1938), but regained more during bull markets (up by 50% in 1936 and 1943). Overall, he outperformed the markets. Chau and Woodward conclude, "Keynes's performance was superior to that of the market on the basis of both total variance and systematic risk" (1983: 234).

On the negative side, Keynes had a serious weakness. He suffered significant, demoralizing setbacks by holding stocks and bonds long term, no matter what the short-term predicament. A one-armed contrarian who bought at the bottom but could never get out at the top, he apparently had no reliable macroeconomic model with which to avoid the mind-boggling bear markets of 1929–32 and 1937–38. He tried to develop a "credit cycling" model for selecting investments, but failed miserably (Keynes 1983: 100). He did not believe in market timing (ibid.). Keynes joined the other established economists, such as Irving Fisher, Ralph Hawtrey, and Wesley C. Mitchell, in their "new era" optimism about America in the 1920s and shared their notion that no depression was possible as long as commodity prices were stable and the central banks were in control (Skousen 1992).

Keynes's inability to predict short-term movements in the financial markets

influenced his "general theory" of the capitalist system. The market economy was inherently unstable, he reasoned, because investment was unpredictable and ephemeral. Government, he argued, needs to step in to keep the capital markets and the economy from going off their tracks. In particular, investment should be "socialized" (a national investment program) in an effort to make future expectations predictable and investment stable (Keynes 1936: 378).

THE STOCK MARKET AS A CASINO

According to Keynes's experience, short-term market fluctuations were totally unpredictable. In *The General Theory*, he likened the stock market to a casino or a game of chance. "For it is, so to speak, a game of Snap, of Old Maid, of Musical Chairs—a pastime in which he is victor who says *Snap* neither too soon nor too late, who passes the Old Maid to his neighbor before the game is over, who secures a chair for himself when the music stops" (ibid.: 155–56). Regarding the future of economic or financial events, he later wrote, "there is no scientific basis on which to form any calculable probability whatever. We simply do not know" (Keynes 1973: 114).

It may seem paradoxical that Keynes, an avid speculator himself, contended that the speculator and the short-term trader are socially destabilizing and exhibit antisocial behavior. "Wall Street . . . cannot be claimed as one of the outstanding triumphs of *laissez-faire* capitalism," he wrote (Keynes 1936: 159). He recommended eliminating much of the short-term speculation in the financial markets because of its destabilizing influence on long-term expectations and business prospects. If Wall Street were indeed a casino, then that casino should not be available to the general public. "It is usually agreed that casinos should, in the public interest, be inaccessible and expensive. And perhaps the same is true of stock exchanges" (ibid.). To mitigate speculative fever on Wall Street, Keynes recommended the introduction of a "substantial government transfer tax" on all stock transactions (ibid.: 160). Paradoxically, Keynes's recommendation would destroy the vitality of the market. Clearly, he failed to recognize the benefits that short-term trading provides for long-term investors, particularly the much needed liquidity that allows long-term investors to get into and out of the market without being hurt. Short-term trading also plays a critical role in raising venture capital—a stock certificate is, after all, not a lottery ticket, but part-ownership in a business.

Essentially, however, Keynes's model of the capitalist financial system was, to a large extent, an expression of his personal experience in the marketplace. Overall, he made a lot more money by being a long-term investor in stocks than a short-term speculator in commodities and foreign currencies.

Keynes also attacked people's desire to hold cash, which he termed "liquidity preference." He stated, "Of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity, the doctrine that it is a positive virtue on the part of investment institutions to concentrate resources upon the holding

of 'liquid' securities'' (ibid.: 155). Of course, it makes sense to hold liquid cash in times of danger and crisis, such as during the 1929 crash. Keynes was undoubtedly expressing his bitterness toward those rash speculators and frightened conservative investors who dumped stocks in favor of liquidity during such crises. Such ''waves of irrational psychology'' could do much damage to long-term expectations.

POST-KEYNESIANS AND THE FINANCIAL-INSTABILITY HYPOTHESIS

The principal heir to Keynes's investment theory is Hyman P. Minsky, Professor of Economics at Washington University in St. Louis. He contends that conventional ''neo-classical'' economics, including most Keynesianism, ignores Keynes's principal thesis: ''The essential aspect of Keynes's *General Theory* is a deep analysis of how financial forces—which we can characterize as Wall Street—interact with production and consumption to determine output, employment, and prices'' (Minsky 1986: 100). According to Minsky's thesis, which he terms the ''financial-instability hypothesis,'' the financial structure of capital assets determines the degree of instability in boom-bust capitalism. Perverse banking practices, speculative fever, excessive corporate debt, and deep uncertainty about the future create inherently unstable conditions and a fragile economic system. Moreover, ''instability is an inherent and inescapable flaw of capitalism'' (ibid.: 120), and this instability ''is not due to external shocks or to the incompetence or ignorance of policy makers'' (ibid.: 10). Like Keynes, Minsky does not reject capitalism, but argues that its unstable nature can be contained through deficit spending and reinflation by a central bank. According to post-Keynesians, big-government capitalism is more stable than laissez-faire capitalism.

Minsky is quite correct in pointing out that neo-classical economics largely ignores the influence of the financial markets on the economy: ''The neo-classical synthesis became the economics of capitalism without capitalists, capital assets, and financial markets'' (ibid.: 120). Indeed, orthodox Keynesians are not the only ones to ignore the stock market and its role in economic progress and expectations. The monetarists and new classicists also minimize the role that financial markets play in the economy. The Austrian economists, on the other hand, have always paid particular attention to the financial markets as an integral part of the economic process and the business cycle. As Murray Rothbard states, ''Stocks . . . are units of title to masses of capital goods'' and therefore respond, sometimes violently, to changing business conditions (Rothbard 1983a: 74–75).

Minsky mistakenly blames the market itself for its instability, when in reality investment volatility is caused by exogenous variables, that is, by monetary and fiscal policies. State intervention in the macroeconomic sphere is the principal source of uncertainty, false expectations, and the boom-bust investment cycle. Speculation is normally beneficial in the marketplace; it is only distorted policies

regarding taxes, expenditures, regulations, monetary inflation, and manipulations of interest rates that can make speculative financing and what Minsky terms "Ponci financing" destabilizing.

Certainly, big-government capitalism can be stabilizing, especially if, in the words of Minsky, "the policy emphasis should shift from the encouragement of growth through investment to the achievement of full employment through consumption production" (Minsky 1982: 113). But a more accurate description of big-government capitalism would be lethargy, characterized by inflation, low growth, bureaucracy, and capital consumption. The Keynesian prescription of inflation, consumption, and big government is precisely the one most Western nations have adopted since the end of the Second World War. In contrast, the Far East nations of Japan, Taiwan, Hong Kong, and Korea, among others, have adopted a distinctly non-Keynesian approach by stimulating investment and "excessively" high savings rates. The results are telling: the growth rates of the Far East have outstripped the West by a wide margin for the past thirty years.

KEYNES'S PRINCIPLES OF INVESTMENT

As Keynes matured, he discovered that the most successful investors are those who invest in sound companies at reasonable or bargain prices and hold for the long term. They ignore short-term bear markets or use them for opportunities to buy. In 1938, Keynes listed three principles for successful investing: (1) A careful selection of a few investments which are "cheap" relative to "intrinsic" value; (2) a steadfast holding of these investments through "thick and thin"; (3) a "balanced" investment portfolio with a variety of risks, including gold shares (Keynes [1938] 1983: 107). Later, in 1940, he wrote, "I am still convinced that one is doing a fundamentally sound thing, that is to say, backing intrinsic values, enormously in excess of the market price, which at some utterly unpredictable date will in due course bring the ship home" (Keynes [1940] 1983: 77; see also 38).

Keynes is famous for his remark, "In the long run we are all dead." But perhaps it would be more accurate to say, in Keynes's case, "In the short run, Keynes was sometimes dead; in the long run, he became incredibly rich."

Chapter 11

Keynes, the Man

by Murray N. Rothbard

John Maynard Keynes, the man—his character, his writings, and his actions throughout life—was composed of three guiding and interacting elements. The first was his overweening egotism, which assured him that he could handle all intellectual problems quickly and accurately and led him to scorn any general principles that might curb his unbridled ego. The second was his strong sense that he was born into, and destined to be a leader of, Great Britain's ruling elite. Both of these traits led Keynes to deal with people as well as nations from a self-perceived position of power and dominance. The third element was his deep hatred and contempt for the values and virtues of the bourgeoisie, for conventional morality, for savings and thrift, and for the basic institutions of family life.

BORN TO THE PURPLE

Keynes was born under special circumstances, an heir to the ruling circles not only of Britain but of the British economics profession as well. His father, John Neville Keynes, was a close friend and former student of Alfred Marshall, Cambridge professor and unchallenged lion of British economics for half a century. Neville Keynes had disappointed Marshall by failing to live up to his early scholarly promise, producing only a bland treatise on the methodology of economics, a subject disdained as profoundly "un-English" (J. N. Keynes [1891] 1955). The classic refuge for a failed academic has long been university administration, and so Neville happily buried himself in the controllership and other powerful positions in Cambridge University administration. Marshall's psyche compelled him to feel a moral obligation toward Neville that went beyond the

pure loyalty of friendship, and that sense of obligation was carried over to Neville's beloved son Maynard. Consequently, when Maynard eventually decided to pursue a career as an economist at Cambridge, two extremely powerful figures at that university—his father and Alfred Marshall—were more than ready to lend him a helping hand.

THE CAMBRIDGE APOSTLE

The most favored education available to the English elite was secured for Maynard by his doting father. First, he was a scholarship student at "College" in Eton, the intellectual subdivision of England's most influential public school. From there Maynard went on to King's College, which, along with Trinity, was one of the two dominant colleges at Cambridge University. At King's, Maynard was soon tapped for coveted membership in the secret society of the Apostles, an organization which rapidly shaped his values and his life. Keynes grew to social and intellectual maturity within the confines of this small, incestuous world of secrecy and superiority. The Apostles were not simply a social club, in the manner of Ivy League secret fraternities. They were also a self-consciously intellectual elite, especially interested in philosophy and its applications to aesthetics and life. Apostle members were chosen almost exclusively from King's and Trinity, and they met every Saturday evening behind locked doors to deliver and discuss papers.[1] During the rest of the week, members virtually lived in each others' rooms. Moreover, Apostleship was not simply an undergraduate affair; it was membership for life and cherished as such. For the rest of their lives, adult Apostles (known as "Angels"), including Keynes, would often return to Cambridge for meetings, and they participated actively in recruiting new undergraduates. In February 1903, at the age of twenty, John Maynard Keynes took his place as Apostle number 243 in a chain that stretched back to the society's founding in 1820. For the next five or six formative years, Maynard spent almost all his private life among the Apostles, and his values and attitudes were shaped accordingly. Furthermore, most of his adult life was spent among older and newer Apostles, their friends, or their relations.

An important reason for the potent effect of the Society of the Apostles on its members was its heady atmosphere of secrecy. As Keynes's biographer, Robert Skidelsky, writes:

> One should never underestimate the effect of secrecy. Much of what made the rest of the world seem alien sprang from this simple fact. Secrecy was a bond which greatly amplified the Society's life relative to its members' other interests. It is much easier, after all, to spend one's time with people from whom one does not have to keep large secrets; and spending much time with them reinforces whatever it was that first drew them together. (Skidelsky 1983: 118; see also Deacon 1986)

The extraordinary arrogance of the Apostles is best summed up in the Society's Kantian half-joke: that the Society alone is "real," whereas the rest of the world

is only "phenomenal." Maynard himself would refer to non-Apostles as "phenomena." What all this meant was that the world outside was regarded as less substantial, less worthy of attention than the Society's own collective life. . . . It was a joke with a serious twist. (Skidelsky, 1983:118) "It was owing to the existence of the Society," wrote Apostle Bertrand Russell in his *Autobiography*, "that I soon got to know the people best worth knowing." Indeed, Russell remarked that when the adult Keynes left Cambridge, he traveled the world with a feeling of being the bishop of a sect in foreign parts. "True salvation for Keynes," remarked Russell perceptively, "was elsewhere, among the faithful at Cambridge" (Crabtree and Thirlwall 1980: 102). Or, as Maynard himself wrote during his undergraduate days in a letter to his friend and coleader, Giles Lytton Strachey: "Is it monomania—this colossal moral superiority that we feel? I get the feeling that most of the rest [of the world outside the Apostles] never see anything at all—too stupid or too wicked" (Skidelsky 1983: 118).[2]

Two basic attitudes dominated this hermetic group under the aegis of Keynes and Strachey. The first was their overriding belief in the importance of personal love and friendship, while scorning any general rules or principles that might limit their own egos; and the second, their animosity toward and contempt for middle-class values and morality. The Apostolic confrontation with bourgeois values included praise for avant-garde aesthetics, holding homosexuality to be morally superior (with bisexuality a distant second[3]), and hatred for such traditional family values as thrift or any emphasis on the future or long run, as compared to the present. ("In the long run," as Keynes would later intone in his famous phrase, "we are all dead.")

BLOOMSBURY

After graduation from Cambridge, Keynes and many of his Apostle colleagues took up lodgings in Bloomsbury, an unfashionable section of north London. There they formed the now-famous Bloomsbury Group, the center of aesthetic and moral avant-gardism that constituted the most influential cultural and intellectual force in England during the 1910s and 1920s. The formation of the Bloomsbury Group was inspired by the death of that eminent Victorian philosopher and classical liberal, Sir Leslie Stephen, in 1904. The young Stephen children, who felt liberated by the departure of their father's stern moral presence, promptly set up house in Bloomsbury and began to hold Thursday evening salons. Thoby Stephen, while not an Apostle, was a close friend at Trinity of Lytton Strachey. Strachey and other Apostles, as well as another of Strachey's good friends from Trinity Clive Bell, became regular salon guests. After Thoby died in 1906, Vanessa Stephen married Bell, and Bloomsbury gatherings divided into two groups. Since Clive was a budding art critic and Vanessa a painter, they established the Friday Club salons, concentrating on the visual arts. Meanwhile, Virginia and Adrian Stephen resumed the Thursday emphases on literature, philosophy, and culture. Eventually, Trinity Apostle Leonard Woolf, a friend

and contemporary of Keynes, married Virginia Stephen. In late 1909, Keynes moved to a Bloomsbury house very close to the Stephens', sharing a flat there with Bloomsbury artist Duncan Grant, a cousin of Strachey's.

Bloomsbury's values and attitudes were similar to those of the Cambridge Apostles, albeit with more of an artistic twist. With a major emphasis on rebellion against Victorian values, it is no wonder that Maynard Keynes was a distinguished Bloomsbury member. One particular emphasis was pursuit of avant-garde and formalistic art—pushed by art critic and Cambridge Apostle Roger Fry, who later returned to Cambridge as Professor of Art. Virginia Stephen Woolf would become a prominent exponent of formalistic fiction. And all of them energetically pursued a lifestyle of promiscuous bisexuality, as was brought to light in Michael Holroyd's (1967) biography of Strachey.

As members of the Cambridge cultural coterie, the Bloomsbury Group enjoyed inherited, although modest, wealth. But, as time went on, most of the financing for the various Bloomsbury exhibits and projects came from their loyal member Maynard Keynes. As Skidelsky writes, Keynes "came to give Bloomsbury financial muscle, not just by making a great deal of money himself [largely through investment and financial speculation], which he spent lavishly on Bloomsbury causes, but by his ability to organize financial backing for their enterprises". . . . Indeed, from the first World War onwards it was almost impossible to find any enterprise, cultural or domestic, in which members of Bloomsbury were involved, which did not benefit in some way from his largesse, his financial acumen, or his contacts. (1983: 250; see also 242–51).

THE MOORITE PHILOSOPHER

The greatest impact on Keynes's life and values, the great conversion experience for him, came not in economics but in philosophy. A few months after Keynes's initiation into the Apostles, G. E. Moore, a professor of philosophy at Trinity who had become an Apostle a decade earlier than Keynes, published his magnum opus, *Principia Ethica* (1903). Both at the time and in reminiscence three decades later, Keynes attested to the enormous impact that the *Principia* had had upon him and his fellow Apostles. In a letter at the time of its publication, he wrote that the book "is a stupendous and entrancing work, *the greatest* on the subject" [Keynes's italics], and a few years later he wrote to Strachey: "It is *impossible* to exaggerate the wonder and *originality* of Moore . . . How amazing to think that only we know the rudiments of a true theory of ethic . . . " And, In a 1938 paper to the Bloomsbury Group entitled "My Early Beliefs," Keynes recalls that the *Principia*'s "effect on *us*, and the talk which preceded and followed it, dominated and perhaps still dominates, everything else." He added that the book "was exciting, exhilarating, the beginning of a new renaissance, the opening of a new heaven on earth" (Skidelsky 1983: 133–34; Keynes [1951] 1972: 436–49). Very strong words about a book on technical philosophy!

