The Eclipse of the Goal of Zero Inflation

Robert Leeson

1. Introduction

William J. Barber's study of Alvin H. Hansen (1887–1975) emphasized the importance of the intellectual transformation that led to the "Keynes-Hansen intellectual system that appeared to have compelling diagnostic and prescriptive power" (Barber 1987, 205).[1] Between 1936 and 1938, Hansen became a convert to Keynesian economics, and this led to the Hicks-Hansen IS-LM model. Subsequent authors (including Phillips in the 1950s) concluded that this approach, being an equilibrium model, did not capture the disequilibrium "essence" of Keynes (Lipsey 1981, 547). The purpose of this article is to highlight a second intellectual transformation in Hansen's policy advocacy, and to suggest the possibility that, once again, Hansen contributed to a Keynesian economics that was in conflict with Keynes's stated position. I will also discuss a parallel transformation in the policy advocacy of Sumner H. Slichter (1892–1959), who was, like Hansen, a Harvard University professor.

Correspondence may be addressed to Dr. Robert Leeson, Economics Programme, School of Economics, Commerce and Law, Murdoch University, Murdoch, Western Australia 6150, Australia. This article has been greatly improved by perceptive comments provided by William J. Barber, A. J. Brown, Graeme Dorrance, Milton Friedman, Geoff Harcourt, Frank King, David Laidler, Keith Norris, Ray Petridis, Rita Ricardo-Campbell, and Herb Thompson, plus two anonymous referees of *HOPE*. The usual disclaimers apply.

1. William J. Barber's article benefited from material on Hansen in the Harvard Archives. Regrettably, it seems that there is little, or nothing, in Hansen's private papers that could shed any light on the issues discussed here (correspondence from Barber, 7 December 1993).

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Between 1936 and 1938, the time of his first transformation, Hansen was already well into middle age. Following 1938, he gradually experienced a second intellectual transformation: he recanted his opposition to inflation. In 1947, Slichter concluded that full employment was only tolerable when combined with stable prices (1947b, 68). Shortly afterward, he appears to have undergone a metamorphosis similar to that experienced by Hansen.

These intellectual transformations are particularly important because of Harvard's role in disseminating Keynesian perceptions among economists and the public in the United States. It was widely believed that Keynes had made Marx redundant (Haberler 1961, viii n. 1; Slichter 1944c, 414–15). But it was Hansen's "disciples [who] dominated the World War II Washington ideology in economics. We live in the world Hansen helped to shape" (Samuelson 1975b). Slichter also directly influenced Samuelson, Tobin, and others; and it is likely that the direction of these influences was not merely one-way (Samuelson 1956, 373; Hansen 1947a, 552; 1949, vi; 1953, vi). A large number of alumni from Hansen's Fiscal Policy Seminar became influential economists in government and in the universities (Salant 1976, 21–23). The inflation that engulfed the world in the 1970s was embarrassing to these Keynesian economists, and Hansen, but not Slichter, lived long enough to be alarmed about this (Haberler 1976, 13). But hitherto, little attention has been paid to the intellectual process by which the objective of zero inflation fell from *primary* favor.

There are many differences and similarities between Hansen and Slichter, but when it came to inflation there was a considerable overlap, not only of policy prescriptions, but also of language.[2] Hansen's

2. Hansen and Slichter were both campaigning scholars, or public intellectuals, although Slichter, unlike Hansen, failed to "develop a coterie of followers to amplify his own influence" (Samuelson 1976a, 24). Both had been taught by John R. Commons (Dunlop 1961, xvii; Barber 1987, 192). Both, presumably, had been influenced by the ideas of the Stable Money League, led by Commons and Irving Fisher; although Hansen (1960b, 27) subsequently believed that Commons's conservative opponents were correct in their policy prescriptions. Both were affiliated with the Littauer School, now renamed the John Fitzgerald Kennedy School of Government. Both had—but subsequently lost—reputations for orthodoxy. Both were prepared to champion causes, regardless of how unacceptable those causes were to their colleagues (Salant 1976, 22–23; Mason 1961). Yet in one important respect, Hansen and Slichter were at opposite ends of the analytical spectrum. According to Samuelson (1947, 146), "the Keynesian taint is unmistakably there upon every one of us [Hansen . . . Slichter . . . myself]." But "Hansen's Law" was a modern theory of stagnation (Abramovitz 1952, 169; Samuelson 1976b, 361), and a majority of Americans appeared to expect a postwar depression (Slichter [1942] 1961, 84;

volte-face with respect to Keynes has been traced back to his largely nonideological approach (Barber 1987, 204). Slichter was also generally regarded as someone who could easily discard cherished views (Dunlop 1961, xx). This is, of course, an admirable scholarly quality.[3] The purpose of this essay is to explore their ability to undertake intellectual transformations, in the context of the eclipse of the primacy of the goal of price stability.

The organization of this article is as follows. In section 2, I trace the evolution of perceptions about inflation, from the widely held proposition that ongoing inflation would *produce* unemployment to the 1960s view that ongoing inflation could be tolerated and that it could purchase sustainable benefits with respect to growth and employment. (More precisely, the argument stated that the fight against inflation was too costly in terms of unemployment.) In section 3, I highlight the significance of the passage of S.380—which became the U. S. Employment Act. In section 4, I offer an analysis of the influence that the Cold War had on the perceptions of economists. (Some economists came to believe that anti-inflation policies would weaken the struggle against communism.) In sections 5 and 6, I examine the changing policy advocacy of Hansen and Slichter. Some concluding remarks are provided in section 7.

Four clarifications are necessary. First, I am primarily concerned with developments in the United States, and the Cambridge referred to is in

1944a, 46; Hansen 1943, 12). In response to this prospect, Hansen (1946b, 17) coined the phrase that became associated with 1960s Keynesianism: "We now need to develop a new frontier, so to speak, in our own backyard and thereby open new outlets for private investment." In contrast, Slichter, in his statement for posterity, listed ten positions that he had taken during his career as an economist. The first was, "The American economy is not in danger of stagnation," and the eighth was, "The view that the expansion possibilities of the American economy was considerably underestimated" (1961, xiv, xv). This was also the theme of his AEA Presidential Address (1942). Slichter (but not Hansen) had been a leading "pre-Keynesian" opponent of annually balanced budgets in times of depression (Davis 1971, 12, 23), but he "vigorously dissented" from the stagnation thesis (Slichter 1961, xii). Slichter believed that Keynes had been "led into his error by his failure to grasp the effects of technological research" ([1958] 1961, 115). He also argued that "The time is ripe to rescue employment theory from its narrow preoccupation with spending" (1946a, 318).

3. Milton Friedman, in correspondence dated 14 March 1994, has written: "I have no doubt that you have done complete justice to Hansen and Slichter's views. Both were people of very high standards and integrity, and of great firmness of conviction once the conclusion had been reached. Both should be applauded for their willingness to change views, even though I happen to believe that the views they changed to were wrong. I did not myself know Hansen well but I did meet him a few times and formed a very high opinion of him as a human being despite my obvious disagreements with him on economic matters."

Massachusetts, not England. Second, if inflation were defined to include a once-and-for-all increase in the price level, then the dichotomy outlined in this article would collapse.[4] I therefore define inflation to exclude the occasional and exceptional resort to such measures. It is *ongoing* inflation, over time, that I am concerned with here.

Third, the evidence appears to suggest that the intellectual transformation described in this article largely occurred in the early postwar period, with 1948 standing out as a watershed year. But we are implicitly dealing with self-conscious revolutionaries (see, for example, Klein 1950), who were very alert to tactical and strategic maneuvers (see, for example, Hansen 1947d, 200). As Galbraith put it, "It is not possible for any reputable American to be overtly in favour of inflation; it is a symbol of evil, like adultery, against which a stand must be taken in public however much it is enjoyed in private" ([1952] 1957, 209). Likewise, Albert Hart, of the Committee for Economic Development (CED), noted that some of those who were prepared to accept the inflationary consequences of the pursuit of full employment "seem to rest their hopes on keeping inflation unnoticed" (1946, 288). It is to be hoped that this will not be taken as a slur on the character of any of the participants in these debates; it merely recognizes that those who go down to the political marketplace in search of influence are usually very alert to the prejudices of their audience. Besides, it seems unlikely that the inflationary sentiments discussed in this article would have been formulated—but not explicitly, or publicly, expressed—much earlier, since ongoing inflation only arrived on the agenda of American policy formulation in the 1940s. But those who opposed S.380 were timid in their advocacy of the necessity of a

4. In 1923, Hansen noted that postwar real wages were 32 percent higher than before the war: "The easiest way of escape is by price inflation," allowing a fall in real wages and an increase in employment: "This will give temporary respite to the struggle. But it will only be temporary. Each succeeding drop in prices will bring a recurrence of the struggle" (1923, 42; Hansen and Tout 1933, 147). During the 1930s, Slichter was prepared to countenance deficit financing as a method of halting the decline in prices, or in permitting their rise (1961, 77, 304–5, 89). To "inflate the general price level slightly . . . but not too much" would allow real wages to fall, and would ameliorate technological unemployment (Slichter [1932] 1961, 313; 1944b, 41). Indeed, such "fiscal inflation" was commonly advocated in the early 1930s by several Chicago economists, such as Jacob Viner and Frank Knight, and by W. C. Mitchell and the Columbia University Commission on Economic Reconstruction (Davis 1968; Viner 1964, 263–64; Knight 1937, 122–23; Hansen 1952, 311–12; Friedman 1967, 8–9; Keynes 1936, 258; Smithies 1946, 22). Also, a "gradual and orderly rise" in the price level was advocated to remove war-induced price-wage distortions, and to facilitate the only politically acceptable method of reducing the American tariff (Slichter 1944c, 414; 1944a, 47).

"floating pool of unemployed" (Bailey 1964, 131; see, for example, Wasson 1945–46, 517–18). In the immediate postwar environment this was simply an unacceptable position. A similar tactical restraint may also have constrained discussion by advocates of S.380.

Did Hansen and Slichter mold or reflect changing professional judgments about inflation? It seems likely that they were largely molding opinion: and both were uniquely placed to do so. Further research may reveal whether they were also influenced by an oral tradition, or by a literature that this article has neglected. But Gottfried Haberler (1972, 135), also of Harvard, had no doubt about the *continuity* between these views and the econometric work derived from Phillips's seminal curve.

Last, economists were grappling with the new problem of how to guarantee full employment against a background of increasing trade union power. Some economists believed that the logic underlying the Keynesian revolution would have consequences "more revolutionary than those of Marxism . . . more so than most contributors to it have yet seen—or said" (Ayers 1946, 124). Some feared that the new situation might make "price inflation a necessary concomitant of full employment forcing the unpalatable alternative of underemployment or inflation . . . we should not encourage the various economic groups in the belief that they will be protected from the consequences of their own folly by government spending. . . . In so far as the Keynesian Revolution has come to this, it is a purely inflationary philosophy which must end in disaster" (Morton 1950, 13, 36). Others, such as Hansen and Slichter, formed different judgments. These views about the relatively benign nature of creeping inflation may have been formulated as an antidote to the alarmist statements made, for example, by Jaques Rueff in the *Quarterly Journal of Economics*.[5] Below, I examine the circumstances under which these alternative judgments were formed.

