Journal of Economic Perspectives—Volume 11, Number 2—Spring 1997—Pages 137–152

The Perseverance of Paul Samuelson's *Economics*

Mark Skousen

Paul Samuelson's *Economics* ranks with the most successful textbooks ever published in the field, including the works of Adam Smith, David Ricardo, John Stuart Mill and Alfred Marshall. His 15 editions have sold over four million copies and have been translated into 41 languages (see Table 1). My own Econ 101 class at Brigham Young University used the 1967 (7th) edition, which turned out to be near the high water mark in annual sales (Elzinga, 1992, p. 874). Since its first edition in 1948, Samuelson's *Economics* has stood the test of time. It has survived nearly half a century of dramatic changes in the world economy and the economics profession: peace and war, boom and bust, inflation and deflation, Republicans and Democrats, and an array of new economic theories. The fiftieth anniversary edition is expected to be published in 1998.

His textbook has so dominated the college classrooms for two generations that when publishers look for new authors for a principles of economics text, they say that they are searching for the "next Samuelson" (Nasar, 1995). Its legacy goes beyond sales figures; in fact, the textbook may no longer be in the top 10 sellers in the U.S. market. However, most of the existing popular textbooks borrow heavily from Samuelson's pedagogy, both in matters of tone and in the use and exposition of diagrams, like supply and demand, cost curves, the multiplier and the Keynesian cross.

This article does not attempt an encyclopedic review of the 15 editions of Samuelson's text. Instead, it uses the succeeding generations of Samuelson's text as a basis for reflecting on what lessons have been emphasized in introductory economics courses over the last 50 years. In doing so, it draws upon a notion

■ *Mark Skousen is Adjunct Professor of Economics and Finance, Rollins College, Winter Park, Florida. His e-mail address is Mskousen@aol.com.*

Table 1
The Publishing History of Paul A. Samuelson's *Economics*

Edition	*Year*	*Author(s)*	*Sales*
1	1948	Samuelson	121,453
2	1951	Samuelson	137,236
3	1955	Samuelson	191,706
4	1958	Samuelson	273,036
5	1961	Samuelson	331,163
6	1964	Samuelson	441,941
7	1967	Samuelson	389,673
8	1970	Samuelson	328,123
9	1973	Samuelson	303,795
10	1976	Samuelson	317,188
11	1980	Samuelson	196,185
12	1985	Samuelson & Nordhaus	N/A
13	1989	Samuelson & Nordhaus	N/A
14	1992	Samuelson & Nordhaus	N/A
15	1995	Samuelson & Nordhaus	N/A

Source: Elzinga (1992, p. 874)
N/A—Not available.

suggested by Samuelson in his introduction to the fourteenth edition (p. xi): "A historian of mainstream-economic doctrines, like a paleontologist who studies the bones and fossils in different layers of earth, could date the ebb and flow of ideas by analyzing how Edition 1 was revised to Edition 2 and, eventually, to Edition 14." The discussion here will spend little time on pure microeconomics and will focus instead on macroeconomics and policy advice. The reason for deemphasizing basic microeconomics is that this is the area where the victory of Samuelson's early pedagogy has been most complete and where the beliefs of economists have changed least. All references to Samuelson's 15 editions of *Economics*, including the 12th and subsequent editions coauthored by William D. Nordhaus, are listed according to edition followed by page number.

For members of the economics profession, looking back at Samuelson's text is like looking into a mirror that reflects many of our past beliefs. If we are uncomfortable with some of what we see in that mirror, then we must also feel uncomfortable with the version of economics that was taught, and perhaps also uncomfortable with the impact that the teaching of economics may have had on the economy.

The Keynesian Motif

In the introduction to an early edition, Samuelson denied that his primary purpose in writing *Economics* was to convey any "single Great Message" (3:v). But

it is clear that Samuelson intended to introduce the "New Economics" of Keynes to students. The multiplier, the propensity to consume, the paradox of thrift, countercyclical fiscal policy, and $C + I + G$ were all incorporated into the language of Econ 101. The now-familiar Keynesian cross income-expenditure diagram was printed on the cover of the first three editions. Macro preceded micro sections of the book, a novel approach at the time. Moreover, only John Maynard Keynes was honored with a biographical sketch in early editions, and only Keynes, not Adam Smith nor Karl Marx, was labeled "a many-sided genius" (1:253n).

In the first edition, Samuelson claimed that the Keynesian "theory of income determination" was "increasingly accepted by economists of all schools of thought," and that its policy implications were "neutral" (1:253). For example, "it can be used as well to defend private enterprise as to limit it, as well to attack as to defend government fiscal interventions." However, his explanation of the model emphasized that "private enterprise" is afflicted with periodic "acute and chronic cycles" in unemployment, output and prices, which government had a responsibility to "alleviate" (1:41). "The private economy is not unlike a machine without an effective steering wheel or governor," Samuelson wrote. "Compensatory fiscal policy tries to introduce such a governor or thermostatic control device" (1:412).

In the editions that followed, Samuelson's rhetorical strategy seemed designed to give students the impression that the economics profession had achieved a monolithic belief structure. By the fourth edition (1958), he declared that "90 per cent of American economists have stopped being 'Keynesian economists' or 'anti-Keynesian economists.' Instead they have worked toward a synthesis of whatever is valuable in older economics and in modern theories of income determination." He labeled this new economics a "neo-classical synthesis" (4:209–10), although "demand management" model might be more accurate.

By the seventh edition, although Samuelson was no longer using the "machine minus the steering wheel" metaphor, he continued to emphasize that "a laissez-faire economy cannot guarantee that there will be exactly the required amount of investment to ensure full employment." If full employment did occur, it would be pure "luck" (7:197–8). He argued that "neo-classical synthesis" was "accepted in its broad outlines by all but a few extreme left-wing and right-wing writers" (7:196), a claim that appeared in similar language in all editions until the twelfth (1985), the first coauthored by Nordhaus. When the aggregate supply and aggregate demand framework was introduced in the twelfth (1985) and subsequent editions, they also were shown intersecting at less-than-full-employment equilibrium (12:91, 186). To the question, "Is there any automatic mechanism that guarantees that saving and investment balance at full employment?" Samuelson and Nordhaus answered "No" (12:139).

