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I. INTRODUCTION

In October 1930, "impressed by the seriousness of the present situation, by the constant recurrence of such periods of economic depression and the failure up to the present to discover any concerted means for averting the losses incurred", the Eleventh Assembly of the League of Nations decided that the Financial Section and Economic Intelligence Service "should undertake the study of the courses and phases of the present depression" (Ohlin 1931: 7-8; preface by Alexander Loveday, director of the Financial Section). Bertil Ohlin's report, which came out a year later, was the first product of that resolution. It consisted of an empirical investigation of the depression up to mid-1931, without much theoretical discussion (cf. Endres and Fleming 2002:30-35). Ohlin's study was based on country reports prepared by national Economic Councils and Research Institutes, plus two meetings of their representatives held in Geneva in March and July 1931 (Ohlin 1931: 8-11). The minutes of the second conference (League of Nations Archive, Geneva) include a suggestion by Friedrich A. Hayek (then director of the Austrian Business Cycle Institute) to get a "distinguished economist to carry out a study of the recurrence of crises, a specialist who should not be burdened with any routine or administrative work, such as collecting data or obligations to publish forecasts". Ohlin supported Hayek's suggestion, stressing the difficulty of preparing an "authoritative report if, on every point, three or four different theories were advanced". Both argued that a synthetic view of economic fluctuations was necessary. Yet it was only three years later that the League would start a longterm program of business cycle research, under a five-year grant from the Rockefeller Foundation. The grant was based on the decision to focus on economic stabilization as a program of concentration within social sciences, taken by 1933 by the trustees of the Foundation (cf. de Marchi 1991: 148-54).

In March 1934 Gottfried Haberler started working at the Economic Intelligence Service on an "Enquiry into the Causes of the Recurrence of Periods of Economic Depression". As he described in a letter of 2 March 1934 to Robert Weidenhammer, "I have just taken up an appointment with the League of Nations. I have to investigate the causes of economic depressions and later on I shall have to make recommendations as to how to prevent the economic system from collapsing from time to time". He finished the first part of the enquiry, titled "Systematic Analysis of the Theories of the Business Cycle", in August 1934. A revised version was completed in December 1935, reflecting correspondence with numerous fellow economists. In June 1936 a first draft of the second part, titled "Synthetic Exposition of the Nature and Causes of the Business Cycles", was sent out and thoroughly discussed by a "committee of experts on the business cycle" in meetings held in Geneva from June 29th to July 2nd. In September 1936, just before leaving for a permanent appointment at Harvard University, Haberler finished the final version of his report, which was published by the League in 1937 under the title *Prosperity and Depression: A Theoretical Analysis of Cyclical Movements.*¹

The task faced by Haberler when he took up his appointment at the League of Nations was the development of a synthetic view of the business cycle on the basis of the seemingly conflicting theories that proliferated at the time. The importance of such a project is aptly made clear by Schumpeter's remark that the debate on business cycles in the early 1930s gave the impression of being "nothing but disagreement and antagonism that went so far as to be discreditable to the science and even ludicrous" (1954: 1125). The terms of the debate would change with the publication of Keynes's 1936 *General Theory*, which was written at the same time as the first drafts of Haberler's book. However, while Keynes reacted to the proliferation of business cycle theories by coming up with a new theory that shifted the focus on the determination of the short-run equilibrium level of employment and income, Haberler sought a consensus on which a generally accepted explanation of the cycle could be built.

Haberler's *Prosperity and Depression* (1937) has been acclaimed as the authoritative survey of pre-Keynesian business cycle theories (see Schumpeter 1954: 1123, n.2; Samuelson 1996: 1682, and for further quotations Boianovsky 2000: 156). With its five editions (1937-64) the book attained the status of a classic, and Haberler's synthesis of business cycle theories came

¹ Haberler (b. 1900, d.1995) graduated from the University of Vienna in 1923, where he became extraordinary professor in the late 1920s. Craver (1986: 26) suggests that it was the publication of his path-breaking 1933 volume on trade theory which led to the appointment at the League of Nations in 1934. Yet Haberler's 1931 memorandum on "the purchasing power of gold", submitted to the League's Gold Delegation (German translation in Haberler 1932a), may also have influenced that decision. (Haberler was not, however, the first choice; as pointed out by Moggridge (1995: 225 n.2), Loveday had offered the survey to Dennis Robertson, who declined). The first edition of *Prosperity and Depression* was published by the League in 1937. The second edition came out in 1939, with a new chapter 8 added to Part I. The third edition was published in 1943, enlarged by a Part III ("Further reflections on recent developments in trade cycle theory"). The fourth and fifth editions (both by private publishers) came out in 1958 and 1964 with changes in Part III and new appendices.

to coexist with the "Neoclassical Synthesis" in macroeconomics, whose origins date back to the same year, to John Hicks's "Mr Keynes and the Classics" (1937). At present, macroeconomics seems to be converging on a "New Neoclassical Synthesis" that combines Real Business Cycle theory, New Keynesian ideas and Wicksellian concepts of cumulative processes and monetary policy (cf. Woodford 2003: 6-10). It may therefore be instructive to take a look back at the genesis of *Prosperity and Depression* in the 1930s. This paper describes the process in which Haberler attempted to create a consensus in business cycle theory, and we discuss in how far his attempt was successful in the light of the reactions of his fellow economists. Our investigation is based mainly on the correspondence that followed the circulation of the first draft of Part I of the report, on the verbatim records of the meetings of June/July 1936, and on a comparison between the successive drafts and the published version of *Prosperity and Depression* (henceforth *PD*).

II. REACTIONS TO HABERLER'S 1934 SURVEY

Haberler's 1934 memorandum on the theories of the business cycle (held at the League of Nations Archive) has six chapters: introduction; purely monetary theories; over-investment theories; under-consumption theories; "horizontal maladjustments" and rise of costs as causes of crisis and depression; agriculture and the business cycle. The chapter on over-investment theories, which comprises almost half of the fifty-page survey, is divided into five sections on monetary and non-monetary theories (respectively), on over-investment resulting from changes in the demand for consumers' goods, on the principle of the acceleration of derived demand, and on the course of the depression. Haberler's (1934: 2; cf. 1937a: 6-7) starting point is that a complex phenomenon such as the business cycle is caused by many factors, so that there is room for a variety of explanations which are "not mutually exclusive and contradictory". The survey is "intended to show how different theories may contribute something towards an understanding of the business cycle", and that "we have to study different theories not in order to reject all but one... but in order to retain certain parts of some of them and combine them with others into a coherent whole". The memorandum was sent in August 1934 to a long list that reads like a "Who is Who?" in business cycle theory at the time.²

² According to the League of Nations Archive, copies were sent to Gustaf and Johan Åkerman, Alfred Amonn, James Angell, Thomas Balogh, Erwin von Beckerath, Constantino Bresciani-Turroni, Charles Bullock, Harold Burbank, Arthur Burns, John Maurice Clark, Gustavo Del Vecchio, François Divisia, Evan Durbin, Luigi Einaudi, Walter Eucken, Marco Fanno, Herbert Feis, Ragnar Frisch, Meredith Givens, T. E. Gregory, Alvin Hansen, Seymour Harris, Roy Harrod, Ralph Hawtrey, Friedrich A. Hayek, John Hicks, Richard Kahn, Nicolas Kaldor, Felix Kaufmann, John Maynard

As Loveday explained in his preface to the 1937 edition of *PD*, Haberler was concerned to get comments and criticisms from the authors quoted in the memorandum. "While this precaution was clearly necessary... it must not be interpreted as implying that the various authors have made themselves responsible for the summary of their reasoning... Indeed one author - though only one - replied that his exposition would not remain recognizable if thus compressed" (Loveday in Haberler 1937a: iv).³ However, Haberler's main objective in circulating the memorandum was not to assure the accuracy of his survey, but to get reactions to his interpretation from economists in general. In the covering letter Haberler pointed out that the memorandum should be considered as "tentative", and that he intended, "in the light of comments received, to work it out in greater detail and, in particular, with the help of statistical and other factual analysis, to make a contribution to the solution of the controversial questions raised".

1. Reactions from Cambridge

Keynes (30 August 1934) reacted negatively to the project, writing Haberler that "I cannot think that you have gone the right way to work. The method of taking various propositions in isolation is to bring authors into the same pigeon-hole who are really leagues apart and have very little in common". Haberler (25 October 1934) replied that Keynes's reaction was an exception:

I appreciate the perfect frankness of your letter, although I am sorry that you are without sympathy for my paper. In the light, however, of the comments of a great number of very competent scholars... I wish to tell you quite frankly that I do not believe that my representation is so bad as you think... When I set out to show, by an impartial exposition of the various theories and after clearing away irrelevant terminological differences, that... the differences between many writers on the subject are not as great as is commonly assumed, I realized that this attempt at conciliation was not a grateful task... Nevertheless, the comments which I have received on my memorandum from many of the writers concerned express on the whole considerable sympathy with my attempt at reconciliation.