5. Rueff (1947, 365–67) argued that "an investment program financed by inflation can bring about an increase of employment . . . [this] will produce along with a rise in the general level of price, all the economic and social disorders associated with inflation. If we wish to avoid the latter without abandoning the investment program which has given rise to them, there would be no other solution but to limit demand by a system of general rationing. 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. We shall see the restraints progressively tightening and expanding, and the steady unfolding of the familiar process of inflation will again bring about the suppression of all human liberties. . . . I am confident that [the policy suggested by Keynes] will not reduce unemployment, except to a very limited extent, but that it will have profound consequences upon the evolution of the countries in which it is applied. . . . Whom Jupiter wishes to destroy, he first makes mad."

2. The Eclipse of the Goal of Zero Inflation

Belief in the importance of price stability had, with the attachment to the principle of free international trade, been almost universally accepted by mainstream economists up until this period. Slichter noted that virtually everyone was opposed to inflation (1948, 4). It was, and is, one of those "platitudes" and "banalities" without which "the most acute minds are liable to go astray" (Robbins, quoted in Cairncross 1985, 3). Seymour Harris (1945, 8) described inflation as "a symptom of disease, of a general breakdown of the economic body," and argued that a monocausal explanation of inflation would be an "unsound investigation." Harris advised the Senate Committee on Banking and Currency in January 1948 that "unless we stop inflation this year we are going to have a galloping inflation, a real inflation" (quoted in Goodwin and Herren 1975, 52). Hansen initiated a series of meetings of economists that resulted in a report submitted to President Roosevelt in October 1944, which concluded that stability in the cost of living was essential if full employment was to be maintained (Goodwin and Herren 1975, 10). Yet within a few years of the passage of the Employment Act, a remarkable transformation was under way, and Slichter (1952a, 53) characterized the view that inflation would "threaten the stability of the national economy and the security of the entire Western world" as an "uncritical and almost hysterical fear."[6]

The axiom that ongoing inflation would be followed by more inflation and a deterioration in economic performance had been accorded the status of an eternal truth by most economists prior to about 1960.[7] The maintained hypothesis of most economic thought was that inflation was associated with instability and would therefore *produce* and not reduce unemployment. Price stability should therefore be pursued as a *primary*

6. "'The recent decline in consumer spending' said a conference of distinguished Americans, 'is only a lull in a continuation of inflation that threatens the stability of the national economy and the security of the entire Western world.' This view of inflation is typical of hundreds that have been made during the past few years. It reflects the uncritical and almost hysterical fear that the thought of inflation arouses in a large part of the community. It also reflects failure to see some of the problems, that confront the country and that can be solved best through a slow rise in prices" (Slichter 1952a, 53).

7. For 1950s expositions, see Fellner 1956; Butler 1957; Adams 1957; Reierson 1957; Sprinkel 1958; Elliss 1958; Tongue 1958; Jacoby 1957; see also Balderstone as quoted in Slichter 1957c. Peacetime governments and central banks were perceived as being "the restraining force" preventing peacetime booms from being other than temporary: "the public authorities will be exceedingly anxious to prevent [the large and rapid rise in general prices]" (Pigou 1949, 130–31, 146).

goal; and economic growth, and hence high levels of employment, would follow as a consequence.[8]

In the 1930s, unemployment was the dominant trauma, and some economists became obsessed with the problem of full employment (Samuelson 1953, 546–47; Meier 1984, 11; Wallich 1968, 350; Bronfenbrenner 1948, 373). Many of Keynes's disciples, such as Joan Robinson, David Worswick, and J. K. Galbraith, were concerned about the inflationary consequence of full employment—in keeping with the pessimistic atmosphere of the times (Galbraith 1941, 83; 1947, 292; Samuelson 1946, 191 n. 5). But in the 1940s, many economists came to believe that full employment need not be accompanied by inflation (Kalecki 1943; Sweezy 1946, 302; Beveridge, quoted in Fellner 1946, 324; Hansen 1947a).[9] Singer (1984, 276) concluded that this was a period of "naive utopianism" (Simons 1942, 162; 1948, 157, 185). In the 1950s, full employment seemed rather elusive, or at least ill-defined; yet some commentators concluded that "*the economy has an inflationary bias*" (Slichter

8. Occasionally, one comes across titles such as "The Evil Effects of Monetary Instability on the Creation of Wealth" (Robertson 1924, 13), accompanied by a section entitled "The Case for a Gently Rising Price Level" (Robertson 1924, 722–25; see also Smithies 1946, 26). Robertson's book *Money* was begun in the northern summer of 1920, during the period of profound postwar crisis for European civilization. It is tempting to see similarities between Robertson's fears, and those of Hansen and Slichter in the post–Second World War period: "On the whole, if we were perfectly free to choose, we should perhaps stick fairly closely to our original decision to keep the price-level stable. But we should be prepared either to suspend our decision, or to compel the overhauling of money contracts, in exceptional circumstances; and so long at any rate as we preserved the system variously known as Private Enterprise and Wage Slavery, we should not refuse to wink at a little judicious use of the money-pump, if the tyres of industry seemed to be sagging unduly" (Robertson 1924, 125). Later, Robertson warned that "it may not be wise to regard the attainment even of an employment objective in itself reasonably conceived as in all circumstances the absolutely overriding aim of all policy . . . this most sacred of all the cows" (1966, 256). Likewise, there is in *The General Theory* a tendency to accept a rise in the price level as a more palatable and successful method of cutting real wages, than a direct assault on money wages. In *How to Pay for the War*, Keynes (1940, 25–26) suggested that inflation—"with its evil social consequences [while also being] a mighty tax gatherer"—might be enlisted for the duration of the war in order to supplement voluntary savings. But Keynes reserved an especially vitriolic style of language to describe the collapse of output and employment that would follow from ongoing inflation (Haberler 1961, 56–60; Humphrey 1981; Hutchison 1977; Meade 1993, 4).

9. The "*primary function* of government finance . . . is the permanent elimination of the twin evils of unemployment and inflation" (Lerner 1943a, 132; Sweezy 1946, 301–2). "In the past the check on this upward [inflationary] pressure has been the large reserve army of unemployed. Now that we have discovered that unemployment is dispensable, we need some other and more reasonable machinery to take over the function of stabilising the general wage level. This is our most important unsolved economic problem" (Lerner 1946, 335).

1961, 49). Inflationary expectations had become embedded in the economy (Slichter 1951b, 107; Burns 1960, 18). But many economists were, understandably, reluctant to abandon the moral imperative of achieving full employment, which was perceived to have an almost miraculous effect on the problems of distressed areas, tariffs, quotas, monopolies, and so forth (Samuelson 1953, 558 n. 8). There appears to have been a large constituency for this judgment: "Just as the public is 'agin sin' it is against unemployment" (Samuelson 1953, 549). Likewise, it was recognized that the early stages of inflation were attractive to some politically powerful groups (Reierson 1957, 160). Galbraith constructed a theory of countervailing power to explain why inflation was the compromise solution that emerged from the de facto coalition between employers and unions ([1952] 1957, 147–48). Samuelson, in his Economic Task Force report to President-Elect Kennedy, wrote that "history reminds us that even in the worst days of the great depression there was never a shortage of experts to warn against all curative public action, on the grounds that they were likely to create a problem of inflation. Had this counsel prevailed here, as it did in pre-Hitler Germany, the very existence of our form of government could be at stake. No modern government will make that mistake again" (quoted in Garvey 1975, 402).

Jacob Viner, in his American Economic Association presidential address, warned the profession that "some economists have been discarding too indiscriminately their inherited intellectual ballast, with the result that they sway too easily with each passing wind . . . let us pay heed to the old as well as the new wisdom, and let us especially beware of old poisons in new bottles" (1940, 16, 17). After the war, there was a gradual change of emphasis regarding the *primary* goal of macroeconomic policy, and Slichter (1950d, 44) began to argue that increasing production, not controlling inflation, was the country's major economic problem. Gradually, some economists came to see ongoing inflation as being no longer self-defeating, but potentially beneficial.

Inflation had previously been generally regarded as a response to some particular event, often a war, and was thought to last only as long as the event with which it was associated. The inflations accompanying the post–Second World War reconstruction and the Korean War were perceived to be war inflations, and by 1953, according to the Organization for Economic Cooperation and Development (OECD), it was hoped that a new period of inflation-free economic expansion was under way (Fellner et al. 1961). But between 1953 and 1959, inflation *did* become persistent in the main industrial countries, and the second Eisenhower Administration, particularly under Raymond J. Saulnier's Council of Economic Advisors (CEA) chairmanship, preferred to tolerate high unemployment as an alternative to inflationary pressures (Jacoby 1957, 160–61). According to Slichter, the Federal Reserve "blunder" of August 1957, when credit and money were tightened, was due to the authorities being excessively concerned with upward price movements (1961, 121). Other economists formed different judgments. Beryl Sprinkel (1958, 83–84), citing evidence from Friedman and Schwartz, recommended to the Joint Economic Committee (JEC) that the 1946 Employment Act be amended to explicitly incorporate the goal of zero inflation. Neil Jacoby (1957, 160–61) believed that Eisenhower had "elevate[d] the goal of price stability—now implicit in the Employment Act—to an explicit position . . . a *primary* aim of federal economic policy." The CED strongly supported this proposition, arguing that 6 percent unemployment, combined with the absence of widespread unionization, could achieve price stability (Barkin 1958, 3–4,6). Nevertheless, there was a gradual change in professional economic opinion (Gordon 1975, 95).

In the 1960s, this change manifested itself in the widespread belief in the existence of a stable and exploitable relationship between inflation and unemployment. The lower section of Samuelson and Solow's curve (1960, 192) could have met with no resistance from the zero-inflation advocates at the CED and elsewhere; their curve crossed the axis at 5.5 percent unemployment, only slightly below the CED estimate. Ironically, Phillips (1962, 10), Slichter (1961, 291; 1959c), Klein and Bodkin (1964, 392, 425), and Scitovsky and Scitovsky (1964, 445–46) all came to much more pessimistic conclusions regarding the unemployment cost of stable prices in the United States. But it was the possibility of trading off unemployment for inflation on the upper section of Samuelson and Solow's curve that was unacceptable to zero-inflation advocates such as Phillips (Leeson 1994b, 1997b).

Desai (1992, 19) noted that in the 1950s "Keynesians were blasé" when confronted with complaints about inflation. Galbraith concluded that "the bogey of inflation has now replaced the bogey of socialism as the barrier to enlarged and improved public services . . . it is a much more effective bogey" (1960, 75). Slichter began to see merits in continuous inflation, as opposed to the "serious injustices" of stable prices (1952a, 53). Slichter was influential in Washington, and these views gradually permeated the academic community. At a Lionel Robbins seminar in the mid-1950s, Kelvin Lancaster asked why 2 percent per annum inflation was perceived to be a major problem; and the reply was perceived to be unconvincing (conversation with Lipsey, 15 July 1993).[10] Economists such as Richard Ruggles, Abba P. Lerner, and Albert Rees argued before the JEC that the welfare losses of 2 or 3 percent inflation were less than the welfare losses of 2 or 3 percent unemployment above the frictional level (Teper 1958, 265; Hansen 1960b, 65–66). Highly influential members of the CEA, such as Keyserling, saw full employment as a precondition for the fight *against* inflation (Goodwin 1975, 6). Slichter argued that "it will be anti-inflationary for the government to spend as much money in the calendar year 1958 as possible. . . . The reason is that the economy will have more unused capacity during this period than it will have later on" (1961, 129–30; in contrast, see Slichter 1947b, 67–68).