What is their source? First was the personal charisma that Moore exercised

upon the students at Cambridge. But beyond that personal magnetism, Keynes and his friends were attracted not so much to Moore's doctrine itself as to the particular interpretation and twist that they themselves gave to that doctrine. Despite their enthusiasm, Keynes and his friends accepted only what they held to be Moore's *personal* ethics (i.e., what they called Moore's "religion"), while they totally rejected his *social* ethics (i.e., what they called his "morals"). Keynes and his fellow Apostles enthusiastically embraced the idea of a "religion" composed of moments of "passionate contemplation and communion" of and with objects of love or friendship. They repudiated, however, all social morals or general rules of conduct, totally rejecting Moore's penultimate chapter on "Ethics in Relation to Conduct." As Keynes states in his 1938 paper:

> In our opinion, one of the greatest advantages of his [Moore's] religion was that it made morals unnecessary. . . . We entirely repudiated a personal liability on us to obey general rules. We claimed the right to judge every individual case on its merits, and the wisdom to do so successfully. This was a very important part of our faith, violently and aggressively held, and for the outer world it was our most obvious and dangerous characteristic. We repudiated entirely customary morals, conventions and traditional wisdom. We were, that is to say, in the strict sense of the term, immoralists. (Keynes [1951] 1972: 142–43)

Shrewd contemporary observers perceptively summed up the attitude of Keynes and his fellow Apostles. Bertrand Russell wrote that Keynes and Strachey twisted Moore's teachings; they "aimed at a life of retirement among fine shades and nice feelings, and conceived of the good as consisting in the passionate mutual admirations of a clique of the elite" (Welch 1986: 43). Or, as Beatrice Webb neatly observed, Moorism among the Apostles was "nothing but a metaphysical justification for doing what you like—and what other people disapprove of" (ibid.).

The question then arises, How seriously did this immoralism, this rejection of general rules that would restrict one's ego, mark Keynes's adult life? Sir Roy Harrod, a disciple and hagiographical biographer, insists that immoralism, as with any other unpleasant aspect of Keynes's personality, was only an adolescent phase, quickly outgrown by his hero. But many other aspects of his career and thought confirm Keynes's lifelong immoralism and disdain for the bourgeoisie. Moreover, in his 1938 paper, delivered at the age of fifty-five, Keynes confirmed his continuing adherence to his early views, stating that immoralism is "still my religion under the surface. . . . I remain and always will remain an immoralist" (Harrod 1951: 76–81; Skidelsky 1983: 145–46; Welch 1986: 43).

In a notable contribution, Skidelsky demonstrates that Keynes's first important scholarly book, *A Treatise on Probability* (1921), was not unrelated to the rest of his concerns. It grew out of his attempt to copper-rivet his rejection of Moore's proposed general rules of morality. The beginnings of the *Treatise* came in a paper, which Keynes read to the Apostles in January 1904, on Moore's spurned chapter, "Ethics in Relation to Conduct." Refuting Moore on probability oc-

cupied Keynes's scholarly thoughts from the beginning of 1904 until 1914, when the manuscript of the *Treatise* was completed. He concluded that Moore was able to impose general rules upon concrete actions by employing an empirical or "frequentist" theory of probability, that is, through observation of empirical frequencies we could have certain knowledge of the probabilities of *classes* of events. To destroy any possibility of applying general rules to particular cases, Keynes's *Treatise* championed the classical a priori theory of probability, where probability fractions are deduced purely by logic and have nothing to do with empirical reality. Skidelsky makes the point well:

> Keynes's argument, then, can be interpreted as an attempt to free the individual to pursue the good . . . by means of egotistic actions, since he is not required to have certain knowledge of the probable consequences of his actions in order to act rationally. It is part, in other words, of his continuing campaign against Christian morality. This would have been appreciated by his audience, although the connection is not obvious to the modern reader. More generally, Keynes links rationality to expediency. The circumstances of an action become the most important consideration in judgments of probable rightness . . . By limiting the possibility of certain knowledge Keynes increased the scope for intuitive judgment. (Skidelsky 1983: 153–54)

We cannot get into the intricacies of probability theory here. Suffice it to say that Keynes's a priori theory was demolished by Richard von Mises (1951) in his 1920s work, *Probability, Statistics, and Truth*. Mises demonstrated that the probability fraction can be meaningfully used only when it embodies an empirically derived law of entities which are homogeneous, random, and indefinitely repeatable. This means, of course, that probability theory can only be applied to events which, in human life, are confined to those like the lottery or the roulette wheel. (For a comparison of Keynes and Richard von Mises, see D. A. Gillies [1973: 1–34].) Incidentally, Richard von Mises's probability theory was adopted by his brother Ludwig, although they agreed on little else (L. von Mises [1949] 1966: 106–15).

THE BURKEAN POLITICAL THEORIST

"If Moore was Keynes's ethical hero, Burke may lay strong claim to be being his political hero," writes Skidelsky (1983: 154). Edmund Burke? What could that conservative worshiper of tradition have in common with Keynes, the statist and rationalist central planner? Once again, as with Moore, Keynes venerated his man with a Keynesian twist, selecting the elements that fitted his own character and temperament. What Keynes took from Burke is revealing. (Keynes presented his views in a lengthy undergraduate prize-winning English essay on "The Political Doctrines of Edmund Burke.") There is, first, Burke's militant opposition to general principles in politics and, in particular, his championing of expediency against abstract natural rights. Secondly, Keynes agreed strongly with Burke's high time preference, his downgrading of the uncertain future versus

the existing present. Keynes therefore agreed with Burke's conservatism in the sense that he was hostile to "introducing present evils for the sake of future benefits." There is also the right-wing expression of Keynes's general deprecation of the long run, when "we are all dead." As Keynes put it, "It is the paramount duty of governments and of politicians to secure the well-being of the community under the case in the present, and not to run risks overmuch for the future" (ibid.: 155–56). Thirdly, Keynes admired Burke's appreciation of the "organic" ruling elite of Great Britain. There were differences over policy, of course, but Keynes joined Burke in hailing the system of aristocratic rule as sound, so long as governing personnel were chosen from the existing organic elite. Writing of Burke, Keynes noted, "the machine itself [the British state] he held to be sound enough if only the ability and integrity of those in charge of it could be assured." (*Ibid.*, p. 156)

In addition to his neo-Burkean disregard for principle, lack of concern for the future, and admiration for the existing British ruling class, Keynes was also sure that devotion to truth was merely a matter of taste, with little or no place in politics. He wrote: "A preference for truth or for sincerity *as a method* may be prejudice based on some aesthetic or personal standard, inconsistent, in politics, with practical good" (Johnson, 1978: 24) Indeed Keynes displayed a positive taste for lying in politics. He habitually made up statistics to suit his political proposals, and he would agitate for world monetary inflation with exaggerated hyperbole while maintaining that "words ought to be a little wild—the assault of thoughts upon the unthinking." But, revealingly enough, once he achieved power, Keynes admitted that such hyperbole would have to be dropped: "When the seats of power and authority have been attained, there should be no more poetic license" (Johnson and Johnson 1978: 19–21).

THE ECONOMIST: ARROGANCE AND PSEUDO-ORIGINALITY

Maynard Keynes's approach in economics was not unlike his attitude in philosophy and life in general. "I am afraid of 'principle,' " he told a Parliamentary committee in 1930 (Moggridge 1969: 90). Principles would only restrict his ability to seize the opportunity of the moment and would hamper his will to power. Hence, he was eager to desert his earlier beliefs and change his mind on a dime, depending on the situation. His stand on free trade serves as a blatant example. As a good Marshallian, his one, seemingly fixed, lifelong politico-economic principle was a devoted adherence to freedom of trade. At Cambridge he wrote to a good friend: "Sir, I hate all priests and protectionists . . . Down with pontiffs and tariffs." For the next three decades, his political interventions were almost solely concerned with championing free trade (Skidelsky, 1983: 122, 227–29). Then, suddenly, in the spring of 1931, Keynes loudly called for protectionism, and during the 1930s, he led the parade for economic nationalism and for policies frankly designed to "begger-thy-neighbor." But during World

War II, Keynes swung back to free trade. Never did any soul-searching or even hesitation seem to hobble his lightning-fast changes.

Indeed, in the early 1930s, Keynes was widely ridiculed in the British press for his chameleon views. As Elizabeth Johnson writes: He was Keynes the india-rubber man: the *Daily News and Chronicle* of 16 March 1931, carried an article headed, "Economic Acrobatics of Mr Keynes" — and illustrated it by a sketch of "A Remarkable Performance. Mr John Maynard Keynes as the 'boneless man,' turns his back on himself and swallows a draught" . . . (1978: 17)

Keynes, however, did not trouble himself about charges of inconsistency, considering himself always right. It was particularly easy for Keynes to adopt this conviction since he cared not a rap for principle. He was therefore always ready to change horses in pursuit of expanding his ego through political power. As time went on, Elizabeth Johnson writes, Keynes "had a clear idea of his role in the world; he was . . . the chief economic adviser to the world, to the Chancellor of the Exchequer of the day, to the French minister of finance, . . . to the president of the United States." Pursuit of power for himself and a ruling class meant, of course, increasing adherence to the ideas and institutions of a centrally managed economy. Among the good men of the organic elite governing the nation, he placed himself in the crucial role of scholar-technician, the twentieth century version of the "philosopher-king" or, at least, the philosopher guiding the king. It is no wonder that Keynes "hailed President [Franklin D.] Roosevelt as the first head of state to take theoretical advice as the basis for large-scale action" (Johnson and Johnson 1978: 17–18).

Action is what Keynes sought from government, especially with Keynes himself making the plans and calling the shots. As Johnson writes:

> His opportunism meant that he reacted to events immediately and directly. He would produce an answer, write a memorandum, publish at once, whatever the issue. . . . In the World War II Treasury, he nearly drove some of his colleagues crazy with his propensity to keep a finger in every pie. "Don't just stand there, do something" would have been his present-day motto. (Ibid.: 19)

Johnson notes that Keynes's "instinctive attitude to any new situation was to assume, first, that nobody was doing anything about it, and, secondly, that if they were, they were doing it wrong. It was a lifetime habit of mind based on the conviction that he was armed with superior brains . . . and, Cambridge Apostle that he was, gifted with superior sensibilities" (ibid.: 33).

One striking illustration of Maynard Keynes's unjustified arrogance and intellectual irresponsibility was his reaction to Ludwig von Mises's brilliant and pioneering *Treatise on Money and Credit*, published in German in 1912. Keynes had recently been made the editor of Britain's leading scholarly economic periodical, Cambridge University's *Economic Journal*. He reviewed Mises's book, giving it short shrift. The book, he wrote condescendingly, had "considerable

merit'' and was ''enlightened,'' and its author was definitely ''widely read,'' but Keynes expressed his disappointment that the book was neither ''constructive'' nor ''original'' (Keynes 1914). This brusque reaction managed to kill any interest in Mises's book in Great Britain, and *Money and Credit* remained untranslated for two fateful decades. The peculiar point about Keynes's review is that Mises's book was highly constructive and systematic, as well as remarkably original. How could Keynes not have seen that? This puzzle was cleared up a decade and a half later, when, in a footnote to his own *Treatise on Money*, Keynes impishly admitted that ''in German, I can only clearly understand what I already know—so that new ideas are apt to be veiled from me by the difficulties of the language'' (Keynes 1930a: I, 199 n.2). Such unmitigated gall. This was Keynes to the hilt: to review a book in a language where he was incapable of grasping new ideas, and then to attack that book for not containing anything new, is the height of arrogance and irresponsibility.[4]

Another aspect of Keynes's swaggering conceit was his conviction that much of what he did was original and revolutionary. His letter to G. B. Shaw in 1935 is well known: ''I believe myself to be writing a book on economic theory that will largely revolutionise . . . the way the world thinks about economic problems. . . . For myself I don't merely hope what I say, in my own mind I'm quite sure.'' (Hession 1984: 279) But this belief in his braggadocio was not confined to *The General Theory*. Bernard Corry points out that ''From about the beginning of his economic work he claimed to be revolutionising the subject.'' So imbued was Keynes with faith in his own creativity that he even proclaimed great originality in a paper on business cycles that was based on D. H. Robertson's *Study of Industrial Fluctuations*, shortly after the book was published in 1913. Corry links this attitude to the insistent emphasis of the Bloomsbury Group on ''originality'' (by which, of course, they mainly meant their own). Originality, he points out, was ''one of the fixations of the Bloomsbury Group'' (Crabtree and Thirlwall 1980: 96–97; Corry 1986: 214–15, 1978: 3–34).

Keynes was greatly aided in his claims of originality by the tradition of economics that Alfred Marshall had managed to establish at Cambridge. As a student of Marshall and a young Cambridge lecturer under Marshall's aegis, Keynes easily absorbed the Marshallian tradition. It was not that Marshall himself claimed blazing originality, although he did make claims to independent inventions of marginal utility and he was secretive, jealous of students who might steal his ideas. Marshall developed the strategy of maintaining a hermetically sealed Marshallian world at Cambridge (and hence in British economics generally). He created the myth that in his 1890 magnum opus, the *Principles of Economics*, he had constructed a higher synthesis, incorporating the valid aspects of all previously competing and clashing theories (deductivism and inductivism, theory and history, marginal utility and real cost, short run and long run, Ricardo and Jevons).[5] Because he successfully pushed this myth, he therefore spawned the universal view that ''it's all in Marshall,'' that, after all, there was no need to read anyone else. For if Marshall had harmonized all the one-sided, one-eyed

economic views, there was no longer any reason except antiquarianism to bother to read them. As a result, the modal Cambridge economist read only Marshall, spinning out and elaborating on cryptic sentences or passages in the Great Book. Marshall himself spent the rest of his life reworking and elaborating The Text, publishing no less than eight editions of the *Principles* by 1920. For the rest, there was the legendary Cambridge "oral tradition," in which Marshall's students and disciples were delighted to listen to and pass on the "Great Man's" words, as well as to read his lesser seminal writings in manuscript or in commission hearings, for Marshall kept most of his shorter writings out of publication until near the end of his life. Thus, the Cambridge Marshallians could take unto themselves the aura of a priestly caste, the only ones privy to the mysteries of the sacred writings denied to lesser men.

The tightly sealed world of Marshallian Cambridge soon dominated Great Britain; there were few challengers in that country. This dominance was accelerated by the unique role of Cambridge and Oxford in British social and intellectual life, especially in the years before the educational explosion that followed World War II. Since the days of Adam Smith, David Ricardo, and J. S. Mill, Great Britain had managed to dominate economic theory throughout the world, so Marshall and his sect managed to assume hegemony not only of Cambridge economics but of the world (see Crabtree 1980: 101–5).[6]

"THE SWINDLER"

The young Keynes displayed no interest whatsoever in economics; his dominant interest was philosophy. In fact, he completed an undergraduate degree at Cambridge without taking a single economics course. Not only did he never take a degree in the subject, but the only economics course Keynes ever took was a single-term graduate course under Alfred Marshall. He found that spell of economics exciting, however, as it appealed both to his theoretical interests and to his thirst for cutting a giant swath through the real world of action. In the fall of 1905, he wrote to Strachey: "I find economics increasingly satisfactory, and I think I am rather good at it. I want to manage a railroad or organise a Trust or at least swindle the investing public" (Harrod 1951: 111).[7]

Keynes, in fact, had recently embarked on his lifelong career as investor and speculator. Yet Harrod was constrained to deny vigorously that Keynes had begun speculating before 1919. Asserting that Keynes had "no capital" before then, Harrod explained the reason for his insistence in a book review six years after the publication of his biography: "It is important that this should be clearly understood, since there were many ill-wishers . . . who asserted that he took advantage of inside information when in the Treasury (1915–June 1919) in order to carry out successful speculations" (Harrod 1957). In a letter to Clive Bell, author of the book under review and an old Bloomsburyite and friend of Keynes, Harrod pressed the point further: "The point is important because of the beastly stories, which are very widespread . . . about his having made money dishon-

ourably by taking advantage of his Treasury position'' (ibid.; cf. Skidelsky 1983: 286–88).

Despite Harrod's insistence to the contrary, however, Keynes had indeed set up his own ''special fund'' and had begun to make investments by July 1905. By 1914, Keynes was speculating heavily in the stock market and, by 1920, had accumulated £16,000, which would amount to about $200,000 at today's prices. Half of his investment was made with borrowed money. It is not clear at this point whether his fund was used for investment or for more speculative purposes, but we do know that his capital had increased by more than threefold. Whether Keynes used inside Treasury information to make such investment decisions is still unproven, although suspicions certainly remain (Skidelsky 1983: 286–88).

Even if we cannot prove the charge of swindling against Keynes, we must consider his behavior in the light of his own bitter condemnation of financial markets as ''gambling casinos'' in *The General Theory*. It seems probable, therefore, that Keynes *believed* his successes at financial speculation to have swindled the public, although there is no reason to think he would have regretted that fact. He did realize, however, that his father would disapprove of his activity.[8]

KEYNES AND INDIA

While at Eton, young Keynes (aged seventeen and eighteen) witnessed a wave of anti-imperialist sentiment in the wake of Britain's war against the Boers in South Africa. Yet he was never influenced by that sentiment. As Skidelsky notes, ''Throughout his life he assumed the Empire as a fact of life and never showed the slightest interest in discarding it. . . . He never much deviated from the view that, all things being considered, it was better to have Englishmen running the world than foreigners'' (Skidelsky 1983: 91).

