ResearchOnline@ND

University of Notre Dame Australia
ResearchOnline@ND

Business Book Chapters

School of Business

1998

The Economic Consequences of the Klassical Caricature

Robert Leeson
University of Notre Dame Australia, rleeson@stanford.edu

Follow this and additional works at: http://researchonline.nd.edu.au/bus_chapters
COMMONWEALTH OF AUSTRALIA
Copyright Regulations 1969
WARNING

This material has been copied and communicated to you by or on behalf of the University of Notre Dame Australia pursuant to part VB of the Copyright Act 1969 (the Act).

The material in this communication may be subject to copyright under the Act. Any further copying or communication of this material by you may be the subject of copyright protection under the Act.

Do not remove this notice.

Recommended Citation

Leeson, R. (1998). The economic consequences of the Klassical Caricature. In J. C. W. Ahiakpor (Ed). *Keynes and the classics reconsidered*. **Boston, MA: Kluwer Academic Publishers.**

This Book Chapter is brought to you by the School of Business at ResearchOnline@ND. It has been accepted for inclusion in Business Book Chapters by an authorized administrator of ResearchOnline@ND. For more information, please contact denise.mclinden@nd.edu.au.

The Economic Consequences of the Klassical Caricature

In Ahiakpor, J. C. W. ed. *Keynes and the Classics Reconsidered.* Boston: Kluwer.

Robert Leeson
Economics Department
Murdoch University
W.A. 6150
AUSTRALIA

20 August 1997

1. Introduction

Keynes' three most successful books were concerned with *The Economic Consequences of*, respectively, *the Peace* (JMK IX [1919]), *Mr. Churchill* (JMK II [1926]) and Professor A. C. Pigou (1936). All three books successfully employed the rhetorical device of a whipping boy. This device was not uncommon. In *The Economics of Unemployment*, J. A. Hobson (1922, 43-4, 50-2) set up J. M. Keynes as his classical whipping boy, interpreting page 19 (actually pages 11-12) of "*The Economic Consequences of the War* [sic]" as having carried further Adam Smith's "mysticism of the 'invisible hand', by which individual greed is transmuted into common benefit".[i] Hobson also developed Pigou's work to illustrate the failure of competition and of the marginalist method.

In *The General Theory* (1936), Keynes accused Pigou of fathering the modern "classical" version of the wage cutting argument. This chapter examines the consequences for economics and economists of this potent and enduring macroeconomic creation myth. The term 'Klassical' (with a K, after Keynes) is used to indicate that the caricature under attack was, to a large extent, Keynes' invention.

There is an obvious tension between the Pigou of the macroeconomic creation myth who supposedly had great faith in the power of the price mechanism (and particularly the price of labour) and the Pigou who co-authored the welfare approach to economic policy which started from the assumption that the price mechanism failed to produce socially optimal results. As Ronald Coase (1988, 20) put it, "the central tendency in [Pigou's] thought ... was that, when defects were found in the working of the economic system, the way to put things right was through some form of government action". But according to the macroeconomic creation myth, the central theoretical tendency in Pigou's macroeconomics was faith in the price mechanism.

Several other aspects of Pigou's work highlight this anomaly. Not only was he conscious of the failure of the price mechanism; he constructed a statistical Phillips curve; his animal spirits explanation of the business cycle involved a model similar to the Expectations Augmented Phillips Curve ; he probably invented the term 'involuntary' unemployment; he developed the concept that would later be called the Okun gap, highlighting the human capital losses associated with unemployment; he also developed a liquidity trap (1927, curve 11, 294-9; 1933, 213-4).

But the *General Theory* contains a few quotes culled from Pigou (ripped all bloody from their context) which appear to suggest that his policy proposals (he was an early opponent of the Treasury View in the 1920s) were inconsistent with his underlying theory. But Pigou's (1933) ultra-theoretical analysis of wage flexibility was not adequately or fairly represented by the macroeconomic creation myth. He calculated that increased plasticity of wages might reduce the amplitude of the business cycle by about one eighth (1913, 243; 1927, 285). He illustrated this proposition with an early version of the theory of the second best. It is also clear that both Kahn and Keynes had read Pigou's work on the employment multiplier (1927, 294-9), before the publication of both *Essays in Persuasion* (1933) and Kahn's multiplier (1931, 1933). Without wishing to suggest that the macroeconomic Old Testament had been plagiarised from the 'classical devil', it appears that Keynes' caricature of Pigou is inaccurate.

In Cambridge in the 1930s, there was "no doubt about the truth but a good deal of trouble about

the proof"; and Keynes developed an unusual inflexibility with respect to Pigou (Austin Robinson 1972, 536). After the passions of the 1930s subsided, Richard Kahn (1984, 19) found Pigou's 1913 assault on (what would later be called) the Treasury View "astonishing". Pigou was not the advocate of the "classical" self-adjusting forces caricatured in *The General Theory*; but Pigou scholarship (as opposed to textbook parody) is, it seems, self-adjusting (Hutchison 1953, 1978, 1981; Schlesinger 1956; Blaug 1968, 1986, 189-191; Fry 1976; Collard 1981, 1983, 1995, 1996; Casson 1983; Bleaney 1987; Shiller 1987; Clarke 1988; Aslanbeigui 1989, 1990, 1992a, 1992b; *The Economist* December 26, 1992-January 8 1993, 107).