The pursuit of price stability came to be perceived as an obstacle to growth, and trade union–sponsored economists, such as Solomon Barkin, could describe the unemployment consequences of the policies of the "price-stability first group" as "unacceptable to the American people" (Barkin 1958, 9). One of Slichter's (1961, 141) final statements became almost a manifesto in the 1960s: "As the public realise that the bad results of inflation have been greatly exaggerated and that some of these results will not happen at all, it will give attention to other problems—particular the problem of unemployment and of achieving an adequate rate of growth." In this way, the advocacy of zero inflation became transformed, in the 1950s, from an axiom or eternal truth to the position of a "group" whose views were "unacceptable"; and in the 1960s, to a distinctly old-fashioned-sounding minority. Even the Natural-Rate Expectations Augmented Phillips curve (N-REAP) model contained, at least prior to Friedman's Nobel Lecture (1977), the assumption that in the long run the performance of the economy, and hence the rate of unemployment, was neutral with respect to the rate of inflation—a suggestion that would have been regarded as outrageous by economists prior to the episode described in this article.

This transformation can be illustrated by Nicholas Kaldor's memorandum to the Radcliffe Committee, which contained a section titled "The Dangers of a Regime of Stable Prices." In response to questioning from Alec Cairncross, Kaldor declared that "given the present dynamism of

10. Robertson, citing Slichter, concluded that "'stability' almost seems to have been *redefined* in terms of a 2 or 3 per cent annual rise" (1966, 249).

the British economy, to keep the ship on an even keel and to prevent it from floundering may require *doping it with inflation* because its dynamism is low" [emphasis added].[11] Cairncross stated that "you are the first witness we have had who is a whole-hearted believer in inflation, if I have understood your memorandum aright. You do not regard it in any way as a regrettable necessity but you actually seem to welcome it?" Kaldor replied, "I would not say that. I don't know what I have said to suggest that." Cairncross concluded that Kaldor's evidence implied that "if we want to escape from economic stagnation, we must reconcile ourselves to rising prices." Kaldor replied, "unless the economy is sufficiently dynamic to get us out of this dilemma" (Radcliffe et al. 1960, 715). Subsequently, political parties, such as the British Labour Party, began to formulate policies on the assumption of ongoing inflation (Hayek 1991, 296). In 1962, President Kennedy asked Heller to brief him on the "possible benign effects of a 'little inflation' " (Barber 1975, 177).

Before Samuelson's textbook, Keynesian perceptions were propagated through a scattering of graduate seminars (Jones 1972, 130; Coats 1980, 608). But there was no uncertainty about the reception to Keynes's ideas among some Cambridge economists: "Here was a remedy for the despair that could be seen just beyond the Yard" (Galbraith 1971, 50; Samuelson 1947, 145). Yet *The General Theory* was regarded, by at least one Cambridge economist, as "not well suited for classroom use. It is arrogant, bad tempered, polemical" (Samuelson 1946, 190). Keynesian macroeconomics—or, at least, one version of it—was not codified until the first edition of Samuelson's textbook (1948b).[12] It rapidly conquered economics departments all over the world (Elzinga 1992). Samuelson concluded that "if price increases could be held down to say less than 5 per cent per year, such a mild steady inflation need not cause too much concern" (1948b, 282). In their seminal AEA paper, Samuelson and Solow concluded that 4 or 5 percent inflation "would seem to be the

11. Kaldor continued: "Some of my colleagues would regard economic growth as having very low priority as compared with the stability of the value of money: it depends on one's set of value-judgements and social preferences. I would regard the sort of inflation we have been having, of the order of 3 to 4 percent a year, as a considerably lesser evil than economic stagnation or mass unemployment or instability in production" (Radcliffe et al. 1960, 715–17).

12. Strictly speaking, this is not accurate. Tarshis's text appeared in 1947, but for reasons associated with the Cold War, was never a strong challenge to Samuelson's (Elzinga 1992; Harcourt 1995). Equally, Meade's *Introduction to Economic Analysis and Policy* was published in 1936: "James having been one of the half-dozen people in the world who understood *The General Theory* before it was published" (correspondence from A. J. Brown, 29 March 1994).

necessary cost of high employment and production in the years immediately ahead" (1960, 192). It was this judgment about these potential benefits—which would be forgone if zero inflation were the primary target of economic policy—that colonized the economics profession in the 1960s. It was this judgment that enabled Tullock to conclude that "apparently the Keynesian era is drawing to a close, and it appears to be leaving the United States and England in a most perilous state. Its legacy of significant inflation with high unemployment may be with us for some time to come . . . the standard Keynesian remedy [is] more inflation" (1972, 429).

The trade-off interpretation of the Phillips curve became the applied macroeconomic application of the Keynesian neoclassical synthesis, which Samuelson had outlined in the third edition of his textbook (1955, 360), but which Hansen and others had formulated much earlier. It quantified the cost of a stable aggregate price level (in terms of high unemployment), and also suggested that tolerable and predictable rates of inflation were associated with lower levels of unemployment. In 1973, Samuelson advised the JEC that "I would not . . . think it disastrous if we went from now until the end of the world at 6 percent inflation with everything adjusted to that" (quoted in Breit and Ransom [1971] 1982, 131). Samuelson was not the only economist to reach such a conclusion.[13] Equally, a monocausal explanation of the numerical value of the rate of inflation, which in its more mechanical interpretation could be read off from a statistically estimated and negatively sloped Phillips curve, came also to be widely accepted at this time.[14] Inflation was also perceived as being easily reversible (should preferences change, the system could be shifted down the Phillips curve to a lower level of inflation). This explanation for, and tolerance of, inflation, eventually facilitated the monetarist and supply side anti-Keynesian revolutions, which, in turn, led many Keynesians to return to orthodoxy with respect to the goal of

13. Tobin concluded that "once the sting is removed from inflation, there is nothing wrong with having more of it" (1967, 106). "Anticipated inflation is harmless inflation . . . so let us aim at the 4 percent unemployment rate . . . and accept the 4 percent inflation which comes with it" (Tobin and Ross 1971, 24; Tobin and Ross 1972; Rees 1970). In 1965, the Institute of Economic Affairs published a paper that concluded that "as soon as the likelihood of price inflation is generally recognised . . . the traditional ill-effects of price inflation . . . become negligible" (Farrell [1965] 1972, 181).

14. Tobin and Ross concluded that "we can live with inflation, but we cannot afford a stagnant economy . . . one of the most dismal and best verified observations of modern economics is that there is ordinarily a trade off between the rate of inflation and the rate of unemployment" (1971, 26, 23).

zero inflation (for example, Lipsey 1990). Monocausal explanations of inflation also appear to have been superseded.

It would be unsettling to our scientific credentials if policy advocacy were *primarily* the product of fashion, unmixed with ancient wisdom. There seems something almost irresistible about the evolution of thought discussed in this essay, notwithstanding the optical illusion that serves to distort the vision of all historians. A group of economists, it seems, had *pre-wired* themselves for the trade-off interpretation of the Phillips curve. As Tobin put it, "Hansen must have found irony in the 'new economics' label attached to the 1961–65 revival of his central ideas but he certainly rejoiced in the substance . . . a gentle revolutionary who lived to see his cause triumphant and his heresies orthodox" (1976, 35, 37). Although *The New Economics* (Harris 1947) became associated with *The New Inflation* (Jones 1973), this is not to suggest that a triangle of Cambridge economists (Hansen, Slichter, and Samuelson) sought to encourage inflation; only that they came to see the unemployment cost of stable aggregate prices as being too high to pay. Inflation had become persistent; the cost of reducing it would be paid in terms of unemployment. Ongoing inflation came to be viewed as something that could be tolerated because of perceived benefits on the jobs front. The trade-off interpretation of the Phillips curve was accepted first in Cambridge, Massachusetts, from where it was transmitted, by Samuelson, Solow, and others, to the rest of the profession. It provided the quantification for a position that had, in a sense, already been adopted.

The process by which this happened involved a number of related perceptions that only became fully articulated in the 1960s. First, there was the view that inflation was, at least in part, a statistical illusion, generated by the inability of the price indexes to take account of quality improvements. The components of the basket of goods and services that were used to calculate the price indexes were changed too infrequently. This imparted an upward bias in the measure of inflation (Slichter 1946a, 304; Seldon 1959, 3; Haberler 1961, 11; Klein and Bodkin 1964, 372). Second, there was the argument that the consumer price index was heavily loaded with service items, which provided fewer opportunities for productivity gains. Thus, any ill-conceived attempt to stabilize the consumer price index would condemn the economy to a falling wholesale price index, which was likely to be incompatible with the required rates of economic growth (Hansen 1960b, 8). Third, there was the theoretical analysis that indicated that the conditions for a flight from money—the tendency for creeping inflation to degenerate into hyperinflation—were quite strict and unlikely to occur in practice (Slichter 1957a, 51–53; 1951c, 34; but see Reierson 1957, 150–52). Fourth, there was an attempt to "debunk" some "fads."[15] Klein and Bodkin (1964, 368–69, 404) argued that the "fad of chronic underemployment" had been replaced by "a new fad . . . that we were entering an era of secular inflation." It would be a mistake to suggest that authors such as Klein and Bodkin were misrepresenting Simons, Fellner, and other zero-inflation advocates;[16] they merely came to a different judgment about the *first priority* of macroeconomic policy.[17]

Hence it is appropriate to refer to the *eclipse* of the objective of zero inflation. The containment of inflation did not disappear from the policy agenda, as witnessed by the introduction of wage-price guideposts in the United States in 1962. These economists did not abdicate their responsibilities with respect to containing inflationary forces in the post-1965 period (Lodewijks 1991, 308; Tobin 1984, 103; Solow 1983, 280; 1984, 134). It was political forces that *eclipsed their advice*: "It was straight politics. . . . Inflation seemed the preferable alternative" (Solow 1992, 163). Even when political forces were organized to effect disinflation, the costs of this operation were, at least in the United Kingdom, much more severe than economists predicted (Laidler 1985).

3. The Employment Act

One of the pertinent changes in the economic and political environment in the late 1940s was the passage of the Employment Act, signed Public Law 304, on 20 February 1946 (Bailey 1964, vii). A 1944 *Fortune* poll

15. "Before the *General Theory* . . . there were . . . formidable obstacles in the way of the development of what we now consider sensible fiscal and monetary policies. . . . There was an inadequate understanding of the process of inflation. The prevailing ideas, in fact bordered on a belief in magic . . . [it was] thought that an increase in the quantity of money would surely produce inflation . . . lack of understanding of the process of inflation led to the fear that inflation might easily be triggered if the government followed the wrong policies. This acted as a powerful deterrent to experimentation in the area of fiscal and monetary policy" (Sweezy 1972, 115–17).