Keynes, Frank Knight, Wilhelm Kromphardt, Simon Kuznets, Emil Lederer, Erik Lindahl, Fritz Machlup, Arthur Marget, Jacob Marschak, F. C. Mills, Ludwig von Mises, Oskar Morgenstern, Gunnar Myrdal, Otto Nathan, Hans Neisser, Frederick Ogilvie, Bertil Ohlin, Redvers Opie, François Perroux, Charles Rist, Lionel Robbins, Dennis Robertson, Wilhelm Röpke, Paul Rosenstein-Rodan, Erich Schneider, Henry Schultz, Joseph Schumpeter, Felix Somary, Arthur Spiethoff, Frank Taussig, Jan Tinbergen, John van Sickle, Alan Sweezy, Jacob Viner, and Ernst Wagemann. Surprisingly, Wesley Mitchell and Irving Fisher are not mentioned in the list.

³ The correspondence about the 1934 draft suggests that the complainant was Lederer (letter of 26 May 1935); his reactions are discussed below.

In his response Keynes (31 October 1934) rejected Haberler's strategy, indicating that he had adopted a completely different one in his own forthcoming "new book":

My essential point is that the method you have adopted forces you to a high degree of superficiality... I cannot believe that the solution can be reached by bringing together... excerpts from the views of a large number of writers, each differing from the other more or less in fundamentals. The answer must lie somewhere much deeper down, yet your method tempts you to skating rather than digging.

The "terminological differences" mentioned in Haberler's letter to Keynes were a central issue in the macroeconomic debate of the 1930s (cf. Andvig 1991). The definition of concepts, especially in connection with the saving-investment mechanism, attracted much attention, as illustrated by the correspondence between Haberler and *Kahn* about the 1934 memorandum. In a letter of 23 October 1934 Kahn anticipated central arguments of Keynes's *General Theory* (1936), claiming that the equality of saving and investment as a truism follows from the definition of the terms, which rules out "forced saving" and the determination of the rate of interest by supply and demand for saving. According to Kahn, the whole memorandum was jeopardized by Haberler's inability to realize this. Furthermore, Kahn found "remarkable that you pay so little attention to Mr Keynes' theory of what determines the amount of output and employment... Nowhere in your analysis is there any suggestion that the sole direct cause of fluctuations in employment may be fluctuations in the rate of investment."

Haberler (16 November 1934 and undated) rejected Kahn's argument about saving and investment by referring to Robertson (1934), whose framework would be adopted in Part II of *PD*. Furthermore, he emphasized, the explanation of unemployment by changes in investment is "shared by a great number of economists (Spiethoff, Hansen, Hayek, Cassel). My memorandum is full of these theories". He did not, however, reply on that occasion to Kahn's claim (13 November 1934) that other economists are not able to establish a "simple relationship between the rate of investment and total output" as expressed by the multiplier formula in Kahn (1931).⁴ Another topic that came up in Haberler's correspondence with Keynes and Kahn was the absence of any detailed discussion of Keynes's *Treatise on Money* (1930) in the memorandum. This is largely explained by Haberler's critical attitude to Keynes's "fundamental equations", a feeling shared by many others, including Keynes himself, who informed Haberler in a letter of 21 May 1934 that he was rewriting the theoretical part of the *Treatise*. Haberler wrote to Keynes (25 October 1934) that "I hope that your new book… will help me… to understand exactly what you

⁴ However, when Keynes's *General Theory* came out, Haberler (1936d) immediately reacted with strong criticism of Keynes's use of the multiplier concept (see Boianovsky 2000: 166-67).

mean." The publication of Keynes's *General Theory* in February 1936 came too late to have any significant impact on Part I of *PD*, but some of the new concepts advanced by Keynes are mentioned in Part II of Haberler's report (as discussed below).

Robertson (6 September 1934) thanked Haberler for sending his "extremely able, illuminating and thought-provoking memorandum". Robertson criticized Haberler's statement that the phenomenon of "wasted saving" in the depression has no counterpart in the boom (1934: 32), pointing out that "forced saving" is precisely that counterpart.⁵ Haberler deleted the passage in the published version of *PD*. Probably in reaction to another comment of Robertson, Haberler (1937a: 101) also eliminated his earlier observation (made in connection with a criticism of Mitchell) that the rise of money-wages lags behind the rise of prices even in the later phases of the boom (Haberler 1934: 43). Furthermore, Robertson argued in critique of Haberler (1934: 35-37) that a "shortage of capital" and an "insufficiency of demand for consumers' goods" need not be mutually exclusive. Haberler (21 September 1934) was not quite convinced, but reproduced Robertson's argument in *PD* (1937a: 123-24).

2. Reactions from Oxford and London

The lack of detailed discussion of Keynes's 1930 notion of a "natural rate of interest" and of Keynes's analysis of the absence of forces to bring the market rate to its "natural" value was noticed by *Harrod* in letters of 19 October and 5 November 1934. Haberler (25 October) pointed out that "the difficulties I experience with [Keynes's] explanation of the trade cycle are connected with his theoretical groundwork (his 'fundamental equations')". In his first letter Harrod suggested that Haberler should remove passages indicating that non-monetary theories of the cycle imply a change in the "effective quantity of money" MV, since such remarks pertain rather to part II ("synthesis"). Haberler (1934: 33, 45-46; cf. 1937: 116, 151) removed the passages and discussed the matter in part II of *PD* (180). More substantially, Harrod criticized Haberler for suggesting that the acceleration principle (an overproportional increase in the demand for fixed capital goods in reaction to a rise in demand for consumption goods) implies a lengthening of the average period of production (1934: 27).

A similar comment was made by *Kaldor* (4 September 1934; League of Nations Archive). In his replies to both Kaldor (6 October) and Harrod (25 October) Haberler defended his point that the acceleration principle works together with an increase in roundaboutness and that , therefore, the acceleration principle and over-investment theory are

⁵ The same comment was made by Hayek and Kaldor, whose letters are both dated 4 September 1934.

closely connected (cf. 1937a: 95). Kaldor found Haberler's "attempt to bring the various explanations into harmony with each other very skillful and interesting". However, concerning the interpretation of the acceleration principle, Kaldor criticized Haberler's (1934: 28) discussion of its operation when there is a shift in demand from commodity A to commodity B for a given aggregate income. Kaldor rejected Haberler's claim that the increase in the demand for machines by B will be stronger than the decline in replacement demand by industry A. In the corresponding passage in *PD* (1937a: 93), Haberler pointed out that the argument applies if the demand for machinery producing A falls to zero, which is close to Kaldor's point in the correspondence. Kaldor also suggested that Haberler's (1934: 8) passing reference to Wicksell's and Fisher's respective theories of the relation between interest and prices should be elaborated with a clear distinction between the "natural rate" and the "real rate", which Haberler (1937a: 35) did.

Asked by Haberler (11 September 1934) to give his opinion about the memorandum's compromise between the monetary and non-monetary theories, Hawtrey (12 October 1934) staunchly reaffirmed his view that no non-monetary impulses need to be assumed for a full explanation of the business cycle. In particular, he described Spiethoff's explanation of the upper turning point by a shortage of consumption goods as "rubbish" and criticized Haberler (1934:39) for accepting Hayek's explanation of business cycles. Furthermore, Hawtrey discussed in detail the memorandum's presentation of his theory. In his reply, Haberler (17 October 1934) wrote that "what you say about your own theory, I take, of course, as an authentic interpretation". Accordingly, Haberler (1937a: 13-26) expanded the section on Hawtrey's "purely monetary theory", adding in particular the notion that the greater cyclical oscillations of the capital goods sector is a consequence of changes in consumers' income and outlay. In his letter Haberler (17 October 1934) clarified that "of Hayek's theory I accept only certain parts; I do not accept, e.g., his analysis of the depression". Nevertheless, Haberler would eliminate from PD the whole paragraph on p. 39 of the memorandum, where he claimed that the explanation of the upper turning point by a shortage of capital - that is, Hayek's hypothesis – is "much more plausible" than a deficiency of consumers' demand. A couple of weeks later, Haberler (1 November 1934) wrote to Loveday that "Mr Hawtrey - as was to be expected - insists that his theory alone is worthy of investigation and verification".

Hayek (4 and 6 September 1934) provided detailed comments on the memorandum. He insisted that Haberler (1934: 13) should not put him in the same department as Mises who claimed that cycles are normally started by "money and banking factors" that "tend to depress the money rate below the natural rate of interest". Hayek referred to his *Monetary Theory and* *the Trade Cycle* (1933: ch.IV) where the cycle is started by a rise in the natural rate.⁶ He also criticized Haberler (1934: 23-29) for attributing too much importance to the acceleration principle and for conceding that some under-consumption theories (such as those of Aftalion, Clark and Schumpeter; see section III below) contain a "sound element" (1934: 35).