In late 1905, despite Marshall's importuning, Keynes abandoned graduate studies in economics after one term and, the following year, took Civil Service exams, gaining a clerkship in the India Office. In the spring of 1907, Keynes was transferred from the Military Department to the Revenue, Statistics and Commerce Department. While he was to become an expert on Indian affairs, he nevertheless blithely assumed that British rule was not to be questioned; Britain simply disseminated good government in places which could not develop it on their own. ''Maynard,'' Skidelsky points out, ''always saw the Raj from Whitehall; he never considered the human and moral implications of imperial rule or whether the British were exploiting the Indians.'' In the grand imperialist tradition of the Mills and Thomas Macaulay in nineteenth-century England, moreover, Keynes never felt the need to travel to India, to learn Indian languages, or to read any books on the area except as they dealt with finance (ibid.: 176).

Despite his rise to high levels of the Civil Service, Keynes soon grew tired of his quasi-sinecure and tried to return to Cambridge by way of a teaching post.

Finally, in the spring of 1908, Marshall wrote to Keynes, offering him a lectureship in economics. Although Marshall was on the point of retirement, he easily persuaded his friend, favorite student, and handpicked successor, Arthur C. Pigou, to follow Marshall's practice of paying for the lectureship out of his own salary; Neville Keynes promptly offered to match the stipend.

In 1908, Keynes happily took up the insular role of lecturing in Marshallian economics at his old school, King's College, Cambridge. But most of his time and energy were spent as a busy man of affairs in London (Corry 1978: 5). One of his functions was to be an informal but valued adviser to the India Office; indeed, his association with the office actually expanded after 1908 (Keynes 1971: 17). As a result, he played an important role in Indian monetary affairs, writing his first major journal article on India for the *Economic Journal* in 1909; writing influential memoranda out of which grew his first book, the brief monograph on *Indian Currency and Finance* in 1913; and playing an influential role on the Royal Commission on Indian Finance and Currency, to which distinguished post he was appointed before the age of thirty.

Keynes's role in Indian finance was not only important but also ultimately pernicious, presaging his later role in international finance. Upon converting India from a silver to a gold standard in 1892, the British government had stumbled into a gold-exchange standard, instead of the full gold-coin standard that had marked Britain and the other major Western nations. Gold was not minted as coin or otherwise available in India, and Indian gold reserves for rupees were kept as sterling balances in London rather than in gold per se. To most government officials, this arrangement was only a halfway measure toward an eventual full gold standard; but Keynes hailed the new gold-exchange standard as progressive, scientific, and moving toward an ideal currency. Echoing centuries-long inflationist views, he opined that gold coin "wastes" resources, which can be "economized" by paper and foreign exchange. The crucial point, however, is that a phony gold standard, as a gold-exchange standard must be, allows far more room for monetary management and inflation by central governments. It takes away the public's power over money and places that power in the hands of the government. Keynes praised the Indian standard as allowing a far greater "elasticity" (a code word for monetary inflation) of money in response to demand. Moreover, he specifically hailed the report of a U.S. government commission in 1903 advocating a gold-exchange standard in China and other Third World silver countries—a drive by progressive economists and politicians to bring such nations into a U.S. dominated and managed gold-dollar bloc (Keynes 1971: 60–85; see also Parrini and Sklar 1983; Rosenberg 1985).

Indeed, Keynes explicitly looked forward to the time when the gold standard would disappear altogether, to be replaced by a more "scientific" system based on a few key national paper currencies. "A preference for a tangible reserve currency," Keynes opined, is "a relic of a time when governments were less trustworthy in these matters than they are now" (1971: 51). Here was the foreshadowing of Keynes's famous dismissal of gold as a "barbarous relic."

More broadly, Keynes's early monetary views presaged the disastrous gold-exchange standard engineered by Britain during the 1920s, as well as the deeply flawed Bretton Woods scheme of a managed gold-dollar imposed by the United States—with the help of Britain and Lord Keynes—at the end of World War II.

The Cambridge economist, however, was not content to defend the gold-exchange status quo in India. Believing that the march toward managed inflation was not proceeding rapidly enough, he urged the creation of a central bank (or "State Bank") for India, thus enabling centralization of reserves, far greater monetary elasticity, and far more monetary expansion and inflation. Although he was unable to convince the Royal Commission to come out in support of a central bank, he was highly influential in its final report. The report included his central-bank view in an appendix, and Keynes also led the harsh cross-examination of pro–gold coin standard and anti–central bank witnesses. An interesting footnote to the affair was the reaction to Keynes's central-bank appendix by his old teacher, Alfred Marshall. Marshall wrote Keynes that he was "entranced by it as a prodigy of constructive work" (ibid.: 268).

Keynes generally liked to tackle economic theory in order to solve practical problems. His primary motivation for plunging into the Indian currency question was to defend the record of his first and most important political patron, Edwin Samuel Montagu, of the influential Montagu and Samuel families of London international banking. Montagu had been president of the Cambridge Union, the university debating society, when Keynes was an undergraduate, and Keynes had become a favorite of his. In the 1906 general elections, Keynes had campaigned for Montagu's successful bid for a Parliamentary seat as a Liberal. In late 1912, when Montagu was Undersecretary of State for India, a scandal developed in Indian finance. The Indian government, of which Montagu was second-in-command, had contracted secretly with the banking firm of Samuel Montagu and Company to purchase silver. It turned out that nepotism had figured strongly in this contract. Lord Swaythling, a senior partner in the firm, was the father of undersecretary Edwin S. Montagu; another partner, Sir Stuart Samuel, was the brother of Herbert Samuel, Postmaster-General of the Asquith government (see Skidelsky 1983: 273).

SELLING THE GENERAL THEORY

Keynes's *General Theory* was, at least in the short run, one of the most dazzlingly successful books of all time. In a few short years, his "revolutionary" theory had conquered the economics profession and soon had transformed public policy, while old-fashioned economics was swept, unhonored and unsung, into the dustbin of history. How was this deed accomplished? Keynes and his followers would answer, of course, that the profession simply accepted a starkly self-evident truth. And yet *The General Theory* was not truly revolutionary at all but merely old and oft-refuted mercantilist and inflationist fallacies dressed

up in shiny new garb, replete with newly constructed and largely incomprehensible jargon. How, then, the swift success?

Part of the reason, as Schumpeter has pointed out, is that governments as well as the intellectual climate of the 1930s were ripe for such conversion. Governments are always seeking new sources of revenue and new ways to spend money, often with no little desperation; yet economic science, for over a century, had sourly warned against inflation and deficit spending, even in times of recession. Economists—whom Keynes was to lump into one category and sneeringly disparage as "classical" in *The General Theory*—were the grouches at the picnic, throwing a damper of gloom over attempts by governments to increase their spending. Now along came Keynes, with his modern "scientific" economics, saying that the old "classical" economists had it all wrong: that, on the contrary, it was the government's moral and scientific duty to spend, spend, and spend; to incur deficit upon deficit, in order to save the economy from such vices as thrift and balanced budgets and unfettered capitalism; and to generate recovery from the depression. How welcome Keynesian economics was to the governments of the world!

In addition, intellectuals throughout the world were becoming convinced that laissez-faire capitalism could not work and that it was responsible for the Great Depression. Communism, fascism, and various forms of socialism and controlled economy became popular for that reason during the 1930s. Keynesianism was perfectly suited to this intellectual climate. But there were also strong internal reasons for the success of *The General Theory*. By dressing up his new theory in impenetrable jargon, Keynes created an atmosphere in which *only* brave young economists could possibly understand the new science; no economist over the age of thirty could grasp the New Economics. Older economists, who, understandably, had no patience for the new complexities, tended to dismiss *The General Theory* as nonsense and refused to tackle the formidably incomprehensible work. On the other hand, young economists and graduate students, socialistically inclined, seized on the new opportunities and bent themselves to the rewarding task of figuring out what *The General Theory* was all about. Paul Samuelson has written of the joy of being under thirty when *The General Theory* was published in 1936, exulting, with Wordsworth, "Bliss was it in that dawn to be alive, but to be young was very heaven." Yet this same Samuelson who enthusiastically accepted the new revelation also admitted that *The General Theory* "is a badly written book; poorly organized. . . . It abounds in mares' nests of confusions. . . . I think I am giving away no secrets when I solemnly aver—upon the basis of vivid personal recollection—that no one else in Cambridge, Massachusetts, really knew what it was all about for some twelve to eighteen months after publication" (Samuelson [1946] 1948: 145; Hodge 1986: 21–22).

It must be remembered that the now familiar Keynesian cross, IS-LM diagrams, and the system of equations were not available to those trying desperately to understand *The General Theory* when the book was published; indeed, it took

ten to fifteen years of countless hours of manpower to figure out the Keynesian system. Often, as in the case of both Ricardo and Keynes, the more obscure the content the more successful the book, as younger scholars flock to it, becoming acolytes. Also important to the success of *The General Theory* was the fact that, just as a major war creates a large number of generals, so did the Keynesian revolution and its rude thrusting aside of the older generation of economists create a greater number of openings for younger Keynesians in both the profession and the government.

Another crucial factor in the sudden and overwhelming success of *The General Theory* was its origin in the most insular university of the most dominant economic national center in the world. For a century and a half, Great Britain had arrogated to itself the role of dominance in economics, with Smith, Ricardo, and Mill all aggrandizing this tradition. We have seen how Marshall established his dominance at Cambridge and that the economics he developed was essentially a return to the classical Ricardo/Mill tradition. As a prominent Cambridge economist and student of Marshall, Keynes had an important advantage in furthering the success of the ideas in *The General Theory*. It is safe to say that if Keynes had been an obscure economics teacher at a small, midwestern American college, his work, in the unlikely event that it even found a publisher, would have been totally ignored. In those days before World War II, Britain, not the United States, was the most prestigious world center for economic thought. While Austrian economics had flourished in the United States before World War I (in the works of David Green, Frank A. Fetter, and Herbert J. Davenport), the 1920s to early 1930s was largely a barren period for economic theory. Antitheoretical institutionalists dominated American economics during this period, leaving a vacuum that was easy for Keynes to fill.

Also important to his success was Keynes's tremendous stature as an intellectual and politico-economic leader in Britain, including his prominent role as a participant in, and then severe critic of, the Versailles treaty. As a Bloomsbury member, he was also important in British cultural and artistic circles. Moreover, we must realize that in pre–World War II days only a small minority in each country went to college and that the number of universities was both small and geographically concentrated in Great Britain. As a result, there were very few British economists or economics teachers, and they all knew each other. This created considerable room for personality and charisma to help convert the profession to Keynesian doctrine.

The importance of such external factors as personal charisma, politics, and career opportunism was particularly strong among the disciples of F. A. Hayek at the London School of Economics. During the early 1930s, Hayek at the LSE and Keynes at Cambridge were the polar antipodes in British economics, with Hayek converting many of Britain's leading young economists to Austrian (that is, Misesian) monetary, capital, and business-cycle theory. Additionally, Hayek, in a series of articles, had brilliantly demolished Keynes's earlier work, his two-volume *Treatise on Money*, and many of the fallacies Hayek exposed applied

equally well to *The General Theory* (see Hayek 1931a, 1931b, 1932). For Hayek's students and followers, then, it must be said that they knew better. In the realm of theory, they had already been inoculated against *The General Theory*. And yet, by the end of the 1930s, every one of Hayek's followers had jumped on the Keynesian bandwagon, including Lionel Robbins, John R. Hicks, Abba P. Lerner, Nicholas Kaldor, G. L. S. Shackle, and Kenneth E. Boulding.

Perhaps the most astonishing conversion was that of Lionel Robbins. Not only had Robbins been a convert to Misesian methodology as well as to monetary and business-cycle theory, but he had also been a diehard pro-Austrian activist. A convert since his attendance at the Mises *privatseminar* in Vienna in the 1920s, Robbins, highly influential in the economics department at LSE, had succeeded in bringing Hayek to LSE in 1931 and in translating and publishing Hayek's and Mises's works. Despite being a longtime critic of Keynesian doctrine before *The General Theory*, Robbins's conversion to Keynesianism was apparently solidified when he served as Keynes's colleague in wartime economic planning. There is in Robbins's diary a decided note of ecstatic rapture that perhaps accounts for his astonishing abasement in repudiating his Misesian work, *The Great Depression* (1934). Robbins's repudiation was published in his 1971 *Autobiography*: "I shall always regard this aspect of my dispute with Keynes as the greatest mistake of my professional career, and the book, *The Great Depression*, which I subsequently wrote, partly in justification of this attitude, as something which I would willingly see forgotten." (Robbins 1971: 154). Robbins's diary entries on Keynes during World War II can only be considered an absurdly rapturous personal view. Here is Robbins at a June 1944 pre–Bretton Woods draft conference in Atlantic City:

> Keynes was in his most lucid and persuasive mood; and the effect was irresistible. . . . Keynes must be one of the most remarkable men that have ever lived—the quick logic, the wide vision, above all the incomparable sense of the fitness of words, all combine to make something several degrees beyond the limit of ordinary human achievement. (Ibid.: 193)

Only Churchill, Robbins goes on to say, is of comparable stature. But Keynes is greater, for he

> uses the classical style of our life and language, it is true, but it is shot through with something which is not traditional, a unique unearthly quality of which one can only say that it's pure genius. The Americans sat entranced as the godlike visitor sang and the golden light played all around. (Ibid.: 208–12; cf. Hession 1984: 342)

This sort of fawning can only mean that Keynes possessed some sort of strong personal magnetism to which Robbins was susceptible.[9]

Central to Keynes's strategy in putting *The General Theory* over were two claims: first, that he was revolutionizing economic theory, and second, that he was the first economist—aside from a few "underworld" characters, such as

Silvio Gesell—to concentrate on the problem of unemployment. All previous economists, whom he lumped together as "classical," he said, assumed full employment and insisted that money was but a "veil" for real processes and was therefore not a truly disturbing presence in the economy.

One of Keynes's most unfortunate effects was his misconceiving of the history of economic thought, since his devoted legion of followers accepted Keynes's faulty views in *The General Theory* as the last word on the subject. Some of Keynes's highly influential errors may be attributed to ignorance, since he was little trained in the subject and mostly read work by his fellow Cantabrigians. For example, in his grossly distorted summary of Say's law ("supply creates its own demand"), he sets up a straw man and proceeds to demolish it with ease (1936: 18). This erroneous and misleading restatement of Say's law was subsequently repeated (without quoting Say or any of the other champions of the law) by Joseph Schumpeter, Mark Blaug, Axel Leijonhufvud, Thomas Sowell, and others. A better formulation of the law is that the supply of one good *constitutes* demand for one or more other goods (see Hutt 1974: 3).

But ignorance cannot account for Keynes's claim that he was the first economist to try to explain unemployment or to transcend the assumption that money is a mere veil exerting no important influence on the business cycle or the economy. Here we must ascribe to Keynes a deliberate campaign of mendacity and deception—what would now be called euphemistically "disinformation." Keynes knew all too well of the existence of the Austrian and LSE schools, which had flourished in London as early as the 1920s and more obviously since 1931. He himself had personally debated Hayek, the chief Austrian at LSE, in the pages of *Economica*, the LSE journal. The Austrians in London attributed continuing large-scale unemployment to wage rates kept above the free-market wage by combining union and government action (e.g., in extraordinarily generous unemployment insurance payments). Recessions and business cycles were ascribed to bank credit and monetary expansion, as fueled by the central bank, which pushed interest rates below genuine time-preference levels and created overinvestment in higher-order capital goods. These then had to be liquidated by a recession, which in turn would emerge as soon as the credit expansion stopped. Even if he had not agreed with this analysis, it was unconscionable for Keynes to ignore the very existence of this school of thought then prominent in Great Britain, a school which could never be construed as ignoring the impact of monetary expansion on the real state of the economy.[10]

In order to conquer the world of economics with his new theory, it was critical for Keynes to destroy his rivals within Cambridge itself. In his mind, he who controlled Cambridge controlled the world. His most dangerous rival was Marshall's handpicked successor and Keynes's former teacher, Arthur C. Pigou. Keynes began his systematic campaign of destruction against Pigou when Pigou rejected his previous approach in the *Treatise on Money*, at which point Keynes also broke with his former student and close friend, Dennis H. Robertson, for refusing to join the lineup against Pigou. The most glaring misstatement in *The*

General Theory, and one which his disciples accepted without question, is the outrageous presentation of Pigou's views on money and unemployment in Keynes's identification of Pigou as the major contemporary "classical" economist who allegedly believed that there is always full employment and that money is merely a veil causing no disruptions in the economy—this about a man who wrote *Industrial Fluctuations* in 1927 and *Theory of Unemployment* in 1933, which discuss at length the problem of unemployment! Moreover, in the latter book, Pigou explicitly repudiates the money-veil theory and stresses the crucial centrality of money in economic activity. Thus, Keynes lambasted Pigou for allegedly holding the "conviction . . . that money makes no real difference except frictionally and that the theory of unemployment can be worked out . . . as being based on 'real' exchanges." An entire appendix to chapter 19 of *The General Theory* is devoted to an assault on Pigou, including the claim that he wrote only in terms of real exchanges and real wages, not money wages, and that he assumed only flexible wage rates (Keynes 1936: 19–20, 272–79).

But, as Andrew Rutten notes, Pigou conducted a "real" analysis only in the first part of his book; in the second part, he not only brought money in, but pointed out that any abstraction from money distorts the analysis and that money is crucial to any analysis of the exchange system. Money, he says, cannot be abstracted away and cannot act in a neutral manner, so "the task of the present part must be to determine in what way the monetary factor causes the average amount of, and the fluctuation in, employment to be different from what they otherwise would have been." Therefore, added Pigou, "it is illegitimate to abstract money away [and] leave everything else the same. The abstraction proposed is of the same type that would be involved in thinking away oxygen from the earth and supposing that human life continues to exist" (Pigou 1933: 185, 212).[11] Pigou extensively analyzed the interaction of monetary expansion and interest rates along with changes in expectations, and he explicitly discussed the problem of money wages and "sticky" prices and wages.