16. Under the subtitle "Economists' Fads," Klein and Bodkin (1964, 368–69, 404) discussed Simons's and Fellner's arguments that the pursuit of full employment could only lead to inflation. Simons argued that full employment was not a rational objective, and therefore zero inflation was "the only sensible objective." High rates of economic growth, and thus high levels of employment, would naturally follow.

17. "The situation may perhaps be compared with the policy management of the war economy. In that case we have a dominant goal that is somewhat like the present goal of a high rate of growth. . . . The goal is pursued relentlessly, but the path is made smoother if it can be traversed with less rather than more inflation" (Klein and Bodkin 1964, 428).

reported that 67.7 percent of respondents believed that the federal government should maintain full employment (Bailey 1964, 9). According to Tobin, "The central goal of Hansen's crusade had been the federal commitment to full employment. . . . More than any other single person, Hansen created in Washington and beyond the climate of opinion and understanding that led to the Employment Act of 1946" (1976, 34). Hansen's battle also involved a "counter-offensive" against the alleged dangers of the pursuit of full employment (Musgrave 1976, 5).

Hansen was the author of the National Resources Planning Board pamphlet, *After the War—Full Employment*; but in 1943, Congress terminated the board by denying it further funding (Nourse 1953, 64). With Gerhard Cohn, he then drafted the first full employment White Paper (Bailey 1964, 161). Initially, Hansen (1945a, 103) hoped that an improved bill would emerge from the congressional debates, but he was in a "dejected mood" following the defeat of the original Murray Bill (Bronfenbrenner 1948, 374, n. 4). In the week that 304 became Public Law, he complained that "everything in the original bill except the spending provisions [is] window dressing" (quoted in Bailey 1964, 47–48). He bemoaned that the section of the first report that considered the "economic philosophy of sustained employment . . . could not pass muster as a serious economic document. . . . It contains highly dubious comments about the nature of the business cycle which would not command the ascent of competent specialists in this field." He concluded that "the Report reveals the enormity of the task. The gaps in our knowledge and in our planning, which the Report discloses, brings home to every one of us how shockingly unprepared we are to carry through the national policy declared in the Act" (1947c, 69, 70). But "the progress that has already been made in fiscal thinking in this country will not stop where this debate left off" (1947b, 118).[18]

This act also established the Council of Economic Advisers, which gave the economics profession both a greater public profile and a permanent relationship with the bureaucracy.[19] A. C. Pigou, in his Royal

18. Other self-avowed supporters of Murray's original bill also captured the mood among the thwarted revolutionaries: "The story of the Employment Act of 1946 suggests a need for more responsible policy-making in our national legislature. It also suggests that until we move in that direction, national economic policies will continue to be formulated by a kaleidoscopic and largely irresponsible interplay of ideas, interests, institutions and individuals" (Bailey 1964, 240, xi).

19. Edwin Nourse, the first CEA chairman, wrote of the Employment Act that " 'the spirit of '76' is a phrase of almost hallowed significance in the book of American patriotism. That was

Economic Society presidential address, concluded that "it is not likely that there will be a market for our produce" (1939, 271). But in 1947, the president of the AEA declared that, henceforth, the relationship between "The Economist and The State" was irrevocably changed: the United States "can no longer remain complacently aloof behind the oceans, nor the economists behind the book stacks. . . . [The CEA] gives the profession of economists a broad opportunity of rendering greater service to the nation and places on them, and on this Association, a correspondingly grave responsibility. . . . The Ivory Tower has been conquered by events and razed to the ground. The economist is out in the open and must come to grips with problems of state" (Goldenweiser 1947, 1, 12).

There are a number of echoes of Goldenweiser's address in Hansen's and Slichter's work. The Employment Act was a vague and ambiguous document, requiring, as it did, the simultaneous achievement of both an undefined, but nevertheless "full" employment, combined with price stability (Bailey 1964, 228–32). Goldenweiser (1947, 4) noted that "Communism places a period after its dogma, in fact, an exclamation point, while a question mark is still discernible at the end of deliberations on *economic dilemmas* by proponents of individual enterprise. This appears to give the communist approach the advantage of certainty, and leaves capitalism under the apparent handicap of indecision. . . . In this critical hour the economist and his Association have a great opportunity and a corresponding responsibility" [emphasis added]. Reading the works of Slichter and Hansen (or Samuelson, Solow, Klein, Modigliani, and Tobin) there can be no doubt about the degree of *responsibility* that these economists felt for macroeconomic outcomes. Brilliant economists like nothing more than unresolved dilemmas or problems (for example, see Samuelson 1992, 245). Equally, as Klein (1992, 185) put it, "when we have learned to harness the computer *now* for problems that seemed to be out of reach *some years ago*, I have a warm feeling inside." The simultaneous pursuit of full employment and price stability came increasingly to be seen as a Delphic ambiguity. It is hardly surprising that an econometrically based Phillips-type relation would later be perceived as a solution to the riddle, or dilemma, posed by the Employment Act.

Year 1 of our national freedom. 'The spirit of '46' may by future generations attain, if not equal, at least very great significance." He also reflected on the unscrupulous nature of "the economic politician as salesman of policies," concluding that "even the best economic politician may have to be a bit of a demagogue to win his chance to be a statesman" (1953, 459, 20–23).

With the demand for responsibility on the part of economists went the hope for leadership on the part of statesmen (Goldenweiser 1947, 6–9; Smithies 1949, 359). Faith in statesmanship with respect to macroeconomic policy, and in particular with respect to restraining wage inflation, was also part of Hansen's (and Keynes's) analysis.[20] Slichter also had, at least for a while, faith in statesmanship on the part of both trade union leaders and management ([1947] 1961, 253; [1950] 1961, 376). These moral imperatives had a global and apocalyptic dimension: without U.S. economic strength, "there is little hope for the future of western civilisation" (Goldenweiser 1947, 4).

In light of the experiences of the 1960s and 1970s, it is difficult to see these hopes as being anything other than pious. At the time the evidence was mixed. Between Pearl Harbor and V-J Day, less than 0.0006 of 1 percent of total U.S. production time had been lost due to strikes (Manchester 1973, 400; Slichter 1943a, 74–75). Trade unions honored their no-strike pledge, and unauthorized strikers were pressured to return to work (Leiserson 1946, 338). Between 1948 and 1950, British trade unions also accepted the necessity of wage restraint. The prohibition on strikes in the United Kingdom was not repealed until the 1951 Trade Union Congress (Phillips 1958, 296-97). In the five years after 1947, less than 2 million working days were lost due to strikes in Britain (Roberts 1957, 114). In 1962, President Kennedy won an impressive victory for the wage/price guidelines against an attempt to raise prices by the steel industry, which enhanced his prestige in foreign affairs (Schlesinger 1967, 508).

4. The Onset of the Cold War

On 5 June 1947, General Marshall delivered his famous fifteen-minute address at Harvard University's commencement exercises (on the same day a communist coup took place in Hungary). On 19 June 1947, the Kremlin received the invitation to participate in what became known as the Marshall Plan. But a compelling economic analysis began to dominate proceedings in the Kremlin, with Marxist theoretical analysis being used to demonstrate that the postwar period would lead to Western economic depression and collapse (Halle 1967, 133). Appealing to the authority

20. Hansen warned that "the teachers and practitioners of Keynesian monetary doctrines had better watch their step lest it should turn out that a Frankenstein monster had been let loose" (1947d, 200; 1972, 35).

of Stalin—"In order to do away with crises, it is necessary to do away with capitalism"—these oracles concluded that the Employment Acts were "radically fallacious. They are based on erroneous theoretical conceptions . . . the method of Keynes is a theoretical figment, which is used for demagogic ends" (Trachtenberg 1946, 406, 409). In 1946, Eugene Varga, the ex-chairman of the Supreme Economic Council of the short-lived 1919 Hungarian communist government, published a controversial book that suggested that such a breakdown was not imminent (Domar 1950). Varga was dismissed from his positions, and eventually was forced to recant, after having been reminded that he "should know from the history of our Party to what sad consequences the stubborn insistence on one's errors leads" (Ostrovitianov, quoted in Domar 1950, 151). Louis Halle concluded that policy in the Kremlin was predicated on the gamble that the West would be unable to recover from the crisis of 1946–47 (1967, 133). Thus June 1947 marked the point of no return with respect to the economic Cold War. On 3 April 1948, President Truman signed the Economic Cooperation Act, and on 16 April 1948, sixteen European nations created the Organization for European Economic Cooperation. In September 1949 the United States lost its nuclear monopoly; China "fell" in 1949; in June 1950 the Korean War began; in April 1951 Julius and Ethel Rosenberg were sentenced to die in the electric chair for allegedly passing atomic secrets to the Russians.

The Marshall Plan had developed through a succession of accidents (Miall 1961, 781), but by 1948 the atmosphere of combating communism was gathering momentum both in Washington and in the West, and "by a self-perpetuating dialectic the Cold War grew rapidly in magnitude and intensity" (Halle 1967, 156). A Gallup poll in October 1947 reported that 76 percent of Americans believed that Russia was determined to rule the world (Wittner 1978, 47). By 1948, Slichter was in no doubt that "the most important fact about the world today is the conflict between the philosophy of life represented by Russia and the philosophy which Western Europe and the United States have inherited from the Greeks and the Anglo Saxons. . . . Russia is gradually creating a community in which individuals are vassals of the State—a new form of serfdom" ([1948] 1961, 261–62).

In his 1949 inaugural address, President Truman sought to mobilize economists to design policies that would help prevent the spread of communism in developing countries. In 1951, the Center for International Studies (CENIS) was established at MIT, under the leadership of Walt

Rostow and Max Millikan (Lodewijks 1991, 286, 292). The motives behind its establishment reflected the Cold War conflicts of the time (Rostow 1984, 240, 259). It also, perhaps, reflected a preference by Cambridge economists to contribute toward the winning of the Cold War through economic policy formulation rather than through participation in such institutions as the RAND corporation (Leonard 1991, 271 n. 9). Hansen's Fiscal Policy Seminars became increasingly preoccupied with these international considerations (Salant 1976, 17–19).

The United States was entering a new period in its history. Nixon and McCarthy had been swept into office in the Republican landslide of 1946, "a time of anti-radical hysteria" (Sweezy 1947, 931). By the end of 1948, Poland, Hungary, Romania, Bulgaria, Czechoslovakia, and East Germany had all become satellites of the Soviet empire. The currency reform, leading to the German economic miracle, began in June 1948, followed immediately by the first open Cold War trial of strength in the Berlin blockade and subsequent airlift. By 1948, postwar euphoria had clearly evaporated, and in August Elizabeth Bentley and Whittaker Chambers accused three eminent Harvard graduates, Lauchlin Currie, Alger Hiss, and Harry Dexter White, of treachery (Manchester 1973, 459, 493–94).[21] President Truman was subpoenaed by the House Un-American Activities Committee (HUAC) in connection with the pursuit of White; he responded by suggesting that "the Committee is more un-American than the activities it is investigating" (quoted in Donner 1961, 36). Shortly afterward, the HUAC targeted university textbooks in their pursuit of subversive literature. This witch-hunt was inspired by the National Council for American Education, which was organized by a notorious anti-Semite, Allen Zoll (MacIver 1955, 59–63; Donner 1961, 30). A. J. Brown (correspondence, 29 March 1994) recalls that discussions about the Cold War and McCarthy were "my daily diet back at Columbia, the latter, especially, growing into a general pre-occupation by the time I left for home in June [1950]."