In reading Samuelson's earlier editions, a student might reasonably conclude that there are no other schools of thought, at least in the mainstream. In fact, of course, Keynesian thought was the subject of furious debate in economics departments across the country through the 1940s and into the 1950s, as young economists steeped in Keynesian thinking entered professorial jobs and collided with the old

guard. In the late 1950s and 1960s, as economists explored how certain modelling structures could express either Keynesian or monetarist insights, it was fair to claim broad acceptance of the "neo-classical synthesis" as a modelling strategy. But Samuelson often seemed to imply that widespread acceptance of the formal models also implied an equally widespread belief that there was no mechanism to lead the macroeconomy toward full employment, that consumption was too low and saving too high, that macroeconomic stability should be emphasized more than economic growth, and that government intervention was the only hope, points on which the degree of consensus was markedly lower.

This slide from Keynesian theory to particular policies was well-illustrated in his seventh edition (1967), when Samuelson cited a statement by Milton Friedman, "We are all Keynesians now." However, at the end of chapter 11, Samuelson (7:210) then referenced the full quotation from a 1966 interview of Friedman in *Time* magazine: "As best I can recall it, the context was: 'In one sense, we are all Keynesians now; in another nobody is any longer a Keynesian.'" Friedman (1968, p. 15) would later put it this way: "We all use the Keynesian language and apparatus; none of us any longer accepts the initial Keynesian conclusions."

Antisaving Views

One way to see how nonpartisan Keynesian modelling shaded into explicit policy conclusions is to follow the antisaving bias that appeared until the most recent editions of Samuelson's text. At less than full employment, there existed a "paradox of thrift," when "everything goes into reverse" (1:271). In this case, a higher savings rate shrinks the economy, and one is left with the paradoxical result that a higher savings rate may not even increase the quantity of savings. Thus, Samuelson expressed the fear that an increased propensity to save may cause money to "leak" out of the system and "become a social vice" (1:253). To be sure, Samuelson would be prosaving when the economy was at full employment. "But full employment and inflationary conditions have occurred only occasionally in our recent history," he wrote. "Much of the time there is some wastage of resources, some unemployment, some insufficiency of demand, investment, and purchasing power" (1:271). This paragraph remained virtually the same throughout the first eleven editions (for example, 11:226).[1]

These antithrift leanings extended to Samuelson's discussion of progressive taxation and the "balanced-budget multiplier." One "favorable" effect of progressive

[1] Here is an area in which contemporary Keynesians (Heller, Solow, Okun, Ackley, et al.) might not be so antisaving as was Samuelson. The 1962 *Economic Report of the President,* issued at the high tide of orthodox Keynesianism, reflected an implicit faith that the economy would always be running near full employment. The business cycle had been tamed and any downturns would be quickly countered. Such a belief meant that savings could then play a positive role. Apparently, Samuelson was not as optimistic about the government's ability to maintain full-employment equilibrium.

taxation was: "To the extent that dollars are taken from frugal wealthy people rather than from poor ready spenders, progressive taxes tend to keep purchasing power and jobs at a high level—perhaps at too high a level if inflation is threatening" (1:174; 7:162; 11:161). In his discussion of the "balanced-budget multiplier," Samuelson stated: "Hence, dollars of tax reduction are almost as powerful a weapon against mass unemployment as are increases in dollars of government expenditure" (7:234; 11:232). Why "almost"? Because only a portion of the tax cut would be "spent" (the rest would be saved) by the public, wherein all of government expenditures would be spent. In both cases, the implication is that greater consumption, not saving, is the key to prosperity.

Samuelson's views on saving evolved over the years, with the major changes appearing in the thirteenth edition (1989). In this edition, the diagram showing savings leaking out of the economic system disappeared. The "paradox of thrift" doctrine, which had been a principal feature in all the editions until then, was made optional in the thirteenth edition (13:183–5) and removed in the fourteenth. However, it returned in 1995 in the fifteenth edition (15:455–7). Samuelson wrote, "Disappearing to zero was, in my reconsidered judgment, an overshoot." He argued that Japan in 1992-94 could be viewed as a modern-day example of the paradox of thrift. Nordhaus has pointed to Europe in the early 1990s and America in the early 1980s as other potential examples of the perversity of saving.[2]

Then, in the thirteenth edition, the authors added a major section bemoaning the gradual decline in the U.S. savings rate (13:142–4). Samuelson and Nordhaus list several potential causes of low savings: federal budget deficits, Social Security, high inflation and high taxes. They also assert a strong correlation between the rate of savings and economic growth: "[V]irtually all [macroeconomists] believe that the savings rate is too low to guarantee a vital and healthy rate of investment in the 1990s" (13:144).

Samuelson's evolving view on saving is also reflected in his discussion of government budget deficits. In the first edition, Samuelson pointed out: "According to the countercyclical view, the government budget need not be in balance in each and every month or year. ... Only over the whole business cycle need the budget be in balance" (1:410–1). But remember that Samuelson argued (until the twelfth edition) that unemployed resources almost always existed; thus, this countercyclical view justified very common federal deficits (1:271; 7:228; 11:226), with less guidance as to when or how the offsetting surpluses were likely to occur.

Although Samuelson issued a series of warnings and caveats regarding the burgeoning national debt, the prevailing sense of the first 10 or so editions was that deficit spending was not a significant problem. The first edition favors the "we owe it to ourselves" argument: "The interest on an internal debt is paid by Americans to Americans; there is no direct loss of goods and services" (1:427). In the seventh

[2] The Samuelson quotation is taken from personal correspondence dated January 20, 1995. The Nordhaus sentiment was also expressed in private correspondence, February 4, 1995.

edition (1967), after raising the specter of "crowding out" of private investment, he went on to say: "On the other hand, incurring debt when there is no other feasible way to move the $C + I + G$ equilibrium intersection up toward full employment actually represents a negative burden on the intermediate future to the degree that it induces more current capital formation than would otherwise take place!" (7:346). At the end of an appendix on the national debt, Samuelson compared federal deficit financing to private debt financing, such as AT&T's "never-ending" growth in debt (7:358; 11:347). By implication, government debt could also grow continually, rather than necessarily being balanced over the business cycle.