Thus, it is clear that Keynes seriously misrepresented Pigou's position and that this misrepresentation was deliberate, since, if Keynes read any economists carefully, he certainly read such prominent Cantabrigians as Pigou. Yet, as Rutten writes, "These conclusions should not come as a surprise, since there is plenty of evidence that Keynes and his followers misrepresented their predecessors" (Rutten 1989: 14). The fact that Keynes engaged in this systematic deception and that his followers continue to repeat the fairy tale about Pigou's blind "classicism" shows that there is a deeper reason for the popularity of this legend in Keynesian circles. As Rutten writes:

> There is one plausible explanation for the repetition of the story of Keynes and the classics. . . . This is that the standard account is popular because if offers simultaneously an explanation of, and a justification for, Keynes's success: without the General Theory, we would still be in the economic dark ages. In other words, the story of Keynes and the Classics is evidence for the General Theory. Indeed, its use suggests that it may be

the most compelling evidence available. In this case, proof that Pigou did not hold the position attributed to him is . . . evidence against Keynes. . . . [This conclusion] raises the . . . serious question of the methodological status of a theory that relies so heavily on falsified evidence. Ibid.: 15)

In his review of *The General Theory*, Pigou was properly scornful of Keynes's "macédoine of misrepresentations," and yet such was the power of the tide of opinion (or of the charisma of Keynes) that, by 1950, after Keynes's death, Pigou had engaged in the sort of abject recantation indulged in by Lionel Robbins that Keynes had long tried to wrest from him (Pigou 1950; Johnson and Johnson 1978: 179; Corry 1978: 11–12).

But Keynes used tactics in the selling of *The General Theory* other than reliance on his charisma and on systematic deception. He curried favor with his students by praising them extravagantly, and he set them deliberately against non-Keynesians on the Cambridge faculty by ridiculing his colleagues in front of these students and by encouraging them to harass his faculty colleagues. For example, Keynes incited his students with particular viciousness against Dennis Robertson, his former close friend. As Keynes knew all too well, Robertson was painfully and extraordinarily shy, even to the point of communicating with his faithful, longtime secretary, whose office was next to his own, only by written memoranda. Robertson's lectures were completely written out in advance, and because of his shyness he refused to answer any questions or engage in any discussion with either his students or his colleagues. And so it was a particularly diabolic torture for Keynes's radical disciples, led by Joan Robinson and Richard Kahn, to have baited and taunted Robertson, harassing him with spiteful questions and challenging him to debate (Johnson and Johnson 1978: 136ff.).

KEYNES'S POLITICAL ECONOMY

In *The General Theory*, Keynes set forth a unique politico-economic sociology, dividing the population of each country into several rigidly separated economic classes, each with its own behavioral laws and characteristics, each carrying its own implicit moral evaluation. First, there is the mass of consumers: dumb, robotic, their behavior fixed and totally determined by external forces. In Keynes's assertion, the main force is a rigid proportion of their total income, namely, their determined "consumption function." Second, there is a subset of consumers, an eternal problem for mankind: the insufferably bourgeois savers, those who practice the solid puritan virtues of thrift and farsightedness, those whom Keynes, the would-be aristocrat, despised all of his life. All previous economists, certainly including Keynes's forbears Smith, Ricardo, and Marshall, had lauded thrifty savers as building up long-term capital and therefore as responsible for enormous long-term improvements in consumers' standard of living. But Keynes, in a feat of prestidigitation, severed the evident link between savings and investment, claiming instead that the two are unrelated. In fact, he

wrote, savings are a drag on the system; they "leak out" of the spending stream, thereby causing recession and unemployment. Hence Keynes, like Mandeville in the early eighteenth century, was able to condemn thrift and savings; he had finally gotten his revenge on the bourgeoisie.

By also severing interest returns from the price of time or from the real economy and by making it only a monetary phenomenon, Keynes was able to advocate, as a linchpin of his basic political program, the "euthanasia of the rentier" class: that is, the state's expanding the quantity of money enough so as to drive down the rate of interest to zero, thereby at last wiping out the hated creditors. It should be noted that Keynes did not want to wipe out investment; on the contrary, he maintained that savings and investment were separate phenomena. Thus, he could advocate driving down the rate of the interest to zero as a means of maximizing investment while minimizing (if not eradicating) savings.

Since he claimed that interest was purely a monetary phenomenon, Keynes could then also sever the existence of an interest rate from the scarcity of capital. Indeed, he believed that capital is not *really* scarce at all. Thus, Keynes stated that his preferred society "would mean the euthanasia of the rentier, and consequently, the euthanasia of the cumulative oppressive power of the capitalist to exploit the scarcity-value of capital." But capital is not *really* scarce: "Interest today rewards no genuine sacrifice, any more than does the rent of land. The owner of capital can obtain interest because capital is scarce, just as the owner of land can obtain rent because land is scarce. But whilst there may be intrinsic reasons for the scarcity of land, there are no intrinsic reasons for the scarcity of capital." Therefore, "we might aim in practice . . . at an increase in the volume of capital until it ceases to be scarce, so that the functionless investor [the rentier] will no longer receive a bonus." Keynes made it clear that he looked forward to a gradual annihilation of the "functionless" rentier, rather than to any sort of sudden upheaval (Keynes 1936: 375–76; see also Hazlitt [1959] 1973: 379–84).[12]

Keynes then came to the third economic class, to whom he was somewhat better disposed: the investors. In contrast to the passive and robotic consumers, investors are *not* determined by an external mathematical function. On the contrary, they are brimful of free will and active dynamism. They are also not an evil drag on the economic machinery, as are the savers. They are important contributors to everyone's welfare. But, alas, there is a hitch. Even though dynamic and full of free will, investors are erratic creatures of their own moods and whims. They are, in short, productive but irrational. They are driven by psychological moods and "animal spirits." When investors are feeling their oats and their animal spirits are high, they invest heavily, but too much; overly optimistic, they spend too much and bring about inflation. But Keynes, especially in *The General Theory*, was not really interested in inflation; he was concerned about unemployment and recession, caused, in his starkly superficial view, by pessimistic moods, loss of animal spirits, and hence underinvestment.

The capitalist system is, accordingly, in a state of inherent macro-instability. Perhaps the market economy does well enough on the micro-, supply-and-demand level. But in the macro-world, it is afloat with no rudder; there is no internal mechanism to keep its aggregate spending from being either too low or too high, hence causing recession and unemployment or inflation.

Interestingly enough, Keynes came to this interpretation of the business cycle as a good Marshallian. Ricardo and his followers of the Currency school correctly believed that business cycles are generated by expansions and contractions of bank credit and the money supply, as generated by a central bank, whereas their opponents in the Banking school believed that expansions of bank money and credit were merely passive effects of booms and busts and that the real cause of business cycles was fluctuation in business speculation and expectations of profit—an explanation very close to Pigou's later theory of psychological mood swings and to Keynes's focus on animal spirits. John Stuart Mill had been a faithful Ricardian except in this one crucial area. Following his father, Mill had adopted the Banking school's causal theory of business cycles, which was then adopted by Marshall (Trescott 1987; Perlman 1989: 88–89).

To develop a way out, Keynes presented a fourth class of society. Unlike the robotic and ignorant consumers, this group is described as full of free will, activism, and knowledge of economic affairs. And unlike the hapless investors, they are not irrational folk, subject to mood swings and animal spirits; on the contrary, they are supremely rational as well as knowledgeable, able to plan best for society in the present as well as in the future. This class, this deus ex machina external to the market, is of course the state apparatus, as headed by its natural ruling elite and guided by the modern, scientific version of Platonic philosopher-kings. In short, government leaders, guided firmly and wisely by Keynesian economists and social scientists (naturally headed by the great man himself), would save the day. In the politics and sociology of *The General Theory*, all the threads of Keynes's life and thought are neatly tied up.

And so the state, led by its Keynesian mentors, is to run the economy, to control the consumers by adjusting taxes and lowering the rate of interest toward zero, and, in particular, to engage in "a somewhat comprehensive socialisation of investment." Keynes contended that this would not mean total state Socialism, pointing out that

> it is not the ownership of the instruments of production which it is important for the State to assume. If the State is able to determine the aggregate amount of resources devoted to augmenting the instruments and the basic rate of reward to those who own them, it will have accomplished all that is necessary. (Keynes 1936: 378)

Yes, let the state control investment completely, its amount and rate of return in addition to the rate of interest; then Keynes would allow private individuals to retain formal ownership so that, within the overall matrix of state control and

dominion, they could still retain "a wide field for the exercise of private initiative and responsibility." As Hazlitt puts it:

> Investment is a key decision in the operation of any economic system. And government investment is a form of socialism. Only confusion of thought, or deliberate duplicity, would deny this. For socialism, as any dictionary would tell the Keynesians, means the ownership and control of the means of production by government. Under the system proposed by Keynes, the government would *control* all investment in the means of production and would *own* the part it had itself directly invested. It is at best mere muddleheadedness, therefore, to present the Keynesian nostrums as a free enterprise or "individualistic" *alternative* to socialism. (Hazlitt [1959] 1973: 388; cf. Brunner 1987: 30, 38)

There was a system that had become prominent and fashionable in Europe during the 1920s and 1930s that was precisely marked by this desired Keynesian feature: private *ownership*, subject to comprehensive government *control* and planning. This was, of course, fascism. Where did Keynes stand on overt fascism? From the scattered information now available, it should come as no surprise that Keynes was an enthusiastic advocate of the "enterprising spirit" of Sir Oswald Mosley, the founder and leader of British fascism, in calling for a comprehensive "national economic plan" in late 1930. By 1933, Virginia Woolf was writing to a close friend that she feared Keynes was in the process of converting her to "a form of fascism." In the same year, in calling for national self-sufficiency through state control, Keynes opined that "Mussolini, perhaps, is acquiring wisdom teeth" (Keynes 1930b, 1933: 766; Johnson and Johnson 1978: 22; on the relationship between Keynes and Mosley, see Skidelsky 1975: 241, 305–6; Mosley 1968: 178, 207, 237–38, 253; Cross 1963: 35–36).

But the most convincing evidence of Keynes's strong fascist bent was the special foreword he prepared for the German edition of *The General Theory*. This German translation, published in late 1936, included a special introduction for the benefit of Keynes's German readers and for the Nazi regime under which it was published. Not surprisingly, Harrod's idolatrous *Life* of Keynes makes no mention of this introduction, although it was included two decades later in volume seven of the *Collected Writings* along with forewords to the Japanese and French editions. The German introduction, which has scarcely received the benefit of extensive commentary by Keynesian exegetes, includes the following statements by Keynes: "Nevertheless the theory of output as a whole, which is what the following book purports to provide, is much more easily adapted to the conditions of a totalitarian state, than is the theory of production and distribution of a given output produced under conditions of free competition and a large measure of laissez-faire." (Keynes 1973 [1936]: xxvi; cf. Martin 1971: 200–5; Hazlitt [1959] 1973: 277; Brunner 1987: 38ff.; Hayek 1967: 346)

As for communism, Keynes was less enthusiastic. On the one hand, he admired the young, intellectual, English Communists of the late 1930s because they reminded him, oddly enough, of the "typical nonconformist English gentlemen who . . . made the Reformation, fought the Great Rebellion, won us our civil and religious liberties, and humanized the working classes last century." On the other hand, he criticized the young Cambridge Communists for the other side of the Reformation/Great Rebellion coin: they were puritans. Keynes's lifelong anti-puritanism emerged in the question, Are Cambridge undergraduates disillusioned when they go to Russia, when they "find it dreadfully uncomfortable? Of course not. That is what they are looking for" (Hession 1984: 265).

Keynes firmly rejected communism after his own visit to Russia in 1925. He did not like the mass terror and extermination, caused partly by the speed of the revolutionary transformation and partly too, Keynes opined, by "some beastliness in the Russian nature—or in the Russian and Jewish natures when, as now, they are allied together." He also had strong doubts that "Russian communism" would be able to "make Jews less avaricious" (Keynes 1925: 37, 15). (Indeed, Keynes had long been anti-Semitic.[13]) At Eton, Maynard wrote an essay titled "The Differences Between East and West," in which he condemned the Jews as an Eastern people who, because of "deep-rooted instincts that are antagonistic and therefore repulsive to the European," can no more be assimilated to European civilization than cats can be forced to love dogs (Skidelsky, 1986: 92). Later, as a British official at the Paris peace conference, Keynes wrote of his great admiration of Lloyd George's brutal anti-Semitic attack on the French Finance Minister, Louis-Lucien Klotz, who had tried to squeeze the defeated Germans for more gold in exchange for relieving the Allied food blockade. First, there was Keynes's description of Klotz: "A short, plump, heavy-moustached Jew, well groomed, well kept, but with an unsteady, roving eye, and his shoulders a little bent with instinctive deprecation." Keynes then described the dramatic moment:

> Lloyd George had always hated him and despised him; and now saw in a twinkling that he could kill him. Women and children were starving, he cried, and here was M. Klotz prating and prating of his "goold." He leant forward and with a gesture of his hands indicated to everyone the image of a hideous Jew clutching a money bag. His eyes flashed and the words came out with a contempt so violent that he seemed almost to be spitting at him. The anti-Semitism, not far below the surface in such an assemblage as that one, was up in the heart of everyone. Everyone looked at Klotz with a momentary contempt and hatred; the poor man was bent over his seat, visibly cowering. We hardly knew what Lloyd George was saying, but the words "goold" and Klotz were repeated, and each time with exaggerated contempt.

At that point, Lloyd George came to the climax of his performance: turning to the French premier, Clemenceau, he warned that unless the French ceased their obstructive tactics against feeding the defeated Germans, three names would go down in history as the architects of Bolshevism in Europe: Lenin and Trotsky

and . . . Keynes wrote: "The Prime Minister ceased. All around the room you could see each one grinning and whispering to his neighbour 'Klotsky.' " (Keynes 1949: 229; Skidelsky 1986: 360, 362) The point is that Keynes, who had never particularly liked Lloyd George before, was won over by his display of George's savage anti-Semitic pyrotechnics. "He can be amazing when one agrees with him," declared Keynes. "Never have I more admired his extraordinary powers" (1949:225).[14]

But the major reason for Keynes's rejection of communism was simply that he could scarcely identify with the grubby proletariat. As Keynes wrote after his trip to Soviet Russia: "How can I adopt such a creed which, preferring the mud to the fish, exalts the boorish proletariat above the bourgeoisie and the intelligentsia who . . . are the quality in life and surely carry the seeds of all human advancement?" (Hession 1984: 224). Rejecting the proletarian socialism of the British Labour Party, Keynes made a stark and similar point: "It is a class war and the class is not my class. . . . The class war would find me on the side of the educated bourgeoisie" (Brunner 1987: 28). John Maynard Keynes was a lifelong member of the British aristocracy, and he was not about to forget it.

SUMMING UP

Was Keynes, as Hayek maintained, a "brilliant scholar"? "Scholar" hardly, since Keynes was abysmally read in the economics literature; he was more of a buccaneer, taking a little bit of knowledge and using it to inflict his personality and fallacious ideas upon the world, with a drive continually fueled by an arrogance bordering on egomania. But Keynes had the good fortune to be born within the British elite, to be educated within the top economics circles (Eton/Cambridge/Apostles), and to be specially chosen by the powerful Alfred Marshall. "Brilliant" is scarcely an apt word either. Clearly, Keynes was bright enough, but his most significant qualities were his arrogance, his unlimited self-confidence, and his avid will to power, to domination, to cutting a great swath through the arts, the social sciences, and the world of politics. Furthermore, Keynes was scarcely a "revolutionary" in any real sense. He possessed the tactical wit to dress up ancient statist and inflationist fallacies with modern, pseudo-scientific jargon, making them appear to be the latest findings of economic science. Keynes was thereby able to ride the tidal wave of statism and socialism, of managed and planning economies. Keynes eliminated economic theory's ancient role as spoilsport for inflationist and statist schemes, leading a new generation of economists on to academic power and to political pelf and privilege.

A more fitting term for Keynes would be "charismatic"—not in the sense of commanding the allegiance of millions but in being able to con and seduce important people—from patrons to politicians to students and even to opposing economists. A man who thought and acted in terms of power and brutal domination, who reviled the concept of moral principle, who was an eternal and

sworn enemy of the bourgeoisie, of creditors, and of the thrifty middle class, who was a systematic liar, twisting truth to fit his own plan, who was a Fascist and an anti-Semite, Keynes was nevertheless able to cajole opponents and competitors. Even as he cunningly turned his students against his colleagues, he was still able to cozen those same colleagues into intellectual surrender. Harassing and hammering away unfairly at Pigou, Keynes was yet able, at last and from beyond the grave, to wring an abject recantation from his old colleague. Similarly, he inspired his old foe Lionel Robbins to muse absurdly in his diary about the golden halo around Keynes's "godlike" head. He was able to convert to Keynesianism several Hayekians and Misesians who should have known—and undoubtedly did know—better: in addition to Abba Lerner, John Hicks, Kenneth Boulding, Nicholas Kaldor, and G. L. S. Shackle in England, there were also Fritz Machlup and Gottfried Haberler from Vienna, who landed at Johns Hopkins and Harvard, respectively.