As Samuelson put it, "The McCarthy era, in my judgement, posed a serious threat of American fascism. . . . I observed at close hand the fears and tremblings that the Harvard and MIT authorities experienced, and these were the boldest of the American academic institutions" (1992,

21. Singer (1984, 296–97) recalled that "trade pessimism alone was often enough to put you in the 'subversive' category . . . those were the days of the Hiss trial and the McCarthy committee." I am grateful to David Laidler for pointing out to me that Harvard showed little interest in retaining Currie or White.

238; Friedman 1962, 141–42). In 1949, President Conant was asked by the chairman of the commission that drafted the antisubversion legislation of Maryland to instigate loyalty tests for all Harvard faculty members (MacIver 1955, 196–97; Conant 1970, 561–79). It would be little more than speculation to inquire into the thought processes of economists such as Hansen or Slichter (over and above that which is grounded in evidence). A full-scale biographical analysis might offer a compelling explanation; this article merely seeks to highlight the intertemporal conjunction of these themes. But it would be foolish to imagine that the Cold War was perceived in Cambridge (or elsewhere) as "a quarrel in a faraway country between people of whom we know nothing." In February 1948 an ex-Harvard economist, Nicholas Georgescu-Roegen, and his wife escaped execution by stowing their way out of Constantsa Harbor, assisted by bribed smugglers. Their return to Harvard in July 1948 must have made the Cold War seem unpleasantly real (Georgescu-Roegen 1992, 133).

Ironically, Samuelson's concerns for the postwar health of the American economy were similar to the prognosis provided for Stalin in the Kremlin. Samuelson (1944a, 1944b) predicted that by 1947, production would fall to 1939 levels, and unemployment would approach 20 percent. He regarded full employment as the central problem of contemporary economics; and only after this primary objective had been met should other problems be addressed. Keynesian policies were essential to preserve our "own concepts of democracy and freedom," which was a different commodity from "the 'industrial democracy' . . . the Russians claim that they have" (1948a, 15, 588). The theme of strengthening the American economy to cope with the Russian threat reappears elsewhere in the text.[22]

These concerns were echoed in a chapter written for a book, the subtitle of which was *A Study of the Politics and Economics of High Employment without Inflation*, edited by Millikan, of MIT's CENIS. Under the head-

22. "Either we learn to control depression and inflationary booms better than we did before World War II, or the political structure of our Society will hang in jeopardy. . . . If, as before the war, America marks time for another decade, the collectivised nations of the world, who need have no fear of the business cycle, as we know it, will forge that much nearer or beyond it" (1948b, 393–94). In the third edition of his textbook Samuelson (1955, 709) noted that "perhaps we should be thankful that the Russian economists have not mastered modern elementary economics; they do not yet understand the 'neo-classical' synthesis which . . . clearly demonstrates the ability of resolute free societies to dissipate the ancient fear of mass unemployment."

ing "Full Employment and Our National Security Strength," Samuelson (1953, 55) stated:

> We live in troubled times. Great interest attaches to the economic sinews of war. Would full employment increase or decrease our defensive and offensive strength in the next war years? The question of our *long-run* military strength—or economic war potential—is closely related to the question of our long-run rate of economic progress. . . . Would mass unemployment help the growth of communism in America and lower the fighting morale of our armed services and civilian labor force? Could it contribute to radical legislation having no immediate relation to recovery and that would be weakening to our productive system? To some extent the answer to the first of these questions, I should suppose must be yes. . . . I question whether our democratic system is quite so fair-weather a flower as some have come to regard it . . . the rest of the world's opinions of us and our way of life would be seriously blackened if we were to succumb to a great depression. . . . Undoubtedly our high levels of civilian production of steel and durables in the 1945–50 post-war period added to our strength to meet the post-Korean challenge.

These themes were quite commonly discussed in the postwar period. During the war, a handful of economists had created a revolution in American policy. The two immediate goals for the postwar period were price control and extensive government spending programs. But the Cold War had elevated the importance of military expenditures over the claims of social welfare programs: "After 1946 the defence program had come, not to represent, but to conflict with the liberal Keynesian hopes for abundance, security and progress" (Jones 1972, 130–32; Smithies 1949, 360). At the same time, it was widely assumed that increased defense expenditures would produce inflationary pressures (Smithies 1949, 358; Reierson 1957, 150, 155).

Richard Gilbert and a group of Harvard and Tufts contributors to the Fiscal Policy Seminars had coauthored a Hansen-inspired analysis of secular stagnation (Gilbert et al. 1938). Later, in a paper delivered to the JEC, titled "Economics for Cold War," Gilbert suggested that the Russians "have allocated their resources with devilish purpose and effect, and they have understood the role of incentives and applied them with spectacular success." Russian growth rates were believed to be double those of the United States, whose performance "falls short of what is clearly required for survival." Gilbert concluded that the continuation of inflation in the United States "would have the most serious consequences" (1958, 230, 221–22). Hansen and Slichter also became preoccupied with national security issues; but their conclusions about inflation were the opposite of Gilbert's.

5. Alvin Hansen

The Keynesian Revolution effected a fundamental redirection of research efforts, away from the detailed analysis of business cycles, toward a *General Theory of Employment* that was also "capable of explaining the phenomena of the Trade Cycle" (Keynes 1936, 313). Hansen was associated with this redirection—both as cause and effect (Seltzer 1946, 67). In his pre-Keynesian period, he regarded each cyclical fluctuation as an extremely complex phenomenon that could be analyzed using the analogy of a pendulum.[23] In his pre-Keynesian days he had concluded that "it is wholly fallacious to assume that a government can, in a private capitalist economy, spend its way out of depression" (Hansen and Tout 1933, 143).

Samuelson concluded that Hansen and others "had gone far in describing the business cycle [although] neoclassical economics was handicapped in that it lacked a developed macroeconomics to match its almost over-developed microeconomics. . . . Fortunately, Hansen did not follow Mitchell's example to move down curves of diminishing returns in trying to let the facts tell their own story about what sometimes happens in business cycles and what sometimes does not. . . . Hostility to economic theory [is] the only sure badge identifying an Institutionalist" (1976b, 845; 1976a, 27). In 1931, a visit by Ragnar Frisch to the University of Minnesota had stimulated Hansen's interest in accelerator analysis (Sweezy 1972, 120–21; Hansen and Tout 1933, 120 n. 2). Under Mitchell's influence, he had previously been suspicious of business cycle models (Breit and Ransom [1971] 1982, 89). Later, Hansen (1941b) and Samuelson (1939) combined the accelerator with the multiplier to generate a model of the business cycle—illustrated with statistical data

23. Equilibrium is disturbed by exogenous forces, and "disequilibrium results from a disruption of the internal price structure." A "gently falling," or (preferably) a "gently rising" price level could reestablish the equilibrium cost-price relationship: "This is the essence of economic stability" (Hansen and Tout 1933, 146–47, 120). Hansen's analysis was usually accompanied by appropriate institutional detail and data analysis (Barber 1987, 192).

from the American economy (Hansen 1941b). This became known as the Hansen-Samuelson model (Ackley 1961, 496).

Hansen had previously been thought of as somewhat of an advocate of deflation (Harris 1968, 320). In the 1920s, he was associated with the view that the fundamental economic difficulty was "society's tendency to accumulate capital without saving, thus giving rise to inflation followed by subsequent collapse" (Musgrave 1976, 3). The AEA organized a session on forecasting the behavior of the business cycle, in spite of the apparent hostility of the AEA president, Jacob Hollander, to such attempts at prophecy (Mitchell 1923, 45). Hansen's contribution was titled "The Outlook for Wages and Employment." Not only does his detailed historical discussion resemble Phillips's (1958); he also discussed an empirically based "employment curve" (Hansen 1923, 38). He also noted, like Phillips, that it was possible for aggregate wages to be sticky downward even in the presence of significant levels of unemployment (Hansen 1923, 31; 1925, 40). But Hansen employed a disaggregated microeconomic approach, and his conclusions were different from those that would subsequently be derived from Phillips curve results: there was, he argued, "a contest of high wages versus full employment."[24] Hansen was concerned about the unemployment consequences of labor's wage tenacity. For the wage-earner, "An established wage is a front line trench which must not be given up at any cost . . . The stage is thus set for an unprecedented struggle over the existing wage level." The rise in real wages since 1914 had been "nothing short of revolutionary" (1923, 39–40, 34). These themes were also echoed and elaborated in Slichter's work.

Hansen subsequently became known as "much more than the American Keynes" (Samuelson 1976a, 25). His after-dinner AEA presidential address declared that full employment was the fundamental problem of the time (1939, 4, 12–15): "a challenge is presented to all those countries which have not as yet submitted to the yoke of political dictatorship

24. Hansen argued that "the abnormally high wage level is likely to remain . . . such a wage level can scarcely fail to affect the volume of employment. To be sure, if we are to have during the next year or so another period of price inflation, the price level may temporarily catch up with the wage level, as in fact it is now in the process of doing, but that will only be a temporary situation. With the next fall in prices, industries will again be confronted with an abnormally high wage level. The inevitable result of such a situation is that a considerable volume of unemployment ensues. . . . It is a contest of high wages versus full employment." Any increase in unemployment would increase the marginal product of labor: "Thus unemployment makes possible higher wages for those employed, or in other words, abnormally high wages cannot be paid without a considerable volume of unemployment" (1923, 36–37, 41).

[and] an all round regimented economy." His challenge to the profession was to devise a program of public expenditure that would maintain full employment while avoiding the vicious spiral of inflation and growing inefficiencies. He discussed numerical estimates of the level of national income at which governments should begin to be alarmed about the consequences for inflation, and warned that economists and policy makers should not understate the dangers involved.[25]

In 1947, Hansen updated his challenge to the profession "on the threshold of this great experiment." Full employment, he argued, would still leave between 2 and 3 million people temporarily unemployed. He saw benefits from an average unemployment rate of 4 to 5 percent, which would provide a suitable degree of labor market flexibility. Inflation, however, was "the immediate danger . . . stability, maximum production and full employment are not easily achievable goals. We are perhaps out of the kindergarten, but we have a long way to go. . . . Inflation now will bring devastating collapse later we need to be on our guard. We must not play with fire . . . we must have a program of wage and price stability. Full employment programs are loaded with inflationary dangers. To deny that would be folly." He also echoed Beveridge's concern with price stability and the necessity for trade unionists to restrain wage demands (1947b, 23, 19 n.1, 108, vii–viii, 13, 57–81, 157).

But inflation became persistent, and Hansen's judgment about the adverse consequences of inflation appears to have changed. Like the transformation between 1936 and 1938, this change occurred gradually.[26] In 1941–42, *How to Pay for the War* came to Washington, via Harvard.

25. Economists "will not perform their function if they fail to disclose the possible danger which lurks in the wake of vastly enlarged government activities . . . public spending is the easiest of all recovery methods, and therein lies its danger" (Hansen 1939, 14–15).

