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Post-Keynesian Economics

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# POST-KEYNESIAN ECONOMICS<sup>1</sup>

## *A Review Article*

By ALVIN H. HANSEN\*

This is a collection of essays by fifteen authors whose names are for the most part well known. The book is divided into three sections, the first of which relates to monetary theory and policy; the second, to economic fluctuations and growth; and the third, to aggregative economics and testing. On a somewhat different basis of classification, three chapters are empirical in character, two compare current economic thinking with earlier doctrines (Marx and the classicals), five are concerned with monetary theory and policy, four with cycle policy (investment control, depreciation policy, income distribution, institutional change), and one with nonlinear cycle theories. While Part III is much the best, some of the chapters in the first two parts make rewarding reading. And though my review is essentially critical, I feel that the book is decidedly worth while.

Does the volume live up to its title *Post-Keynesian Economics*? Yes and no. It is post-Keynesian in the sense that most of the discussion is cast in terms of the Keynesian tools of analysis. It is post-Keynesian in that the endeavor is made here and there to improve on Keynes, but the result in this respect is far from impressive. It is post-Keynesian in the sense that a part of the volume is devoted to “filling the empty boxes” of the Keynesian analysis with empirical data. Especially notable here is Klein’s chapter—an outstanding contribution—and those by Tarshis and Modigliani. It is post-Keynesian in the respect that it seeks in two chapters (Tsuru and Streeten) to assess the Keynesian stream of thinking against the background of earlier traditions. It is post-Keynesian in the respect that it takes a fresh look in a number of chapters at policy programs stemming from the Keynesian system.<sup>2</sup>

On balance the gleanings must be set down as relatively meager, though the volume does contain, as indicated above, a number of notable chapters. That the gleanings are somewhat meager both with respect to tools of analysis and policy matters, after nearly twenty years of voluminous discussion, makes Keynes’ individual work stand out all the more strikingly as a truly Herculean contribution to modern economics.

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<sup>1</sup> K. K. Kurihara, editor, *Post-Keynesian Economics* (New Brunswick: Rutgers Univ. Press, 1954. Pp. xviii, 442. \$8.50).

<sup>2</sup> The title *Post-Keynesian Economics* might, however, lead the reader to think that the volume perhaps attempts a survey of the literature which has appeared since 1936. This is not the case. Current literature is of course touched upon here and there but only in a casual manner.

First let us consider the empirical studies. Keynes' system is built on the foundation of several specific hypotheses concerning human behavior. Does empirical investigation support or contradict this foundation? This is the question to which Klein addresses himself. He notes that the essence of Keynesian economics can be stated as follows: "The system of classical competitive equilibrium does not automatically lead to a stable solution of full employment" (p. 281).

The only empirical findings to date, says Klein, that are in any way contrary to the essence of Keynesian economics are the data on the influence of liquid wealth on saving—the so-called Pigou effect. But the empirical evidence is not clear-cut against the Keynesian theory, the evidence being mixed in direction of effect. At all events, the magnitude of the "marginal asset effect on saving is probably not large enough to render market forces adequate operators of adjustment towards full employment equilibrium" (p. 294).<sup>3</sup>

Klein's chapter, which no economist can afford to neglect, is remarkable for the vast range of empirical materials, covering all aspects of the Keynesian analysis, which are surveyed. He concludes that the Keynesian system is "firmly rooted in fact" and that any reader, whether convinced or not, must at any rate agree that the empirical evidence is not superficial or casual.

Tarshis has given us, in his essay on "The Flow of Business Funds, Consumption and Investment," a welcome contribution. Keynes put forward the proposition that consumption is a function of *national* income. Much of the literature, however, has restricted itself to the relation of consumption to disposable income—a much narrower concept. When consideration is given to the multiplier effect of an increase in investment or a reduction in the taxes on consumers, it is the marginal propensity to consume out of an increment of *national* income that is relevant. The bites taken by the progressive rise in business saving and by a progressive tax system (individual and corporate combined) are far more important than the saving of individuals in determining the slope of the consumption function and so the multiplier. We have had too little empirical investigation of the "tax bite" and of the "business savings bite." Keynes, as Tarshis reminds us, had much to say about the important role of dividend policy and depreciation policy in establishing the relation between income and consumption.