Keynes (1936, 182-3, 292-3) ended a type of professional schizophrenia: "Nobody before him, as far as I know, had brought all the relevant factors, real and monetary at once, together in a single formal scheme through which their interplay could be coherently investigated" (Pigou 1950, 65; Austin Robinson 1983, 260). But the price of his revolution has been to introduce a fresh professional schizophrenia between historical research and the Year Zero mentality to be found in macroeconomic textbooks. This mentality was propagated, in large part, by those around Keynes; especially Joan Robinson and Richard Kahn.[ii]

Pigou's 'sin' was to publish an arid and tedious *Theory of Unemployment* (1933) as a sequel to his *Industrial Fluctuations* (1927). His opening words of explanation and self-defence could have been: "'Among persons interested in economics analysis, there are tool-makers and tool-users' [Pigou 1929]. This book is presented to the analytical economist as a box of tools. It is an essay in the technique of economic analysis, and can make only an indirect contribution to our knowledge of the actual world. It is only by using their tools upon observed facts that economists can build up that working model of the actual world which it is their aim to construct. To tinker with the tool-box is merely a preliminary to the main attack, and, to those who are in haste fort results, it may appear to be an idle occupation far inferior to the fruitful work of the tool-users". But these were the opening words of Joan Robinson's *Economics of Imperfect Competition* (1933, 1). Neither Joan Robinson nor Richard Kahn were inclined to read Pigou in this light; they, alone among Keynes' colleagues, encouraged the use of the Klassical caricature. This chapter explores the consequences for the development of Keynesian economics of the Klassical caricature and highlights some of the unpredictable results; most of which were profoundly distasteful to Joan Robinson and Richard Kahn.

Faced with a unreliable dichotomy between Keynes and the Klassics, economists immediately tried to heal the breach. The IS-LM model was explicitly designed for that purpose. Any theoretical differences, it was hoped, could be resolved by using the newly designed tools of econometrics. In the process, the culture of economists was increasingly influenced by a formalist anti-historical attitude; leaving Joan Robinson to bemoan the inadequate way that history had been incorporated into economic analysis. Keynes seems to have disliked the unpleasant atmosphere that was developing at Cambridge (fostered by the divisions between Kahn and Joan Robinson and the interwar business cyclists, Pigou and Dennis Robertson); his later sympathies appeared to have been hostile to the Left Keynesian personalities. These themes are explored in the sections below.

Section 2 suggests that Keynes came to regret some of the rhetorical flourishes contained in the *General Theory*. The IS-LM model that Joan Robinson and Richard Kahn so objected to was constructed to reunite Keynes with the Klassics (a division they had done so much to encourage). If economists were to choose between the true and the false prophets of the

macroeconomic creation myth, then surely the tools of technocratic science had a mission to reformulate the words of the competing prophets as competing equations amenable to econometric estimation. In this way, the Klassical caricature provided a perfect opportunity for the econometrics movement to acquire the role of adjudicator of economic disputes; a development that Joan Robinson and Richard Kahn believed diminished the possibility that Keynes' insights would be incorporated into macroeconomic analysis and policy (section 3). The rhetorical decision to devote a large proportion of the *General Theory* to Pigou's work naturally led anti-Keynesians to focus on Pigou in a manner that seems unlikely had he not been allocated the role of Keynes' whipping boy. In some ways, the anti-Keynesian counter-revolution was Pigou's revenge (section 4). Section 5 describes the final paradox with Joan Robinson calling for a 'return to history' as an antidote to the direction that economics was taking, even though that direction had been stimulated by her own historically inaccurate representation of Pigou.

This essay is part of a wider investigation into the macroeconomic creation myth; and this introductory section provides only a *very* brief summary of Pigou's work. The reader's indulgence is therefore requested: full justification for my assertions will be provided in a forthcoming book. Limitations of space prohibit me from doing justice to my thesis about Pigou at the same time as addressing my allocated topic.

2. 'Adam' Keynes

The Klassical caricature rapidly created a 'modern' orthodoxy (with great appeal to the young) in opposition to the "noxious influence of authority ... an unprecedented rate of obsolescence in economic theory" (Marget [1942], cited by Walker 1986, 5). Keynes ordinarily carried no animosity towards those with whom he differed intellectually (Austin Robinson 1975, 13); and he was willing to retract unreliable assertions: "my own readiness to accept the prevailing generalisation, at the time when I was writing my 'General Theory', was much influenced by an apriori argument, which had recently won wide acceptance, to be found in Mr. R. F. Kahn's article on 'The Relation of Home Investment to Employment' ... I now recognise that the conclusion is too simple and does not allow sufficiently for the complexity of the facts" (1939, 39; Kahn 1976, 32, n14).[iii] After the *General Theory*, Keynes began to distance himself from some of his disciples.

A few weeks before his death, Keynes in his address to the Political Economy Club insisted that "there was value in the old classical doctrines; there are in fact deep currents and there is an invisible hand, although it operates more slowly than the classical economists thought. Strains of adjustment were only intolerable if not eased. The long-run mechanisms of the classical system must be allowed to work; but it would only be allowed to work in the long run if short-run aids were supplied" (cited by Harrod 1951, 622, n1). Harrod's account is derived from "very full notes" taken by Harry Johnson. A fuller version, including sentiments about using "what we have learnt from modern experience and modern analysis, not to defeat, but to implement the wisdom of Adam Smith" appeared in Keynes' final posthumously published article (1946, 185-6): "I find myself moved, not for the first time, to remind contemporary economists that the classical teaching embodied some permanent truths of great significance, which we are liable to-day to overlook because we associate them with other doctrines which we cannot now accept without much qualification. There are in these matters deep undercurrents at work, natural forces, one can call them, or even the invisible hand, which are operating towards equilibrium ... how much modernist stuff, gone wrong and turned sour and silly, is circulating in our system,

also mixed, it seems with age-old poisons ...".

Harry Johnson gained a "perhaps erroneous impression" that Keynes' words were directed partly at Joan Robinson (Johnson and Johnson 1978, 208). Kahn thought Keynes' "remarkable" words were the product of "a sick man". There was even some discussion of temporarily suppressing the article (Kahn 1974, 381, n3; but see Moggridge 1994; Hutchison 1996). On Pigou's retirement in 1944, Keynes thought that Dennis Robertson should be offered the chair that Marshall and Pigou had held; a development that restrained the Cambridge Left Keynesian cause. But the "ancient argument" continued, spitefully, exacerbated by a 'Cambridge' tendency to deny adequate justice to other Cambridge economists (Samuelson 1963, 516, 521; Austin Robinson 1975, 14).