3. Reactions from the Continent

Tinbergen (16 November 1934) noticed the absence of any mathematical discussion in Haberler's memorandum, supposing that Haberler had "not given much attention to an exact statement of all relations forming a given closed system", because he had to write "for mathematically unskilled readers". Tinbergen referred to his forthcoming Econometrica survey of quantitative business cycle theories (Tinbergen 1935), which Haberler (1937a: 8) came to mention in connection with the distinction between "exogenous" and "endogenous" theories.⁷ Concerning the general argument in Haberler's memorandum, Tinbergen stressed the need to specify the assumptions about the quantitative relations involved. He criticized Haberler's (1934: 35) assertion that underconsumption theory overlooks the fact that the "accumulation of capital might go on for a very long time, practically indefinitely without any equally rapid increase in the output of consumers' goods". According to Tinbergen, "of course the question is whether quantitative relations in reality fulfill this assumption or not". Haberler (1937a: 118, italics in the original) changed the passage by pointing out that "while the opponents [of underconsumption theory] have shown the theoretical possibility of smooth adjustment of savings and new investment, they have not shown its necessity." In the same vein, Tinbergen suggested that Haberler's (1934: 39) implicit assumption that a investment demand is interest-elastic had not been statistically established, and expressed his interest to "see the statistical research in this field, you have in mind to perform".⁸ Marschak (20 September 1934) likewise referred to Tinbergen's quantitative approach and pointed out that, "for example, the emergence of a cumulative process in Wicksell's terms depends not only on the existence and signs of certain variables, but on their absolute quantitative values, too".

⁶ However, Hayek could not prove Haberler completely wrong, because in *Prices and Production* (1931: lect. III), which was written two years after the original version of *Monetary Theory*, he had started from the assumption that the banks lower the money rate of interest.

⁷ On that occasion, Tinbergen did not bring up the argument that a complete mathematical model of the business cycle would render the central theme of PD – the discussion of turning points – obsolete (cf.. Tinbergen 1940, and Haberler 1943: 479-80).

⁸ This was nearly two years before it was decided that Tinbergen himself would replace Haberler in the

Wicksell was also the topic of a letter from Johan Åkerman (24 August 1934). He criticized Haberler (1934: 8 n.) for describing Hawtrey's theory as a "masterly blend of Fisher and Wicksell", pointing out that Wicksell's explanation of the business cycle was not based on his monetary theory (a similar comment was made by Marget, 6 October 1934). Haberler (5 September 1934) accepted the point (cf. 1937a: 30) and reacted positively to Åkerman's discussion of the upturn in the business cycle, acknowledging that "it is true that the theory of the revival... has not been satisfactorily discussed in my memorandum and I hope to fill this gap later" (cf. 1937a: 57-60). Einaudi (28 January 1935) criticized that Haberler's discussion of some topics - such as underconsumption theory and the role of inventories in the working of the acceleration principle - was incomplete. This led to further elaboration of those themes in PD. Haberler (1937a: 118; cf. 1934: 34-35) added that, even if consumer demand is decreased, a fall in the rate of interest may stimulate the construction of new capital equipment, insofar as the latter helps to lower unit costs. He also observed that derived demand for stocks of goods fluctuates less regularly than derived demand for capital equipment (1937a: 90; cf. 1934: 25). Furthermore, Haberler (1937a: 27-28) followed Einaudi's suggestion to move the definition of "horizontal" and "vertical" maladjustments from the end of the memorandum (1934: 40) to the beginning.

4. Reactions from America

Haberler's relatively brief discussion of Mitchell's contributions (1934: 42-44; cf. 1937a: 100-103) raised complaints by *Mills* (26 October 1934), who found it "rather inadequate". Haberler replied that he could not refer everywhere in the text to authors with a more consensual view, like Mitchell.⁹ *Schultz* (undated) too found the discussion of Mitchell insufficient and disapproved of Haberler's use of the notion of "roundabout methods of production", referring to Frank Knight's criticism of that idea. He rejected Haberler's claim that "shortage of capital" and "deficiency of consumers' demand... cannot be both true" as explanations of the upper turning point (1934: 39). "Why not?" asked Schultz. "It all depends on the definitions given to them". The whole passage was removed from *PD. Viner* (28 January 1935) reacted positively to the memorandum, but criticized it for "not giving

second (econometric) stage of the League's business cycle project.

⁹ Haberler's sparse treatment of Mitchell may also be explained by his view that the Great Depression had exposed the "failure of the atheoretical approach" of the Harvard Committee and "the Mitchell School" (Haberler 1933b: 92) and that he found Mitchell's explanations of the crisis generally "vague and unhelpful" (1934: 42 n.).

adequate attention to the monetary aspects", that is, a study of the business cycle from the cash balance angle. This may have influenced Haberler's extensive discussion of the role of cyclical changes in real balances in part II of *PD*. Like Schultz, Viner did not accept Haberler's assumption that investment can only be increased by lengthening the production period. In his reply, Haberler (26 April 1935) maintained that "investment means initiating longer roundabout ways and is *by definition* connected with a lengthening of the production period". Viner remained unconvinced. Haberler (1937a: 37, n.1) would refrain from "going more closely into the matter, since the theories... under discussion can be analysed without a final decision" on "the problem of the 'time-dimension' of capital".

Angell (19 October 1934) wrote that "you rather dismiss psychological theories" (cf. Haberler 1934: 40). While accepting that such theories are not sufficient to explain the turning points, Angell claimed that they account for the generality of a given movement of rise or fall. Haberler (1937a: ch. 7) came to add a chapter on "psychological theories" (see below). *Marget* (6 October 1936) urged Haberler to bring the role of expectations more into the foreground when using the "natural rate of interest" concept, a point that was also made by *Kaldor*. In his reply to Marget, Haberler (23 October 1936) wrote that he was studying Myrdal's (1933) "extremely important contribution, which opens quite new vistas". Marget also commented on Wicksell's concept of a natural rate of interest, suggesting that, given the problems associated with this terminology, it should be replaced by the notion of an "equilibrium rate of interest". Haberler (1937a: 32) complied.

Lederer (26 May 1935) complained that Haberler (1934: 32-37) had misrepresented his approach by subsuming it under underconsumption theories (à la Hobson or Foster & Catchings) that explain depressions "by the fact that too large a proportion of current income is being saved". In Lederer's view, cyclical fluctuations are caused by "disproportionalities of flows of income", but not by over-saving. Haberler reacted by discussing Lederer's ideas in much greater detail in *PD* (1937a: 124-25; 128-30) than in the 1934 draft. In the same context *Neisser* (29 March 1935), another German émigré who otherwise was in general agreement with the memorandum, rejected Haberler's remark that "[t]he over-saving theorists have completely overlooked the fact that new productive investments reduce the unit cost of production" (1934: 34). Neisser argued that this criticism did not apply to the Rodbertus-neomarxist version insofar as the latter presupposes a more or less constant rate of real wages. Furthermore, Neisser pointed out that the expression "reduction of unit costs" lacked clarity because of the missing distinction between technical progress and capital intensive growth. Haberler's remark was also criticized by *Kaldor* (4 September 1934) on the grounds that new productive investments will reduce unit costs only if

entrepreneurs expect, as a result of the fall in the interest rate, that the prices of their products will fall, too. The corresponding paragraph of the draft (1934: 34) was eliminated in the final version.

In a short memorandum of 14 June 1935 titled "A Study of the Recurrence of Economic Cycles - Rockefeller Grant Research Work" Loveday reported that Haberler is now "redrafting [his survey] in the light of comments" received. The next section examines the more fundamental changes that Haberler made in addition to the aforementioned smaller revisions.

III. BROADER CHANGES IN HABERLER'S SURVEY

The manuscript of Part I ("analysis") of *PD*, a second draft of the 1934 survey, was largely completed by December 1935 (Haberler 1936a; 1937a: 2). It was distributed in June 1936, together with Part II ("synthesis"), to a "committee of experts". The committee, however, was told to focus exclusively on Haberler's synthesis (1936b). Earlier in that year Haberler (1936c) provided a summary of the revised version of the 1934 survey and a first sketch of the synthesis in an article for the Harvard *Review of Economic Statistics*. There, as in the introduction to *PD* (1937a: 12), Haberler argued that theories should be assessed according to their ability to explain each of the four phases of the cycle: the cumulative processes of expansion ("prosperity") and contraction ("depression"), and the upper and the lower turning-points ("crisis" and "revival").