The gross national product is equal to consumption plus individual saving plus gross business saving plus *net* taxes. By "net taxes" I mean total tax receipts minus transfer payments. Tarshis calls this "government saving," but this seems to me an unfortunate term. He presents tables for these three categories from 1929 to the present, showing their relative importance in holding consumption below the GNP. Personal saving throughout the period has played a relatively small role.

<sup>3</sup> Referring to two recent studies of the consumption function (Ruth Mack's in *A Survey of Contemporary Economics*, Vol. II [Homewood, Ill., 1952], and R. Ferber's *A Study of Aggregate Consumption Functions*, Nat. Bur. Econ. Research Tech. paper [New York, 1953]), Klein concludes that neither of these studies is sufficiently discriminating in its choice of empirical studies since they "draw upon results that are open to serious criticism from an econometric point of view" (pp. 294-95).

Tarshis also examines the impact of business saving on investment (pp. 381-86) and the role of *sources* of funds (retained earnings, stock issues, borrowing) on decisions to invest. Keynes undoubtedly did not pay adequate attention to the availability of internal corporate funds and their impact on investment decisions.

The third empirical essay is the chapter on "Utility Analysis and the Consumption Function" by Modigliani and Brumberg. What is the impact of long-range plans and expectations on consumption expenditures? Current income, expected future income, initial assets, and age, are among the more significant factors. Since it is not possible to obtain the relevant data from the observation of individuals over time, the authors content themselves with "cross-section" data on the average and marginal rates of consumption with respect to household incomes.

From their so-called "stationary" cross-section data, they conclude that (despite appearances to the contrary) the *proportion* of income saved is in reality independent of the household income bracket, but tends to rise with age. The regression of consumption on income *tends* to be linear and a line fitted to the data tends to go through the origin. But a household whose income *unexpectedly* rises will save more than the normal ratio.

These propositions are certainly rather novel. Margaret Reid had, however, already suggested that there is "good reason to believe the percentage of income saved to be independent of the economic level of the separate families."<sup>4</sup> Earlier writers (Brady and Friedman) have found from family budget studies that the *ratio* of saving to income *is* a function of the family's position on the Lorenz income distribution curve—a proposition contrary to the one stated above. Nevertheless the ratio of aggregate saving to aggregate family income *over time* is not thought to be a function of income.<sup>5</sup> This however does not tell us what is the relation of consumption to *national* income either in the business cycle short run<sup>6</sup> or over the longer run.

Now Modigliani and Brumberg agree indeed that the data do show that the *ratio* of saving to income is a function of the income bracket in which a household's income falls, but they hold that the higher *ratio* of saving to income in the upper brackets is not due to the fact that they are upper-bracket incomes. Rather, this rising ratio is due to the fact that households in these upper brackets are, by and large, "recent arrivals." Their current incomes are above their *accustomed* incomes, and therefore they tend to save a higher ratio of income. If the new income is regarded as *transitory* the saving ratio will rise. Or, in the event that the new income is regarded as permanent, the initial asset holdings are now out of line with the revised outlook. Thus the saving ratio must rise in order to bring the asset holdings up

<sup>4</sup> See *Savings in the Modern Economy*, ed. by Heller et al. (Minneapolis, 1953), p. 219.

<sup>5</sup> See also James Duesenberry, *Income, Saving, and the Theory of Consumer Behavior* (Cambridge, Mass., 1949).

<sup>6</sup> Modigliani and Brumberg's chapter relates to budget studies and not to the behavior of consumption in relation to national income over the cycle. Thus their attack (p. 43) on those who have employed the Keynesian consumption function is not valid. The secular aspect of the matter is something else again. See in this connection my *Guide to Keynes*

to a level commensurate with the new income.<sup>7</sup> But if all incomes were at their accustomed levels, the ratio of saving to income would, they believe, be quite unaffected by the level of the household's income. In the absence of unexpectedly large incomes, the authors suggest that households save primarily to cushion against major variations in income over the life cycle, and that the savings which a household wishes to make and can afford to make must be basically *proportional* to its basic earning capacity.