Of all the Misesians of the early 1930s, the only economist completely uninfected by the Keynesian doctrine and personality was Mises himself. And Mises, in Geneva and then for years in New York without a teaching position, was removed from the influential academic scene. Even though Hayek remained anti-Keynesian, he too was touched by the Keynesian charisma. Despite everything, Hayek was proud to call Keynes a friend and indeed promoted the legend that Keynes, at the end of his life, was about to convert from his own Keynesianism.

Hayek's evidence for Keynes's alleged last-minute conversion is remarkably slight—based on two events in the final years of Keynes's life. First, in June 1944, upon reading *The Road to Serfdom*, Keynes, now at the pinnacle of his career as a wartime government planner, wrote a note to Hayek, calling it "a great book . . . morally and philosophically I find myself in agreement with virtually the whole of it." But why should this be interpreted as anything more than a polite note to a casual friend on the occasion of his first popular book? Moreover, Keynes made it clear that, despite his amiable words, he never accepted the essential "slippery slope" thesis of Hayek, namely, that statism and central planning lead straight to totalitarianism. On the contrary, Keynes wrote that "moderate planning will be safe if those carrying it out are rightly oriented in their minds and hearts to the moral issue." This sentence, of course, rings true, for Keynes always believed that the installation of good men, namely, himself and the technicians and statesmen of his social class, was the only safeguard needed to check the powers of the rulers (Wilson 1982: 64ff.).

Hayek proffers one other bit of flimsy evidence for Keynes's alleged recantation, which occurred during his final meeting with Keynes in 1946, the last year of Keynes's life. Hayek reports:

> A turn in the conversation made me ask him whether or not he was concerned about what some of his disciples were making of his theories. After a not very complimentary remark about the persons concerned he proceeded to reassure me: those ideas had been

badly needed at the time he had launched them. But I need not be alarmed: if they should ever become dangerous I could rely upon him that he would again quickly swing round public opinion—indicating by a quick movement of his hand how rapidly that would be done. But three months later he was dead. (Hayek 1967b: 348)

Yet this was hardly a Keynes on the verge of recantation. Rather, this was vintage Keynes, a man who always held his sovereign ego higher than any principles, higher than any mere ideas, a man who relished the power he held. He could and would turn the world, set it right with a snap of his fingers, as he presumed to have done in the past. Moreover, this statement was also vintage Keynes in terms of his long-held view of how to act properly when in or out of power. In the 1930s, prominent but out of power, he could speak and act "a little wild"; but now that he enjoyed the high seat of power, it was time to tone down the "poetic license." Joan Robinson and the other Marxo-Keynesians were making the mistake, from Keynes's point of view, of not subordinating their cherished ideas to the requirements of his prodigious position of power.

And so Hayek too, while never succumbing to Keynes's ideas, did fall under his charismatic spell. In addition to creating the legend of Keynes's change of heart, why did Hayek not demolish *The General Theory* as he had Keynes's *Treatise on Money*? Hayek admitted to a strategic error, that he had not bothered to do so because Keynes was notorious for changing his mind, so Hayek did not think then that *The General Theory* would last. Moreover, as Mark Skousen has noted in chapter 1 of this volume, Hayek apparently pulled his punches in the 1940s in order to avoid interfering with Britain's Keynesian financing of the war effort—certainly an unfortunate example of truth suffering at the hands of presumed political expediency.

Later economists continued to hew a revisionist line, maintaining absurdly that Keynes was merely a benign pioneer of uncertainty theory (Shackle and Lachmann), or that he was a prophet of the idea that search costs were highly important in the labor market (Clower and Leijonhufvud). None of this is true. That Keynes was a Keynesian—of that much derided Keynesian system provided by Hicks, Hansen, Samuelson, and Modigliani—is the only explanation that makes any sense of Keynesian economics. Yet Keynes was much more than a Keynesian. Above all, he was the extraordinarily pernicious and malignant figure that we have examined in this chapter: a charming but power-driven statist Machiavelli, who embodied some of the most malevolent trends and institutions of the twentieth century.

NOTES

1. Asking himself why the eminent constitutional historian Frederic W. Maitland had no influence over the Apostles in this era, even though a member, Derek Crabtree answers that Maitland was unfortunate enough to hold his chair at Downing College, one of the lesser, uninfluential colleges at Cambridge (see Crabtree 1980: 18–19).

2. Bertrand Russell, who was a decade older than Keynes, did not like the Keynes/

Strachey group that dominated undergraduate members during the first decade of the twentieth century, largely because of their conviction that homosexuality was morally superior to heterosexuality.

3. When the philosopher John E. McTaggart, a lecturer at Trinity who had been an Apostle since the 1880s, got married late in life, he assured the Apostles that his wife was merely "phenomenal" (Skidelsky 1983: 118).

4. In view of his friendship with Keynes, Hayek's account of this episode characteristically misses Keynes's arrogance and gall, treating the story as if it were merely unfortunate that Keynes did not know German better: "The world might have been saved much suffering if Lord Keynes's German had been a little better" (Hayek [1956] 1984: 219; see also Rothbard 1988: 28).

5. There is no space here to elaborate my conviction that this was a false and even pernicious myth, that what Marshall really did was not to synthesize but to reestablish the dominance of Ricardo and Mill and their long-run equilibrium and cost-of-production theories, overlaying them with a thin veneer of trivialized marginal-utility analysis.

6. Thus, as late as World War II and shortly thereafter, my honors seminar at Columbia College consisted of a chapter-by-chapter reading and analysis of Marshall's *Principles*. And when I was preparing for my doctoral oral examination in the history of thought, the venerable John Maurice Clark told me that there was no real need for me to read Jevons because "all his contributions are in Marshall."

7. As Skidelsky points out, it is typical of Roy Harrod's whitewashing biography that, in quoting this letter, he leaves out his hero's remark about "swindling the investing public" (Skidelsky 1983: 165n).

8. In a letter to his mother on September 3, 1919, Keynes wrote of his speculation in foreign exchange, "which will shock father but out of which I hope to do very well" (Harrod 1951: 288). For a penetrating critique of Keynes's views on speculation as gambling, see Hazlitt ([1959] 1973: 179–85).

9. Harry Johnson put the strategy perceptively: "In this process, it helps greatly to give old concepts new and confusing names . . . [T]he new theory had to have the appropriate degree of difficulty to understand. This is a complex problem in the design of new theories. The new theory had to be so difficult to understand that senior academic colleagues would find it neither easy nor worthwhile to study, so that they would waste their efforts on peripheral theoretical issues, and so offer themselves as easy market for criticism and dismissal by their younger and hungrier colleagues. At the same time, the new theory had to appear both difficult enough to challenge the intellectual interest of younger colleagues and students, but actually easy enough for them to master adequately with a sufficient investment of intellectual endeavour. These objectives Keynes's *General Theory* managed to achieve: it neatly shelves the old and established scholars, like Pigou and Robertson, enabled the most enterprising middle-and lower-middle-aged like Hansen, Hicks, and Joan Robinson to jump on and drive the bandwagon, and permitted a whole generation of students . . . to escape from the slow and soul-destroying process of acquiring wisdom by osmosis from their elders and the literature into an intellectual realm in which youthful iconoclasm could quickly earn its just reward (in its own eyes at least) by the demolition of the intellectual pretensions of its academic seniors and predecessors. Economics, delightfully, could be reconstructed from scratch on the basis of a little Keynesian understanding and a lofty contempt for the existing literature—and so it was" (1978: 188–89).

10. Robbins's biographer, D. P. O'Brien, labors hard to maintain that, despite what

he admits is Robbins's "elaborate" and "exaggerated contrition," Robbins never really, deep down, converted to Keynesianism. But O'Brien is unconvincing, even after he tries to show how Robbins waffled on some issues. Moreover, O'Brien admits that Robbins dropped his Misesian macro approach, and he fails to mention Robbins's astonishing treatment of Keynes as "godlike" (O'Brien 1988: 14–16, 117–20).

11. Keynes's only reference to Mises in *The General Theory* does not concern his business-cycle theory or monetary analysis, which were most relevant to the book, but expresses Keynes's surprise at Mises's "peculiar" theory of interest, which "confused" the "marginal efficiency of capital" (essentially Keynes's term for the rate of return on investment) with the ratio of consumers' to capital goods' prices and with the rate of interest. If Keynes had known anything about capital theory, he would have recognized Mises's position as a Böhm-Bawerkian one, similar to much nineteenth-century capital theory, which concentrated on the long-run rate of profit as *the* rate of interest. One of Keynes's greatest fallacies was his belief that interest was a purely monetary phenomenon, making only the loan rate of interest important (Keynes 1936: 192–93; cf. Rothbard [1962] 1970: I, 454–55).

12. See also the illuminating article by Andrew Rutten (1989). I am indebted to Dr. Rutten for calling this article to my attention.

13. Earlier, Keynes had called for a "transformation of society," which "may require a reduction in the rate of interest toward the vanishing point within the next thirty years" (Keynes 1933: 762).

14. Keynes could rise above his generally anti-Semitic attitude, especially when a wealthy international banker, capable of conferring favors, was involved. Thus, we have seen that Edwin Samuel Montagu was Keynes's earliest and most important political patron; and Keynes also became fond of Germany's representative at the Paris peace conference, Dr. Carl Melchoir: "In a sort of way I was in love with him" (Keynes 1949: 222). The fact that Melchior was a partner in the prominent international banking firm of M. M. Warburg and Company might have had something to do with Keynes's benign attitude.

15. Harry Johnson recorded a similar impression, at Keynes's presentation of his posthumously published paper on the balance of payments, in which Johnson concludes that Keynes's reference to "how much modernist stuff, gone wrong and turned sour and silly, is circulating in our system," refers to the left-Keynesian, or Marxo-Keynesian, Joan Robinson (Johnson 1978: 159n).

Chapter 12

The Misesian Case against Keynes

by Hans-Hermann Hoppe

It is my goal to reconstruct some basic truths regarding the process of economic development and the role played in it by employment, money, and interest. These truths neither originated with the Austrian school of economics nor are an integral part of only this tradition of economic thinking. In fact, most of them were part and parcel of what is now called classical economics, and it was the recognition of their validity that uniquely distinguished the economist from the crank. Yet the Austrian school, in particular Ludwig von Mises and later Murray N. Rothbard, has given the clearest and most complete presentation of these truths (Mises [1949] 1966; Rothbard [1962] 1970). Moreover, that school has presented them their most rigorous defense by showing them to be ultimately deducible from basic, incontestable propositions (such as that man acts and knows what it means to act) so as to establish them as truths whose denial would not only be factually incorrect but, much more decisively, would amount to logical contradictions and absurdities.[1]

I will first systematically reconstruct this Austrian theory of economic development. Then I will turn to the "new" theory of J. M. Keynes, which belongs, as he himself proudly acknowledged, to the tradition of "underworld" economics (like mercantilism) and of economic cranks like S. Gesell (Keynes 1936). I will show that Keynes's new economics, like that "underworld" tradition, is nothing but a tissue of logical falsehoods reached by means of obscure jargon, shifting definitions, and logical inconsistencies intended to establish a statist, anti–free market economic system.

I.1 Employment

"Unemployment in the unhampered market is always voluntary" (Mises [1949] 1966: 599). Man works because he prefers the anticipated result of doing so to the disutility of labor and the psychic income to be derived from leisure. He "stops working at that point, at which he begins to value leisure, the absence of labor's disutility, more highly than the increment in satisfaction expected from working more" (ibid.: 611). Obviously, then, Robinson Crusoe, the self-sufficient producer, can only be unemployed voluntarily, that is, because he prefers to remain idle and consume present goods instead of expending additional labor in the production of future ones.

The result is similar when Friday appears and a private-property economy is established, based on mutual recognition of each person's right of exclusive ownership over those resources which he had recognized as scarce and had appropriated (homesteaded) by mixing his labor with them before anyone else had done so as well as ownership of all goods produced with their help. In this situation, not only exchange ratios—prices—for the purchase or rental of material goods become possible, but also prices (wages) for the rental of labor services. Employment will ensue whenever the offered wage is valued by the laborer more highly than the satisfactions of leisure or than the returns of self-employment. In the latter case, the laborer faces three choices. He may (1) work self-sufficiently on his own resources, or homestead previously submarginal resources, and consume his own products; (2) become a capitalist entrepreneur, engaging in barter with other self-employed entrepreneurs; or (3) become a capitalist entrepreneur in the market, selling a product for money.

Employment will increase and wages rise so long as entrepreneurs perceive existing wages as lower than the marginal value product (discounted by time preference[2]) which a corresponding increment in the employment of labor can be expected to bring about. On the other hand, unemployment will result and increase so long as a person values the marginal value product attained through self-employment or the satisfactions of leisure more highly than a wage that reflects his labor services' marginal productivity.

In this construction there is no logical room for such a thing as "involuntary unemployment." A person is not employed, that is, not working as a hired laborer, either because he prefers leisure or because he is self-employed. In either case the person is unemployed voluntarily. But may it not be true that, on the free and unhampered market, someone is "unemployed" in the modern sense, that is, he is seeking work and cannot find a job? But such a construct raises many problems. Thus, I may be seeking a position as president of Harvard University, and this employer, for some obscure reason, may refuse to hire me for that post. We could say that I am "involuntarily unemployed," but this would distort any sensible meaning of the term. In any wage agreement, as in any exchange on the free market, *both parties* must participate willingly in the

exchange, that is, both must participate voluntarily. If half of the labor force should take it into their heads that each of them should be hired as president of Harvard, and each insists on this employment and no other, then indeed half of the labor force minus one person will be permanently and "involuntarily" unemployed. But is this, as Keynes would have it, a failure of the free market, or is it a failure of the mental processes and values of those laborers? And since this problem is clearly a failure internal to the workers themselves, we must conclude that such unemployment is "voluntary" in the realistic sense that it is the consequence of the internal mental processes and choices of those workers, even though each would "voluntarily" prefer to be president of Harvard rather than to be without work.

Similarly, and coming closer to the reality of unemployment during depressions, laborers might insist on not allowing themselves to be hired at a wage below a certain rate, that is, imposing on themselves a minimum wage below which they will not be hired. Usually, this happens during business-cycle recessions, when, as Austrian business-cycle theory tells us, there is a sudden drop in employers' demand for labor, particularly in the capital-goods industries. That decline is a reflection of the sudden revelation, at the onset of a depression, that businessmen have been led by inflationary credit expansion, and the consequent drop in interest rates below the free-market level, to make unsound malinvestments. Such investments bid up wage rates and other costs too high, compared to the genuine market willingness to buy those capital goods at a profitable price. The end of, or significant slowdown in, bank credit expansion reveals these malinvestments and causes sudden business losses, leading to sharp declines in the business firms' demand for labor, land, and raw materials. Generally, the prices of land and materials are free to fall on the market, but often laborers will not accept a sudden fall in wage rates, and the result will be the same with every minimum price higher than the free-market-clearing price: an idle, unsold surplus at that overly high price. The labor market works like any market in goods and services: an artificial minimum above the market-clearing wage causes an unsold surplus—in this case, unemployment of labor. The faster that laborers allow their wage rates to fall, the sooner will unemployment disappear.

Again, we may suppose that I go to my university employer and insist that I will not be employed unless they raise my salary to $1 million a year. They wish me Godspeed with a "have a nice rest of your life." Am I then "involuntarily" unemployed? Yes, in the sense that I would like to be employed at my present post for $1 million and my employer refuses to make such a contract. But no, in the sense that I am stubbornly insisting on not continuing employment at less than $1 million per year and on "voluntarily" preferring idleness to a salary below that amount. Again, although I may not enjoy idleness and would prefer my present post at $1 million per year, I am "voluntarily" unemployed in the surely coherent sense that my unemployment is the result of my own internal mental processes.

It should be clear that the case of workers' failing to adapt quickly to a falling demand for labor is only different in degree, rather than in kind, from my own outlandish hypothetical case. Nor is such worker refusal or self-imposed minimum wage always and necessarily wrong headed. In many cases, he may be "speculatively unemployed," that is, either waiting to move to another job or region or waiting for an interval because he expects that, before too long, the demand for labor at his former post or its close equivalent will rise and he will be able to return to work at a higher pay. And those expectations are not necessarily foolish; they may in some cases be correct. But again, he would clearly be "voluntarily" unemployed, even if his expectations turn out to be in error.[3] As Mises writes:

> Unemployment is a phenomenon of a changing economy. The fact that a worker discharged on account of changes occurring in the arrangement of production processes does not instantly take advantage of every opportunity to get another job but waits for a more propitious opportunity . . . is not an automatic reaction to the changes which have occurred, independent of the will and the choices of the job-seekers concerned, but the effect of their intentional actions. It is speculative, not frictional. (Mises [1949] 1966: 600)

Of course, this does not mean that all unemployment is "voluntary," but only that in a free and unhampered market. When the market is subject to the coercion of external intervention, specifically when an external coercive institution, whether a union or a government, imposes wage rates above the market-clearing level, then there will be "involuntary" unemployment, and that unemployment will last so long as the wage rate is held above the marginal productivity of labor in that occupation. An alternative way in which the government may coerce unemployment is to *subsidize* that unemployment by paying workers to the extent that they are unemployed. This can occur either as direct government payments to the unemployed (often tax-exempt and thereby higher in after-tax terms) or as welfare payments. In either case, the net psychic return from employment over leisure is sharply reduced by such a subsidy, and the incentive to accept the proffered market wage is reduced by the same extent. Mises perceptively refers to such unemployment as "institutional" unemployment.