In this spirit, Samuelson offered a favorable reaction to the burgeoning deficits in the early 1980s: "As federal budget deficits grew sharply over the 1982-1984 period, consumer spending grew rapidly, increasing aggregate demand, raising GNP, and leading to a sharp decline in unemployment. The torrential pace of economic activity in 1983-1984 was an expansion, fueled by demand-side growth, in the name of supply-side economics" (12:192). But in that same edition, the AT&T comparison disappeared, the Reagan deficits were labelled as "skyrocketing" (12:349–50), and the crowding out of capital became "the most serious consequence of a large public debt" (12:361). By the fifteenth edition, Samuelson and Nordhaus were declaring "a large public debt can clearly be detrimental to long-run economic growth. . . . Few economists today have words of praise for America's large and growing debt" (15:638–9).

Evolving Views on Monetary Policy

Samuelson used to emphasize fiscal policy over monetary policy as a tool for stabilization; now the reverse is true. The transition is unmistakable. In 1955 he wrote, "Today few economists regard federal reserve monetary policy as a panacea for controlling the business cycle" (3:316). In 1973, after labelling monetarism "an extreme view," he declared, "both fiscal and monetary policies matter much" (9:329). In 1995, Samuelson and Nordhaus reversed this traditional view, observing, "Fiscal policy is no longer a major tool of stabilization policy in the United States. Over the foreseeable future, stabilization policy will be performed by Federal Reserve monetary policy" (15:645).

This evolution of the perceived role of monetary policy can also be seen in the treatment of money. Early editions spent considerable space, more than most other textbooks, on the classical gold standard and the origin of money and banking. Samuelson's preference in the earlier editions seemed to be for a government-managed monetary system, but not one based on gold. While recognizing gold's role as a rein on monetary authorities' ability to inflate the money supply, Samuelson was sharply critical of gold as a monetary standard. A strict gold standard was historically deflationary, Samuelson argued, because "The long-run supply of gold cannot possibly keep up with the liquidity needs of growing international trade"

(8:697). Deflation was dangerous because "falling price levels tend to lead to labor unrest, strikes, unemployment and radical movements generally" (8:629). Gold was an "anachronism" (8:700).

But after the United States officially left the gold standard in August 1971, Samuelson warned that the world was "in uneasy limbo" (9:652). He gradually warmed to the idea of flexible exchange rates, especially as futures markets developed (9:724–5). By 1995, Samuelson and Nordhaus were no longer deeply concerned about an international monetary crisis or breakdown in trade under a pure fiat money system. They declared that international currency management and central-bank coordination in the last half-century was "one of unparalleled success" (15:736). Gold's role had become so moribund that by the fifteenth edition, only two pages were devoted to the yellow metal.

The quantity theory of money was discussed in the first edition, although Irving Fisher, frequently cited as the modern founder of the quantity theory, was not mentioned (1:290–7). (Fisher was cited in earlier editions regarding capital theory, but not for his quantity equation.) No one expected Samuelson to cite Milton Friedman in the early editions—after all, Friedman's studies in monetary theory and history did not gain wide credence until the early 1960s—but Samuelson soon made up for lost time. Friedman began to be quoted in 1961 (5:315), and Irving Fisher was given some credit by 1970 (8:264).

Defender of an Activist Government

Through 15 editions, Samuelson has appeared to favor a substantial role for the state. In an early edition, he forecast that while the growth in government was not "inevitable," there was no end in sight (4:112). In a later edition, he observed, "No longer does modern man seem to act as if he believed 'That government governs best which governs least'" (8:140). In keeping with the Keynesian motif, a large government provided "built-in stabilizers" to the economy, such as taxes, unemployment compensation, farm aid and welfare payments that tend to rise during a recession (8:332–4).

In discussing the overall U.S. tax burden, Samuelson has argued that to a large extent, higher taxes are a byproduct of economic and social development. Several editions displayed a chart showing that "poor, underdeveloped countries show a persistent tendency to tax less, relative to national product, than do more advanced countries" (4:113). In a later edition, Samuelson added, "With affluence come greater interdependence and the desire to meet social needs, along with less need to meet urgent private necessities" (14:300). Samuelson also pointed out with international comparisons that the United States lags behind most Western nations in terms of tax burden. Thus, "our government share is a modest one" (8:140n; 12:698; 15:278).

On the subject of cutting taxes, Samuelson has supported Keynesian-oriented tax cuts, though not supply-side tax cuts. In the seventh edition, he

argued in terms reminiscent of the Laffer curve thesis that a tax cut may pay for itself in increased government revenues: "To the extent that a tax cut succeeds in stimulating business, our progressive tax system will collect extra revenues out of the higher income levels. Hence a tax cut may in the long run imply little (or even no) loss in federal revenues, and hence no substantial increase in the long-run public debt" (7:343). However, after marginal tax rates were reduced in the 1980s during the Reagan administration, Samuelson and Nordhaus wrote: "Laffer-curve prediction that revenues would rise following the tax cuts has proven false" (14:332).

What about the supply-side argument that high tax rates discourage work, saving and risk taking? The answer was "unclear." Samuelson suggested that progressive taxes might actually make some people "work harder in order to make their million" (10:171). He argued, "Many doctors, scientists, artists, and businessmen, who enjoy their jobs, and the sense of power or accomplishment that they bring, will work as hard for $30,000 as for $100,000" (10:171), a sentiment repeated in later editions (15:310).

In keeping with this sentiment, Samuelson has been a strong supporter of the welfare state and antipoverty programs as a response to inequality. "Our social conscience and humanitarian standards have completely changed, so that today we insist upon providing certain minimum standards of existence for those who are unable to provide for themselves," he wrote early on (1:158). He denied that welfare expenditures were "anticapitalistic" (7:146). Moreover, "Contrary to the 'law' enunciated by Australia's Colin Clark—that taking more than 25 per cent of GNP is a guarantee of quick disaster—the modern welfare state has been both humane and solvent" (8:140). Although welfare assistance was "indeed costly" and "often inefficient" (11:761), there was little choice, since private charity has always been "inadequate" (11:760). His discussion of welfare reform focused on an endorsement of Milton Friedman's proposed "negative income tax" (11:761–3). But by the 1995 edition, Samuelson and Nordhaus seem less certain and are asking: "Have antipoverty programs helped...[or] produced counterproductive responses?" (15:372).