This conclusion is admittedly a tentative one and the authors wisely refrain from dogmatism. Whether right or wrong, is the hypothesis at variance with Keynes' formulations with respect to the relation of consumption to income? In answer to this question the authors are, to put it mildly, a bit irresponsible. They fail to point out that their conclusion does not in the least contradict Keynes' statement that we can take it as a "fundamental psychological rule of any modern community<sup>8</sup> that, when its real income is increased, it will not increase its consumption by an equal *absolute* amount" (*General Theory*, p. 97). Instead they claim that they depart from Keynes. But their citation from Keynes consists of a casual side remark and not from his central argument. Moreover the citation significantly omits the phrase "as a rule" which, if included, would have shown that Keynes made no firm "contention" about the *proportion* of income saved as income rises.<sup>9</sup> Finally, and this is highly important, Keynes was talking about the behavior of the "modern community" as a whole, including business saving as well as individual saving. Thus Modigliani and Brumberg are not even talking about the same thing as Keynes! And even though they were, it is not true that their findings (if verified) would show Keynes to be in error.

Tsuru is concerned with the history of economic ideas with special reference to Keynes and Marx. The appearance of the *General Theory* caused at first a sharp division among the ranks of economists between those who emphasize the income effect and those who emphasize the "efficacy of cost-price relation-

(New York, 1953), pp. 75-78; also my *Business Cycles and National Income* (New York, 1951), pp. 164-70.

Moreover, the proposition that the *ratio* of saving to income is independent of income is often misinterpreted to mean that *saving* is not a function of income. This misconception has led to a vast amount of confusion, and to quite unfounded charges that Keynes' position has been proven to be in error.

<sup>7</sup> This lag effect is emphasized by Keynes on p. 97 of the *General Theory* where he discusses the difference between one's "actual income" and one's "habitual standard." But is this sufficient to explain the higher saving ratio in the upper income brackets? Is it not also true, as Keynes put it (p. 97), that the "motives towards accumulation" only acquire effective sway "when the margin of comfort has been attained"?

<sup>8</sup> Note that Keynes speaks of the modern *community*, and that his elaborate discussion of the psychological behavior pattern of the community involves not only the behavior of individuals as consumers, but also as government officials managing sinking-funds, and business officials managing depreciation funds, etc. The current literature is full of misinterpretations of Keynes' "psychological law."

<sup>9</sup> Indeed in the very next sentence, following the phrase which our authors quote, Keynes explicitly disavows any firm contention, for he says: "But whether or not a greater proportion is saved, we take it as a fundamental psychological rule . . . etc." (The completed sentence is given above.)

ships." This division has gradually given way to "an attempt at synthesis." Marx, while recognizing the effectiveness of price adjustments, developed his theory largely in terms of "long-run normal price." "In other words, 'parametric adjustments' have no place in the stage of abstraction where Marx took up his aggregative analysis" (p. 333). Tsuru attempts to contrast the Keynesian aggregates and the Marxian aggregates in economic analysis. This effort necessarily requires a good deal of reading between the lines.

Streeten's excellent chapter is on "Keynes and the Classical Tradition." Attention is centered around the "harmony of interest" doctrine. "Keynesian theory strengthened the utilitarian tradition because it resolved one of the great moral dilemmas of the neo-utilitarians" (p. 351). A more egalitarian income distribution might raise general welfare, but inequality appeared to be necessary to safeguard adequate savings and so investment. Thus greater equality might defeat, as the utilitarians saw it, its own purpose. But Keynes' consumption function analysis showed that a decrease in thrift might in fact raise income and investment, and so there might well be no conflict.

While Keynes believed in the virtues of the free market and the pricing system, Streeten continues, his measures for regulating investment represent a break with liberal-utilitarian tradition. Moreover, he did not believe, as did Mill, that production would "look after itself." Here he was more like List than the classicals. Keynes thought that the state must take certain actions "in order to create the right environment for private self-interest to work."

Keynesian policies are designed to promote employment and prosperity—the "interests of all." Then why is there opposition to Keynesian policies? There are various reasons, *e.g.*, they may undermine the discipline of workers, entrepreneurs may fear that their power and status in society will be reduced, etc.

Streeten suggests that Keynes believed more strongly in a "harmony of interests" than recent full-employment experience would warrant. Here he calls attention to the oft expressed fear that full employment and price stability are incompatible. (Streeten, however, fails to canvass adequately American experience since 1948.) Reference is also made to the conflict that may arise between full-employment and balance-of-payments problems.

Under large-scale unemployment, one group's gain need not spell another's loss. But with full employment, conflicts over the "full-employment pie" emerge.