26. He wrote that "it is of utmost importance not to be so scared of inflation as to drive headlong into stagnation" (1938, 319). In 1939 he presented a preliminary report on *Fiscal Policy and Business Cycles* to a conference of specialists. Hansen reiterated the "conclusion of the 1930s" about the correspondence between "*American Prosperity and World Peace*," which required "bold social engineering." He highlighted a paradox: "Until an approach to full employment is reached expansion will help prevent inflation. This is true because until full employment is reached, the main danger of inflation lies in the development of bottlenecks." But he also cautioned against "dangerous price inflation as the economy approached full employment . . . inflation is even more serious and insidious than unemployment. It will not do to let it get started in any area" (1941b, 448–49, 434–35). Henry Simons, who came "to bury Hansen," acknowledged "an implicit Hansen principle, namely that inflation should be avoided. . . . He clearly is disposed to avoid and deplore inflation. . . . By implication he is asking for the most expansive fiscal policy compatible with price stability" (1942, 162, 180–82).

There was an "almost paranoiac concern in 1940 and 1941 over inflation . . . it was axiomatic that, in the coming conflict, inflation must, above all, be prevented. It was also axiomatic that to prevent much inflation one must prevent a little. . . . In early 1941, Alvin Hansen took up the discussion at Harvard." (Galbraith 1981, 127–28). Hansen's (and Gilbert's) slightly heretical proposal was to distinguish between localized inflation, due to specific shortages or bottlenecks, and a generalized increase in all prices due to a general excess of demand (Galbraith 1981, 129). Tobin interpreted this episode as opposition to the "premature imposition of anti-inflation measures, correctly arguing—not only against conservative Americans but against Keynes himself when he visited Washington—that slack in the American economy was still enormous" (1976, 36–37). The Wartime Keynesians "shifted public attention to the expansionary rather than inflationary effects of large deficits" (Jones 1972, 128). Toward the end of the war, attention was increasingly devoted to the policy analysis of the type of wage and price behavior that would be required to achieve and maintain full employment (Salant 1976, 17). But Hansen's analysis involved the advocacy of "reasonable prices" and "competitive price decreases"; plus a caution about wage increases "encountering unfavourable economic repercussions with respect to the cost-price structure" (1943, 14, 19, 20).

By 1945, Hansen was more fully aware of the inflationary consequences of the pursuit of full employment, and he advocated an incomes policy (Samuelson 1976a, 30). He argued that "a compensatory fiscal program cannot allow expansion to run on into a price inflation"; with wage inflation "the prospect of economic stability would be very dark indeed." But he also argued that some degree of postwar inflation was the only alternative to an upheaval in industrial relations and widespread disputes: "It would be suicidal to engage in destructive industrial conflicts over the wage question. . . . In the fight against inflation, as indeed in any public policy, awkward but hard facts intrude and not infrequently throw serious monkey-wrenches into the machine. Many things simply must be done within reason even though they conflict with the goal of price stability. . . . Tough facts such as these [that is, the likelihood of industrial disputes] do, indeed strike blows at rigorous consistency. The reed that does not bend may break. Blind adherence to a doctrinaire and inflexible pursuit of *mere price stability* will not do" (1945b, 260; 1945–46, 693–94; emphasis added). But still he advocated "full employment at a substantially stable price level" (1946a, 72).

In 1947, he discounted the "alleged dilemma" of accepting 6 to 8 million unemployed as the inevitable cost of stable prices. His analysis of inflation was, at this time, constructed in microeconomic terms. Hansen detected a change in Keynes's priorities between 1936 and 1939. Previously, Keynes had assumed that cost curves were U shaped. By 1939, Keynes concluded that cost curves might be flatter than he had hitherto supposed. Hansen cited empirical evidence that concluded that cost curves might be horizontal over large ranges of output, the U-shaped proposition being no more than a bias in economic theory, without empirical support. Full employment was, therefore, inherently compatible with price stability. Wage inflation was not an inevitable "flaw" under full employment capitalism, but "a problem of labor management relations and collective bargaining" (1947a, 560–61).[27] By 1949, Hansen believed that it was "now widely held" that cost curves were substantially horizontal over large ranges of output, and that real wages might actually rise as employment increased. In the absence of a war-induced inflation, "the system is, within limits, internally and inherently stable." But Hansen restated his opposition to ongoing inflation: too rapid an increase in prices "may be highly dangerous to the continued stability and social cohesiveness of a democratic society" (1949, 120–21, 155, 129).

In 1949, Hansen stated that "as full employment is approached, prices may tend to rise more rapidly than employment." Hansen introduced a concept that he called "the price elasticity of output as a whole at different levels of output." This elasticity was conditioned, in part, by "bottleneck situations," although Hansen thought that "Keynes was perhaps inclined to overstress their importance" (1949, 133–34). These bottleneck situations could be broken by a variety of policy actions. It is tempting to see in this analysis an optimistic forerunner of the Phillips relation that would dominate New Frontier thinking about the relationship between full employment and inflation. In the 1960s, zero inflation was abandoned as a policy goal; the 1950s can be seen as a transitional period with respect to these changing views of inflation. During the 1950s, an increasing number of economists became attracted to the view that full employment policies should be pursued, even if this implied ongoing in-

27. In the transitional period, prior to full employment, labor would have to choose between abnormally high profits or high levels of unemployment. When expectations adjusted to continuing full employment, entry of new firms and movements along long-run cost curves "will tend to put downward pressure on marginal costs, prices and output" (Hansen 1947a, 559–64; Slichter 1945a).

flation. Thomas Balogh and the United Nations Report on Full Employment advocated this view. "Hansen's theory" stated that full employment was incompatible with price or wage stability, and that an unacceptably large volume of unemployment was required to prevent inflation (Wagner 1957, 87–90).

By 1952, Hansen's contributions to the Fiscal Policy Seminar were regarded, by some, as rather "cut and dried" (Salant 1976, 21). Although he was four years away from retirement, he was already sixty-five years old. During a visit to Berkeley in the early 1950s, Hansen invited John Letiche to offer some criticisms of his work. Letiche replied that Hansen seemed to be repeating himself in his work on employment theory. Hansen retorted, "you're right and I intend to do something about it" (quoted in Breit and Ransom 1971, 105 n. 50). He began to espouse the social imbalance hypothesis, which Galbraith popularized (Samuelson 1976b, 849). The postwar episode had demonstrated "how vast a volume of aggregate demand is necessary to keep the . . . American economy fully employed" (Hansen 1951, 508). He also concluded that "Keynesian critics may, however, have exaggerated the danger of inflation and wage control in a full-employment society" (1953, 229). In 1954, he advised the Joint Committee on the Economic Report that fears of peacetime inflation were "grossly exaggerated" (quoted in Gordon 1975, 101). In 1957, he concluded that the previous quarter-century had provided a laboratory experiment with which to test the validity of Keynesian policies (1972, 33). The U.S. economy was equipped with safeguards against peacetime inflation; the remaining problem of wage inflation could be solved by "statesmanlike action"; the "fetish of rigid price stability is an obstacle to growth" (1972, 35).[28] Unless aggregate demand was used to generate full employment, "we shall not even discover what our potentialities for growth are. Under these circumstances we could gradually drift into a condition of stagnation" (1972, 36–39). Hansen also forcibly

28. To support his argument, Hansen (1972, 36) cited the work of Frederick Mills, of the NBER, whose analysis of periods of expansion over an eighty year period "showed that . . . for every 1 per cent. increase in output we have had 8/10 per cent. increase in prices—a 5 to 4 ratio." Inflation needed to be redefined as "a condition in which prices rise without any appreciable increase in output . . . one does not encounter the condition of inflation in any meaningful sense so long as percentage increases in aggregate output exceed by some margin the percentage increases in the price level. . . . There are times when a tremendous forward push is urgently needed, when a choice has to be made between permitting a price increase substantially greater than my rule suggests or else forgoing the needed increase in aggregate output." Rapid growth, Hansen argued, was normally associated with moderate inflation.

argued for an increase in government expenditure (1960b, 67: Slichter 1961, 142).[29]

In these autumn 1959 Phillips Lectures, Hansen (aged seventy-three) argued that the postwar average unemployment rate of 5.1 percent was "intolerably high" (1960b, iv). Given the timing, it seems likely that he had access to the "Samuelson-Solow schedule" prior to the 1959 AEA meeting (1960b, 4). In earlier time periods,

> the word "inflation" was virtually unknown. Words, phrases, play a not inconsiderable role in popular psychology. You cannot frighten people out of their boots with the phrase "high cost of living." . . . "Inflation" implies that something is about to blow up. And in fact, much of the current discussion partakes, I fear, of something unpleasantly akin to hysteria. . . . We should stop trying to scare the wits out of people about the inflation issue. Fortunately the public puts little stock in this alarmist talk about the "tinder of inflation lying all about us." The inflation problem can be made, and is being made, into a powerful propaganda argument against increases in government expenditures. . . . It is high time that we modernised our system of built-in stabilizers. Until we do this, we shall not escape the bugaboo of inflation every time we begin to approach full utilisation. We need inflation-resisting cushions to make us bolder in our programs of expansion. (Hansen 1960b, 25, 31, 23, 66)

The urgency of Hansen's tone was due to "The Soviet Economic Challenge" (1960b, 43–68). Soviet annual industrial growth rates, he believed, had been 10 percent, compared with 3.5 to 4 percent in the United States. The "growing authority of Soviet science and technology" was attributed to generous allocations of funds:

> It must become clearer day by day to any reasonable observer of the American scene that the marginal tax dollar has currently a much higher social utility than the marginal pay-envelope dollar. The former goes into schools; the latter into tail fins. . . . Basically the matter simmers down to this: under currently dominant political tenets, the Federal government is not permitted to play the role which is requisite for adequate growth . . . in order to measure up to the production

29. Slichter advised the Senate Finance Committee that "in addition to stepping up spending in the immediate future as much as possible, moderately large longterm increases in spending should also be planned" ([1958a] 1961, 130).

> requirements imposed upon us by the Cold War. It cannot be done by purely conventional methods. . . . National defence is indeed *the* supreme issue confronting us. On one matter at least there is no controversy among economists. No economist, to my knowledge, questions the economic capacity of the United States to provide adequate defence. . . . Up to the First World War the gold standard and the balanced budget were sacrosanct. The gold standard is gone, but the balanced-budget dogma has enjoyed of late a considerable revival. And linked with it, as a substitute for the gold standard, is a newly born dogma—already a lusty infant—the dogma of price stability. The dogma has become in recent years a major weapon to beat down government expenditures. (1960b, 43, 47, 24, 44–45, 5–6)

Hansen mentioned only one of the 1960 U.S. presidential candidates: "The Nixon cabinet committee, on price stability and growth . . . noted . . . that if prices are not to fall in recession periods, they must be nipped in the bud in periods of expansion. This, however, is easier said than done, and at any rate it raises the very serious question whether really vigilant price policing would not also nip expansion in the bud. . . . It is shocking to hear high Administration officials declare that we cannot *afford* adequate defence, education, housing, urban renewal etc. . . . Instead of giving us a vigorous positive leadership they are spreading a fear psychology throughout this country by alarmist talk about inflation." But there is a not-too-mysterious reference to the U.S. presidential candidate most closely aligned with Cambridge thinking: "What is needed is not the banker's mentality of caution, but rather the entrepreneurial spirit of adventure, of bold experimentation. I leave it to the reader to see if he can scan on the horizon that kind of leadership" (1960b, 22–23, 185, 39).