In an early Preface to *The General Theory*, Keynes stated that "an economics writer requires from his reader much goodwill and intelligence ... there are a thousand futile yet verbally legitimate, objections which an objector can raise". In response to Harrod's discussion of persuasive and unpersuasive rhetoric, Keynes replied that "there is some evil genius which sits at the elbow of every economist, forcing him into all sorts of contorted and unnecessary complications" (JMK XIII [1934], 469-70; [1935], 538). He told Kahn that Pigou's writings "seems to me the most extraordinary in some ways in the history of the subject. But it has a dreadful fascination for me, and I cannot leave it alone" (JMK XIII [1935], 525). Later, he informed Hugh Townsend that "I should like some day to endeavour to restate the whole matter, not controversially or critically or in relation to the views of others, but simply as a positive doctrine" (JMK XXIX [1936], 247). But his planned book of *Footnotes* was never completed, first because of his heart attack, then because of his Wartime duties (JMK XIV [1936], 47, 87).

The first footnote of *The General Theory* (1936, 3, n1) acknowledged that to include Pigou in the Klassical category might be tantamount to perpetrating an act of "solecism" - and Keynes rapidly found that his own work could be so treated. There are several complaints in his correspondence about "dreadful[ly] barren" misrepresentations and controversy, which only served to "darken counsel" (JMK XXIX 172, 180, 183, 232, 235, 239, 281-2). In 1938, he lamented to Pigou that "It is a great pity that everything becomes so political"; and to Robertson that "the state of struggle in the Faculty which has existed lately I have seen and hated. But it seems to be too deeply rooted in feelings to be easily composed by reasonableness" (JMK XIII [1935], 650-2, 638, 640). Robertson perceived things to have deteriorated after Keynes' death, with the Keynesian system "crystallising ... into an orthodoxy no less rigid than that against which it was, or conceived itself to be, a revolt" ([1946] cited by Hicks 1964, 314; Mizen and Presley 1995, 642).

In his assault on the ‘Keynesian Counter-Revolution’, Robert Clower (1965, 103-4) referred to the "surprisingly harmonious literature on Keynes and the Classics ... we now have an extremely clear idea of the orthodox content of contemporary theory"; which had been lacking before the Klassical caricature. Pigou (1939, 220) had, in a sense, predicted this: "Out of the turmoil something new and valuable may grow. A period of confusion; then a second Marshall and a new synthesis - a synthesis, if one dare a prophesy, much nearer to that of the first Marshall than many now suppose". 'The Reincarnation of Keynesian Economics' involved the acceptance of the Natural-Rate of Unemployment hypothesis: "classical economics is right in the long run" (Mankiw 1992, 561).

On of the unintended long-run consequences of the Klassical caricature was to draw attention to Pigou's work, partly in search of the ingredients of a successful counter-revolution (Johnson 1971). One of the co-authors of the Keynesian Neoclassical Synthesis thought that "the basic policy disagreement between Keynes and the classics related to the degree of government intervention required for full employment" (Patinkin 1972, 902). Patinkin (1981, 3-17) had been a research associate at the Cowles Commission, where postwar econometric theory was largely developed, and where he had been stimulated by Lawrence Klein's "excellent" *Keynesian Revolution* (1947). This led him to produce papers on 'Unemployment in Keynesian Systems', 'A Reconsideration of the Theory of Unemployment' (in which the first section is called 'A Generalised Classical-Keynesian Model') and a doctoral thesis 'On the Consistency of Economic Models: A Theory of Involuntary Unemployment'. The prevailing atmosphere was that "'everybody knew' what classical economics was"; but Jacob Marschak suggested that Patinkin actually read the 'classical' authors he was describing. In commenting (November 1947) on a draft of Patinkin's 'Price Flexibility and Unemployment', Friedman scrawled across the top of the front page: "Have you read Pigou's article in recent Economica? You should".[iv]

The result of this rediscovery was *Money Interest and Prices: An Integration of Monetary and Value Theory* (Patinkin 1956). Along the way, Patinkin produced an essay in *Econometrica* on 'The Indeterminacy of Absolute Prices in Classical Economic Theory' which attempted to "reconstitute the classical theory. As frequently in such cases, once the formulation is completed, it is possible to go back to the texts and show that it is really closer to what the original propounders had in mind" (Patinkin 1981 [1949], 146). Patinkin sent a copy of the conclusion to Milton Friedman for comments on 11 January 1949: "In a way I think the conclusion represented the completion of a circle. I started out being very unhappy about certain aspects of the classical theory. I now find that by returning to our old friend, Pigou, these difficulties can be cleared up and the classical theory reconstituted on a much stronger basis".[v]

Joan Robinson began (in print) to describe the Keynesian Neoclassical Synthesis (and the IS-LM model in particular) as the work of the illegitimate heirs of Keynes - the "bastard Keynesians" who, Edmund-like, had manoeuvred themselves into a position of temporary advantage, at the expense of those in the authorised tradition. She first used the term (four times) in a two and a quarter page *Economic Journal* review of Harry Johnson's *Money, Trade and Growth* (Robinson 1962b); Kahn (1959) had earlier extended her discussion of the Golden Age, by creating the label "Bastard Golden Age". Kahn (1955, 255) - in outlining the modern post-Keynesian view of interest thought that Johnson had been "mesmerised by the serpent". In so far as 'Adam' Keynes was fed Klassical quotes by 'Eves' Robinson and Kahn, the banishment of the supposed authorised tradition from the garden of mainstream Keynesianism was a fitting punishment.

3. The Formalist Revolution

It seems that Joan Robinson played a major role in the construction that would captivate those whom she would later characterise as Bastard Keynesians: "I really didn't know what I was rebelling against ... later [Samuelson] often said and wrote that there was no clear, explicit classical macrodynamic model prior to the Keynesian challenge"; but Marshall and Pigou had, without doubt, "dismissed the problem of inadequate demand by assertion - (Say's Law)" (Tobin 1983, 189; 1972, 105, n1). In *The Keynesian Revolution*, Pigou was caricatured as having "supported a policy of wage cuts" before the Macmillan Committee: "on the whole,

Pigou firmly believed that, with the proper banking policy, wage cuts, in practice, could be relied upon to raise the level of employment" (Klein 1968, 46, 94). The "Bastard Keynesians" were, in a sense, the legitimate heirs of 'Joan' Keynes.