In the Victorian society, convention and superstition tended to prevent an open conflict of interest. The gold standard, the balanced budget, the acceptance of unemployment, etc., testify to the "submission to external unquestioned rules and conventions" (p. 362). But this quasiharmony broke down because the loss of these ancient beliefs "stripped the structure of economic relations of the superstitions which had cemented them." Keynesian economics helped to destroy the "barriers which prevented the full pursuit of a selfish manipulation of society," and thus brought "clashes into the open" (p. 362).

Yet Keynes' thought is "unmistakably in the classical liberal-utilitarian



tradition." He advocated the "regulation of *aggregates* only." Nevertheless, in a country pledged to full employment, the classical conflict of interests has again more or less come into its own, and in addition new problems have arisen.

A number of chapters deal with the business cycle, partly in terms of theory but more often in terms of policy. Matthews' paper is on "Capital Stock Adjustment Theories" and the problem of stabilizing investment at a level "such as not to cause the stock of capital to increase so rapidly that a decline in its marginal efficiency occurs" (p. 173). The boom level of investment is not maintainable for reasons made plain by the capital stock adjustment theories. "The dilemma is, then, that a rate of investment high enough to give full employment leads to excessive capital accumulation and is not maintainable" (p. 173). Investment must therefore be stabilized at lower than the boom level and this would require for full employment a rise in the consumption function; or alternatively there might be offsetting increases in government spending.

Matthews poses this problem in relation to three theories of the cycle: (1) Schumpeter's innovatory investment theory, (2) the Wicksell-Frisch theory of damped cycles sustained by erratic shocks, and (3) the theory of antidamped cycles whose explosive tendencies are contained by various restraints (Hicks, Goodwin). It is the "ceiling theory" to which Matthews devotes primary attention. The ceiling may be imposed by a general shortage of factors or by bottlenecks in the investment industries—the "investment ceiling." In place of the ceiling hypothesis, we have Keynes' view that full employment of factors is likely to "transform a boom into a cumulative inflation of wages and prices" (p. 180). This Matthews calls "Wicksellian instability."

Matthews closes his theoretical analysis with the conclusion that if the Hicks-Goodwin theory can be at all accepted as realistic (a point left unsettled) then cyclical instability must probably be faced and in addition there is the danger of "Wicksellian instability." Thus the authorities are confronted with the policy alternatives already referred to above. Of these alternatives, Matthews favors a policy of direct control of investment. This policy, he believes, is likely to be effective in a condition of overexpansion such as most countries have had to contend with during the last ten years owing to war-created shortages, and more recently to rearmament expenditures. "But we must not shirk contemplation of the time when this will not be so" (p. 191). Unfortunately, however, the essay throws no new light on how we should solve this problem if and when more normal conditions arrive. Thus this very useful essay is more interesting in its theoretical implications than as a guide to policy.

Ichimura's chapter, largely mathematical, is devoted to a survey and comparison of recent cycle theories. He disregards exogenous theories of the Schumpeter or Spiethoff variations, and rules out endogenous linear theories as unsatisfactory, though he grants that when combined with erratic or quasi-oscillatory shocks, such systems have much to commend them. He devotes his chapter, however, to the nonlinear theory of Kaldor and those of the

Hicks-Goodwin type. He begins his essay with an analysis and reformulation of the Kaldor model, and then moves on to a comparison with other recent theories, at the same time throwing light here and there upon the relation of these to earlier theories.

The essay by Bowen and Meier is instructive and challenging. The last twenty years teach us, they think, that "painful changes in deeply-rooted institutions are involved in any effort to achieve stability via fiscal policy" (p. 164). They conclude that "stabilization necessarily involves change in firmly established institutions and is therefore likely to be difficult of attainment" (p. 168). The most difficult obstacles are: (1) the institution of budget-balancing, (2) the ponderous legislation procedures with respect to fiscal policy, (3) intergovernmental relations in a federal system, (4) the traditionally established dichotomy between state and private industry, and (5) the effort of trade unions to raise money wages.

These obstacles form well-established and persistent institutional patterns. It is a delusion, the authors assert, to suppose "that fiscal policy does not require major institutional changes" (p. 165). Fiscal policy of a magnitude to overcome a deep depression "would even today be confronted with strong institutional resistance" (p. 166).

To facilitate a stabilization program they suggest (among other things) a closer coordination of investment and saving involving control over saving or investment, or both. This might involve direct investment by the government and greater equality in income distribution.