1. The Vanishing Attraction of Austrian Business Cycle Theory

Haberler's examination of the literature had led him to the conclusion that there was a large measure of agreement about the nature of the cumulative processes, but not about the turning-points (1936c; 1937a: 185, 226). The description of the contraction as a cumulative process that carries the system away from equilibrium was not shared by an important group of economists.

"Many economists used to explain depression simply by the necessity of liquidating the maladjustments which were created during the preceding expansion and which led to the collapse of the boom. An adjustment in the structure of production naturally takes time; it involves the transfer of labor among industries, and, by reason of the rigidity of wages and the lack of mobility of labor, it leads to unemployment... [H]owever,... one cannot thus explain why the depression spreads almost to *all* parts of the economic system. The fact that production contracts everywhere and prices fall all around makes it necessary to assume that the collapse of the boom - by whatever cause it may have been brought about - engenders a process of deflation which, once started, is just as cumulative as the process of expansion." (Haberler 1936c: 2-3)

This criticism was clearly aimed at Hayek (1931). This is noteworthy because, a few years earlier, Haberler (1931, 1932b) had argued that the Austrian theory of the crisis was the only theory

capable of explaining the depression at that time. And, as pointed out by Hawtrey (see section 2), some parts of Haberler's 1934 draft give the impression that he was a qualified supporter of Hayek's capital shortage hypothesis. The memorandum actually contained some skeptical remarks about Hayek's monetary over-investment theory (1934: 17-18).¹⁰ But in the revised draft (1936a: 53-58) and in *PD* (1937a: 48-57 and 119-24), in which "Hayek's theory of capital shortage" was set apart from other over-investment theories and discussed in great detail, Haberler took a much more critical stand. He argued that Hayek failed to prove his central points, namely that monetary expansion inevitably ends in a crisis and "that a stabilisation of prices in a progressive economy must always lead to over-production, crisis and depression" (1937a: 57; cf. Laidler 1999: 43-44; Boianovsky 2000: 163-65; Klausinger 2003: 230-34).

Haberler's change of mind about the explanatory power of the Hayek-Mises business cycle theory is partly reflected in his correspondence with Hayek, Machlup and Morgenstern. In a letter of 22 May 1934 to Morgenstern, Haberler expressed an opinion that was partly included in the memorandum: "My position on [the approach of] Mises-Hayek is now the following: the theory does a lot to explain the upswing and the situation that leads to the crisis. In this respect, however, it contradicts Spiethoff, Cassel and J. M. Clark. But what they [Hayek and Mises] say about the depression, and in particular about policies to fight it, is extremely primitive" (cf. Haberler 1933b: 97; 1934: 17). Ten months later Haberler had turned critical even about Hayek's explanation of the upper turning-point. He wrote to Machlup that "the more I think about it, the less important [Hayek's] theory appears to me and the more shrinks its field of application" (21 March 1935, as quoted by Klausinger 2003: 230).

Neisser's (1934) review of Hayek's *Prices and Production* (2nd ed.) made a great impression on Haberler. This is evident from Hayek's reactions in letters of 14 April and 25 July 1935,¹¹ in which he complained that Neisser's article "remains full of the most awful confusion, even though Marschak and I had cured him of his worst mistakes". Haberler had apparently referred to Neisser in an intermediate version of the survey that he sent to Hayek for comments. Hayek's letter of 25 July was accompanied by long notes in which he criticized Haberler for

¹⁰ The account offered by Endres and Fleming (2002: 35-37) is marred by their mistake in dating 1932 as the start of Haberler's work at the League, which is behind their imprecise interpretation that Haberler's (1932b) Austrian formulation of the business cycle was part of his activities in Geneva. Yet, even before Haberler came to Geneva he had begun to show a rather critical attitude towards Hayek's approach in his contribution to the *Spiethoff-Festschrift* (1933b).

¹¹ The Haberler-Hayek correspondence of the 1930s (held at the Hoover Institution) includes letters from Hayek to Haberler, but Haberler's letters have not survived; for other aspects of that correspondence, especially concerning Hayek's opinion about Keynes, see Howson (2001).

misrepresenting him on various issues and attempted to refute Neisser's criticism of his assertions that monetary expansion and stabilization policies must always bring about a real business cycle that returns the system to the original structure of production. A careful comparison of Hayek's notes with the final version of Haberler's survey indicates that practically all the passages criticized by Hayek have survived essentially unchanged and mostly in the original wording, as quoted by Hayek. This shows that Haberler was not convinced by Hayek's anti-critique and reservations.¹² In *PD* (1937a: 53-57) he used Neisser's criticism to demonstrate the limits of Hayek's theory. Moreover, under the impression of his work at the League and his frequent discussions with visiting economists, he changed his mind on active stabilization. In a letter to Morgenstern (21 September 1935), he revealed that "I am more and more inclined towards advocating expansionary policy... As far as I can see there is nothing that guarantees that the next boom will last longer or the next crisis will be milder if the liquidation of the present crisis is deferred, that is, if no expansion is enacted and one waits until the crisis has run its course".

2. Accentuating the Acceleration Principle, and Other Changes

In the final version of his survey Haberler (1937a: 80-98) paid special attention to the role of the acceleration principle. The discussion was more detailed than in the 1934 memorandum, probably elicited by comments received from Robertson, Kaldor and others. According to Haberler, the principle brings out the strong influence of fluctuations in the demand for consumers' goods on investment and the business cycle mechanism as a whole. Haberler (1934: 23; 1937a: 81) claimed that the acceleration principle and the over-investment theory are "in reality not alternative but complementary explanations". He also considered possible connections between the acceleration principle and under-consumption theories (1934: 35; 1937a: 119).

Haberler's critique of "crude" under-consumption theories, which explain the downturn by a sudden increase in saving and a corresponding fall in consumption, carried through from the 1934 memorandum to the final version. In *PD* (1937a: 119-29), however, he expanded his discussion of what he had earlier described as the "sound element" of under-consumption theories (1934: 35-36). This was the proposition that the insufficiency of demand for consumers' goods is caused by a rapid rise in their supply when the new roundabout methods of production mature an idea he mainly ascribed to Aftalion, Clark and Schumpeter. Haberler (1937a: 119-21) referred to this proposition when contrasting the two main rival explanations of the upper turning-point: (i)

¹² Nor was Ragnar Nurkse, who at that time was Haberler's assistant and expressed his doubts about Hayek's arguments against Neisser in a letter to Haberler (30 July 1935).

the supply of capital becomes too small to complete the new roundabout methods of production, or (ii) consumers' demand is insufficient to sustain the increased productive capacity. In the memorandum Haberler (1934: 36-37) had held the opinion that the dispute could be settled by empirical studies, suggesting that the high rates of interest observed at the end of the prosperity period supported the capital-shortage hypothesis. That discussion is eliminated from the subsequent versions, which can be in part explained by Haberler's realization that the rise in the interest rate may be nominal only (due to an expected rise in prices), or that it may be due to an absorption of loanable funds into financial circulation: "There is no single unfailing statistical criterion" (Haberler 1936c: 6). Instead, the "critical question" is: "How should the flow of money between saving and spending and between the various branches of spending be modified in order to restore equilibrium?" (Haberler 1937a: 124; cf. 1936a: 147; 1936c: 5)

Haberler's final version of his survey (1936a: 123-26; 1937a: 107-09) included a section on Fisher's debt-deflation theory, which had not been discussed in the 1934 memorandum. Haberler conceded that Fisher's debt factor may play a role as an intensifier of the depression, but doubted that it could be considered an independent cause of the upper turning-point. There is no indication that this new section was sent to Fisher for comments.

A more extensive addition was chapter 6 of PD, titled "psychological theories", which had no correspondence in both the 1934 and 1936 drafts of the survey. That new chapter was written in July and August 1936 to take account of Keynes's "notes on the trade cycle" (1936: ch. 22). Haberler (1937a: 141) considered Keynes, Arthur Cecil Pigou and Frederick Lavington as "psychological theorists", whose approach makes no specific contribution to the explanation of the upper turning-point, since the elements of expectation and uncertainty are compatible with any of the traditional hypotheses (capital shortage, insufficiency of consumers' demand, or horizontal misdirection of capital). In a long footnote Haberler (1937a: 135, n. 1) remarked that "it has become fashionable to lay stress on the element of expectation" in economic theory. He mentioned Myrdal (1933), but did not discuss the Swedish ex ante / ex post approach. It was only in the second edition of PD (1939: 180-91; 252-53), in the new chapter 8 on "recent discussions on the trade cycle", that Haberler would discuss the Swedish concepts and the general role of expectations in economics, taking a much more critical position than in his earlier correspondence (see section 2). His scepticism was based on the view that "we do not say very much, unless we give some hint as to how these expectations are formed" (Haberler 1939: 252). Expectations – especially price expectations determined by past experience - did nevertheless play a role in Haberler's synthetic explanation of cumulative processes, as discussed below.