Thus, involuntary unemployment is only logically possible once the free-market economy is fundamentally changed and a person or institution is introduced which can successfully exercise control over resources that he or it has not homesteaded or acquired through voluntary exchange from homesteaders. Such an extramarket institution, by imposing a minimum wage higher than the marginal productivity of labor, can effectively prohibit an exchange between a supplier of labor service and a capitalist, an exchange which would be preferred by both if both had unrestricted control over their homesteaded property. The would-be laborer then becomes involuntarily unemployed, and the would-be employer is forced to dislocate complementary factors of production from more into less value-productive usages. As a matter of fact, an extramarket institution

can in principle create any desired amount of involuntary unemployment. A minimum wage of, say, one million dollars per hour would, if enforced, involuntarily disemploy practically everyone and would, along this way toward forced self-employment, condemn most of today's population to death by starvation. In the absence of any institution exempt from the rules of the free market, involuntary unemployment is logically impossible and prosperity, instead of impoverishment, will result.

I.2. Money

Man participates in an exchange economy (instead of remaining in self-sufficient isolation), insofar as he is capable of recognizing the higher productivity of a system of division of labor and he prefers more goods over less. Out of his market participation arises, in turn, his desire for a medium of exchange, namely, money. Indeed, only if one were to assume the humanly impossible, that is, that man had perfect foresight regarding the future, would there be no reason for him to have money. For then, with all uncertainties removed, in the never-never land of equilibrium, one would know precisely the terms, times, and locations of all future exchanges; everything could be prearranged accordingly and would take on the form of direct, rather than indirect, exchange (Mises [1949] 1966: 244–50).[4] Under the inescapable human condition of uncertainty, however, when all these are not known and action must by nature be speculative, man will begin to demand goods, no longer exclusively because of their use value, but also because of their value as media of exchange. He will also consider trading whenever the goods to be acquired are more marketable than those to be surrendered, such that their possession would then facilitate the acquisition of directly serviceable goods and services at as yet unknown future dates.

Moreover, since it is the very function of a medium of exchange to facilitate future purchases of directly serviceable goods, man will naturally prefer the acquisition of a more marketable, even universally marketable, medium of exchange to that of a less or nonuniversally marketable one. Therefore, "there would be an inevitable tendency for the less marketable of the series of goods used as media of exchange to be one by one rejected until at last only a single commodity remained, which was universally employed as a medium of exchange; in a word, money" (Mises 1971: 32–33; Menger 1981). And on the way toward this ultimate goal, by selecting monies that are increasingly more widely used, the division of labor is extended and productivity increased.

However, once a commodity has been established as a universal medium of exchange and the prices of all directly serviceable exchange goods are expressed in terms of units of this money (while the price of the money unit is its power to purchase an array of nonmoney goods), money no longer exercises any systematic influence on the division of labor, employment, and produced income. Once a money is established, any stock of money becomes compatible with any amount of employment and real income. There is never any need for more money

since any amount will perform the same maximum extent of needed money work: that is, to provide a general medium of exchange and a means of economic calculation by entrepreneurs.[5] But this means that any supply of money is optimal and, in that sense, that the supply of money is indifferent or "neutral" to the real processes of the economy. But, unfortunately, *changes* in the supply of money can have untoward and even devastating effects on the real processes of production.

Thus, suppose that the supply of money increases. Prices and wages will generally go up and the purchasing power of the money unit, down. Insofar as the money supply is greater and its purchasing power has fallen without hindrance, the new money supply will have no effect on the real economy. But, on the other hand, the supply of money is always injected into one or more specific spots in the economy and does not increase proportionately and instantly but ripples out over time and over the market, from early receivers to later receivers. Therefore, increases of the money supply in the real world always change relative prices and alter the distribution of income and wealth. Hence, the process of change in the money supply necessarily changes relative prices and distribution, so it cannot be neutral to these real processes. Furthermore, if the increases of money occur through the expansion and monetization of bank credit, then Austrian business-cycle theory demonstrates that, inevitably, such money changes necessarily put into effect the malinvestments and the volatility of the boom-bust cycle. And such inflationary increases can wreak still more devastation on the real economy by distorting and falsifying economic calculation so that business firms will have no real idea of their costs or be able to forecast relative prices or business profits or losses.

But even though *changes* in the money supply will not be neutral to the price system or to the distribution of income or wealth, and inflation in bank credit will bring about malinvestments, failures of calculation, and a business cycle, there still need be no market unemployment. Even a sudden drop in wage rates in a depression, as we have seen, can still clear all markets every day and every step of the way. A fall in money-demand curves for goods or for resources need not create an unsold surplus if prices are free to fall downward to the market-clearing price. In the same way, a drop in the money-demand curves for labor need not cause unemployment if laborers are willing to accept falling wage rates that clear the market and ensure that everyone willing to work has a job. But if laborers are not so willing and decide to insist on a minimum wage, hoping for an early rise of their wage rates, their consequent unemployment on an unhampered market would have to be considered "voluntary." As we have seen, however, if unions or governments interfere to prop up wage rates above the market-clearing rates, then involuntary unemployment will add to the malinvestment problems of the business cycle.

Changes in the demand for money have effects similar to changes in supply, except that (a) they cannot generate a business cycle, and (b) they cannot, as in the case of government-fiat paper money of inflationary bank credit, increase

without limit or, rather, increase up to the limit of a crack-up boom and runaway inflation. Thus, an increase in the demand for money, that is, a higher relative value attached to cash as compared to other goods, would certainly change relative prices and incomes, since the increase in demand would not be uniform for each person and the effects would ripple through time across the market economy. The increased demand for a given stock of money would decrease prices and wages and would raise the purchasing power of the money unit, mutatis mutandis. But employment and real income need not be affected.

I.3. Interest

The holding of money is a result of the systemic uncertainty of human action. Interest rates, on the other hand, result from time preference, which is as essential to action as uncertainty. In acting, an actor not only invariably aims to substitute a more for a less satisfactory state of affairs and so demonstrates a preference for more rather than fewer goods; he must also invariably consider when in the future his goals will be reached (i.e., the time necessary to accomplish them) as well as a good's duration of serviceability; every action thus also demonstrates a universal preference for earlier over later goods and for more over less durable ones. Every action requires some time to attain its goal; since man must consume something sometimes and cannot ever stop consuming entirely, time is always scarce. Thus, ceteris paribus, present or earlier goods are, and must invariably be, valued more highly than future or later ones.[6] In fact, if man were not constrained by time preference and the only constraint operating were that of preferring more over less, he would invariably choose those production processes that would yield the largest output per input, regardless of the length of time needed for those methods to bear fruit. For instance, instead of making a fishing net first, Crusoe would immediately begin constructing a fishing trawler, as the economically most efficient method for catching fish. That no one, including Crusoe, acts in this way makes it evident that man cannot but "value fractions of time of the same length in a different way according as they are nearer or remoter from the instant of the actor's decision" (Mises [1949] 1966: 483).

Thus, constrained by time preference, man will exchange a present good against a future one only if he anticipates thereby increasing his amount of future goods. The rate of time preference, which can be different from person to person and from one point in time to the next, but which can never be anything but positive for everyone, simultaneously determines the height of the premium that present goods command over future ones as well as the amount of savings and investment. The market rate of interest is the aggregate sum of all individual time-preference rates, reflecting, so to speak, the social rate of time preference and equilibrating social savings (i.e., the supply of present goods offered for exchange against future goods) and social investment (i.e., the demand for present goods capable of yielding future returns).

No supply of loanable funds could exist without previous savings, that is,

without abstention from some possible consumption of present goods (an excess of current production over current consumption). And no demand for loanable funds would exist if no one were to perceive any opportunity to employ those funds, that is, to invest them so as to produce a future output that would exceed current input. Indeed, if all present goods were consumed and none invested in time-consuming production processes, there would be no interest or time-preference rate. Or rather, the interest rate would be infinitely high, which, anywhere outside of the Garden of Eden, would be tantamount to leading a merely animal existence, that is, of eking out a primitive subsistence by facing reality with nothing but one's bare hands and only a desire for instant gratification.

A supply of and a demand for loanable funds only arises—and this is the human condition—once it is recognized that indirect, more roundabout, lengthier production processes can yield a larger or better output per input than direct and shorter ones;[7] and it is possible, by means of savings, to accumulate the number of present goods needed to provide for all those desires whose satisfaction during the prolonged waiting time is deemed more urgent than the increment in future well-being expected from the adoption of a more time-consuming production process (Mises [1949] 1966: 490ff.).

So long as this is the case, capital formation and accumulation will set in and continue. Instead of being supported by and engaged in instantly gratifying production processes, land and labor, the originary factors of production, are supported by an excess of production over consumption and employed in the production of capital goods, that is, produced factors of production. These goods have no value except as intermediate products in the process of turning out final (consumer) goods later. Production of final products with the help of these goods is more "productive." Or, what amounts to the same thing, he who possesses, and can produce with the aid of, capital goods is nearer in time to the completion of his ultimate project than he who must do without them. The excess in value (price) of a capital good over the sum expended on the complementary originary factors required for its production is due to this time difference and to the universal fact of time preference. This excess is the price paid for buying time: for moving closer to the completion of one's ultimate goal rather than having to start at the very beginning. And for the same reason of time preference, the value of the final output must exceed the sum spent on its factors of production, that is, the price paid for the capital good and all complementary labor services.

The lower the time-preference rate, then, the earlier the process of capital formation will set in and the faster it will lengthen the roundabout structure of production. Any increase in the accumulation of capital goods and in the roundaboutness of the production structure raises, in turn, the marginal productivity of labor. This leads to increased employment and/or wage rates and, in any case (even if the labor-supply curve should become backward sloping with increased wages), to a higher wage total (see Rothbard [1962] 1970: 663ff.). Supplied with an increased number of capital goods, a better-paid population of wage

earners will now produce an overall increased—future—social product, raising at last, after that of the employees, the real incomes of the owners of capital and land.

While interest (time preference) thus has a direct praxeological relationship to employment and social income, it has nothing whatsoever to do with money. To be sure, a money economy also includes a monetary expression for the social rate of time preference. Yet this does not change the fact that interest and money are systematically independent and unrelated and that interest is essentially a "real," not a monetary phenomenon. Time preference and interest, in contrast to money, cannot be conceived of as disappearing even in the state of final general equilibrium. For even in equilibrium the existing capital structure needs to be constantly maintained over time (so as to prevent it from becoming gradually consumed in the even course of an endlessly repeated pattern of productive operations). There can be no such maintenance, however, without ongoing savings and reinvestments, and there can be no such things as these without the expectation of a positive rate of interest. Indeed, if the rate of interest paid were zero, capital consumption would result and one would move out of equilibrium (see Mises [1949] 1966: 530–32; Rothbard [1962] 1970: 385–86).

Matters become more complex under conditions of uncertainty, when money is actually in use, but the praxeological independence of money and interest remains intact. Under these conditions, man invariably has three instead of two alternative ways to allocate his current income. He must decide not only how much to allocate to the purchase of present goods and how much to future goods (i.e., how much to consume and how much to invest), but also how much to keep in cash. There are no other alternatives. Yet while man must always make adjustments concerning three margins at once, the outcome is invariably determined by two distinct and praxeologically unrelated factors. The consumption/investment proportion is determined by time preference. The source of the demand for cash, on the other hand, is the utility attached to money (i.e., its usefulness in enabling immediate purchase of directly serviceable goods at uncertain future dates). And both factors can vary independently of one another.

As with other aspects of the real economy, the level of money stock has no effect whatsoever on the rate of interest, which is determined by time preference. But *changes* in the stock of money can not only affect relative prices and incomes, but also reduce overall real incomes by causing booms and busts or by dislocating the process of economic calculation. Furthermore, since changes in the stock of money will necessarily affect the distribution of incomes, the social rate of time preference will be affected by the time preferences of the early, as compared to the later, receivers of the new money. But since there is no way of predicting whether social time preferences will rise or fall from any given change in the money supply, such changes can have no systematic effect on the rate of time preference and hence, on the rate of interest.

The same is true of changes in the demand for money and their effects on

time preferences. If, for example, the Keynesian nightmare of increased hoarding becomes reality and prices generally fall while the purchasing power of money correspondingly rises, this will have no predictable systematic effects on the investment/consumption proportion in society. This proportion, and the time-preference schedule determing it, will change unpredictably, depending on the time preferences of the hoarders and nonhoarders and on how the changing demand for money ripples through the market economy.

In an unhampered economy, the interest rate is solely determined by the social rate of time preference (to which is added a premium, depending on the extent of risk involved in the particular loan). Since the real interest rate will tend to equal this social rate of time preference, expected price inflation will tend to be added by the market to the money interest rate, so as to keep the real rate equal to time preferences. The rate of interest on money loans will tend to be equal to the rate of return on investments, with this rate itself determined by the time-preference rate plus the inflation premium. But if the banks inflate credit, the increased supply of loans will temporarily drive down the loan-interest rate below the free-market rate, thereby generating the inflationary boom-bust cycle.

I.4. The Capitalist Process

With the division of labor established and extended via development of a universal medium of exchange, the process of economic development is essentially determined by time preference. To be sure, there are other important factors: the quality and quantity of the population, the endowment with nature-given resources, and the state of technology. Yet of these, the quality of a group of people is largely beyond anyone's control and must be taken as a given; the size of a population may or may not advance economic development, depending on whether the population is below or above its optimum size for a given-sized territory; and nature-given resources or technological know-how can have an economic impact only if discovered and utilized. In order to do this, though, there must be prior savings and investment. It is not the availability of resources and technical or scientific knowledge that imposes limits on economic advancement; rather, it is time preference that imposes limits on the exploitation of actually available resources as well as on the utilization of existing knowledge (and also on scientific progress, for that matter, insofar as research activities too must be supported by saved-up funds).

Thus, the only viable path toward economic growth is through savings and investment, governed as they are by time preference. Ultimately, there is no way to prosperity except through an increase in the per-capita quota of invested capital. This is the only way to increase the marginal productivity of labor, and only if this is done can future income rise in turn. With real incomes rising, the effective rate of time preference falls (without, however, reaching zero or becoming negative), adding still further increased doses of investment and setting in motion an upward-spiraling process of economic development.

There is no reason to suppose that this process will come to a halt short of

reaching the Garden of Eden, where all scarcity has disappeared—unless people deliberately choose otherwise and begin to value additional leisure more highly than any further increase in real incomes. Nor is there any reason to suppose that the process of capitalist development will be anything but smooth, that is, that the economy will flexibly adjust not only to all monetary changes but to all changes in the social rate of time preference as well. Of course, as long as the future is uncertain, there will be entrepreneurial errors, losses, and bankruptcies. But no systematic reason exists for this to cause more than temporary disruptions or for these disruptions to exceed, or drastically fluctuate around, a "natural rate" of business failures (see Rothbard 1983a: 12–17).

Matters become different only if an extramarket institution such as government is introduced. It not only makes involuntary unemployment possible, as explained above, but the very existence of an agent that can effectively claim ownership over resources which it has neither homesteaded, produced, nor contractually acquired also raises the social rate of time preference for homesteaders, producers, and contractors, hence creating involuntary impoverishment, stagnation, or even regression. It is only through government that mankind can be stopped on its natural course toward a gradual emancipation from scarcity long before ever reaching the point of voluntarily chosen zero growth.[8] And it is only in the presence of a government that the capitalist process can possibly take on a cyclical (rather than a smooth) pattern, with busts following booms. Exempt from the rules of private-property acquisition and transfer, government naturally desires a monopoly over money and banking and wants nothing more than to engage in fractional reserve banking, that is—in nontechnical terms, monopolistic counterfeiting—so as to enrich itself at the expense of others through the much less conspicuous means of fraud rather than through outright confiscation (see Rothbard 1983a; Hoppe 1989a). Boom-and-bust cycles are the outcome of fraudulent fractional reserve banking. If, and insofar as, the newly created counterfeit money enters the economy as additional supplies on the credit market, the rate of interest will have to fall below what it would otherwise have been: credit must become cheaper. Yet at a lower price more credit is taken and more resources then are invested in the production of future goods (instead of being used for present consumption) than would otherwise have been. The roundaboutness of the entire production structure is lengthened. In order to complete all investment projects now under way, more time is needed than that required to complete those projects begun before the credit expansion. All the goods that would have been created without credit expansion must still be produced—plus those that are newly added. However, for this to be possible more capital is required. The larger number of future goods can be successfully produced only if additional savings provide a means of sustenance sufficiently large to bridge, and carry workers through, the longer waiting time. But, by assumption, no such increase in savings has taken place. The lower interest rate is not the result of a larger supply of capital goods. The social rate of time preference has not changed at all. It is solely the result of counterfeit money entering the economy through the credit market. It follows

logically that it must be impossible to complete all investment projects under way after a credit expansion, due to a systematic lack of real capital. Projects will have to be liquidated so as to shorten the overall production structure and readjust it to an unchanged rate of social time preference and the corresponding real investment/consumption proportion.[9]

These cyclical movements cannot be avoided by anticipation (contrary to the motto "a cycle anticipated is a cycle avoided"): they are the praxeologically necessary consequences of additional counterfeit credit being successfully placed. Once this has occurred, a boom-bust cycle is inevitable, regardless of what the actors correctly or incorrectly believe or expect. The cycle is induced by a monetary change, but it takes effect in the realm of "real" phenomena and will be a "real" cycle no matter what beliefs people happen to hold.[10]

Nor can it be realistically expected that the inevitable cyclical movements resulting from an expansion of credit will ever come to a halt. As long as an extramarket institution like government is in control of money, a permanent series of cyclical movements will mark the process of economic development; for through the creation of fraudulent credit, a government can engender an inconspicuous income and wealth redistribution in its own favor. There is no reason (short of idealistic assumptions) to suppose that a government would ever deliberately stop using this magic wand merely because credit expansion entails the "unfortunate" side effect of business cycles.