The authors agree that a substantial residue of institutional changes bearing on stabilization was left by the social crisis created by the Great Depression—social security, financial reform, a more progressive tax structure, etc. And they agree that the resistance to change may have been "softened up a little by the arguments of economists" (p. 168). But they fear that institutional barriers may before long be "back at par."

Kurihara's chapter is basically a policy chapter, and the program he proposes, to secure full employment and growth, is primarily to raise the consumption function through a redistribution of income. The main defect in the chapter, as I see it, is that his policy directive takes little or no cognizance of social priorities. It may well be that in the visible future what is most urgently needed is public investment expenditures, not only on resource development, roads, etc., but also outlays on health, education, recreation, control of juvenile delinquency, etc., instead of more private consumption via redistribution of income. Greater equality of income up to a point is no doubt desirable, but there may be danger in pushing it so far that the strength of a vigorous middle class—upon which a dynamic society must heavily lean—may be sapped. Over against income redistribution, public investment and deficit financing are important alternative fiscal routes to full employment. The appropriate combination of all possible alternatives requires a careful assessment of social priorities. It is on this basis that we must decide how large the government budget should be, whether it is to be financed by borrowing or by taxes, and if by taxes, what degree of progressivity should be imposed. These matters are somewhat neglected by Kurihara



who concentrates his analysis on (1) raising consumption, and thereby (via the acceleration principle) stimulating private investment, and (2) lowering the rate of interest so as to push private investment toward the point of zero marginal efficiency.

Murad's chapter on "Net Investment and Industrial Progress" presents the thoroughly unorthodox view (with respect not only to classical but also to Keynesian theory) that industrial progress *necessarily* tends toward zero net investment. He begins with the well-accepted thesis that increasing capital accumulation, in the absence of growth of population and changes in technique, will reduce the marginal efficiency of capital eventually to zero. Later he introduces technical change, but argues that if technological advances occur at the same rate in producers' goods industries as in consumers' goods industries, no new opportunities for *net* investment will result from such advances.

Appraisal of Murad's argument necessarily involves consideration of what constitutes true replacement and what constitutes true net investment. To this there is no easy answer. Depreciation funds are not used, in a technologically progressive society, to replace the same old-type industrial machines. They are used to buy new and better machines. If now the depreciation sums set aside for replacement are just sufficient to buy new machines capable of producing the *same* output as the old, and if sums so spent accurately measure *replacement* investment, then (contrary to Murad's view) progress will not rule out net investment. Output all around will have increased, let us say, by 100 per cent; money wages (and other money incomes) will also have increased by 100 per cent while prices of both producers' goods and consumers' goods have remained constant. It now requires only half as many laborers to produce the new machines needed to replace the productive capacity of the old machines. Since wages have doubled, the money cost of these new machines is, however, the same as the cost of the old; therefore, if depreciation has been calculated on a money-cost basis, the depreciation sums set aside will be just sufficient to replace the old machines with machines of equal productive capacity. But half of the labor force has been set free. Hence, concomitant with the advance in technology, *net* investment is continuously necessary to provide the displaced laborers with capital equipment and to implement in terms of increasing output, the fruits of technical advance. Thus on the conditions here stated—and they do not violate his assumptions—Murad's proposition is in error.

Murad himself inadvertently admits this point without seeing how damaging it is to his thesis. He notes (footnote, p. 246) Domar's definition of depreciation as the "cost of replacement of the depreciated asset by another one of *equal* productive capacity." Murad objects to this definition on two grounds: (1) that it is not in accordance with accounting practice, and (2) that such a definition would equate all additions to capital (measured in terms of productive capacity) with net investment. The answer to these objections is first, that accounting practice (depreciation calculated on a money-cost basis) would in fact replace equal productive capacity on the assumptions which I have made above; and, second, that Domar's depreciation

does provide the best answer to the difficult question—what indeed is meant by *net* investment.