For society's retirement programs, Samuelson has been a strong supporter of a pay-as-you-go Social Security system. Earlier editions contained a chapter on "Personal Finance and Social Security," which called the pay-as-you-go system "a cheap and sensible way" to provide retirement benefits to individuals.[3] Samuelson argued: "It is one of the great advantages of a pay-as-you-go social security system that it rests on the general tax capacity of the nation; if hyperinflation wiped out all private insurance and savings, social security could nonetheless start all over again, little the poorer" (4:179). But this statement—along with the chapter on personal fi-

[3] Samuelson was prescient in his first edition about the prospects for programs along the lines of Medicare and Medicaid: "It is not unlikely that in the next generation payments for sickness and disability, and a comprehensive public health and hospital program, will have been introduced" (1:222).

nance and Social Security—was dropped after the fifth edition. His recommendation to buy U.S. savings bonds earning 3 percent, which were "a very great bargain," was removed after the third edition.[4]

Samuelson has spent little space on Social Security since then, other than reporting higher payroll taxes with each edition. For example, in the 1985 edition, Samuelson and Nordhaus noted, "The payroll tax has been the fastest growing part of federal revenues, rising from nothing in 1929, to 18 percent of revenues in 1960, to 36 percent in 1985" (12:732). The 1995 edition mentions in one paragraph that Social Security taxes may contribute to a decline in thrift (15:432–3). There are several reasons why Social Security may deserve more attention. More than half of American workers pay more in payroll taxes than in income taxes. Social Security is in the center of an argument about intergenerational equity. And there are a number of interesting proposals for revising the system, including privatization.

The role of government extends into a debate between market and government failure. Mainstream economic wisdom, as embodied by the Samuelson text, has tended to emphasize numerous examples of "market failure" (15:30–5, 164–77, 272–3, 280–2, 291–2, 329, 347–52), including imperfect competition, externalities, inequities, monopoly power and public goods. Samuelson pointed out that the government could take on "an almost infinite variety of roles in response to the flaws in the market mechanism" (15:30–1). At one level, this is all fair enough. But for several decades, there has also been a line of thought, perhaps best embodied in the work of Ronald Coase, that points out that actors in markets may be quite creative in finding ways to address market failures.

Consider the example of lighthouses as a public good. Since 1961, Samuelson has used the lighthouse as an example of a public good, one that private enterprise could not run profitably because of the nonexcludable, nondepletable nature of the service. But Coase (1974) wrote an article pointing out that numerous lighthouses in England were built and owned by private individuals and companies prior to the nineteenth century, who earned profits by charging tolls on ships docking at nearby ports.[5] To be sure, some of these lighthouse

[4] Based on his Keynesian philosophy, Samuelson also tended to argue that people should avoid saving in difficult economic times. "Never again can people be urged in times of depression to tighten their belts, to save more in order to restore prosperity. The result will be just the reverse—a worsening of the vicious deflationary spiral" (1:272; 6:238–9; 10:239). In the third edition, Samuelson denounced families who "hysterically cut down on consumption when economic clouds arise" (3:339). He echoed the advice of Harvard economist Frank W. Taussig, who during the Great Depression went on the radio "to urge everyone to save less, to spend more on consumption" (7:226). Whatever the merits of this advice as macroeconomic wisdom, it would surely increase the financial risk for the individuals involved.

[5] I wrote to Samuelson about this issue. His response was: "If you read carefully the Coase article on lighthouses, you will see that the historical examples he described are not able to conquer the 'free-rider' problem. When scrambling devices become available to meet that problem, there still remains the deadweight inefficiency intrinsic to positive pricing for the marginal use of something that involves only zero or derisory marginal cost" (personal correspondence, August 9, 1995). Without disputing these points, one can continue to hold the conclusion expressed in the text, that rather than implying that governments are the only agencies that can provide lighthouses, it would be interesting to discuss the method of lighthouse provision that actually occurred.

organizations had more the flavor of private voluntary organizations than of perfectly competitive markets; nonetheless, an introductory economics class might well be interested in the fact that free economic actors can work out practical ways of building and paying for certain public goods without explicit government provision.

Explanations of market failure often deserve a counterbalancing discussion of government failure, lest the unwary student assume that economists believe in imperfect markets but perfect government. Various editions of the text do argue that governments should follow market-oriented policies when addressing a market failure. In the most recent edition, for example, the U.S. health-care debate was analyzed in terms of a list of "market failures" in the health-care industry, together with a market-oriented criticism of Clinton's proposed price controls and nationalized health services in foreign countries (15:289–96). Similarly, market failures and market-oriented solutions also are stressed in the environmental arena (15:351–3).

The argument that certain types of government action are preferable to others would seem to open the door to a discussion of whether government can be counted on to enact appropriate policies. Some textbooks now have substantial sections on "government failure," but the broad possibility of such failures has been downplayed in the Samuelson texts. In the 1955 edition, he cited a Herbert Hoover study indicating "very little" waste in federal spending, only $3 billion (3:119). Since the twelfth edition, the subject index has numerous listings under "market failure," but none under "government failure." Surely Samuelson's criticism of price controls would fall under this category (1:463–6; 8:370–3; 15:66–71). Apart from price fixing, Samuelson and Nordhaus offered only two brief mentions of government failure in the fifteenth (1995) edition, a question at the end of chapter 2 on "Markets and Government in a Modern Economy" (15:37) and a mention in their discussion of "public choice theory," which claims that "harmful" government policies are "probably rare" (15:285).

The Family Tree of Economics: The Mainstream and Marxism

Samuelson's desire to homogenize mainstream economics into one grand "neo-classical synthesis" is evident in his "family tree of economics." Beginning with the fourth edition (1958, flap), the author created a genealogical diagram of economic thought from the Greeks to the present. By the time the twentieth century was reached, only two schools of thought remained—followers of Marxist-Leninist socialism and those of the Marshall-Keynes "neo-classical synthesis." In this chart, Adam Smith and the classical school were claimed as ancestors of the neoclassical synthesis by way of Alfred Marshall. The Chicago monetarists and the Austrians do not appear on the chart until the twelfth edition (1985), when "Chicago Libertarianism" and "Rational-

Expectations Macroeconomics'' surface alongside ''Modern Mainstream Economics.'' Samuelson and Nordhaus include the Austrians, Friedrich Hayek and Ludwig von Mises, in the ''Chicago Libertarianism'' category (13:828). This categorization is questionable. The Austrians, with their emphasis on subjectivism and microeconomics, consider themselves neither followers of the Chicago school nor philosophical descendants of Walras and Marshall. Then, in the fourteenth and fifteenth editions, the other schools again disappear from the family tree, apparently subsumed by the single category of ''Modern Mainstream Economics.''