One of the unresolved controversies of macroeconomics is whether the Hicks-Hansen IS-LM apparatus is a perversion of *The General Theory*. Keynes received Hicks' paper "Mr. Keynes and the 'Classics': A Suggested Interpretation" in October 1936, and replied on March 31, 1937: "*six months* later, a rather astonishing lapse of time for such a punctilious correspondent" [emphasis in text] (Skidelsky 1992, 614). Joan Robinson (1978, 13), in contrast, noted that "Hicks used to be fond of quoting a letter from Keynes which, because of its friendly tone, seemed to approve of IS-LM ...". By August/September 1936, after having read (but not sympathised with) Pigou's review of *The General Theory*, Keynes concluded that he had made a tactical blunder: "the whole book needs re-writing and re-casting"; his rhetorical simplification was an injustice, and a "mistake", and promised to use "fair language ... I am afraid that one cannot rely on one's irony, any more than one's arguments, being always understood by everyone".

Keynes' 'General Theory of Employment' was published in February 1937; it focused on Ricardian long-period analysis, and downplayed Pigou *et al*.; the tone is completely changed. An "outside position towards the book" left Keynes feeling his way towards "new lines of exposition". He complained to Joan Robinson that "Author's melancholy did set in at the end. I feel I have not been worthy of my task" (cited by Kahn 1978, 550). In October 1936, he told Joan Robinson that he was "not at all happy" about aspects of her *Essays in the Theory of Employment*; to which she replied "I'm sorry you are put out by my playful footnote about [the nineteenth century]. I feel the time has come when it is the right policy to put in a good word for the classics wherever possible" (JMK XIV [1937], 215, 101, 109-23, 150;[1936], 138-9; XXIX [1938], 270, 267).

Kahn (1984, 248-9) blamed Keynes for having been "too mild with John Hicks ... the IS-LM scheme has very seriously confused the development of economic thought". Hicks' IS-LM [SILL] model was constructed to correct the "satiric aspect" of *The General Theory* - "is the whole thing a sham fight?" - by constructing "a typical 'classical' theory, built on an earlier and cruder model than Professor Pigou's" (Hicks 1937, 147-8, 157-8). The populariser of the IS-LM analysis was also caustic: Keynes accusation about "the failure of Pigou to analyse the dynamic forces which control the rate of real wages" was "surely without justification ... The current orthodox theory - represented, for example, by Pigou - has so fully elaborated the theory of underemployment equilibrium, under conditions of cost rigidities and monopolistic control of supply, that it is only necessary here to make reference thereto" (Hansen 1983 [1936], 78-9). The Keynesian 'counter-revolution' supposedly launched by John Hicks in 1937 and carried forward by Patinkin and other general equilibrium theorist had successfully donned Keynes' mantle: "The Generalised General Theory" (Clower 1965, 103; Hicks 1937). Within months of Hick's article, Kaldor (1937, 745, 752) discussed the Keynes-Pigou controversy by embedding Pigou's model "in a more general form", illustrated by Hick's IS-LM curve. Abba P. Lerner (1938, 211, 230) used a similar apparatus to provide a "more sympathetic interpretation" of both the "classical view and the modern [namely the 'Keynesian'] view". In 'Some Cambridge Controversies in Monetary Theory', Harry Johnson (1951-2, 95, 98, 104) attempted to resolve the loanable funds versus liquidity preference (i.e. Dennis Robertson versus Joan Robinson) controversy by noting that "Most of Keynes' chapter 14 [The Classical Theory of the Rate of

Interest] is rather confusing ... the subject is more easily understood with the help of the Hicksian IS-LM diagram". The debate "turns on a question of fact", which depended on empirical evidence.

Keynes (JMK XIII [1933], 312) objected to Pigou's formalism: a "nonsense apparatus ... a completely bogus use of mathematics of a single variable". Keynes informed Hicks that "Walras' theory and all others along those lines are little better than nonsense" (cited by Skidelsky 1992, 615); Walras was strictly in the classical tradition (Keynes 1936, 177). Keynes described Hick's *Value and Capital* to Kahn as "so utterly empty ... about nothing whatsoever" (cited by Moggridge 1992, 553). But *Value and Capital*, the *General Theory* and Paul Samuelson's *Foundations of Economic Analysis* were highly influential; and Keynesian macroeconomics obtained a wider appeal as "a short cut 'general equilibrium' theory" (Tobin 1987, 118; Solow 1984, 13, 24-5). The Klassical caricature had launched a revolution which neither 'Joan' Keynes nor Joan Robinson were able to direct; they pushed against the string that they had previously pulled, and Keynes' critique of Keynesian macroeconometrics failed to halt the formalist tide (Leeson 1998). Samuelson (1946, 197, n11; 1967, 109; 1976, 27) - a pioneer of the formalist (mathematical and econometric) revolution - was the leading methodological opponent of Marshall; Joan Robinson (1962b, 690), rather belatedly, criticised Harry Johnson for not appreciating Marshall's qualities "inherited from Ricardo ... which are lacking in the branch of the neo-classical school that derives from Walras". Kahn (1974, 377-8) complained about "Some of the gross over-simplifications of which the textbooks are shamefully guilty are attributable to Keynes's burning desire to be understood. To clarify his presentation, he was apt to give a misleading impression of believing in a number of simple relationships. Many of his readers have failed to realise that the simplifying assumptions made for the sake of clarity are not to be taken literally".