Now it was already recognized by J. S. Mill (and I have myself frequently stressed this point<sup>10</sup>) that a society which already has a huge stock of capital *may* enjoy increasing productivity without net investment. This conclusion rests, however, on grounds other than those laid down by Murad. It rests basically on two assumptions—assumptions which are probable, or at least possible, but which are not necessarily concomitant with a large accumulated capital stock. These assumptions are primarily: (1) that, in a modern advanced society, technology in fact has tended to produce capital-saving machines<sup>11</sup> (*i.e.*, technical progress in the producers' goods industries tends to exceed that in consumers' goods industries—*e.g.*, services, etc.) and (2) that accounting practice in fact tends to supply depreciation funds in excess of the amount required to maintain the same productive capacity.<sup>12</sup>

Finally we come to chapters dealing with monetary theory and monetary policy. I am not at all happy about any of these chapters, and I fear that my comments may be overly critical. Dillard's chapter on "The Theory of a Monetary Economy" begins with high promise but fades away at the end, it seems to me, into mysticism. Dillard tries to make something quite special out of Keynes' "Essential Properties of Interest and Money" but fails, I think, to add anything to Lerner's important article.<sup>13</sup> While much of the chapter is well written and thought-provoking, its central thesis does not, in my opinion, stand up well.<sup>14</sup> He attempts to show that in Keynes' theory

<sup>10</sup> In my *Fiscal Policy and Business Cycles* (New York, 1941), I canvassed this matter with some care (see pp. 310-11). Among other things, I stated: "A mature economy may, as Mill stated, under certain conditions modernize and improve its capital equipment, introducing continually new techniques, without tapping any new savings or making any net addition to capital formation. If the progress of technique in the capital goods industries outruns the rise in wage rates, then the accumulated depreciation reserves will be adequate to finance the replacement of an old machine by a new one more productive than the old." Also the following: "When capital saving innovations are made . . . the expenditure of replacement allowances will yield a net increase in productivity."

<sup>11</sup> Murad indeed discusses capital-saving inventions (p. 244), but he does not succeed in clarifying the issue. The definitions which he presents on page 245 are vague and confusing.

<sup>12</sup> See in this connection my "Growth or Stagnation in the American Economy," *Rev. Econ. Stat.*, Nov. 1954, XXXVI, 409-14.

<sup>13</sup> See also my chapter on "Nature and Properties of Capital, Interest, and Money" in my *Guide to Keynes*, *op. cit.*

<sup>14</sup> Dillard attempts to elevate the highly perfunctory chapter which Keynes wrote for the Spiethoff *Festschrift* (Munich, 1933) into a monumental contribution. He asserts that this chapter appears to be unknown to English-speaking economists, probably because it appeared in a German volume. But Keynes' chapter is in English (other English chapters are by Robertson, Mitchell, Carl Snyder, and Hawtrey), and the volume has frequently been cited by English and American writers on business cycles. In my own case, I have used the volume a good deal and have been familiar with the Keynes chapter from the time it appeared. But I have always regarded it, and still do, as a slight piece, probably dashed off in an hour or two and neither a credit to Keynes nor to Spiethoff in whose honor it was written. As one rereads it, it becomes quite clear that all sorts of things which later were spelled out clearly in the *General Theory* (not simply a *monetary* theory) were floating around in his mind. About the only interesting thing in the essay is the announcement (1933) that he was working on an important new book.

“money holds the key to explaining unemployment” (p. 20); again that “the ultimate theoretical explanation of unemployment must be sought in money” (p. 22); or again, that money is “the strategic factor” upon which Keynes’ entire analysis focuses (pp. 19-20). This of course is not the first attempt to show that the whole Keynesian system rests on a single pivot.

Dillard is in fact less one-sided than some of his more extreme statements would indicate. The chapter, however, ends somewhat disappointingly as one encounters repetitions of such phrases as “the monetary theory of employment,” “the nature of money as the key institution of modern capitalism,” money’s “role as a special form of property,” etc.

Martin Bronfenbrenner believes that events thus far indicate that, for causes quite apart from war and rearmament,<sup>15</sup> we are now in a new phase of secular inflation owing to “pressure economics” and “Keynesian economics” (p. 39). These new developments certainly raise important issues which deserve careful study. But there is some danger in exaggerating current inflationary forces compared with those of earlier periods. Actually, the first quarter of our century was considerably more inflationary than the second quarter.<sup>16</sup> Or again, wholesale and consumer prices combined (prior to 1913, wholesale prices) rose 143 per cent from 1894-97 to 1923-25, but only 100 per cent from 1931-34 to 1948-50. From 1948 to 1955 wholesale prices have risen less than 1 per cent per annum, whereas from 1897 to 1910 they rose nearly 4 per cent per annum. Where were “pressure” and “Keynesian economics” then? Do these figures show as Bronfenbrenner asserts, that the strongest, most aggressive, and best-disciplined of the pressure groups were held in check, in the pre-Keynesian days, by “limitations of demand” (p. 40)?