Over the years, Samuelson has gradually given more space in his textbook to non-Keynesian schools. By the eighth edition (1970), Milton Friedman was cited a half dozen times. In the ninth edition (1973), he recommended Friedman's *Capitalism and Freedom* as a ''rigorously logical, careful, often persuasive elucidation of an important point of view'' (9:848). The ninth edition also adds a significant chapter, ''Winds of Change: Evolution of Economic Doctrines,'' which summarizes the spectrum of warring schools, including institutionalists (Veblen and Galbraith), the New Left and radical economics.

References to Marx and international socialism are scarce and random in the early editions. In the first edition, Marx was declared ''quite wrong'' in his prediction that the ''poor are becoming poorer'' (1:67). Samuelson expressed suspicion of Soviet central planning, and he considered the U.S. brand of ''mixed-enterprise system'' superior (1:603). Attacks on Marxism expanded with each edition. Marx's prediction of falling real wages had been proven ''dead wrong'' (4:757). Lenin had been wrong in his charge that Western nations practiced imperialism for economic gain (4:756–7). The profit rate had ''stubbornly refused to follow'' the Marxist law of decline (7:707).

But starting with the ninth edition, references to the ideas and followers of Karl Marx and Friedrich Engels expanded dramatically, including a biography of Marx and a nine-page appendix on Marxian economics. In the preface to that edition, Samuelson wrote: ''It is a scandal that, until recently, even majors in economics were taught nothing of Karl Marx except he was an unsound fellow'' (9:ix). Samuelson added in the tenth edition that ''at least a tenth of U. S. economists'' fell into the ''radical'' category (10:849). However, this expanded coverage did not mute his criticism of Marxist beliefs. With the fall of the Soviet Union, the discussion of Marx shrank from 12 pages in the fourteenth edition to three pages in the fifteenth (1995) edition, including a two-paragraph biography of Marx, and no appendix on Marxian economics.[6] Typical of the tone: ''Marx was wrong about

[6] The reduction in space allocated to Marxist economics has been accompanied by less discussion about the Austrian economists Ludwig von Mises and Friedrich Hayek, who warned earlier that socialist central planning could not work and could not calculate prices and costs accurately. Samuelson and Nordhaus mention the role of Mises and Hayek in the socialist calculation debate from editions nine through 12 (9:640; 12:693), but have dropped them from the most recent editions.

many things—notably the superiority of socialism as an economic system—but that does not diminish his stature as an important economist" (15:7).

Central Planning and Soviet Growth

In very early editions, Samuelson expressed skepticism of socialist central planning: "[O]ur mixed free-enterprise system ... with all its faults, has given the world a century of progress such as an actual socialized order might find it impossible to equal" (1:604; 4:782). But with the fifth edition (1961), although expressing some skepticism of Soviet statistics, he stated that economists "seem to agree that her recent growth rates have been considerably greater than ours as a percentage per year," though less than West Germany, Japan, Italy and France (5:829). The fifth through the eleventh editions showed a graph indicating the gap between the United States and the USSR narrowing and possibly even disappearing (for example, 5:830). The twelfth edition replaced the graph with a table declaring that between 1928 and 1983, the Soviet Union had grown at a remarkable 4.9 percent annual growth rate, higher than did the United States, the United Kingdom, or even Germany and Japan (12:776). By the thirteenth edition (1989), Samuelson and Nordhaus declared, "the Soviet economy is proof that, contrary to what many skeptics had earlier believed, a socialist command economy can function and even thrive" (13:837). Samuelson and Nordhaus were not alone in their optimistic views about Soviet central planning; other popular textbooks were also generous in their descriptions of economic life under communism prior to the collapse of the Soviet Union.[7]

By the next edition, the fourteenth, published during the demise of the Soviet Union, Samuelson and Nordhaus dropped the word "thrive" and placed question marks next to the Soviet statistics, adding "the Soviet data are questioned by many experts" (14:389). The fifteenth edition (1995) has no chart at all, declaring Soviet Communism "the failed model" (15:714–8). To their credit, Samuelson and Nordhaus (15:737) were willing to admit that they and other textbook writers failed to anticipate the collapse of communism: "In the 1980s and 1990s, country after country threw off the shackles of communism and stifling central planning—not because the textbooks convinced them to do so but because they used their own eyes and saw how the market-oriented countries of the West prospered while the command economies of the East collapsed."

Where are the Economic Success Stories?

While Samuelson overplayed the economy of the Soviet Union, he underplayed the successful postwar economies of Germany and Japan, and the newly developing

[7] For example, in their eighth edition, Lipsey, Steiner and Purvis (1987, pp. 885–6) claimed, "The Soviet citizens' standard of living is so much higher than it was even a decade ago, and is rising so rapidly, that it probably seems comfortable to them" (cf. Skousen, 1991, pp. 213–15).

countries in Europe, Asia and Latin America. From the second to the fourteenth edition, Samuelson briefly mentioned the dramatic story of West Germany's post-war recovery to elucidate the benefits of currency reform and price freedom (2:36; 14:36). Various editions also discuss Germany's bout with hyperinflation in the early 1920s. But his one-paragraph account offers little space to convey the magnitude of the subsequent German economic recovery from a devastating world war. The same could be said of Japan's postwar economic miracle. In 1945, Japan was desperate, starving, shattered; half a century later, it was an economic superpower. Yet Samuelson barely mentioned Japan. In 1970, he offered a sentence in his chapter on economic growth, with no further comment: "Japan's recent sprint has been astounding" (8:796). In the 1980s and 1990s, even as many textbooks offered a more global approach, Samuelson and Nordhaus still practically ignored Japan. In the twelfth edition, they asked, "For example, many people have wondered why countries like Japan or the Soviet Union have grown so much more rapidly than the United States over recent decades" (12:798). They spent many pages discussing the Soviet Union, but except for a brief reference to "rapid technical change," they were silent on Japan. The same pattern holds for the fifteenth (1995) edition.

What about the other high-performing economies in East Asia? They were not mentioned until the thirteenth edition (1989), at which point Samuelson and Nordhaus devoted two paragraphs to Hong Kong and other East Asian miracles (13:832, 886). In the fifteenth edition, they touched briefly on the causes of East Asian development, including the newly industrialized countries of Korea, Singapore, Taiwan, Indonesia, Malaysia and Thailand (15:712–3). The economic success stories of Latin America (Chile, Mexico, and so on) receive no mention at all. Privatization, a rapidly growing phenomenon around the world, is virtually ignored in Samuelson's and most other American textbooks.