IV. THE MEETINGS OF THE COMMITTEE OF EXPERTS

In March 1936 Loveday invited a group of economists to meet in Geneva in late June to discuss Part II of Haberler's enquiry. In a letter to Robertson, Loveday wrote that "in the present stage and before the work of statistical analysis and control is embarked upon, I think it is desirable to obtain some expert advice from scientists interested in those problems... I think it would be convenient if this consultation took the form of informal conversations". Apart from Robertson (Cambridge University) and Haberler (who acted as chairman), the meetings were attended by Otto Anderson (Economic Research Institute, Sofia), John Maurice Clark (Columbia University), Leon Dupriez (Catholic University of Leuven), Alvin Hansen (Department of State, Washington D.C.), Oskar Morgenstern (Austrian Business Cycle Institute), Bertil Ohlin (Stockholm School of Economics), Charles Rist (University of Paris), Lionel Robbins (London School of Economics), Wilhelm Röpke (University of Istanbul), and Jan Tinbergen (Dutch Institute of Economics). The initial list of invited economists included also Bresciani-Turroni, Mitchell and Schumpeter, who all declined.¹³ A short notice about the meetings was published in the June edition of the Monthly Summary of the League of Nations (vol. XVI, no. 6, p. 202). A verbatim record was kept in order to assist Haberler in the final revision of his report, and sent to all participants.¹⁴ Under the title "Committee of experts on the business cycle" the record reproduces the discussions that took place in seven meetings from the morning of 29 June until the afternoon of 2 July 1936.¹⁵

1. First Session

In the opening session (p. 1), Loveday described the meeting as a "conversation", without any formal demands such as reports or resolutions. The central question was "why do depressions occur or recur?" A "programme of the discussions on the business cycle" had been circulated by Haberler on 30 May with an agenda of the topics to be discussed in each session. The order of discussion followed very closely the table of contents of Haberler's (1936b) "Synthetic Exposition", which is the same as Part II of Haberler (1937a) except for chapter 11 (on "International Aspects of Business Cycles"), which was written after the meetings.

¹³ Hayek (15 February and 3 May 1936) regretted that he could not participate because Haberler had invited Robbins as representative of the LSE.

¹⁴ However, those records are apparently not held at the League of Nations Archive. The copy used in the present essay has been located in the Bertil Ohlin papers at the Swedish National Archives.

¹⁵ Haberler (1964: V; 1976: 10) wrongly recollected that the meetings took place in August or September, respectively.

Haberler started by asking the participants if they agreed with his claim (1936b: ch. 1; 1937a: ch. 8) that the depression may be caused by various factors, so that "a fairly general theory can be given of the way it develops cumulatively, not given much attention at first to the way in which it has been started" (p. 21). There was general agreement about Haberler's approach (including the division of the cycle into four phases), but Hansen disputed Haberler's definition of prosperity and depression in terms of employment and volume of production (Haberler, 1936b: 6). Hansen claimed that changes in profit are a better index of cyclical fluctuation, since output could change for causes other than the business cycle. In the end, after some debate about index number problems involved in the distinction between real income and output, most of the conferees (especially Ohlin) supported Haberler's suggested measurement of fluctuations.¹⁶

2. Second Session

The second session addressed the cumulative process of expansion. Haberler proposed to start the analysis of the cycle at the low point of the depression, and not at full employment, in order to bring out the "essential" feature of the expansion process, namely the "reciprocal stimulation of investment and consumption" (second session, p. 14). There was no criticism of that, except for Ohlin's remark that Haberler's discussion of the monetary aspects of the expansion (1936b: ch. 2.B) did not go much beyond Wicksell's original theory of the cumulative process.¹⁷ Ohlin suggested that a more detailed discussion of the saving-investment mechanism should be provided, including recent contributions by Robertson (1934). According to Ohlin, this could show how a higher level of expenditure in public works brings about "unintentional savings" able to finance the public deficit (pp. 30-31). There was general agreement that "we must have period analysis in the way indicated by Mr. Robertson", but there were difficulties in making different "terminologies" compatible with each other. Haberler insisted on confining the concepts of investment and saving to effective flows of money, whereas Ohlin stressed the importance of including the effects of discrepancies between expectations and outcomes, which are best brought out under the (Wicksellian) assumption of "a perfectly elastic monetary system" (pp. 32-44).

¹⁶ According to Haberler (1976: 11), Hansen "did not take a very Keynesian position in the discussions at the conference. For example, he stressed the ups and downs of profits as the essential characteristic of the business cycle, while Bertil Ohlin and I argued in favor of expansion and contraction in output and employment".

¹⁷ However, Wicksell (1898) based his theory on the full-employment assumption, and for Hayek (1931 and 1933) full-employment equilibrium was crucial as a starting-point, since he considered the cycle to be a deviation that was *corrected* by the crisis; see also Trautwein (1996).

Morgenstern (p. 45) asked Haberler to explain how his curves of the demand and supply of credit are constructed and equilibrium is determined, considering that demand is a function of the profit rate, whereas the relevant supply side variable is the interest rate (cf. Haberler 1936b: 34-37). Haberler answered that he "meant it here as being the same - the price of the investible funds" (p. 49). Ohlin disputed Haberler's assumption that there is a rate of interest that will keep the price level stable (p. 64). However, instead of debating that point in detail, Haberler suggested that "we turn to the acceleration principle, because that goes to the heart of the problem for some members of this group". After getting positive reactions (from Tinbergen, Hansen and Clark) to the role attributed to that principle in the expansion process (cf. 1936b: 42-51), Haberler asked Robbins if he agreed, since "the theory which you have does not stress this factor". Robbins replied that "I find myself in substantial agreement with what you have said, but I should not have been in agreement had it not been developed in such close connection with the theory of mine".

3. Third Session

In the morning of 30 June the conferees discussed a new section titled "saving and the expansion process" that had been circulated on the first day of the conference (cf. Haberler 1937a: ch. 9.A, sect. 6). The original draft has not survived. As Haberler pointed out, "these pages are largely written by Mr. Fleming and I must give the credit to him" (third session, p. 21).¹⁸ The main issue in the new section is the effect of an increase of the propensity to save on the expansion process. Haberler argued that, if savings increase, "this will put a brake on the rapidity of the expansion, but it will have a favorable influence, making it possible and easier then to reach equilibrium somewhere" (p. 29; cf. Haberler 1937a: 214-18). Robertson criticized Haberler's statement that, even if the savers seek to invest all their savings, this will not increase actual investment to an equivalent extent, since it will be in part counteracted by hoarding in reaction to the decrease in the rate of interest (1937a: 215-16). According to Robertson, this would be true only if the "liquidity curve" were very elastic in the upswing, which he found doubtful. Fleming clarified that "the assumption which has been made during this analysis, in particular concerning the

¹⁸ Marcus Fleming (b. 1911; d. 1976) joined the League in 1935 as a research economist to assist Haberler. He is better known for his contribution to the "Mundell-Fleming" model in the 1960s. Strangely enough, there is no acknowledgement of Fleming's, or other colLeagues', contributions to *PD* in the 1937 edition. It was only in the preface to the 1958 edition that Haberler (1964, p. V) referred to criticism and comment he had received in the 1930s from that "remarkable group of economists at Geneva". Besides Fleming, he mentioned Loveday, Nurkse, Folke Hilgerdt, Rifaat Tirana, J. B. Condliffe and Luis Rasminsky.

upswing, was that [the liquidity curve] was fairly elastic" (p. 42).

Haberler next moved the discussion to the cumulative process of contraction. He started by reaffirming his view that the depression should be seen not as a process of readjustment towards equilibrium, but as a cumulative deflationary process that carries the system away from equilibrium. Morgenstern agreed, but pointed out that "if no point of the whole business cycle ever passes through the equilibrium point,... that limits equilibrium analysis of static theory very much... and throws overboard the usefulness which one has so far seen in... starting from static conditions, which have been often, as you say yourself in the first part, used by Hayek" (third session, pp. 48-49).