Bronfenbrenner suggests that the inflationary movement did not subside during the relative peace years preceding Korea (p. 38). But the facts are otherwise. At the outbreak of Korea, prices stood at 157 compared with 165 for 1948. It is not true that “no substantial reversal of the inflationary trend” occurred in 1951 (p. 39). Wholesale prices turned down in February 1951, falling fairly steadily from 114.8 (new index) to 109.5 at the end of 1954.

It thus appears that it is perhaps too early to get overly alarmed about pressure groups and Keynesian economics. Indeed it may be altogether possible (though I would not venture an opinion) that collective bargaining (stable contracts over a considerable period, etc.) and the increasing spread of Keynesian economics—even involving members of Congress (witness the growing awareness of the impact of tax changes on inflation and deflation)—may give us greater price stability than was achieved over considerable periods in the “good old days.”

With respect to the future, however, Bronfenbrenner has no illusions that the old methods could any longer be effective to hold down inflation. Labor

<sup>15</sup> Bronfenbrenner asserts that it is a “convenient escape . . . to ascribe the inflation completely to the military factors of war and rearmament” (p. 38).

<sup>16</sup> From 1900 to 1925, wholesale prices and consumer prices (wholesale prices alone prior to 1913) rose by 103 per cent; from 1925 to 1950 these price indexes rose by only 40 per cent.

will no longer tolerate either mass unemployment or gross inequality in income distribution—both powerful deflationary forces. He pictures labor as currently trying the inflation route to full employment and greater equality. But labor will, he thinks, eventually realize the futility of inflation. The drive toward greater equality will however continue and this may tend to dampen growth and efficiency.

Perhaps, but no such tendencies are currently visible. Bronfenbrenner does not adequately appraise the contribution to efficiency and stability of greatly improved labor-management relations—a development which has taken place during the last twenty years of so-called “pressure economics” and “Keynesian economics.”

Turning to Mabel Timlin’s paper on “Monetary Stabilization Policies and Keynesian Theory,” the reader will note her failure to assess the *real* factors. This is all the more remarkable since her chapter begins with a reference to Section VI of Chapter 21 in the *General Theory* which stresses the complexity of causes underlying price movements, and especially the real factors.

Miss Timlin is quite prepared to argue that during the immediate postwar years (p. 65) the rate of investment should have been restricted despite the vast backlog of urgent needs for additional plant, equipment, and housing. But would a drastic monetary restraint on investment at that time have been desirable? Dennis Robertson years ago reminded us that there are times when price stability is not necessarily to be preferred to other goals. These other goals may not be wholly realizable if price stability is rigidly pursued. Miss Timlin’s paper does not realistically examine the painful choices that confronted Canada, no less than the United States, in the years that followed a *total* war in which nearly half of the nation’s resources had for years been devoted to military pursuits. Could the interest-rate policy advocated by Miss Timlin have prevented price-level increases without any sacrifice of output and employment goals? And we should certainly have expected from a Canadian a full discussion of the consequences of a Canadian price policy completely at variance with American developments.

The Canadian policy-makers are roundly criticized for their expectation that the postwar inflationary situation might prove to be temporary, and that later on the problem might well be one of inadequate demand in relation to production capacity (pp. 62, 64). But what is the evidence (assuming a peaceful world) that they were not right? The inflation ran out by 1948, and since then a falling price trend has been interrupted only by the eight months of panic buying following the outbreak of war in Korea. They could scarcely be expected to know that we were soon to move into a costly cold-war situation.

Miss Timlin stresses “adequate control over the quantity of currency and bank deposits, exercised through flexibility of yields on the securities entering into the portfolios of central banks” (p. 86). She is unhappy over the reliance placed by the Canadian government on (a) its budgetary surpluses,<sup>17</sup> (b)

<sup>17</sup> Actually the cash budgetary surplus was enormous in fiscal 1947, and substantial in 1948-50. Miss Timlin surely underestimates their role in checking the 1946-47 inflation.

“suggestions” to the chartered banks, (c) consumer credit regulations, and (d) deferred depreciation tax allowances. She would like to have jumped the yields in a “*sharp and sudden and once-for-all rise*” (p. 64) but she thinks that a lagging and niggardly rise in rates, taking place by small degrees (the policy advocated by the New York Federal Reserve Bank), might aggravate the problem. She does not explain how anyone would know exactly how much that sudden sharp rise should be, or what might be the consequences of a drastic fall in capital values generally.