Why such a dearth of economic success stories? Space limitations must have played a role. Another reason is that Samuelson's rhetorical approach, like that of many textbooks, is to paint with a broad brush, to discuss concepts and problems in general, but seldom to focus on specific examples. Free-market economists might point out that some policies adopted by many of these high-growth countries—high savings rates, a general reliance on free markets, relatively low government spending and budgets often in surplus, little or no taxation on savings and investment—do not mix well with Keynesian biases. On the other hand, other policies—public education, land reform, import protection and export promotion, targeted government investment subsidies and close government/industry ties—favor Samuelson's approach.

The Impact of Samuelson's Textbook

It is hard to gauge the influence of Samuelson's textbook, or in general the impact of introductory courses in economics, on U.S. policymakers or corporate

executives. Samuelson has been willing to claim, with tongue only slightly in cheek, a considerable impact. He has made a well-known comment: "I don't care who writes a nation's laws—or crafts its advanced treaties—if I can write its economics textbooks" (Nasar, 1995, C1). He has also expressed hope that his textbook would be a reference guide for former students. "When the election of 1984 rolls around," he wrote in 1967, "all the hours that the artists and editors and I have spent in making the pages as informative and authentic as possible will seem to me well spent if somewhere a voter turns to the old book from which he learned economics for a rereasoning of the economic principle involved" (7:vii).

The hope is worth raising not only for Samuelson's text, but for all those students who once took an introductory economics course. To the extent that Samuelson's text has been a much-imitated leader among all principles textbooks, it is reasonable to ask how helpful these texts would have been in thinking about the issues of public debt, inflation, foreign competition, recession, unemployment and taxes that have challenged the public over the past 50 years.

On the positive side, Samuelson must be congratulated for his optimism about the future of the American economy. Although he anticipated a deep recession following World War II (Sobel, 1980, pp. 101–2), he did not succumb to the lure of fellow Keynesian Alvin Hansen's stagnation thesis (1:418–23). He wisely rejected the doomsayers' frequent calls for another Great Depression or imminent bankruptcy due to an excessive national debt. "Our mixed economy—wars aside—has a great future before it" (6:809), he wrote. To his credit, Samuelson has been willing to update his textbook in keeping with new events and new theories. The virtues of monetary policy, saving and markets have received more emphasis in recent issues.

Samuelson offered a balanced brand of economics that found mainstream support. While Samuelson (especially in the earlier editions) favored heavy involvement in "stabilizing" the economy as a whole, he appeared relatively laissez faire in the micro sphere, defending free trade, competition and free markets in agriculture. He was critical of Marx, weighed the burdens of the national debt, denied that war and price controls were good for the economy, wrote eloquently on the virtues of a "mixed" free-enterprise economy, suggested that big business may sometimes be benevolent (1:132; 15:172–4) and questioned whether labor unions could raise wages (2:606; 15:238). This advice could often be summarized as an injunction to rely broadly on markets, but also to be aware that markets might fail in many cases, thus creating a situation where government intervention could be justified.

Samuelson was unable to foresee many of the major economic events and crises, but this is surely no criticism. After all, most mainstream economists failed to foresee the stagflations and dollar devaluations of the 1970s or the S&L crisis and trade deficits of the 1980s. To some extent, introductory textbooks will always play catch-up to events. For example, in writing about the effects of federal deposit insurance and central bank authority, Samuelson confidently predicted in 1980:

"In the 1980s, the only banks to fail will be those involving fraud or gross negligence" (11:282). By the 1992 edition, after the collapse of hundreds of saving and loans, Samuelson and Nordhaus wrote, "Many economists believe that the deposit insurance system must be drastically overhauled if this sad episode is not to be repeated in the future" (14:535).

But although it would be unfair to criticize anyone for not being clairvoyant about events, it is surely fair criticism of a principles of economics course to point out that some of its advice seems questionable in light of current knowledge. Indeed, Samuelson has hinted in later editions that he would no longer agree with some of his analysis in earlier editions. Today, he probably would be uncomfortable saying, as he did in the preface of the eighth edition, that his textbook contained "nothing essential being omitted" or "nothing that later will have to be unlearned as wrong." By the fourteenth edition, he confessed, "What was great in Edition 1 is old hat by Edition 3; and maybe has ceased to be true by Edition 14" (14:xiv).

When faced with such rueful comments by an author of Samuelson's stature, a certain degree of modesty seems warranted for the rest of the economics profession. The successive editions of Samuelson's textbook illustrate that the profession's view of both principles and facts can shift substantially with recent experience, whether the point is the Keynesian lessons that came out of the Great Depression or the speed of Soviet economic growth. An introductory course requires some natural simplification, but it should aim to avoid false certainty.

Samuelson's textbook has delivered a great deal of economic wisdom. For many economists, the positive side of the balance sheet has outweighed the negative. Indeed, his defenders might ask: Might the United States and the West have suffered another Great Depression if Samuelson had not emphasized the need for "automatic stabilizers"? Did not Samuelson's heralding of the "mixed" economy curb the appetite of third world countries for national socialism?

We will never know, of course, but it is humbling to speculate on whether alterations in principles textbooks might have led to a different U.S. economy. Might the United States have experienced higher rates of saving, investment and growth if Samuelson had moderated his antithrift tone sooner? Would the U.S. economy and financial system have been less volatile if textbook writers had given earlier credence to monetarism? Would the United States and developing countries be growing more rapidly if textbook writers had emphasized long-term growth (as characterized by West Germany, Japan and the East Asian economic miracles) over macroeconomic stabilization policies (inflation-unemployment tradeoffs)? Would attitudes toward the Soviet Union and markets have been different if principles texts had been more critical of central planning and Soviet growth statistics? In my judgment, it is difficult to sidestep the conclusion that as the teaching of introductory economics has followed in Samuelson's footsteps, its advice has contributed to certain of the economic problems that the United States faces today.

■ *Thanks to Paul Samuelson, William Nordhaus, Milton Friedman, Roger Garrison, Kenna C. Taylor, Larry Wimmer, Michael Betterman and Jo Ann Skousen for comments and background materials. Special appreciation to Paul Samuelson and Ken Elzinga for locating hard-to-find early editions of Economics. I would also like to thank the editors, Alan B. Krueger, J. Bradford De Long and especially Timothy Taylor, for their many helpful changes and suggestions.*

References

Coase, R. H., "The Lighthouse in Economics." In *The Firm, the Market, and the Law.* Chicago: University of Chicago Press, 1988, pp. 187–213; originally published in *Journal of Law and Economics,* October 1974, *17*:2, 357–76.