According to Haberler, the main feature of the deflationary process is the reduction of the velocity of circulation of money and the increase of hoarding, which he described as a "striving for liquidity" (p.63). Ohlin complained that "you say nothing at all about how savings go, how losses come, and I should appreciate it if you added a ... paragraph on this" (p. 67). The discussion turned instead to Haberler's (1937a: 226-39) detailed "monetary analysis of the contraction process". Haberler called attention to his criticism of Keynes's (1930) notion that sales of old assets to cover losses is a factor which makes for the intensification of deflation (Haberler 1936b: 67-69; 1937a: 236-38). Ohlin and Robertson agreed with Haberler's objection that savings of a part of the public are compensated by dissaving on the part of entrepreneurs, but suggested that it should be stressed that the mechanism is deflationary to the extent that it prevents the rate of interest from falling (pp. 81-82). Another deflationary factor discussed at that session was "Sales of securities or other assets for fear of a fall in their price" (pp. 90-92; cf. Haberler 1936b: 69; 1937: 238). This is reminiscent of Keynes's (1936) speculative demand for money, but Haberler argued that hoarding has a deflationary effect irrespective of whether transactions actually take place (caused by a divergence of opinions) or not (as in the case of uniform expectations). Haberler (1936b: 70-71; 1937a: 238-39) mentioned in his report the notion devised by "some writers" that "liquidity preferences" tend to rise in a cyclical depression, a concept he would associate to Keynes (1936) in a footnote added to PD (1937a: 238, n.1). Haberler dismissed it on the grounds that "such generalisations" add very little to the detailed analysis provided in his report, a claim that was not disputed by the other participants.

4. Fourth Session

The fourth meeting (afternoon of 30 June) dealt with "the most important and difficult problem of the whole theory of the cycle: namely, the upper turning-point" (fourth session, p. 1). Haberler (1936b: 84-90; 1937a: 254-59) suggested that the system becomes more and more sensitive to

deflationary disturbing shocks when it approaches full employment. The process of expansion can only go on at the expense of rising prices "and if prices start to rise and rise continuously, I think you will agree that this cannot go on forever - that this rise in prices will become progressive and must be stopped" (p. 41). Haberler's notion of inflation acceleration - that is, prices "progressing at a more rapid rate" (p. 42; cf. Haberler 1937a: 256) - raised comments from Clark and Hansen, who argued that prices could conceivably rise gradually for a long time.

Haberler was at pains to clarify that "full employment" is a relative, not absolute, concept, since it is not just a matter of the total amount of idle factors, but also of their distribution. "I think Keynes makes this mistake - he says you can go on expanding so long as there is an unemployed man in the country but if this man happens to be in an industry where demand does not increase during the expansion and if he cannot be moved to another industry, then this will not help" (pp. 43-44). Robbins then asked which rate of unemployment should be described as the "danger point" at which money-wages begin to rise. According to Robbins, one could "find some connection between the percentage of unemployed and the point at which wages rose, although with strong trade unions you might get a rise in wages with 5 per cent unemployment" (p. 45). Haberler, however, did not show much interest in Robbins's suggestion of a statistical investigation of (what we now call) a Phillips curve, since "you cannot fix a certain point and say 'Now the danger arises".

Haberler regarded full employment as a limiting point, in the sense that the expansion could be reversed by maladjustments even before that limit is reached. This led to the "most complicated and most difficult question: namely, that concerning those disturbances or maladjustments which are likely to be brought about by the expansion process itself" (p. 48). It was in this context that Haberler referred to the central question in Part I of his report, as to which changes in the flow of money would restore equilibrium at the end of the boom (see section 3). However, by the time he drafted Part II, Haberler (1936b: 102-03; cf. 1937a: 268-69) was no longer sure about the existence of a clear-cut answer to that question. "It seems to me the situation is more involved than I thought it was" (p. 49).

After dismissing the "old view" that there is one particular maladjustment that ends the expansion, Haberler maintained that a "very probable" explanation follows from the fact that, as the system approaches full employment and factors of production become scarce, "you still have producers' goods industries on such a high level which is compatible only with a rise in output" (p.50). Eventually the production of capital goods is reduced because consumption goods industries had to contract when full employment was reached. Ohlin objected that the argument is only valid if a constant rate of interest is assumed, so that an expansion of the production of

consumption goods through a higher capital/output ratio is ruled out. Haberler was not convinced, since that would "necessitate the assumption of a high flexibility of the system" (p. 63).

Ohlin then suggested another explanation of the turning-point, based on the fact that consumption is a function of both the absolute size of income and of its rates of change. A rise in income could lead to changes in the consumption pattern that eventually produce maladjustments of supply and demand, "so we are bound to get excess supplies somewhere; a fall in prices and small contraction processes which may lead into general contraction processes" (p. 82). Ohlin's remark was followed by a comment by Robertson: "Supposing people are saturated with motor cars and so on for the moment and there is no compensating want in some other direction, then you do get a general decline" (p. 83; cf. Robertson 1934). At the end of the session Haberler suggested that "it would be useful now to ask ourselves of what kind of statistical and other factual evidence we ought to look if we want to find out in a particular case the reason for the breakdown" (p. 102). However, this question was not followed up in the next meeting.

5. Fifth Session

The upper turning-point was still the topic at the beginning of the fifth session (morning of 1 July). Haberler noted that several explanations had been considered, but "we have not reached a solution", despite the "great role" of the acceleration principle (fifth session, p.1). Hansen aptly characterized the core of disagreement as relating to "the question whether a large volume of increased saving in the period of expansion [is] deflationary or expansionary in its effect" (p.2). After some discussion about the possibility that firms' windfall profits and internal savings in the expansion have a deflationary effect that may explain the downturn, the conferees returned to Haberler's initial proposal to examine the capital shortage hypothesis, as elaborated by Hayek and Robbins. The latter accordingly insisted that interpreting the downturn as being "brought about by some rather abrupt reduction in the rate of saving... seems plausible in regard to what we have come to look upon as the classical scheme", including the crises of 1907 and 1929 (p. 43). Ohlin retorted that over-saving, caused by discontinuities in the opportunities for profitable investment, was equally probable as a cause of the breakdown. In addition to the lack of balance between saving and investment, he emphasized the presence of horizontal maladjustments associated with the difficulty to transfer labor from one sector to another (pp. 46-47). Robertson and Robbins argued, against Ohlin, that historically an excess of saving over investment seldom comes before the breakdown, but only after the turn caused by over-investment. Ohlin replied that the undersaving (or capital shortage) hypothesis was not convincing as a general explanation of crises, since investment booms need not always end in crises and expansionary credit policies need not

make depressions more severe (pp. 52-53).

Keynes's (1936) notion that the curve of investment opportunities goes down rather rapidly was mentioned by Haberler as a possible explanation of the upper turning point, but "I doubt whether it is very important" (p. 54). Haberler then returned to his previous definition of under-saving and over-saving as shortage of capital and insufficiency of consumers' demand, respectively. "I have the feeling that these types are not always kept separate". Ohlin went even further by suggesting that "the one is the same as the other" (p. 54). In particular, he claimed that the rate of interest should be reduced immediately after the downturn, which raised Robbins's criticism. Hansen suggested public works to fill the investment gap in the depression, but Haberler was not entirely convinced, since "this already implies a certain diagnosis of the situation. If you will accept, say, Professor Hayek's view, then you simply have to cut down investment somewhere or make people save more" (p. 59). Interestingly enough, Hansen did not find his suggestion of public investment "inconsistent with Hayek's view" (p. 59).

As the discussion about the upper turning-point could not settle the issue, Haberler decided to move on to the discussion about the lower turning-point and downward limits of a cumulative contraction process. He noticed an asymmetry between the upper and lower turning-points (1936b: 108; 1937a: 276): An expansion can always be stopped by an interest rate high enough, but there may be no positive nominal rate of interest able to encourage investment if deflationary price expectations prevail in the depression (p. 61).¹⁹ Another asymmetry is that there is no lower limit in a contraction corresponding to the upper limit of full employment in an upturn (p. 65). Haberler's starting point was that a revival may come about either by an increase in consumers' demand or in producers' spending, which he contrasted with the prevailing view (maintained, e.g., by Schumpeter) that a general upswing could not be brought about by an independent increase in the demand for consumption goods.

One of the main features of a cumulative contraction process is the slowing down of the velocity of circulation of money. Haberler claimed that there is a limit to the accumulation of hoards in terms of money, but even more so in real terms, because prices and wages fall (p. 66; cf. Haberler 1936b: 119-22; 1937a: 284-87). When this happens, people will become less disposed to save, and the demand for consumers' goods will cease to fall. "In Mr. Keynes' terminology, the propensity to consume will raise". This is an early formulation of the "Pigou effect", applied to the dynamics of the business cycle (instead of the stationary state, as in Pigou 1943).

¹⁹ Such formulations of the idea that deflationary expectations could generate a liquidity trap were not rare in the pre-Keynesian literature; see Boianovsky (2004).