What Haberler (1938, 332, 322-3) called "Mr. Kahn's ingenious method of quoting" provoked an acrimonious exchange which may well have fuelled the econometricians desire to uncover the structural equations of capitalism so as to discriminate between the true and the false model, as opposed to the true and false prophet. In 'Some Comments on Mr. Kahn's Review of *Prosperity and Depression*', Haberler complained that Kahn, by selecting sentences in isolation with no attention to the literature referred to, had produced a "quite inaccurate statement of what is to be found in my book". Haberler thought that Keynes had retreated from the Klassical caricature: "It is unfortunate that these latest admissions and modifications by Mr. Keynes have not yet affected the thinking of Mr. Kahn, who still likes to refer to 'the classical theory' without saying exactly of which writer and of which proposition he is speaking". Like others who resisted the Klassical caricature, Haberler sought to "narrow the terminological gulf between my system (and the body of doctrines which it represents) and that of the school of thought for which Mr. Kahn acts as 'the official spokesman'". In the 1939 revised edition of *Prosperity and Depression*, Haberler was hardly able to find any "essential differences" between Keynes and Pigou (JMK XXIX, 275). Ironically, Kahn (1937, 679) fuelled the formalist revolution which marginalised the Cambridge true-believers in the post-war period: the next step in the League of Nations project was to "confront the various theories with historical facts", which was exactly what Tinbergen and his followers sought to do.

4. The Anti-Keynesian Revolution

Pigou's work played a role in the anti-Keynesian counter-revolution. In his Nobel Lecture, Friedman (1977, 469) wrote that "The hypothesis that there is a stable relation between the level

of unemployment and the rate of inflation was adopted by the economics profession with alacrity. It filled a gap in Keynes's theoretical structure. It seemed to be the "one equation" that Keynes himself had said "we are ... short" (1936, 276)". Friedman (1974, 132, n1) had earlier referred to this equation in his famous 'Theoretical Framework for Monetary Analysis', which was originally entitled 'The Missing Equation' (Hammond 1996, 150, n12).
Keynes' words can be found in the Appendix on 'Professor Pigou's Theory of Unemployment'. The equation referred to was missing from *Pigou's* theory: "[Pigou] agrees that within certain limits labour in fact often stipulates, not for a given real wage, but for a given money-wage. But in this case the supply function of labour is not a function of [the real wage] alone but also of the money price of wage goods; - with the result that the previous analysis breaks down and an additional factor has to be introduced, without there being an additional equation to provide for this additional unknown ... We are, as I have said, one equation short ... The pitfalls of the pseudo mathematical method ... could not be better illustrated" (Keynes 1936, 275-6; Pigou 1953, 35).

New Classical perceptions involved a belief in Klassical - if not Ricardian (1821, 85-88, 101-102) - wage flexibility and market outcomes. Robert Solow (1980, 3-4, 9-10) devoted part of his American Economic Association Presidential Address, 'On Theories of Unemployment', to resurrecting the wisdom of Pigou, praising his "common sense that seems somehow to escape his modern day successors".[vi] New Keynesians have likewise found in Pigou's work (1933) an understanding of real-life economies that lead to models that do not suggest New Classical policy solutions (Hart 1982). In *The General Theory*, Keynes (1936, 360-1) invoked the persecuted wisdom of Mandeville's *Fable of the Bees* ("an allegorical poem ... not without a theoretical basis") to contrast against the grim prudence of "Adam Smith, the forerunner of the classical school". 'The Fable of the Bees' was later invoked in support of market outcomes and to discredit Pigou's "main argument for instituting government action to correct allegedly inefficient market activities ... Whether or not Keynes was correct in his claim that policy makers are 'distilling their frenzy' from economists, it appears evident that some economists have been distilling their policy implications from fables" (Cheung 1973, 11, 32). Keynes argued that Pigou's policy proposals were inconsistent with his underlying theoretical apparatus; an approach that Coase (1988, 149) found useful in 'The Problem of Social Cost': "Pigou has not thought his position through". Somewhat ironically, DeSerpa, writing in the *Cambridge Journal of Economics* (which Kahn and Joan Robinson had helped establish when the *Economic Journal* was removed from Cambridge) complained that Coase had constructed his anti-Pigovian revolution by taking "certain passages out of context ... It is therefore of some interest to speculate as to why [the Chicago theorists] accepted Coase's misrepresentation of Pigou's position ... The key player in the seminar was Milton Friedman" (1993, 42, 45; see also McCloskey 1997).

The Keynesian Neoclassical Synthesis was hegemonic until the Islamic fundamentalism and OPEC shocks of the Great Inflation; it appeared to 'save' capitalism, at a theoretical level, from the implications of secular stagnation and the low level equilibrium trap. The Synthesis augmented the IS-LM model with the Pigou effect, thus illustrating the healing properties of a fall in the price level. As Friedman (1976, 317, 315, 321) put it, the Pigou effect "demonstrated the non sequitur in Keynes's proposition ... [that] in a monetary economy, it may not be possible to reach full equilibrium ... extremely important on a theoretical level in assuring that there is no basic flaw in our theoretical analysis". Later, the IS-LM model was augmented by the Phillips Curve trade-off; an ISLMPC fundamentalism which appeared to suggest that "there was no

longer a unique Full Employment, but rather a whole family of possible equilibrium [employment] rates, each associated with a different rate of inflation ..." (Modigliani 1977, 3). The orthodox Pigou effect could not operate in situations of ongoing inflation; but "The Phillips curve ... is simply a market clearing relation" (Klein 1985 [1977], 151). The Great Inflation of the 1970s seemed to threaten and discredit capitalism; and undermine "faith in the econometrician's magic numbers ... the Bastard Keynesian era is coming to an end in general disillusionment" (Joan Robinson 1973, 8, 11).

5. Ricardo, Sraffa, History and Joan Robinson

The first footnote of *The General Theory* (1936, 3, n1) states that "The 'classical economists' was a name invented by Marx to cover Ricardo and James Mill and their *predecessors*, that is to say for the founders of the theory which culminated in the Ricardian economics". Joan Robinson (1978b, 14-5) devoted her contribution to the inaugural edition of *Journal of Post Keynesian Economics* to 'Ricardo and Keynes', reflecting that "Sraffa had shown a draft [of *Production of Commodities by Means of Commodities*] to Keynes in 1928. Keynes evidently did not make much of it and Sraffa, in turn, never made much of the *General Theory* ... The classical theory that had come down to Keynes through Marshall was a travesty of Ricardo ... it was not right to throw him in the same box as Pigou in timeless equilibrium".