II

After this reconstruction of the classical, and especially the Austrian theory of employment, money, interest, and the capitalist process, I will now turn to Keynes and his "new" theory. Against the backdrop of our explanation of the old theory, it should be easy to recognize Keynes's "new" *General Theory of Employment, Interest, and Money* as fundamentally flawed and the Keynesian revolution as one of this century's foremost intellectual scandals.[11]

II.1. Employment

Keynes sets out a false theory of employment. Contrary to the classical view, he claims that there can be involuntary unemployment on the free market and, further, that a market can reach a stable equilibrium with persistent involuntary unemployment. Finally, in claiming such market failures to be possible, he professes to have uncovered the ultimate economic rationale for interference in the operations of markets by extramarket forces. Since the free market is defined in terms of homesteaded or produced private property and the voluntary nature of all interactions between private property owners, it should be clear that what Keynes claims to show is roughly equivalent to a squaring of the circle.

Keynes begins with the false statement that the classical theory assumed "that there is no such thing as involuntary unemployment in the strict sense" (Keynes

1936: 21, 6, 15). In fact, it assumed no such thing. Classical theory assumed that involuntary unemployment is logically/praxeologically impossible as long as a free market is in operation. That involuntary unemployment, indeed any degree of it, can exist in the presence of an extramarket institution such as minimum-wage laws, has never been seriously doubted.

After stating this falsehood, Keynes then proceeds to give his definition of involuntary unemployment: "Men are involuntarily unemployed if, in the event of a small rise in the price of wage-goods [i.e., consumer goods] relative to the money wage, both the aggregate supply of labor willing to work for the current money-wage and the aggregate demand for it at that wage would be greater than the existing volume of employment" (ibid.: 15).[12] Translated into plain English, what Keynes is saying is that men are involuntarily unemployed if an increase in prices relative to wage rates leads to more employment (see Hazlitt [1959] 1973: 30). Yet such a change in relative prices is logically equivalent to a fall in real wage rates; and a fall in real wages can be brought about on the unhampered market by wage earners at any time they so desire simply by accepting lower nominal wage rates, with commodity prices remaining where they are. If laborers decide not to do this, there is nothing involuntary in their remaining unemployed. Given their reservation demand for labor, they choose to supply that amount of labor which is actually supplied. Nor would the classification of this situation as voluntary change a bit if, at another time, lower wage rates increased the amount of employment. By virtue of logic, such an outcome can be brought about only if, in the meantime, laborers have increased their relative evaluation of a given wage rate versus their labor reservation demand (otherwise, if no such change has occurred, employment will decrease instead of increasing). The fact, however, that one can change one's mind over time hardly implies that one's earlier choice was involuntary, as Keynes would have it. Of course, one can define one's terms anyway one wishes, and, in true Orwellian fashion, one may even choose to call voluntary "involuntary" and involuntary "voluntary." Yet, through this method, anything under the sun can be "proven," while in fact nothing of substance whatsoever is shown. Keynes's alleged proof leaves entirely unaffected the fact that no such thing as involuntary employment, in the usual sense of this term, can ever exist on the unhampered market.

And as if this were not enough, Keynes tops it off by claiming that involuntary unemployment is conceivable even in equilibrium. Indeed, he criticizes his earlier *Treatise on Money* by saying, "I had not then understood that, in certain conditions, the system could be in equilibrium with less than full employment" (Keynes 1936: 242–43, 28). Yet equilibrium is *defined* as a situation where changes in values, technology, and resources no longer occur; where all actions are completely adjusted to a final constellation of data; and where all factors of production, including labor, are employed to the fullest extent possible (given these unchanging data) and are repeatedly and endlessly employed in the same constant production pattern. Hence, as H. Hazlitt has remarked, the discovery of an unemployment equilibrium by Keynes, in his *General Theory*, is like the

discovery of a triangular circle—a contradiction in terms (Hazlitt [1959] 1973: 52).

II.2. Money

Having failed in his treatment of employment and unemployment, Keynes, in his discussion of money, then discards economic reasoning by advancing the claim that money and monetary changes (can) have a systematic and even positive effect on employment, income, and interest. Given the fact that "money" appears in the full title of *The General Theory*, Keynes's positive theory of money is amazingly brief and undeveloped. Brevity, of course, can be a virtue. In the case of Keynes, it offers the opportunity to pinpoint rather easily his elementary mistakes. For Keynes, "*the importance of money essentially flows from its being a link between the present and the future*" (Keynes 1936: 293). "Money in its significant attributes is, above all, a subtle device for linking the present and the future" (ibid.: 294). That this is false follows from the fact that in equilibrium no money would exist,[13] yet even under equilibrium conditions there would still be a present and a future, and both would still be linked. Rather than functioning as a link to the future, money serves as a medium of exchange; a role that is inextricably tied to the *uncertainty* of the future.[14] *Action*, which invariably begins in the present and is aimed at some future goal, more or less distant in time from the action's beginning, constitutes the real link between the present and the future. And it is time preference as a universal category of action that gives this link between present and future its specific shape. Money, in contrast to interest, no more relates the present to the future than do other economic phenomena, such as nonmonetary goods. Their present value, too, reflects anticipations regarding the future, no more and no less than does money.

From this first misconception regarding the nature of money, all other misconceptions flow automatically. Being defined as a subtle link between present and future, the demand for money (its supply being given), which Keynes, in line with his general inclination to misinterpret logical/praxeological categories as psychological ones, terms "liquidity preference" or "propensity to hoard" (ibid.: 174), is said to be functionally related to the rate of interest (and vice versa).[15] "Interest," writes Keynes, "is the reward of not-hoarding" (ibid.), "the reward for parting with liquidity" (ibid.: 167), which makes liquidity preference in turn the unwillingness to invest in interest-bearing assets. That this is false becomes obvious as soon as one asks the question, "What, then, about prices?" The quantity of beer, for instance, that can be bought for a definite sum of money is obviously no less a reward for parting with liquidity than is the interest rate, thus making the demand for money an unwillingness to buy beer as much as an unwillingness to lend or invest (see Hazlitt [1959] 1973: 188ff.). Or, formulated in general terms, the demand for money is the unwillingness to buy or rent nonmoney, including interest-bearing assets (i.e., land, labor, and/or capital goods, or future goods) *and* noninterest-bearing assets (i.e.,

consumer or present goods). Yet to recognize this is to recognize that the demand for money has nothing to do with either investment or consumption, nor with the ratio of investment-to-consumption expenditures, nor with the spread between input and output prices, that is, the discount of higher-order, or future, goods versus lower-order, or present goods. Increases or decreases in the demand for money, other things being equal, lower or raise the overall level of money prices, but real consumption and investment as well as the real consumption/investment proportion remain unaffected; and, such being the case, employment and social income remain unchanged as well. The demand for money determines the spending/cash balance proportion. The investment/consumption proportion, pace Keynes, is an entirely different and unrelated matter. It is solely determined by time preference (see Rothbard 1983a: 40–41; Mises [1949] 1966: 256).

The same conclusion is reached if changes in the supply of money (liquidity preference being given) are considered. Keynes claims that an increase in the supply of money, other things being equal, can have a positive effect on employment. He writes, "So long as there is unemployment, employment will change in the same proportion as the quantity of money" (Keynes 1936: 296). Yet this is a highly curious pronouncement because it *assumes* the existence of unemployed resources instead of *explaining* why such a thing should possibly occur; for, obviously, a resource can be unemployed only because it is either not recognized as scarce at all and thus has no value whatsoever or because its owner voluntarily prices it out of the market and its unemployment then is no problem needing a solution (see Hutt [1939] 1977).

Even if one were to waive this criticism, Keynes's statement would still be fallacious. For if other things were indeed equal, then the additional supply of money would simply lead to increased overall prices and to simultaneously and proportionally increased wage rates, and nothing else would change at all. If, contrary to this, employment should increase, it could only do so if wage rates did not rise along with, and to the same extent as, other prices. However, other things then could no longer be said to be equal because real wage rates would be lowered, and employment can only rise while real wages fall if the relative evaluation of employment versus self-employment (i.e., unemployment) is assumed to have changed. Yet if this were assumed to have changed, no increase in the money supply would have been required. The same result, namely, increased employment, could also have been brought about by laborers' accepting lower nominal wage rates.

II.3. Interest

In his discussion of the interest phenomenon, Keynes abandons reason and common sense entirely. According to Keynes, since money has a systematic impact on employment, income, and interest, then interest itself—quite consistently, for that matter—must be conceived of as a purely monetary phenomenon (Keynes 1936: 173).[16] I need not explain the elementary fallacy of this view.

Suffice it to say here again that money would disappear in equilibrium, but interest would not, which suggests that interest must be considered a real, not a monetary, phenomenon.

Moreover, Keynes, in talking about "functional relationships" and "mutual determination" of variables instead of causal, unidirectional relations, becomes entangled in inescapable contradictions as regards his theory of interest (see Rothbard [1962] 1970: 687–89). As has been explained above, on the one hand, Keynes thinks of liquidity preference (and the supply of money) as *determining* the interest rate, such that an increased demand for money, for instance, will raise the interest rate (and an increased supply of money, lower it) and that this then will reduce investment, "whilst a decline in the rate of interest may be expected, ceteris paribus, to increase the volume of investment" (Keynes 1936: 173). On the other hand, characterizing the interest rate as "the reward for parting with liquidity," he contends that the demand for money is *determined* by the interest rate. A fall in the interest rate, for instance, would increase one's demand for cash (and also, it should be added, one's propensity to consume) and hence lead to *reduced* investment. Obviously, however, a lower interest rate can hardly do both, increasing and decreasing investment at the same time. Something must be wrong here.

Since interest, according to Keynes, is a purely monetary phenomenon, it is only natural to assume that it can be manipulated at will through monetary policy (provided, of course, that one is not restricted in this policy by the existence of 100% reserve commodity money standard, such as the gold standard). "There is," writes Keynes, "no special virtue in the pre-existing rate of interest" (ibid.: 328). In fact, if the supply of money is sufficiently increased, the interest rate supposedly can be brought down to zero. Keynes recognizes that this would imply a superabundance of capital goods, and one would think that this realization should have given him cause to reconsider. Not so! On the contrary, in all seriousness he tells us "that a properly run community equipped with modern technical resources, of which the population is not increasing rapidly, ought to be able to bring down the marginal efficiency of capital in equilibrium approximately to zero within a single generation" (ibid.: 220). It is "comparatively easy to make capital goods so abundant that the marginal efficiency of capital is zero (and) this may be the most sensible way of gradually getting rid of many of the objectional features of capitalism" (ibid.: 221). "There are no intrinsic reasons for the scarcity of capital" (ibid.: 376). Rather, it is "possible for communal saving through the agency of the State to be maintained at a level where it ceases to be scarce" (ibid.).

Never mind that this would imply no need for maintenance or replacement of capital any longer (for, if this were the case, capital goods would still be scarce and hence command a price) and that capital goods would instead have to be "free goods" in the same sense in which air is usually "free." Never mind that if capital goods were no longer scarce, then neither would consumer goods be scarce (for, if they were, the means employed to produce them would have to

be scarce too). And never mind that in this Garden of Eden, which Keynes promises to establish within one generation, there would no longer be any use for money. For, as he informs us, "I am myself impressed by the great social advantages of increasing the stock of capital until it ceases to be scarce" (ibid.: 325). Who would dare disagree with this?[18]

Yet more is to come—because, as Keynes sees it, there are some obstacles on the path toward paradise. For one thing, the gold standard gets in the way because it makes the expansion of credit impossible (or difficult, at least, in that a credit expansion would lead to an outflow of gold and a subsequent economic contraction). Hence Keynes's repeated polemics against this institution.[18] Further, there is the just explained problem of his own making: that is, a lower interest rate supposedly increases and decreases investment simultaneously. And it is to get out of this logical mess that Keynes comes up with a conspiracy theory: for, while the interest rate must be reduced to zero in order to eliminate scarcity, as we were just told, the lower the interest rate, the lower also the reward for parting with liquidity. The lower the interest rate, that is to say, the lower the incentive for capitalists to invest because their profits will be reduced accordingly. Thus, they will try to undermine, and conspire against, any attempt to resurrect the Garden of Eden.

Driven by "animal spirits" (ibid.: 161) and "gambling instincts" (ibid.: 157), and "addicted to the money-making passion" (ibid.: 374), they will conspire to ensure "that capital has to be kept scarce enough" (ibid.: 217). "The acuteness and peculiarity of our contemporary problem arises, therefore," writes Keynes, "out of the possibility that the average rate of interest which will allow a reasonable average level of employment [and of social income] is one so unacceptable to wealth owners that it cannot be readily established merely by manipulating the quantity of money" (ibid.: 308–9). In fact, "the most stable, and least easily shifted, element in our contemporary economy has been hitherto, and may prove to be in the future, the minimum rate of interest acceptable to the generality of wealth owners" (ibid.: 309).[19] Fortunately, we are informed, there is a way out of this predicament: through "the euthanasia of the rentier, and, consequently, the euthanasia of the cumulative oppressive power of the capitalist to exploit the scarcity-value of capital" (ibid.: 376, 221). Surely, they deserve such a fate. For "the business world" is ruled by an "uncontrollable and disobedient psychology" (ibid.: 317), and private investment markets are "under the influence of purchasers largely ignorant of what they are buying and of speculators who are more concerned with forecasting the next shift of market sentiment than with a reasonable estimate of the future yield of capital assets" (ibid.: 316). As a matter of fact, don't we all know that "there is no clear evidence from experience that the investment policy which is socially advantageous coincides with that which is most profitable" (ibid.: 157); indeed, that the decisions of private investors depend largely on "the nerves and hysteria and even the digestions and reactions to the weather" (ibid.: 162), rather than on rational calculation? Thus, concludes Keynes, "the duty of ordering the

current volume of investment cannot safely be left in private hands'' (ibid.: 320). Instead, to turn the present misery into a land of milk and honey, ''a somewhat comprehensive socialization of investment will prove the only means'' (ibid.: 378). ''The State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage [must take] an ever greater responsibility for directly organizing investment'' (ibid.: 164).

I trust that none of this requires further comment. It is all too obvious that these are the outpourings of someone who deserves to be called anything except an economist.

II.4. The Capitalist Process

Such a verdict finds still more support when Keynes's theory of the capitalist process is finally considered. That Keynes was no friend of capitalism or capitalists should be obvious from the quotations above. In fact, by advocating ''a socialization of investment he comes out openly as a socialist.''[20] For Keynes, capitalism *meant* crisis.

He gave essentially two reasons for this. The first one, to which Keynes attributed the cyclical nature of the capitalist process, has already been touched upon. Surely, as long as the course of the economy is largely determined by capitalists who, we have been told, ''are largely ignorant of what they are purchasing,'' and who conspire ''to keep things scarce,'' that course cannot be a smooth, even one. Depending mostly on people who base their decisions on their ''digestion and the weather,'' the capitalist process must be erratic. Moved by the ''waxing and waning'' of entrepreneurial optimism and pessimism, which in turn are determined by the ''uncontrollable and disobedient psychology of the business world,'' booms and busts are inevitable. Business cycles—so goes the central message of chapter 22 of *The General Theory*, ''Notes on the Trade Cycle''—are *psychologically* determined phenomena. Yet this is surely incorrect. A psychological explanation of the business cycle is, strictly speaking, impossible, and to think of it as an explanation involves a category mistake: Business cycles are obviously real events experienced by individuals, but experienced by them as occurring outside of themselves in the world of real goods and real wealth. Beliefs, sentiments, expectations, optimism, and pessimism, on the other hand, are *psychological* phenomena. One can think of any psychological phenomenon as affecting or influencing any other one. But it is impossible to conceive of a psychological phenomenon or feeling state as having any direct impact on outcomes in the external world of real things and goods. Only through *actions* can the course of real events be influenced, and any explanation of the business cycle must then necessarily be a *praxeological* (as opposed to a psychological) one. Keynes's psychological business-cycle theory, in fact, *cannot explain why anything real happens at all.*

However, in the real world, people must act and must continually allocate

and reallocate scarce resources to valued goals. One cannot *act* arbitrarily, though, as Keynes would have it, because in acting one is invariably constrained by a real scarcity which cannot be affected by our psychology at all. Nor does Keynes's theory explain why entrepreneurial mood swings would result in any *particular* pattern of business fluctuations—such as the boom-bust cycle that he supposedly wants to explain—instead of any other conceivable pattern of fluctuations. The second reason for the instability of capitalism, and for the desirability of a Socialist solution, according to Keynes, is capitalism's inherent stagnationist tendencies. His stagnation theory centers on the notion, which he takes from Hobson and Mummery and endorses, "that in the normal state of modern industrial Communities, consumption limits production and not production consumption" (Keynes 1936: 368).[21] With this as one of his axioms, only nonsense can follow.