Elzinga, Kenneth G., "The Eleven Principles of Economics," *Southern Economic Journal,* April 1992, *58*:4, 861–79.

Friedman, Milton, "Why Economists Disagree." In *Dollars and Deficits: Living with America's Economic Problems.* Englewood Cliffs, N.J.: Prentice-Hall, 1968, pp. 1–16.

Lipsey, Richard G., Peter O. Steiner, and Douglas D. Purvis, *Economics.* 8th ed., New York: Harper & Row, 1987.

Nasar, Silvia, "Hard Act to Follow?," *New York Times,* March 14, 1995, C1, C8.

Samuelson, Paul A., *Economics.* New York: McGraw-Hill, 1948 and various years.

Skousen, Mark, *Economics on Trial.* Homewood, Ill.: Irwin, 1991.

Sobel, Robert, *The Worldly Economists.* New York: Free Press, 1980.

This article has been cited by:

1. Saileshsingh Gunessee, Tom Lane. 2023. Changing perceptions about experimentation in economics: 50 years of evidence from principles textbooks. *Journal of Behavioral and Experimental Economics* **107**, 102086. [Crossref]
2. Jocelyn Hickey. 2022. Reading the Invisible Hand: An Epistemological Consideration. *History of Political Economy* **54**:5, 935-950. [Crossref]
3. Ashwani Saith. Camp Skirmishes Over Interstitial Spaces: Journals, Seminars, Textbooks 295-413. [Crossref]
4. Philipp Bagus, Eduardo Blasco. Will the Antagonism Between the Mainstream Theories and the Theories of the Austrian School of Economics Continue to Exist in the Future or Will More Ideas of the Austrian School Be Incorporated in Mainstream Economics? 305-324. [Crossref]
5. Richard M. Ebeling. 2021. Socialism-in-practice was a nightmare, not Utopia: Ludwig von Mises's critique of central planning and the fall of the Soviet Union. *The Review of Austrian Economics* **34**:4, 431-448. [Crossref]
6. Niclas Modig. 2021. What do economic scholars consider powerful economic knowledge of importance for people in their private and public lives? Implications for teaching and learning economics in social studies. *Studies in Higher Education* **46**:11, 2200-2215. [Crossref]
7. Philippe Fontaine. 2021. Kenneth Boulding's Visual Imagination. *History of Political Economy* **53**:2, 213-241. [Crossref]
8. Madhavi Venkatesan, Natasha Keidl. 2021. Addressing the Relationship between Economics and Climate Change: A Discussion of Principles. *Sustainability and Climate Change* **14**:1, 35-41. [Crossref]
9. Michael Roos, Franziska M. Hoffart. Why We Do Not Have More Pluralism 97-119. [Crossref]
10. Stephen Cummings, Todd Bridgman. A New History of (Sustainable) Management 105-144. [Crossref]
11. Michael C. Acree. Conclusions and the Future of Psychological Research 393-443. [Crossref]
12. Yann Giraud. 2020. ADDRESSING THE AUDIENCE: PAUL SAMUELSON, RADICAL ECONOMICS, AND TEXTBOOK MAKING, 1967–1973. *Journal of the History of Economic Thought* **42**:2, 177-198. [Crossref]
13. Mark Skousen. 2020. There's Much Ruin in a Nation: An Analysis of Modern Monetary Theory. *Atlantic Economic Journal* **48**:1, 11-21. [Crossref]
14. John Bendix, Matthias Wehnert. Samuelson, Paul Anthony: Economics 1-2. [Crossref]
15. Matthias Aistleitner, Jakob Kapeller, Stefan Steinerberger. 2019. Citation patterns in economics and beyond. *Science in Context* **32**:4, 361-380. [Crossref]
16. Kuniyoshi Saito. 2019. LIGHTHOUSE PROVISION IN PREMODERN JAPAN. *Economic Inquiry* **57**:3, 1582-1596. [Crossref]
17. . Supplements 557-625. [Crossref]
18. Victor V. Claar, Greg Forster. Forging the Consumption Paradigm: A Morally Neutral Moral Crusade 131-159. [Crossref]
19. Robert Leeson. 'Free'-Market 'Knowledge': Seven Suggested Research Topics 269-305. [Crossref]
20. Mauro Boianovsky. Divergence and Convergence: Paul Samuelson on Economic Development 535-569. [Crossref]
21. John Weeks, Tom Weisskopf, Michael Best, Paddy Quick, David Barkin, Laurie Nisonoff, Ted Behr. 2018. Memoirs. *Review of Radical Political Economics* **50**:3, 582-598. [Crossref]