In the 1950 and 1960s, Joan Robinson led the Sraffian assault on orthodoxy. The reswitching debate found an 'engineering' defect in neoclassical capital theory; a fall in wages relative to the interest rate did not necessarily produce an increase in labour intensity. Robinson (1975, xii-xiii) was outraged that economists could have such a defective understanding of history: "To reconstruct equilibrium, it is necessary to escape from history ... The situation in the teaching of economic theory at the present time is unsatisfactory, not to say shameful ... The economics of equilibrium is a Moloch to which generations of students are still being sacrificed". The crucial dispute between the Keynesians and the orthodox (including Pigou) was "History versus Equilibrium" (1978a). Joan Robinson frequently stated that "What I took from Marx was a sense of history ... it was a revelation to read Marx ... a very good economist grappling with a historical process". She accused her Cambridge colleague James Meade of "emasculat[ing] history" in his *Neo-Classical Model of Equilibrium Growth* which had "insulate[d] the analysis from contact with reality" (Joan Robinson 1961, 369). But she perpetuated the "Cambridge caricature" of her perceived enemies (Collard 1973, 465); and even those sympathetic to her and her cause concluded that she was "not a good historian, because she had the habit of rewriting history to fit in with her own current preoccupations" (Harcourt 1995, 37-8, 44).

Joan Robinson (1951, 93) found a "Cheshire cat to grin at Professor Robertson"; dismissing Pigou's discussion of the Keynes effect in favour of a theory of interest which "might be useful in historical analysis". She rather perceptively noted (1962a, 122, 74) that "economists have a bias in favour of the measurable like the tanner's bias in favour of leather"; but prior to the *General Theory* there was "almost no link between history and theory". A leading anti-Keynesian noted that during the formalist era, statistics had been elevated over history as the primary source of empirical information. Simultaneously, interest in the history of thought "languished mightily [which can be documented by] the unamusing caricature of the classical economists one so frequently encounters ... a slovenly stereotype" (Stigler 1949, 100-2; 1962, 70).

Pigou was not interested in "the wrong opinions of dead men", and had little interest in the

history of economics (cited by Moggridge 1992, xvi; Robbins 1971, 133); he complained that Dennis Robertson should get on "with constructive work of his own" rather than devoting his time to criticising Keynes (cited by Collard 1981, 133). Pigou's elevation as Marshall's successor was, in a sense, a defeat for the history of economic thought (the speciality of the defeated candidate, H. S. Foxwell). Pigou's continuing role as Klassical whipping boy reveals, beneath the veil of macroeconomics, the "extraordinary provincialism in time of much contemporary professional literature" (Robbins 1976, 39).

According to Austin Robinson (1974, 101), Keynes would have hated "the Holy Writ of Maynard"; he would have advised: "Forget the *General Theory* ... Go on and think for yourself". Joan Robinson (1973, ix) mournfully reflected that "At the time it seemed that ... Keynes' 'long struggle of escape' has broken out of the cocoon of timeless equilibrium and emerged into history" - but historians are still struggling to persuade macroeconomists to escape from the cocoon of the Klassical caricature.[vii]

NOTES

i.. Hobson continued: "iniquity is made the very foundation-stone of prosperity and progress ... Controversial experience has, however, taught me that it is not enough to establish propositions by constructive argument, so long as deep seated implications of an opposing theory remain unanswered. Now the classical economics, which held over-saving, over-production, and a limited market to be mere illusions, relied upon the operation of two automatic checks". Hobson found these two checks (interest rate and price flexibility) to be "slow and ineffective".

ii. "I wonder to what extent these [anti-Keynesian] critics are aware of the quite astonishing state of economics before the *Treatise on Money* ... Keynes had to contest the *very widely held view* that, quite apart from favourable effects of exports, if only wages fell more heavily, unemployment would be reduced ... Keynes was mainly concerned, in the *General Theory*, with *the failure of economists and others* to appreciate the reluctance of money wages to fall and to realise that even if they did fall, unemployment would not be diminished, except in industries subject to competition with overseas suppliers" [emphasis added] (Kahn 1974, 369, 376).

iii. Keynes was referring to his assertion about the inverse relationship between real and nominal wages.

iv. Patinkin Papers, Duke University.

v. Patinkin Papers, Duke University.

vi. Solow continued: "Only what Veblen called trained incapacity could prevent anyone from seeing that some or all of these mechanisms do indeed capture real aspects of the modern capitalist economy ... All I do claim is that a reasonable theory of economic policy should be based on a reasonable theory of economic life".

vii. Or from what Hutchison (1978, 119, n22) described as the "Cambridge version of the history of modern economics".

REFERENCES

Aslanbeigui, N. 1989. Marshall's and Pigou's Prescriptions on Unemployment, Socialism and Inequality. In Walker ed.

___ 1990. On the Demise of Pigovian Economics. Southern Economic Journal 56.3: 616-27.

___ 1992a. More on the Demise of Pigovian Economics. Southern Economic Journal 59.1: 98-103.

___ 1992b. Pigou's Inconsistencies or Keynes's Misconceptions? History of Political Economy 24:2: 413-433.

Bleaney, M. 1987. Macroeconomic Theory and the Great Depression Revisited. Scottish Journal of Political Economy 34.2, May: 105-119.

Blaug, M. 1968. Economic Theory in Retrospect. London: Heinemann. 2 ed.

___ 1986. Great Economists Before Keynes. England: Edward Elgar.

___1992. ed. Arthur Pigou (1877-1959). England: Edward Elgar.

Brown, E. C. and Solow, R. 1983. eds. Paul Samuelson and Economic Theory. New York: McGraw Hill.

Casson, M. 1983. Economics of Unemployment: An Historical Perspective. Oxford: Martin Robertson.