The *minimum* objective, she thinks, should be to prevent any increase of currency and bank deposits and to deter any flow of securities to the central bank. Actually both of these minimum objectives were achieved in the United States, but this did not prevent the price rise in 1946-47. (Currency and demand deposits stood at \$106 billion in June, 1946, and at \$108 billion in June, 1948,<sup>18</sup> while U. S. securities holdings by the Federal Reserve Banks were \$23.8 billion in June, 1946, and \$21.4 billion in June, 1948.)

Unlike Miss Timlin who assumes price stability as a *summum bonum*, Vickrey poses the question whether “an economy in which prices are rising steadily” may not be more stable than one with a stable price index (p. 89). He posits a “condition of specified, controlled, and generally anticipated inflation as a respectable and possibly even desirable condition” (p. 90).

The key condition, he thinks, is that inflation be generally anticipated. And it is not difficult, he says, to construct models in which *anticipated* inflation does not of itself produce instability. “Models,” perhaps, yes. But what of the actual world?

Varying combinations of interest rates, tax rates, and government spending rates may of course be employed to achieve (in model building at least) any desired trend of prices. On balance, Vickrey prefers a high rather than a low money rate since he prefers to operate on a liquidity preference curve that is more nearly vertical.

Vickrey guides the reader through several models, but for the most part he is aware that they have little significance for the real world, however interesting the speculations may be. Among the unrealistic assumptions introduced are the following: (1) real aspects of the economy are unaffected by monetary vagaries and are also fully anticipated; (2) public confidence in the maintenance of a precisely *steady* rate of inflation, say 10 per cent per year<sup>19</sup> (pp. 110, 112, 118).

Currently “wartime destruction and the demands of rearmament” have pushed the productivity of capital up into a range which gives, he thinks, sufficient margin for the effective operation of monetary controls (p. 122). But he concludes that the “long-term trend seems still to be one in which the accumulation of capital, combined with the shift towards capital-saving

<sup>18</sup> In Canada currency and active deficits increased by 10 per cent from 1946 to 1948.

<sup>19</sup> No government can be certain of continuous *full* employment, however much it may aim to achieve this goal. But is it not still more difficult to guarantee exact price stability, let alone an exact percentage *increase* in prices? Vickrey has surely not overstated his case when he says that it “may be some time before any such controlled inflation is adopted in any country as a deliberate and explicit policy” (p. 122).

innovations," will tend to drive down the real marginal productivity of capital (p. 122).

Patinkin's paper on the quantity theory is, I feel, only of limited interest. The quantity theory, given certain rigid conditions, is held to be correct. Now Keynes always held that classical theory came into its own under full-employment conditions. He laid down two assumptions under which the quantity theory was valid: (1) full employment, and (2) effective demand will change in the same proportion as the quantity of money. This latter condition would be true under *one* of two assumptions: (1) the propensity to hoard is zero; or (2), if not zero, then the liquidity preference schedule, the investment demand schedule and the consumption function are assumed to have such slopes that the aggregate demand will increase in the same proportion as the increase in the quantity of money.

Patinkin, however, argues that two conditions, and only two, are necessary to make the quantity theory valid: (1) full employment, and (2) absence of "money illusion."<sup>20</sup>

Patinkin thinks that his position presents a significant difference between himself and Keynes, but I question that this can be maintained. He admits that Keynes was quite right in insisting that the validity of the quantity theory was connected with the condition that effective demand must increase in the same proportion as the quantity of money. As Patinkin puts it, this latter condition is indeed a necessary consequence of his own crucial assumption with respect to the absence of any money illusion.

Patinkin's chapter, as with everything he writes, deserves the careful attention of economists, and it is possible that I have not done him full justice. At any rate this chapter interests me far less than his earlier very able contributions. With respect to this chapter, and indeed all the others as well, it is far more difficult to assess in a balanced way a book containing chapters by fifteen authors than a book of fifteen chapters by one author. All in all the book is an interesting and useful contribution to post-Keynesian economics.

<sup>20</sup> True, he takes cognizance (as did also the classicals) of the special condition that there must be no distributional effects such as might account for forced saving.