Stagnation is due to a lack of consumption. "Up to the point where full employment prevails," Keynes writes, "the growth of capital depends not at all on a low propensity to consume but is, on the contrary, held back by it" (ibid.: 372–73). Combined with this underconsumptionist thesis is a "fundamental psychological law, upon which we are entitled to depend with great confidence both *a priori* from our knowledge of human nature and from the detailed facts of experience, is that men are disposed, as a rule and on the average, to increase their consumption as their income rises, but not by as much as the increase in their income" (ibid.: 96). "As a rule, . . . a greater proportion of income [will be] saved as real income increases" (ibid.: 97, 27ff.).

On its own, this second law, which is accepted as plausible here for the sake of argument (except for adding that consumption can, of course, never fall to zero), would not seem to indicate any trouble. So what? If savings overproportionally increase with increasing incomes, so much the better for the social product.[22] But Keynes, characteristically, joins this law to the thesis that production is limited by consumption, and he then has no difficulty proving whatever he wishes.

If consumption limits production, and if nonconsumption rises with rising incomes, then it does indeed seem to follow that increasing incomes imply their own undoing by increasing nonconsumption, which in turn limits production, and so on. And if this is so, it also seems to follow that wealthier societies, which non-consume more, should be particularly plagued by this "stagnitis" and that, in any given society, it should be the rich, who non-consume more, who contribute most to economic stagnation (except for the "minor" problem that one cannot explain, according to this theory, how individuals or societies could be wealthier than others in the first place!). In any case, Keynes accepts these conclusions as true.[23] Then, accordingly, he presents his recommendations for how to get out of stagnation. In addition to a "comprehensive socialization of investment," Keynes suggests measures to stimulate consumption, in particular an income redistribution from the rich (people with a low propensity to consume) to the poor (those with a high propensity to consume):

> Whilst aiming at a socially controlled rate of investment with the view to a progressive decline in the marginal efficiency of capital, I should support at the same time all sorts of policies for increasing the propensity to consume. For it is unlikely that full employment can be maintained, whatever we may do about investment, with the existing propensity to consume. There is room, therefore, for both policies to operate together: —to promote investment and, at the same time, to promote consumption, not merely to the level which with the existing propensity to consume would correspond to the increased investment, but to a higher level still. (Ibid.: 325)[24]

But how is such a thing as simultaneously promoting investment and consumption in order to increase income conceivably possible? In fact, Keynes gives us his own formal definitions of the terms involved: "Income = consumption + investment; saving = income − consumption; therefore, saving = investment" (ibid.: 63).[25] Under these definitions, a simultaneous increase in consumption and investment out of a given income is conceptually impossible!

Keynes, however, is not much disturbed over "details" such as these. In order to get what he wants, he simply shifts, completely unnoted, the meanings of his terms. He drops the formal definitions quoted above, since these would render such a result impossible, and he adopts a new meaning for the term "saving." Instead of unconsumed income, "saving" quietly comes to mean "hoarding," that is, the act of not spending money on *either* consumer *or* capital goods (see Hazlitt [1959] 1973: 120–33). The results can thereby be easily made to come out right. For now savings are no longer equal to investment; and saving, being defined as the act of *not* spending, automatically acquires a negative connotation, while investment and consumption take on positive ones. Moreover, now one must almost naturally be worried about savings exceeding investment, or so it seems, for this would appear to imply that something is leaking out of the economy and that income (defined as investment + consumption) will be somehow reduced. Keynes certainly worries about this possibility. He calls it "a chronic tendency throughout human history for the propensity to save to be stronger than the inducement to invest" (Keynes 1936: 367). And this chronic tendency must surely be particularly pronounced if incomes are high, for then, as we have been told, savings reach a particularly high proportion of income. But do not despair: where something can leak out, something also can leak in. If savings are viewed as unspent money, then savings can be brought into existence, simply enough, by means of governmental money creation to compensate for the outward leakage which tends to increase with increasing incomes. There is the danger, of course, that these compensatory "community savings" will immediately leak out again by being added to the private sector's cash hoardings (because, according to Keynes, the newly created savings would lower the interest rate, and this in turn would increase the capitalists' liquidity preference so as to counteract such a tendency and artificially to "keep capital scarce"). But this can be taken care of by the "socialization of investment," as we know, and by some Gesellian stamped-money schemes: "the idea behind

stamped money is sound'' (ibid.: 357). And once saving and investing are done publicly—through the agency of the state, as Keynes would say—and all money is spent, with no keep-things-scarce motive in the way any more, there is indeed no longer any problem with increasing consumption and investment simultaneously. Since savings have become unspent money, and newly created money and credit are just as ''genuine'' as any other because these are not ''forced'' on anyone, savings can be created by the stroke of a pen.[26] And since the state, contrary to the scarcity-exploiting capitalists, can make sure that these additional genuine savings are indeed being spent (instead of wandering into hoards), any increase in the supply of money and credit through governmental counterfeiting increases consumption and investment simultaneously and so promotes income twice. Permanent inflation is Keynes's cure-all. It helps overcome stagnation; and more of it overcomes the more severe stagnation crises of the more advanced societies. Finally, once stagnation is defeated, still more inflation will abolish scarcity within one generation.[27]

Yet the wonders do not cease. What is this leakage, this surplus of savings over investment, that constitutes all such dangers? Something must leak from somewhere to somewhere else, and it must play some role both here and there. Keynes tries to deflect such thoughts by asking us once again not to apply logic to economics. ''Contemporary thought,'' he writes, ''is still deeply steeped in the notion that if people do not spend their money in one way they will spend it in another'' (ibid.: 20). It seems hard to imagine how this contemporary thought could possibly be wrong, but Keynes believed it false. For him there exists a third alternative. Something, an economic good, one would think, simply drops out of existence, and this means trouble.

> An act of individual saving means—so to speak—a decision not to have dinner to-day. But it does *not* necessitate a decision to have dinner or buy a pair of boots a week hence or a year hence or to consume any specified thing at any specified date. Thus it depresses the business of preparing to-day's dinner without stimulating the business of making ready for some future act of consumption. It is not a substitution of future consumption-demand for present consumption-demand—it is a net *diminution* of such demand. (Ibid.: 210)

Still, the strictures of a two-valued logic do not quite crumble yet. How can there be any net diminution of something? What is not spent on consumer goods or capital goods must still be spent on something else—namely, on cash. *This exhausts all possibilities.* Income and wealth can and must be allocated to consumption, investment, or cash. Keynes's diminution, the leakage, the excess of savings over investment, is income spent on, or added to, cash hoardings. But such an increase in the demand for cash has no effect on real income, consumption, or investment, as has already been explained. With the social money stock being given, a general increase in the demand for cash can only bid down the money prices of nonmoney goods. But so what?[28] Nominal income, that is,

income in terms of money, will fall; but real income and the real consumption/investment proportion will be unchanged. And people, along the way, get what they want, that is, an increase in the real value of their cash balances and in the purchasing power of the money unit. There is nothing stagnating here, or draining, or leaking, and Keynes has offered *no theory of stagnation at all* (and with this, of course, no theory of how to get out of stagnation either). He has merely given a perfectly normal phenomenon, such as falling prices (caused by an increased demand for money or by an expanding productive economy), a bad name in calling it "stagnation," or "depression," or the result of a lack of effective demand, so as to find another excuse for his own inflationary schemes.[29]

Here we have Keynes, then: the twentieth century's most famous "economist." Out of false theories of employment, money, and interest, he has distilled a fantastically wrong theory of capitalism and of a socialist paradise erected out of paper money.

NOTES

1. On the foundations of economics, see Mises (1978b, 1981, 1985), Rothbard (1979), and Hoppe (1983, 1988). On the competing positivist view of economics, according to which economic laws are hypotheses subject to empirical confirmation or falsification (much like the laws of physics), see Friedman (1953).

2. On time preference, see section I.3, below.

3. "The individual believes that he will find at a later date a remunerative job in his dwelling base and in an occupation which he likes better and for which he has been trained. He seeks to avoid the expenditure and other disadvantages involved in shifting from one occupation to another. There may be special conditions increasing these costs. . . . In all these cases the individual chooses temporary unemployment because he believes that this choice pays better in the long run" (Mises [1949] 1966: 598–99).

4. "In a system without change in which there is no uncertainty whatever about the future, nobody needs to hold cash. Every individual knows precisely what amount of money he will need at any future date. He is therefore in a position to lend all the funds he receives in such a way that the loans fall due on the date he will need them" (Mises [1949] 1966: 249; see also Rothbard [1962] 1970: 280).

5. See Rothbard ([1962] 1970: 669–71). "Goods are useful and scarce, and any increment in goods is a social benefit. But money is useful not directly, but only in exchanges. . . . When there is less money, the exchange-value of the monetary unit rises; when there is more money, the exchange-value of the monetary unit falls. We conclude that there is no such thing as 'too little' or 'too much' money, that, whatever the social money stock, the benefits of money are always utilized to the maximum extent" (Rothbard [1962] 1970: 670; see also Rothbard 1983).

6. On the time-preference theory of interest, see W. S. Jevons (1965), E. von Böhm-Bawerk (1959), R. Strigl (1934), F. A. Fetter (1977), and R. B. Garrison (1979, 1988).

7. To be sure, not all lengthier production processes are more productive than shorter ones; but under the assumption that man, constrained by time preference, will invariably and at all times select the shortest conceivable method of producing some given output,

any increase in output then can—praxeologically—be achieved only if the production structure is lengthened.

8. On the role of government as destructive of wealth formation, see Rothbard (1977) and Hoppe (1989d).

9. On the theory of the business cycle, see Mises's original contribution (Mises 1971); his first elaborate version is in Mises (1928 1978a). See also Hayek (1939b, [1935] 1967c). Hayek's works were first published in 1929, resp.1931; it is interesting to note that Hayek, who received the Nobel Prize in 1974, the year after Mises's death, for his contributions to the Mises/Hayek theory of the business cycle, obviously misrepresents Mises's achievements as regards the development of this theory. In his *Prices and Production* of 1931, the first presentation of the Austrian business-cycle theory to appear in English, Hayek acknowledges Mises's prior claim to fame. Yet even though he cites Mises's 1928 work (cited above), he falsely claims that Mises's contributions to the theory were essentially confined to a few remarks in his original work of 1912; See Strigl (1934), Robbins (1971), Rothbard (1983a), Mises, Haberler, Rothbard, and Hayek (1983), Hoppe (1983), Garrison (1986, 1988).

10. See also R. Garrison 1988b. See also the critique of psychological (as opposed to praxeological) business-cycle theories, below.

11. For pro-Keynesian literature, see S. Harris (1948a), A. Hansen (1953); for anti-Keynesian literature, see H. Hazlitt ([1959] 1973, 1984).

12. At this point Keynes promises an alternative definition to be given on page 26; revealingly, no such definition appears there or anywhere else in the book!

13. Mises explains: "Let us assume that there is only gold money and only one central bank. With the successive progress toward the state of an evenly rotating economy all individuals and firms restrict step by step their holding of cash and the quantities of gold thus released flow into nonmonetary—industrial—employment. When the equilibrium of the evenly rotating economy is finally reached, there are no more cash holdings; no more gold is used for monetary purposes. The individuals and firms own claims against the central bank, the maturity of each part of which precisely corresponds to the amount they will need on the respective dates for the settlement of their obligations. The central bank does not need any reserves as the total sum of the daily payments of its customers exactly equals the total sum of withdrawals. All transactions can in fact be effected through transfer in the bank's books without any recourse to cash. Thus the 'money' of this system is not a medium of exchange; it is not money at all; it is merely a *numéraire*, an ethereal and undetermined unit of accounting of that vague and indefinable character which the fancy of some economists and the errors of many laymen mistakenly have attributed to money" (Mises [1949] 1966: 249).

14. Keynes recognizes that money also has something to do with uncertainty. The fundamental mistake in his theory of money pointed out here, however, surfaces again when he relates money not to uncertainty as such but, more specifically, to uncertainty of interest rates. "The necessary condition [for the existence of money]," he writes, "is the existence of uncertainty as to the future rate of interest" (Keynes 1936: 168–69). See also the following discussion.

15. On the absurd implications of the assumption of functional—rather than causal—relations, see the discussion in section II.3, below.

16. See also Keynes's laudatory remarks on mercantilist economics, and in particular, S. Gesell, as precursors of this view (Keynes 1936: 341, 355).

17. See also Hazlitt ([1959] 1973: 231–35). What about the seemingly obvious ob-

jection that the expansion of monetary credit, through which Keynes wants to bring about the reduction of the interest rate to zero, is nothing but an expansion of paper and that the problem of scarcity is a matter of "real" goods which can only be overcome through "genuine savings"? To this he gives the following funny answer: "The notion that the creation of credit by the banking system allows investment to take place to which 'no genuine saving' corresponds" (Keynes 1936: 82), that is, "the idea that saving and investment . . . can differ from one another, is to be explained, I think, by an optical illusion" (ibid.: 81). "The savings which result from this decision are just as genuine as any other savings. No one can be compelled to own the additional money corresponding to the new bank-credit unless he deliberately prefers to hold more money rather than some other form of wealth" (ibid.: 83). "The new money is not 'forced' on anyone" (ibid.: 328). As Henry Hazlitt remarks, "On the same reasoning we can create any amount of new 'savings' we wish overnight, simply by printing that amount of new paper money, because somebody will necessarily hold that new paper money" (Hazlitt [1959] 1973: 227).

18. See Keynes (1936: 129ff., 336ff., 348ff.). On Keynes's role in the actual destruction of the gold standard, see Hazlitt (1984).

19. He adds, in a footnote, "the nineteenth-century saying, quoted by Bagehot, that 'John Bull' can stand many things, but he cannot stand 2 per cent." On Keynes's conspiracy theory, see Hazlitt ([1959] 1973: 316–18).

20. Keynes's socialism, however, was not the egalitarian-proletarian version espoused by the Bolsheviks. For this, Keynes had nothing but contempt. His socialism was of the Fascist or Nazi variety. In the preface to the German edition of his *General Theory* (which appeared in late 1936) he wrote:

"Nevertheless the theory of output as a whole, which is what the following book purports to provide, is much more easily adapted to the conditions of a totalitarian state, than is the theory of production and distribution of a given output produced under conditions of free competition and a large measure of laissez-faire."

21. On the Keynesian theory of stagnation, see Hansen (1941); for a critique, see G. Terborgh (1945) and Rothbard (1987).

22. In fact, Keynes informs us that *savings is by definition identical to investment* (Keynes 1936: 63), "that the excess of income over consumption, which we call saving, cannot differ from the addition to capital equipment which we call investment" (ibid.: 64). Then, however, a reduced proportion of consumption expenditures must by definition go hand in hand with increased investments, and this would lead to a higher future income, to still more absolute consumption and still more absolute and relative saving and investment. Where, indeed, is the problem here?

23. Keynes writes, "If in a potentially wealthy community the inducement to invest is weak, then, in spite of its potential wealth, the working of the principle of effective demand will compel it to reduce its actual output, until, in spite of its potential wealth, it has become so poor that its surplus over its consumption is sufficiently diminished to correspond to the weakness of the inducement to invest" (Keynes 1936: 31). Or: "The greater, moreover, the consumption for which we have provided in advance, the more difficult it is to find something further to provide for in advance, and the greater, unfortunately, is the margin between our incomes and our consumption. So, failing some novel expedient, there is, as we shall see, no answer to the riddle, except that there must be sufficient unemployment to keep us so poor that our consumption falls short of our income

by no more than the equivalent of the physical provision for future consumption which it pays to produce to-day'' (ibid.: 105).

24. Or, ''the remedy would lie in various measures designed to increase the propensity to consume by the redistribution of incomes or otherwise'' (Keynes 1936: 324).

25. It is typical of Keynes's philosophy of abundance that he gets things upside down here as well. For the correct definitions are: product produced = income; income − consumption = saving; saving = investment. Where does Keynes's income come from?

26. On this, see note 17.

27. On Keynes's program of permanent inflation, see also this remark on the trade cycle: ''The right remedy for the trade cycle is not to be found in abolishing booms and keeping us permanently in a semi-slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom'' (Keynes 1936: 322). The answer to credit expansion, that is, is still more credit expansion.

28. Contrary to Keynes's fanciful fears, the demand for money can never be infinite because everyone must obviously consume sometimes (and cannot delay consumption further), and at such points liquidity preference is definitely finite.

29. The second element of Keynes's stagnation theory is equally false. It may be true that savings equaling investment increase overproportionally with increasing incomes—although it can never reach 100 percent. Yet this situation should certainly give no one concern regarding the social income produced. It is, however, *not* true that savings, in the sense of hoarding, increase with increasing incomes and that the greatest leakage then occurs among the rich and in wealthy societies. The opposite is true. If real income increases because the economy, supported by additional savings, is expanding, then the purchasing power of money increases (the money stock being given). But at a higher purchasing power of the money unit, the amount of cash demanded actually falls (the demand-for-money schedule being given). Thus, if anything, the leak/stagnation non-problem should actually diminish, rather than increase, with increasing wealth.

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