Cheung, S. N. S. 1973. The Fable of the Bees: An Economic Investigation. Journal of Law and Economics 11-33.

Clarke, P. 1988. The Keynesian Revolution in the Making, 1924-1936. Oxford: Clarendon.

Clower, R.W. 1965. The Keynesian Counter Revolution: A Theoretical Reappraisal. In Hahn and Brechling eds.

Coase, R. H. 1988. The Firm, The Market and the Law. Chicago: University of Chicago Press.

Collard, D. 1973. Leon Walras and the Cambridge Caricature. Economic Journal 83.330, June: 465-476.

___1981. A. C. Pigou. In O'Brien and Presley eds.

___ 1983. Pigou on Expectations and the Cycle. Economic Journal 93, June: 411-414.

___ 1995. Pigou and Modern Business Cycle Theory. University of Bath Papers in Political Economy.

___ 1996. Pigou and Future Generations: A Cambridge Tradition. Cambridge Journal of Economics 20: 585-97..

DeSerpa, A. C. 1993. Pigou and Coase in Retrospect. Cambridge Journal of Economics 17: 27-50.

Fitoussi, J-P. 1983. ed. Modern Macroeconomic Theory. Oxford: Basil Blackwell.

Friedman, M. 1974. A Theoretical Framework for Monetary Analysis and Comments on the Critics. In Gordon ed.

____ 1976. Price Theory. Chicago: Aldine.

_____ 1977. Inflation and Unemployment: Nobel Lecture. Journal of Political Economy 85. 3: 451-472.

Fry, G. K. 1976. The Marshallian School and the Role of the State. Bulletin of Economic Research 2: 23-35.

Gordon, R. 1974. ed. Milton Friedman's Monetary Framework: A Debate with his Critics. Chicago: University of Chicago Press.

Haberler, G. 1938. Some Comments on Mr. Kahn's Review of *Prosperity and Depression*. Economic Journal June: 322-333.

Hahn, F. and Brechling, F. 1965. eds. The Theory of Interest Rates. London: Macmillan.

Hammond, J. D. 1996. Theory and Measurement: Causality Issues in Milton Friedman's Monetary History. Cambridge: Cambridge University Press.

Hansen, A. 1983. Mr. Keynes on Underemployment Equilibrium. In Wood ed.

Harcourt, G. C. 1995. Talking About Joan Robinson. Review of Social Economy LIII.1, Spring: 31-64.

Harrod, R. 1951. The Life of John Maynard Keynes. London: Macmillan.

Hart, O. 1982. A Model of Imperfect Competition with Keynesian Features. Quarterly Journal of Economics February: 109-138.

Hicks, J. R. 1937. Mr. Keynes and the 'Classics': A Suggested Interpretation. Econometrica 5, April: 147-159.

___ 1964. Dennis Holme Robertson, 1890-1963. Proceedings of the British Academy: 305-16.

___ 1983. IS-LM: An Explanation. In Fitoussi ed.

Hobson, J. A. 1922. The Economics of Unemployment. London: George Allen and Unwin.

Hutchison, T.W. 1953. Review of Economic Doctrines, 1870-1929. Oxford: Oxford University Press.

___1978. On Revolutions and Progress in Economic Knowledge. Cambridge: Cambridge University Press.

___ 1981. The Politics, and Philosophy of Economics. Oxford: Basil Blackwell.

___ 1996. Review of *Contra Keynes and Cambridge: The Collected Works of F. A. Hayek*, Vol 9. Economic Affairs Spring: 38-43.

Johnson, H. G. 1951-2. Some Cambridge Controversies in Monetary Theory. Review of Economic Studies: 90-104.

Johnson, H. G. 1971. The Keynesian Revolution and the Monetarist Counter-Revolution. American Economic Review 61.2, May: 91-106.

Johnson, E.S. and H.G. 1978. The Shadow of Keynes. Oxford: Basil Blackwell.

Kahn, R. F. 1931. The Relation of Home Investment to Unemployment. Economic Journal June: 173-198.

____ 1933. Public Works and Inflation. Journal of the American Statistical Association Supplement: 168-173.

___ 1937. The League of Nation's Inquiry into the Trade Cycle. Economic Journal December: 670-9.

___ 1955. Some Notes on Liquidity Preference. Manchester School of Economics and Social Studies 22: 229-257.

___ 1959. Exercises in the Analysis of Growth. Oxford Economic Papers June, II:

___ 1974. On Re-Reading Keynes. Proceedings of the British Academy: 361-391.

___ 1978. Some Aspects of the Development of Keynes's Thought. Journal of Economic Literature XVI, June: 545-559.

____ 1984. The Making of Keynes' General Theory. Cambridge: CUP.

Kaldor, N. 1937. Prof. Pigou on Money Wages in Relation to Unemployment. Economic Journal December: 745-753.

___ 1941. Pigou: Employment and Equilibrium. Economic Journal December: 458-473.

Keynes, J.M. 1936. The General Theory and Employment, Interest and Money. London: Macmillan.

___ 1939. Relative Movements of Real Wages and Output. Economic Journal March:34-51.

_____ 1946. The Balance of Payments of the United States. Economic Journal June: 172-187.

_____ 1971-89. Collected Writings. London: Macmillan.

Keynes, M. 1975. ed. Essays on John Maynard Keynes. Cambridge: Cambridge University Press.

Klein, L. 1968. The Keynesian Revolution. New York: Macmillan. 2 ed.

____1985. Economic Theory and Econometrics. Oxford: Basil Blackwell. Ed. J. Marquez.

Kregel, J. A. 1975. The Reconstruction of Political Economy: An Introduction to Post-Keynesian Economics. London: Macmillan.

Kuenne, R.E. 1967. ed. Monopolistic Competition Theory: Studies in Impact: Essays in Honour of E.H. Chamberlain. New York: John Wiley.

Leeson, R. 1998. 'The Ghosts I Called I Can't Get Rid of Now': The Keynes-Tinbergen-Friedman-Phillips Critique of Keynesian Macroeconometrics. History of Political Economy (forthcoming).