6. Sumner Slichter

Slichter was widely regarded as a highly influential economist, with uncanny forecasting ability and unrivaled perceptiveness about trade unions (Dunlop 1961, xxi; Samuelson 1961, 24; Haberler 1961, 25). He was also the author (1937) of one of the most influential studies of the U.S. interwar business cycle (Gordon 1949, 55; Haberler 1949, 87). He became a leading advocate of the wage-push explanation of inflation (Haberler 1961, 21). He was also the chairman of the AEA Committee on Public Issues (Slichter 1949a; 1950b), which published the influential subcommittee report on economic instability (1950b). His devotion to labor-management relations and their macroeconomic implications lasted virtually until the day of his death, when despite his painful and crippling illness he managed, in his hospital room, to put the final touches to *The Impact of Collective Bargaining upon Management* (Mason 1961, 182–83).

Slichter's AEA presidential speech (1942), delivered a few weeks after the Japanese attack on Pearl Harbor, addressed the same issues that would later concern the New Frontier economists—"The Conditions of Expansion." High postwar levels of employment required a change in policies, institutions, and trade union attitudes, if such pursuits were not to be dissipated in inflation. Slichter supported Roosevelt's 1942 wage stabilization program, and he advocated that workers who posed a threat to the national wage policy be enlisted into the armed forces (1944b, 38–39; 1944a, 41–42). He was optimistic about postwar employment prospects, "if the control of prices during the war and immediately after is reasonably effective" (1943b, 252). In 1946, he concluded that "the main protection of the country against inflation is the people themselves—their willingness to wait for goods and their resistance to sizeable increases in prices. If the mood of the people were to change, inflation would quickly be upon us" (1946b, 62). In an article titled "Prices Must Come Down," he argued in favor of "the development of an inflationary psychology. . . . The most dangerous aspect of the business situation is the rapid rise in wholesale prices" (1947c, 7, 71). But, as I argue below, his subsequent analysis was significantly different. Now there was an urgency prompted by Cold War considerations ([1954] 1961, 403). Ultimately, if employer resistance weakened and the public did not insist on wage restraint, then inflation would have to be tolerated ([1954] 1961, 404–5; 1958, 292; [1959b] 1961, 431).

Murray's original Full Employment Bill stated that full employment in the United States was essential for international peace. If, and apparently only if, the estimated expenditures exceeded the full employment target, then the president should step in to prevent inflationary dislocations, or reduce expenditures, or both (Bailey 1964, 244–46). But Slichter opposed the Murray Bill on anti-inflationary grounds (1945a, 111–12; 1946a, 313). Deficit spending would have little favorable influence on the volume of structural unemployment, and would be of little assistance to the least efficient workers—those in "the twilight zone between employable and unemployable" (1946a, 316).

Two interrelated themes dominated Slichter's writing prior to the Cold War. The first theme was a recognition that economic power had shifted toward organized labor ([1920] 1961 167; [1939] 1961, 215). This required a new sense of responsibility on the part of trade union leaders, causing unions to become quasi-public organizations (1943b, 258). The second theme was the necessity of achieving high industrial morale ([1920] 1961, 167–83; [1929] 1961, 184–212). In 1940, Slichter took over the leadership of the Trade Union Fellowship Project at Harvard, which was devoted to the education of trade union leaders (1961, xiii). He also devoted an enormous amount of time to industrial relations fieldwork. Slichter, like many other economists writing in the interwar period, was concerned that the fall in prices had not been matched by a corresponding fall in nominal wages (which he attributed to timidity on the part of employers, with respect to the prospect of radicalism and strikes). This raised the prospect of serious and chronic unemployment ([1932] 1961, 304). Slichter nevertheless drew a characteristically optimistic conclusion: "One course remained—to increase efficiency by developing a stable force and by winning the good will and cooperation of the men. This alternative was widely adopted" ([1929] 1961, 189–212). Collective bargaining had revolutionized the labor market—"employment must adjust itself to the price of labor rather than the price of labor to employment"—but the resulting unemployment was caused by "the tendency of many trade unions to underestimate the elasticity in the demand for labor." Fortunately, this could tend to accelerate research and technological change. Slichter was aware that a certain amount of wage flexibility—especially in a downward direction—was required to prevent unemployment, and that "industrial democracy, if unwisely operated, may threaten the existence of political democracy." It was fear of social conflict that led him to advocate economic expansion ([1939] 1961, 218–19, 223–24, 232). He became alarmed by postwar social conflict (1945c, 207; 1943a, 74), which in 1946 manifested itself in a series of massive strikes in the United States, involving more than 5 million workers. The coal strike was dramatically settled five minutes after President Truman began a speech to Congress asking for authority to draft into the armed forces all striking workers. Nevertheless, 107,476,000 working days were lost due to strikes in that year (Wittner 1978, 18–19; Manchester 1973, 400, 402).

Macroeconomic policy since 1960 cannot adequately be described without reference to the various negatively sloped curves that have been imposed on inflation-unemployment data. It seems probable that there was another curve lurking behind the policy disputes of the immediate postwar period: the strongly positively sloped curve tracing the meteoric increase in trade union membership, from around 10 percent of the United States workforce at the start of the New Deal, to more than 35 percent of the workforce in the late 1940s,[30] increasing sixfold in the quarter-century prior to Phillips's seminal paper, from 3 million in 1933 to 14.5 million in 1945 (Slichter 1958, 54; 1945c, 207). During the war, a "majority" of professional labor economists were engaged in wage setting and labor-management arrangements. Many became dismayed by the irrelevance of orthodox wage theory and the lack of detailed information about this crucial area (Hopkins 1947, 719–20).[31] Slichter saw his work as correcting the misinformation on which previous theory had been based (1947a). He emphasized that "most unions believe that their principal aim after the war will be fighting deflation and unemployment. Some of them are accumulating funds for fighting wage cuts. . . . The political policies of organised labor during the first two or three years after the war are likely to affect the stability of the economy even more than its economic policies. . . . It is not unrealistic to conclude that the balance of power in the struggle over the prevention of inflation after the war will be held by organised labor" (1943b, 243–47). But "the achievement of effective cooperation between organised groups will be the great task of the twentieth century. The war, by compelling men to put national interests first, may help them to learn new social skills and to discover how to limit the area of conflict and to enlarge the area of cooperation. Should this happen on a substantial scale, the rise in the standard of living after the war would be breathtaking" (1943a, 82).

Like other economists, Slichter became preoccupied with national security issues, but his conclusions about inflation were the opposite of Gilbert's. The Korean War would raise the price level by 10 to 20 percent, which might prevent the maintenance of high employment (1950e,

30. *Economist*, 19–25 February 1994, 24. In 1933, trade unions in the United States were "of relatively little importance" (Hansen and Tout 1933, 146).

31. "Exploration of the relation of wages and prices to employment cannot fail to impress one with the deplorable state of employment theory. . . . Nobody knows how this [new kind of economy] will work and how wages and prices in it will behave" (Slichter 1946a, 316–17). Richard Lester began an assault on "the mental ruts" of marginal productivity thinking, as part of this reexamination of labor economics orthodoxy (1947, 148). A. M. Ross concluded that "the influences determining wages run in political rather than geographical or industrial orbits" (1947a, 822).

24, 7). But the title of this article was "We Can Win the Economic 'Cold War' Too." The chief economic misconception of the time was "the assertion that preventing inflation is the country's number one problem." An enormous increase in output was necessary to

> prevent Communist aggression . . . the policies necessary to keep prices stable would severely handicap the United States in an effort to contain Communism by building up the economies of the free world. . . . A stable price level, or the conditions that accompany it, could handicap the United States in its effort to unite the free nations of the world against Communism and to make these nations prosper so that Communism cannot flourish within their borders. . . . From the standpoint of the rest of the world, a slowly rising price level in the United States is greatly to be desired. Certainly it would promote the success of our foreign policy. . . . The new economic competition from Russia promises to benefit the United States by compelling the country to re-evaluate its economic policies and to pay more attention to economic growth and less attention to a stable price level. (1950c, 31; 1952a, 53–55; 1961, 403, 161–62, 150)

Thus, in the Cold War period, economists who were concerned to effect full employment, and to defeat communism, came to the judgment that inflation would be helpful to these objectives; the battle against inflation might reduce employment and thus weaken the fight against communism (Slichter [1952] 1961, 107).[32]

Slichter concluded that creeping inflation was one of the consequences of converting the "defense economy" into the "war economy." But inflation would be accompanied by high employment and output, and a higher standard of living (1951a, 29, 77; 1951c, 33; 1952b, 39). In an article titled "How Bad Is Inflation?" he stated, "At the risk of being called an irresponsible and dangerous thinker, let me say that in the kind of econ-

32. In terms of the transitional period of Slichter's thought, he noted in February 1948 that there had been a 50 percent rise in wholesale prices in the previous two years, yet employment levels had been high ([1948a] 1961, 93). Slichter was also an advocate of deficit spending—and regarded budget surpluses as, potentially, a major deflationary influence (90). He was aware that the rise in indebtedness had been outstripped by the rise in nominal national product ([1952] 1961, 98–99). Inflation tends to reduce the real burden of federal debt (Slichter 1950c, 24; Samuelson 1943, 29 n. 2; Meade 1958, 6; Harris 1943, 169–85, 194). But inflation-induced bracket creep also tends to increase taxes (Slichter 1947b, 12, 67). Slichter argued that inflation would severely reduce the price of fixed-income securities: "The repercussions upon the economy would be enormous" (1947b, 68).

omy possessed by the United States, a slowly rising price level is actually preferable to a stable price level. The reason for this conclusion is that the maintenance of a stable price level would conflict with other important interests of the country." There was a potential trade-off between zero inflation and other desirable goals: "Whilst a modest rate of inflation of two or three per cent. per year was hardly enough to be noticed at any given moment, [it] is sufficient to cause substantial injustice . . . more than offsetting these injustices, however, will be the avoidance of unemployment that is necessary in order to keep prices stable. . . . And in the divided world of today, in which every recession in business gives opportunities for Communist activity, it is imperative that the United States avoids severe or even moderate recessions" (1952a, 53, 57, 54). Slichter also argued that increasing imports into the United States (which would be associated with creeping inflation) must become the cornerstone of American foreign policy in its struggle with world communism (1952a, 56; for the strategy of increasing imports as an anti-inflationary device see Lerner 1948, 25–26).

Slichter wrote two brief memorandums about his life and work, which he left, presumably for posterity, in his files. Under the subtitle "Some Positions I Have Taken," Slichter prophetically listed "the view that there is a conflict between maximum employment and keeping prices stable" (1961, xv). Slichter directed his readers to the article "How Bad Is Inflation?" which illustrated this position. By 1952, Slichter was clearly an opponent of stable prices. Twenty years earlier, he had outlined the reasons why inflation was undesirable as an ongoing policy ([1932] 1961, 313). In 1950, his statistical analysis of interwar U.S. data led him to propose a small but negative correlation between increases of *employment* and average hourly earnings ([1950] 1961, 376–77; 1945c, 221; 1946a, 308; [1948a] 1961, 90; [1942] 1961, 85; [1929] 1961, 186–87). Yet by 1952, Slichter's statistical analysis of inflation-output data led him to propose a *negatively* shaped relation between *unemployment* and inflation, for the years 1889–1950 ([1952] 1961, 96–97).