22. Yann Giraud. 2018. Textbooks in the History of Recent Economics. *History of Political Economy* **50**:3, 579-585. [Crossref]
23. Robert Leeson. 'Financial Considerations' and the 'Free' Academic Market 115-180. [Crossref]
24. Yann B. Giraud. 2018. Textbooks in the Historiography of Recent Economics. *SSRN Electronic Journal* . [Crossref]
25. Matthias Aistleitner, Jakob Kapeller, Stefan Steinerberger. 2018. Citation Patterns in Economics and Beyond. *SSRN Electronic Journal* . [Crossref]
26. Arne Heise, Henrike Sander, Sebastian Thieme. Fazit 169-181. [Crossref]
27. Yann B. Giraud. 2017. The Contestable Marketplace of Ideas: Paul Samuelson's Defense of Mainstream Economics Through Textbook Making, 1967-1976. *SSRN Electronic Journal* . [Crossref]
28. Arne Heise, Sebastian Thieme. 2016. The Short Rise and Long Fall of Heterodox Economics in Germany After the 1970s: Explorations in a Scientific Field of Power and Struggle. *Journal of Economic Issues* **50**:4, 1105-1130. [Crossref]
29. Arye L. Hillman, Heinrich W. Ursprung. 2016. Academic exclusion: some experiences. *Public Choice* **167**:1-2, 1-20. [Crossref]
30. Arne Heise,, Sebastian Thieme. 2015. Zur De-Pluralisierung der Wirtschaftswissenschaft nach 1970: Explorationen in einem wissenschaftlichen Macht- und Kampffeld. *Schmollers Jahrbuch* **135**:2, 155-187. [Crossref]
31. Beatrice Cherrier. 2014. Toward a History of Economics at Mit, 1940-72. *History of Political Economy* **46**:suppl_1, 15-44. [Crossref]
32. Yann Giraud. 2014. Negotiating the "Middle-of-the-Road" Position: Paul Samuelson, Mit, and the Politics of Textbook Writing, 1945-55. *History of Political Economy* **46**:suppl_1, 134-152. [Crossref]
33. Peter-Wim Zuidhof. 2014. Thinking Like an Economist: The Neoliberal Politics of the Economics Textbook. *Review of Social Economy* **72**:2, 157-185. [Crossref]
34. Robert Leeson. Hayek and 'Deacon' McCormick: Testing Austrian Knowledge 139-188. [Crossref]
35. Roger Backhouse. 2014. The Neoclassical Synthesis and the Emergence of Heterodox Economics. *SSRN Electronic Journal* . [Crossref]
36. Tom L. Green. 2013. Teaching (un)sustainability? University sustainability commitments and student experiences of introductory economics. *Ecological Economics* **94**, 135-142. [Crossref]
37. J. Scott Armstrong, Kesten C. Green. 2013. Effects of corporate social responsibility and irresponsibility policies. *Journal of Business Research* **66**:10, 1922-1927. [Crossref]
38. Beatrice Cherrier. 2013. Toward a History of Economics at MIT, 1940-1972. *SSRN Electronic Journal* . [Crossref]
39. Hanno Pahl. Zur performativen Dimension konstitutiver Metaphern in der ökonomischen Theoriebildung: Zwischen Disziplinarität und Gesellschaft 277-298. [Crossref]
40. Hanno Pahl. Disziplinierung und Popularisierung ökonomischen Wissens als wechselseitiger Verstärkungsprozess: Konstituentien der Oikodizee 53-76. [Crossref]
41. . The Bolshevik Revolution and the Socialist Calculation Debate 32-67. [Crossref]
42. Karmo Kroos. 2012. Eclecticism as the Foundation of Meta-theoretical, Mixed Methods and Interdisciplinary Research in Social Sciences. *Integrative Psychological and Behavioral Science* **46**:1, 20-31. [Crossref]
43. David M. Levy, Sandra J. Peart. 2011. Soviet growth and American textbooks: An endogenous past. *Journal of Economic Behavior & Organization* **78**:1-2, 110-125. [Crossref]
44. . Notes 307-346. [Crossref]

45. Philippe Fontaine. 2010. Stabilizing American Society: Kenneth Boulding and the Integration of the Social Sciences, 1943–1980. *Science in Context* **23**:2, 221-265. [Crossref]
46. YANN B. GIRAUD. 2010. THE CHANGING PLACE OF VISUAL REPRESENTATION IN ECONOMICS: PAUL SAMUELSON BETWEEN PRINCIPLE AND STRATEGY, 1941–1955. *Journal of the History of Economic Thought* **32**:2, 175-197. [Crossref]
47. DAVID R. KAMERSCHEN, DEEPA J. SRIDHAR. 2009. THE THEORY OF [COMPETITIVE] PRICE ACCORDING TO GEORGE J. STIGLER. *Journal of the History of Economic Thought* **31**:2, 181-200. [Crossref]
48. David M. Levy, Sandra J. Peart. 2009. Soviet Growth & American Textbooks. *SSRN Electronic Journal* . [Crossref]
49. Ashwani Saith. 2008. Joan Robinson and Indian Planning: An Awkward Relationship. *Development and Change* **39**:6, 1115-1134. [Crossref]
50. Lawrence Lai, Stephen Davies, Frank Lorne. 2008. The political economy of Coase's lighthouse in history (Part I): A review of the theories and models of the provision of a public good. *Town Planning Review* **79**:4, 395-426. [Crossref]
51. Robert W. Dimand. 2007. The Creation of Heroes and Villains as a Problem in the History of Economics. *History of Political Economy* **39**:Suppl_1, 76-95. [Crossref]
52. Catherine Resche. 2006. Étude préliminaire du discours de présentation de la notion de marché dans les manuels d'introduction aux principes de l'économie. *ASp* :49-50, 93-118. [Crossref]
53. Aron A. Gottesman, Lall Ramrattan, Michael Szenberg. 2005. Samuelson's economics: The continuing legacy. *The Quarterly Journal of Austrian Economics* **8**:2, 95-104. [Crossref]
54. Paul W. Richardson *. 2004. Reading and writing from textbooks in higher education: a case study from Economics. *Studies in Higher Education* **29**:4, 505-521. [Crossref]
55. J. E. King, Alex Millmow. 2003. Death of a Revolutionary Textbook. *History of Political Economy* **35**:1, 105-134. [Crossref]
56. Carl Mosk. 2003. Professional Specialization: Why Labour Market Changes Have Undermined the Role of Economic History in Economics Departments. *SSRN Electronic Journal* . [Crossref]
57. Donald E. Frey. 2002. Francis Wayland's 1830s Textbooks: Evangelical Ethics and Political Economy. *Journal of the History of Economic Thought* **24**:2, 215-231. [Crossref]
58. J. Scott Armstrong. Introduction 1-12. [Crossref]
59. Manfred Gärtner. 2001. Teaching Economics to Undergraduates in Europe: Volume, Structure, and Contents. *The Journal of Economic Education* **32**:3, 219-230. [Crossref]
60. Jeffrey D. Sachs, Wing Thye Woo, Xiaokai Yang. 2001. Economic Reforms and Constitutional Transition. *SSRN Electronic Journal* . [Crossref]
61. Robert A. Mcguire, Elliott S. Willman. 1999. Textbook Explanations of Inflation in the 1970s. *Public Finance Review* **27**:1, 52-76. [Crossref]
62. John P. Cochran, Steven T. Call. 1998. The role of fractional-reserve banking and financial intermediation in the money supply process: Keynes and the Austrians. *The Quarterly Journal of Austrian Economics* **1**:3, 29-40. [Crossref]
63. Vicky Allsopp. 1997. Economics, canonizing discourse and the case for interdisciplinarity. *Journal of Area Studies* **5**:11, 83-103. [Crossref]
64. . References 586-616. [Crossref]