___ 1999. Keynes and the Keynesian Phillips Curve. History of Political Economy (forthcoming).

Lerner, A. P. 1938. Alternative Formulations of the Theory of Interest. Economic Journal June: 211-230.

McCloskey, D. 1997. The Good Old Coase Theorem and the Good Old Chicago School. In Medema ed.

Medema, S. G. 1997. ed. Coasean Economics. Boston: Kluwer.

Mankiw, G. 1992. The Reincarnation of Keynesian Economics. Eastern Economic Review 36: 559-565.

Mizen, P. and Presley, J. R. 1995. Robertson and Persistent Negative Reactions to Keynes's General Theory: Some New Evidence. History of Political Economy 27:4: 638-651.

Modigliani, F. 1977. The Monetarist Controversy or Should We Forsake Stabilisation Policies? American Economic Review 67.2, March: 1-19.

Moggridge, D. 1974. ed. Keynes: Aspects of the Man and His Work. London: Macmillan.

___ 1992. Maynard Keynes: An Economist's Biography. London: Routledge.

___ 1994. Richard Kahn as an historian of economics. Cambridge Journal of Economics 18, February: 107-116.

O'Brien, D. P. and Presley, J. R. 1981. eds. Pioneers of Modern Economics in Britain. London: Macmillan.

Patinkin, D. 1956. Money Interest and Prices: An Integration of Monetary and Value Theory. New York: Harper Row.

___ 1972. Friedman on the Quantity Theory and Keynesian Economics. Journal of Political Economy: 883-905.

___ 1981. Essays in and On the Chicago Tradition. Duke University Press: Durham, NC.

Pigou, A.C. 1912. Wealth and Welfare. London: Macmillan.

___ 1913. Unemployment. London: Williams and Norgate.

___ 1927. Industrial Fluctuations. London: Macmillan.

___ 1932. The Economics of Welfare. London: Macmillan

___ 1933. The Theory of Unemployment. London: Macmillan.

_____ 1939. Presidential Address. Economic Journal June, XLIV.194 : 215-21.

____ 1950. Keynes's 'General Theory': A Retrospective View. London: Macmillan.

___ 1953. Alfred Marshall and Current Economic Thought. London: Macmillan.

Reese, D. A. 1987. ed. The Legacy of Keynes. Harper Row: San Francisco.

Ricardo, D. 1821. On the Principles of Political Economy and Taxation. London: John Murray. 3 ed.

Robbins, L. 1971. Autobiography of an Economist. London: Macmillan.

___ 1976. Political Economy Past and Present. London: Macmillan.

Robinson, E. A. G. 1972. John Maynard Keynes: Economist, Author, Statesman. Economic Journal June, 82.326: 531-546.

____ 1974. Discussion. In Moggridge ed.

___ 1975. A Personal View. In M. Keynes ed.

____ 1983. Impressions of Maynard Keynes. In Worswick and Trevithick eds.

Robinson, J. 1933. The Economics of Imperfect Competition. London: Macmillan. 1 ed.

___ 1951. The Rate of Interest. Econometrica 19: 92-111.

___ 1961. Equilibrium Growth Models. American Economic Review LI, June: 360-9.

___ 1962a. Economic Philosophy. England: Penguin.

__ 1962b. Review of H.G. Johnson's *Money, Trade and Economic Growth*. Economic Journal September, LXXII, 287: 690-2.

___ 1973. ed. After Keynes. Oxford: Basil Blackwell.

__ 1975. Foreword. In Kregel

__ 1977. Michel Kalecki on the Economics of Capitalism. Oxford Bulletin of Economics and Statistics Special Issue, February: 7-18.

__ 1978a. Contributions to Modern Economics. Oxford: Basil Blackwell.

___ 1978b. Keynes and Ricardo. Journal of Post Keynesian Economics 1.1: 12-18.

___ and Wilkinson, F. 1977. What has become of Employment Policy? Cambridge Journal of Economics 1.1: 5-14.

Samuelson, P.A. 1946. Lord Keynes and the General Theory. Econometrica July.

___ 1963. D. H. Robertson (1890-1963). Quarterly Journal of Economics LXXVII.4, November: 517-536.

___1967. In Kuenne ed.

___ 1976. Economics. New York: McGraw Hill.

Schlesinger, J. R. 1956. After twenty years: the *General Theory*. Quarterly Journal of Economics LXX, November: 581-602.

Shiller, R. J. 1987. Ultimate Sources of Aggregate Variability. American Economic Review Papers and Proceedings 77.2, May: 87-92.

Skidelsky, R. 1992. John Maynard Keynes: The Economist as Saviour 1920-37. London: Macmillan.

Solow, R. 1980. On Theories of Unemployment. American Economic Review 70.1, March: 1-11.

___ 1984. Mr. Hicks and the Classics. Oxford Economic Papers 36, November, Supplement: 13-25.

Stigler, G. 1949. A Survey of Contemporary Economics. Journal of Political Economy LVII.2, April: 93-105.

__ 1962. Comment. Journal of Political Economy 70: 70-1.

Tobin, J. 1972. Cambridge (U.K.) versus Cambridge (Mass). The Public Interest: 102-9.

___ 1983. Macroeconomics and Fiscal Policy. In Brown and Solow eds.

___ 1987. Keynesian Economics and its Renaissance. In Reese ed.

Walker, D. A. 1986. Why Keynes' General Theory was a Success. Economic Notes 15: 5-29.

___ 1989. ed. Perspectives on the History of Economic Thought Volume 1 Classical and Neoclassical Economic Thought. England: Edward Elgar, for the History of Economics Society.

Wood, J. C. 1983. ed. J. M. Keynes: Critical Assessments. London: Routledge.

Worswick, G.D. 1976. ed. The Concept and Measurement of Involuntary Unemployment. London: Allen and Unwin.

Worswick, G. D. and Trevithick, J. 1983. eds. Keynes and the Modern World. Cambridge: Cambridge University Press.