After some discussion with Ohlin, Dupriez and Röpke about details of that mechanism (such as its effects on financial markets), Haberler suggested making a compromise: "We shall agree that as long as the process of contraction goes on, hoards are growing...; but it is important to stress this factor which has been much overlooked: that this process involves an increase in the value of hoards. Keynes at many points does not realize this factor and the conclusions which must be drawn from it. Let us make no assumption as to whether there is such a lower limit as I have indicated; it may be of no practical interest" (pp. 69-70). Before the lower limit is reached, the demand for investment may increase because of inventions or re-investment.²⁰ At the end of the session, Haberler suggested that the next meeting should deal with the question whether a fall in wages and prices can put an end to a contraction (cf. Haberler 1936b: 128-40; 1937a: 291-301).

6. Sixth and Seventh Session

The entire sixth meeting (morning 2 July) and part of the seventh meeting (afternoon 2 July) were used to discuss Tinbergen's plans of statistical testing of business cycle theories after the conclusion of Haberler's work at the League. A large part of the discussion consisted of the presentation of the new statistical techniques, which most of the participants were not familiar with (the exceptions being Anderson and Morgenstern). The conversation about Haberler's report was resumed at the middle of the seventh and last session. Haberler pointed out that the opinions about the question posed at the end of the fifth session diverge very much in the literature, and contrasted Keynes's (1936) view - who "says quite frankly that if you reduce money wages, nothing is gained, because prices will fall just as much" - with the view of those "whom he likes to call classical economists", who hold that price and wage flexibility will lead the system out of the depression (seventh session, p. 49). Although the verbatim records make clear that this part of Haberler's report was an attempt to sort out the conflict between Keynes (1936, ch. 19) and the "classics", there is no reference to Keynes in the corresponding pages of the first edition of *PD*. However, Haberler (1939: 395, n. 2) would make clear in the second edition that his analysis of the effects of a fall in wages "has many points in common with Mr. Keynes' treatment".

²⁰ In reaction to Dupriez, Ohlin redefined the limit of hoarding as "ultimate limit of money destruction" (p. 71). However, the committee did not discuss reductions in the quantity of money due to a credit contraction, caused by increases in repayments and defaults as well as by cutbacks in the loan supply. Such processes are inherent in downward cumulative processes, as noted by Fisher (1933) and others, and may even slow down deflation while intensifying the contractionary process. In how far the contraction ends, when enough "[d]ebts have been cancelled or wiped out by bankruptcy", was discussed by Hansen and Ohlin in the seventh session (pp. 45-48).

Haberler asked how a reduction in money-wages would affect aggregate demand (p. 49). He made an example of money-wage reductions in a specific industry and concluded that employment in this industry would go up somewhat - with the exception of the case that, "as Keynes says", the wage reductions generate expectations of further reductions. He considered this to be unlikely, but conceded that the increase in employment could be smaller than the fall in price, in which case that the wage reductions would lead to an intensification of the depression. However, as the industry will save the money - that is, hoard or use it to repay bank loans -Haberler claimed that the (real balance) effect he had put forward would come into action and bring the system to a higher level of aggregate employment. "If the contraction is intensified, money would fall in value and amount and the system becomes more liquid and sooner or later the point will come when entrepreneurs and people in general will decide that their liquidity has risen enough" (p. 60). The only exception would be an increase in liquidity preference, due to uncertainty. However, "since we do not know exactly the level of liquidity which must be reached in order that the system may go up, it is very difficult to determine that; and if it is found possible to start the expansion in some other way, then certainly it is better to be on the safe side and have wages and prices as flexible as possible" (p. 61; cf. 1936b: 134; 1937a: 297).

Ohlin disagreed with Haberler's conclusion. "This is the only part where this report does not only fulfill all expectations but even exceeds them as far as practical usefulness goes, in a most satisfying degree..., but may I say that in this chapter on wages there are certain conclusions which might do real harm if they stand unqualified" (pp. 61-62). Ohlin pointed out that the outcome depends on the different timing of the effects on consumption and investment, and that the time lags in the reactions of wage-earners and entrepreneurs tend to differ. Workers will reduce their consumption immediately, whereas entrepreneurs and people who are expecting dividends will count on those being paid only in the next period. Moreover, deflationary price expectations affect investment negatively. Ohlin concluded that nothing definitive could be said about the effects of wage reductions on the volume of production and employment, and his conclusion started a lively discussion. Robbins disagreed with what he called Ohlin's "scepticism" and "intellectual nihilism" (p. 87 and 121). According to Robbins, who received qualified support from Robertson, Röpke and others, wage reductions at the beginning of the depression may contribute to the recovery, especially if there was some wage rigidity at the end of the boom. In the end, Haberler conceded that "everything is possible", but "still I wonder if it is advisable to stress too much that wages should not be reduced" (p. 108). Ohlin pointed out that nobody had suggested that. He had only meant to say that the conditions in which wage reductions help to prevent or mitigate a depression are much too specific to propose them as

general solution of the problem. Haberler's remark that "we are now at the end of our discussions" (p. 122) brought the conference of the committee of experts to its end.

V. HABERLER'S SYNTHETIC THEORY OF BUSINESS CYCLES

The meetings of the committee of exports were reported in a brief memorandum, written by John Van Sickle (Rockefeller Foundation) on 25 July 1936. According to Van Sickle (1936: 2), "a number of those in attendance told me privately that they had come with considerable scepticism as to the usefulness of such a conference. At the end there was not a single one who did not feel that the meeting had been definitely worthwhile. Every one felt that Dr. Haberler had succeeded in bringing about a notable consensus of opinion as to the nature of the phenomenon under examination". The key word was "consensus", since the Rockefeller Foundation expected as one of the results of its five-year grant to the League of Nations, that "the divergence of views among economists as to the nature and the means of controlling the business cycle will be appreciably lessened", which would be an "essential preliminary to the unification of national policies for dealing with the business cycle" (Van Sickle 1936: 3).

The meetings of the experts were immediately followed by a conference organized by the Rockefeller Foundation to consider the "Desirability and Feasibility of Encouraging Coordination of Fundamental Economic Research upon Problems of Economic Change", held in Annecy in 3-5 July 1936 (cf. de Marchi 1991: 149-50). The proceedings (p. 14) of that conference mentioned the "new technique in research which has been followed during the last two years in the study of the theory of Business Cycles by Dr. Haberler", called "Haberler-like methods". It consisted in "consultation with leading authorities in the field..., visits to a number of leading academic centres..., the circulation of drafts dealing with his progress in certain sections of his work..., and a small and carefully selected conference of prominent economists to discuss very fully with him his final draft".

1. The Impact of the 1936 Conference on 'Prosperity and Depression'

To what extent did the meetings in summer 1936 affect the text of Part II of *PD*? According to Haberler's recollections in the preface to the 1958 edition of the book, the criticisms and suggestions made at that conference "led to extensive revisions" of the final draft (Haberler 1964, p. V). A careful comparison between Haberler (1936b) and Part II of *PD* (1937a) indicates that, although several revisions were indeed made after the meetings of June/July 1936, they usually did not change the essence of the argument. This may reflect the fact that many aspects of Haberler's synthesis commanded a considerable degree of agreement. But Haberler's persistence

can also be interpreted as a reaction to the difficulties in reaching a consensus whenever there was fundamental controversy, as in the discussions of the upper and lower turning-points of the business cycle described above.

The first chapter of Part II of PD (1937a), chapter 8 (definition and measurement of the business cycle) did not change, as compared to the version in Haberler (1936b). Chapter 9-A (on the expansion process) was slightly revised to take into account criticisms by Morgenstern and Ohlin concerning the intelligibility of the text. The relation between the profit rate and the demand curve for investible funds was clarified (Haberler 1937a: 191-94). The Robertsonian concept of saving as a decision based on income earned in the previous period was explicitly adopted (1937a: 198), although without referring to Robertson in this connection (but Haberler 1939: 296 would later refer to the identity of his definition with Robertson's). The section also included a new discussion of the determinants of the elasticity of the saving and investment functions in respect to the rate of interest and other variables (1937a: 199-200). Some elements of the discussion in the third session of the meetings about saving in the expansion were reproduced in the following sentence: "The comparison, it must be noted, lies not between the state of affairs after the saving and before it, but between the state of affairs at a given time with the saving, and what it would have been had there been no saving" (1937a: 216; cf. the statement by Fleming, p. 42 of the third session). Chapter 9-B (on the contraction process) is virtually the same in the 1936 and 1937 versions, except for a new section 9 (1937a: 239-43) on the operation of the acceleration principle in the downturn that was added after the meetings. However, Haberler did not follow Ohlin's suggestion of a new section on the behavior of saving in the depression.