In one of his last papers, Slichter argued that inflation had become endemic; but that it was diminishing ([1959a] 1961, 134–35; 1959c, 69). Creeping inflation was unlikely to break into a gallop ([1959a] 1961, 146; 1952a, 56–57). He predicted that public revulsion against both trade union power and rapid wage inflation would tend to diminish the tendency of wages to outrun productivity ([1958] 1961, 133). Inflation, however, was "far less important than the problem of 4.4 million unemployed. . . . A rising price level (inflation, if you will) is likely to be a sign of vigorous economic health, of an economy possessing great capacity to develop new investment opportunities" ([1959a] 1961, 149, 142). His causal explanation for inflation ran from technological research, leading to higher profits, which led to ambitious wage demands, which were acceded to in the interests of industrial peace (1959c). The "fetish" of a stable price level was, therefore, a constraint on expansionist policies. These policies would be accompanied by creeping inflation, but this would strengthen the dollar ([1959a] 1961, 148; in contrast, see Slichter 1951b, 109–10). In one of his last papers, "Inflation—A Problem of Shrinking Importance," Slichter noted that 1948 was a "dividing year" with respect to explanations of inflation ([1959a] 1961, 136).[33] Around this time, Slichter, like Hansen, came to see the battle against inflation as too expensive in terms of employment, and hence regarded inflation as something that would purchase benefits on this front.[34]

Slichter's devotion to the cause of freedom, individualism, and satisfactory labor market outcomes is impressive (see, for example, 1961, 13; 1943a, 78). Yet he increasingly felt that it had been a mistake to permit "the Juggernaut of industrial revolution to run wild" during the previous two centuries (1961, 315). Labor market corporatism was the concession that would enable the other values to flourish. He was delighted that more Americans felt "*the sense of belonging*" (1961, 17). Initially, he had faith that a vigorous trade union movement would exert a healthy

33. "1948 may be regarded as a dividing year in the post war economic history of the United States. . . . Explanations of inflation that are valid for a period when the economy was becoming more liquid, are not necessarily valid for a period during which the economy was losing liquidity. Hence, though inflation up to about 1948 can be explained in large part by the increase in the money supply, that explanation is not satisfactory for the subsequent period" ([1958] 1961, 130). Slichter supervised Rita Ricardo-Campbell's research on postwar economic conditions, until her departure from Harvard in 1946. Dr. Ricardo-Campbell has informed me that during this period she heard nothing from Slichter that indicated a departure from zero-inflation advocacy (correspondence, 14 August 1995).

34. Slichter had a lifelong fascination with the potential of science and technology, which was, of course, a significant component of institutionalist thought. Upward pressure on wages could be useful if it stimulated technological research, thus offsetting wage-push inflation (1945c, 221; 1946a, 312). He was most gratified by the sevenfold increase in research expenditures between 1930 and 1947: "Technological research has, of course, been enormously stimulated by the Korean War, the defence program and the keen military competition with Russia." This research activity also tended to stabilize the economy, "because it put the demand for goods to a greater extent than ever before within the control of industry." The prospect of a drop in defense spending, leading to a recession, "would have far-reaching consequences throughout the world and would be a serious setback to our foreign policy" ([1952] 1961, 105–7).

influence (1961, 315); later, under the influence of the perceived Soviet threat, his disillusionment with excessive union power led him to another concession—the toleration of ongoing inflation: "Collective bargaining . . . is too well established and produces too many important benefits to be disturbed simply because it produces creeping inflation" (1959a, 69). Besides, price stability would not halt cost-push pressures originating from trade union power (1951c, 33).

With the onset of the Cold War, Slichter emphasized that "the problem of a wise price policy is complicated by the rise of powerful trade unions in recent years. . . . In this great conflict between two philosophies the trade unions are an important ally of the West. . . . They have been a major contributor towards implementing the philosophy of the West." The rapid rise to power of trade unions, especially since the New Deal era, had necessitated major changes in economic and political arrangements: "It means that the United States is gradually shifting from a capitalistic community to a laboristic one." The future of civilization depended on the behavior of *Trade Unions in a Free Society*: "Although the difficulties are formidable, the stakes are immense. The success or lack of success of the community in bringing about appropriate internal changes in the labor movement and in developing appropriate public policies towards trade unions will determine whether unions become powerful instruments for realising the philosophy of freedom or whether they become a new and formidable threat to freedom" (1952a, 54; [1948b] 1961, 262, 255; [1947] 1961, 254).

Slichter had always been optimistic about the tendency of "conservative unionism" to act as a "bulwark against irresponsible and dangerous groups" and "shallow demagogues" ([1929] 1961, 187; [1947] 1961, 236; 1943b, 261). He believed that trade unions were the most powerful economic organizations in the community with sufficient political clout to influence election results, and with sufficient industrial muscle to confront the largest corporations (1947a, 4, 14; 1945c, 207; 1947b, 12). He drew optimistic inferences from the statements of leaders from the American Federation of Labor concerning the pursuit of common interests; and he hoped that trade unionists would be compelled "to consider the stake which they have in the supply and vigour of enterprise in the community" ([1947] 1961, 253). He repeatedly argued that to avoid inflation common interests should prevail over the special interests of a particular trade union body (242). Strong public hostility to strikes was an important restraint on wage increases (1944a, 35–36). Yet wage-push inflation had become endemic, and by 1947 the government had withdrawn its national wage policy (Ross 1947a, 811). As exhortation and moral suasion appeared less likely to produce stable prices, Slichter ([1959a] 1961, 141; 1957c, 22) relented on his anti-inflation stance: "I am pessimistic about the possibility of halting creeping inflation because I am optimistic concerning the prospects of the economy and its capacity to grow . . . creeping inflation may be regarded as part of the price that we must pay for confidence and satisfaction with [our democratic] institutions."[35]

There were two additional transformations in Slichter's approach. In 1947, he stated that trade unions had a choice between fighting over the division of a small national income or cooperating to increase that income ([1947] 1961, 242). Yet, in a Brookings Institution lecture, he also concluded that the selling of labor through monopolies had effected a historic structural transformation of capitalism by "giving the economy substantial new capacity to generate money incomes." Thus, trade union power shielded the economy from temporary contractions. Monopoly trade union power also, however, reinforced the inflationary tendency in periods of boom. The American economy was now characterized by "mutual exploitation," the fruits of which "are so widely distributed." Prophetically, Slichter believed that there should be "considerably more thorough investigation of the economic consequences of labor monopolies than economic theory has thus far provided. . . . It requires radical changes in our conception of trade unions and drastic rewriting of wage theory and employment theory. . . . Widely accepted beliefs concerning the alleged bad effects of wage increases upon employment must be abandoned." Wage increases below full employment, he believed, tended to increase output ([1959b] 1961, 420, 427, 416, 410, 425; in contrast, see 1947b, 67).

7. Concluding Remarks

Included in Slichter's lecture to the Brookings Institution are two methodological statements. Slichter had been a lifelong devotee of data and statistical analysis, "the last step in the production of knowledge" (Slichter

35. Slichter had always been skeptical about the motives of politicians (for example, see Slichter, 1946a, 318), and toward the end of his life he began to advocate an attack on the economic power of trade unions ([1959a] 1961, 143–44; 1959a, 67). Trade unions had courted public disillusionment by failing to become instruments of industrial democracy (1958). He also became concerned about class conflict ([1959a] 1961, 144), which ran directly counter to his social philosophy.

1949b, 26). Yet Dunlop noted that he was "distrustful of formal models and closed systems in theoretical or econometric terms" (1961, xix).[36] There was no shortage of illustrative data in Slichter's writing, but the reference to "rigorous statistical proof" ([1959b] 1961, 426) appears to be unusual.[37] So too is the reference to "a valuable paper," delivered to the Econometric Society (420 n. 3).[38] Likewise, he informed a television audience in February 1959 that 3 percent unemployment should be targeted, and that annual inflation of up to 5 percent was below the galloping threshold (1959b, 106). These may be no more than straws in the wind with respect to changing fashions in economic discourse. However, Sumner Slichter died on 26 September 1959, and three months later two other Cambridge economists, Paul Samuelson and Robert Solow, launched the Phillips curve estimation industry, which, based on econometric evidence, appeared to suggest that ongoing inflation would purchase sustainable reductions in unemployment.[39]

With the benefit of hindsight it is clear that inflation in the 1960s and 1970s did all the things to the economy that Keynes and Phillips predicted it would. Liberation "from traditional shibboleths" to achieve full employment and "stability through inflation" (Vickery 1955, 89–122) proved to be unconducive to either stability or liberation.[40] As Keynes put it, in another context, "I only wish to warn you that the chaining up of one devil may, if we are careless, only serve to loose another still fiercer and more intractable" (1973, 133). The Faustian pact with the "inflation dragon" (Lerner 1967, 3) turned out to be not so easy to reverse. Peter

36. Hansen had almost nothing to do with econometrics (Breit and Ransom 1971, 89 n. 14). He also warned that "the statistical relationship between . . . variables tells us absolutely nothing about causal relations. Correlations of statistical series only pose problems" (1960b, 10).

37. "Rigorous statistical proof of this proposition cannot be given, but the figures for the recession of 1958, though less than complete proof, are convincing" (Slichter [1959b] 1961, 426–27).

38. "A valuable paper dealing with the income-creating aspects of higher wages was presented at the American Econometric Society in December 1958 by Jaroslav Vanek of Harvard University" (Slichter [1959b] 1961, 420).

39. Gottfried Haberler wrote, "During the last great debate on inflation in the 1950s, the late Sumner H. Slichter took the position that we have to resign ourselves to creeping inflation of about 3 per cent. a year. . . . Recently, Slichter's theory of permanent but harmless inflation has been revived, provided with new up-to-date econometric foundations and redecorated with Phillips curves, expectational analyses and cost benefit computations and what not. Whereas Slichter spoke modestly of 3 per cent. inflation, the new inflationists speak of 5 per cent. and mention no upper limit" (1972, 135).

40. William Vickery's chapter was published in a volume titled *Post-Keynesian Economics*, dedicated "To the Memory of John Maynard Keynes."

Wiles (1973, 377, 379), in an article "born of shame," bemoaned the "Latin Americanisation of the world . . . cost inflation at a high rate has produced a 'general crisis of capitalism' and the stability of Communist prices shines like a good deed in a naughty world; yet economic theory has nothing to say." Goldenweiser (1947, 3) stated that "at no time has it been more important for economists to have the respect and confidence of the public." Slichter's views on inflation generated much opposition among his fellow economists (Mason 1961, 183), but in the years that followed, the economics profession gradually embraced a relationship that would lead to the demise of public esteem. The years between Goldenweiser's AEA presidential address (1947) and Samuelson's (1962) were the years of germination of this relationship; the years between 1962 and Friedman's address (1968) were the years of colonization. The subsequent years saw an outbreak of nosological concerns about the economics profession. There clearly needs to be a more detailed analysis of the process by which economists came to be loosened from their attachment to the primacy of the goal of price stability, if for no other reason than the desire to avoid a repeat of this experiment.

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