Chapter 10-A (on the upper turning-point, or "crisis") included a new footnote (1937a: 256 n. 1) that acknowledged the possibility - mentioned by Clark and Hansen - that prices may rise slowly for a long time without degenerating into progressive inflation, a qualification that "does not substantially affect the argument". The most important change in that chapter was the addition of new paragraphs (1937a: 270-74) on money-wage dynamics and on a drop in investment due to insufficient demand ("saturation"), which represented reactions to arguments put forward by Robbins and Robertson. Likewise, Haberler (1937a: 271) pointed out that the bargaining position of the trade unions becomes stronger with rising employment, and that "they use it to accelerate the rise in money wages". He also discussed Robertson's proposition (put forward in the fifth session, p. 43) that the upper turning-point may come even earlier than the limit set by the amount and distribution of the supply of production factors. Haberler concluded that this is a possible, but not inevitable outcome (1937a: 274).

The changes in chapter 10-B of PD (on the lower turning-point, or "revival") can be

found in three new footnotes, all of them written as reactions to Ohlin's criticism at the last session of the meetings. The first one is a qualification of Haberler's argument about the influence of real balances on consumption. Haberler (1937a: 286 n. 2) acknowledged that there may be a rational incentive for the indefinite continuation of hoarding when prices are expected to fall further. Nevertheless, he claimed that "it remains true that the incentive to dishoard must grow continuously with the growth of hoards in terms of money and goods". Note 1 on page 289 considers the possibility, mentioned by Haberler at the meetings, that his "theory of the automatic cessation of hoarding and contraction is not accepted", which would make necessary to rely on other factors to explain the lower turning-point, such as the "return of confidence" in investment demand. Finally, the third note (Haberler 1937a: 295 n. 1) takes into account Ohlin's point about the role of lags in the analysis of the effects of wage reductions on aggregate output, which Haberler now accepted in part.

The main difference between Haberler (1936b) and Part II of *PD* (1937a) was the addition of chapter 11 on "international aspects of business cycles". That chapter was written after the meetings of the committee of experts, where international aspects had not been discussed. Hence, that chapter was neither circulated nor discussed before its publication, except probably for some feedback from other economists at the Economic Intelligence Service (such as Nurkse and Fleming). This may reflect the fact that, as noticed by Hart (1937: 698), the topic had not been discussed extensively in the literature prior to *PD*, and that Haberler's (1937a, ch. 11) analysis therefore grew out of his own work in the field of international trade. In the same vein a review of *PD* published in *The Economist* pointed out that Haberler had begun to fill the "most serious gap in our knowledge of the trade cycle", that is, "its international aspects".²¹ Among other things, chapter 11 of *PD* dealt with the question how the choice of the exchange-rate system and the degree of international capital mobility affect the international transmission of economic fluctuations. With an eye to the coordination of national macroeconomic stabilization policies, those topics were of central concern to the League of Nations and the Rockefeller Foundation.

2. Reviews of 'Prosperity and Depression'

Haberler's *Theoretical Analysis of Cyclical Movements* (the subtitle of *PD*, 1937a) was reviewed in the main economic journals (see Officer 1982: 152-53), with largely positive reactions to its synthetic approach, presented in Part II. Many of the reviews stressed that he had succeeded in

²¹ See Flanders (1989: 275-81) for Haberler's (1937a) treatment of the international propagation of business cycles in a general equilibrium setting that involves both current and capital accounts.

increasing the area of consensus concerning the nature of economic fluctuations. Ellsworth (1938: 108) suggested that Haberler's explanation of the business cycle is "the most complete and coherent yet available". As pointed out by Ellsworth (110), Haberler makes it clear that the "desire for liquidity" is a function not only of the rate of interest but also of the price level, which explains its satiation with falling prices. In a brief note, Harrod (1938) remarked that the synthetic view in Part II of *PD* was built on the common ground discovered in Part I, but that Haberler also revealed "irreconcilable points of divergence, in the hope that they may ultimately be settled by the test of experience". Hart (1937: 697) admired the balance in the survey in Part I of the book, relating it to Haberler's ability "to be almost completely free from the contemporary curse of being unable to understand what other people are saying". Hart's review focused on chapters 9 and 10, the two central chapters of the book, whose arrangement he found "novel and very suggestive". He complained nevertheless that there was no detailed analysis of what sort of adjustments could prevent the breakdown. A similar comment was made by Kahn (1937), who wrote the longest and most critical review of *PD*, as discussed below.

While Kahn (1937) expressed the opposition of the Keynesian camp to Haberler's project, there was no review of *PD* by representatives of the Austrian school, whose ideas were often criticized in Haberler's book. Interestingly enough, *Economica* (edited under the influence of Robbins and Hayek) published a review by Hawtrey, who had no sympathy for the Austrian approach. Hawtrey, who had corresponded with Haberler about the 1934 draft of Part I, found that part of the book a "brilliant achievement, a lucid and concise survey of theories of multifarious variety" (1938: 93). Although he described Part II as "able and interesting", Hawtrey was critical of the monetary aspects of Haberler's synthesis, emphasizing the neglect of the role of working capital, which played a key role in his own framework. Nor did he accept Haberler's thesis that the breakdown is caused by real maladjustments and the operation of the acceleration principle, as opposed to an interruption of money supply by the banking system. In particular, "that there is ever a shortage of projects for capital outlay [when prices are stabilized at the end of the boom] there is no evidence at all. Professor Haberler's synthesis is purely theoretical with no reference to practical experience" (Hawtrey 1938: 96).

Kahn's review in the *Economic Journal* (1937) stood out as the most detailed and negative reaction. It was the only review that prompted a reply from Haberler, after some correspondence with Keynes, the editor of *EJ*. According to Kahn (1937: 671), there is "one fundamental difficulty running throughout the book", and that is the definition of saving and investment. Kahn pointed out that the disagreement between Haberler and himself on that score went back to their correspondence of 1934. He disapproved, in particular, of Haberler's analysis

of the effects of a divergence between saving and investment in monetary disequilibrium, as there is no such a thing as excess saving in his own framework. Kahn referred critically to *PD* (1937a: 40 and 197), where Haberler dismissed Keynes's objections to the doctrine of forced saving as "purely verbal". He noted that Haberler had adopted Robertson's concept of saving, which was consistent with quantity theory of money and entailed some anti-Keynesian implications.

Kahn was also critical of Haberler's analysis of the effect of a reduction of money-wages on employment, which stressed dishoarding instead of the Keynesian route of a fall in the rate of interest. Kahn's (1937: 677-78) main criticism was provoked by Haberler's ambiguous answer (1937a: 268-69) to the central question in *PD*, namely: whether the crisis could be staved off by an increase or by a decrease in saving. As documented above, Haberler admitted at the expert meetings that he had come to the conclusion that the question was more complex than he thought when he had originally formulated it in Part I. Kahn drew attention to a similar ambiguity in Haberler's discussion of public works, reflecting "a major defect in this book, from the point of view of those who seek advice on matters of practical policy" (Kahn 1937: 678).²²

Despite his being "unsympathetic to the author's basic ideology", Kahn (1937: 673-77) admitted that there were some positive points in *PD*. Haberler's (1937a: 215) discussion of the effect of saving upon investment, for example, "marks a refreshing break-away from the lines of current controversy". Kahn approved of Haberler's suggestion that the net effect of an increase of saving is contractionary to the extent that the rate of interest falls, as this promotes hoarding - an argument that was criticized by Robbins and Robertson at the 1936 Geneva meetings, as documented above. Kahn also noticed with satisfaction that maladjustments in the vertical structure of production play only a small role in Haberler's theory of crisis. The latter was based on the decline of investment caused by an interruption of the expansion in consumption when the economy approaches full employment. As realized by Kahn, this brought Haberler's interpretation of the upper turning-point close to Harrod's (1936) book on the trade cycle.

²² Haberler's somewhat surprising answer to the question whether his diagnosis of the breakdown should be classified as under-saving or over-saving (1937a: 265-70) was, as noted by Kahn, that both types of maladjustments could be associated with his analysis of the upper turning-point. The depression could only be avoided by a shift in the structure of production, but the outcome depended upon in which industries technical adaptation is more easily achieved. An increase in saving will help to reestablish equilibrium only if technical progress is realized in producers' goods industries. Interestingly Ellis, who first agreed with Kahn about Haberler's "inconclusiveness" (Ellis 1938:119), would later describe Haberler's suggestion that "it all depends" as a "noteworthy original contribution" (Ellis 1941: 291). In his reply to Kahn, Haberler (1938) did not touch upon this issue, but focused on the "terminological gulf" between his system and the Keynesian one.

Harrod's Trade Cycle (1936) appeared when PD was already in the press (cf. Haberler 1937a: 217 n. 1). Haberler reviewed it for the Journal of Political Economy (1937), where he described Harrod's approach as "eclectic", adding that "this is by no means intended to be a criticism; it seems to me, on the contrary, to be the only possible procedure" (1937b: 690). He criticized Harrod nevertheless for ignoring that the interaction of the "Relation" (Harrod's name for the acceleration principle) and the "Multiplier" was not a new concept, but a description of the Wicksellian process of contraction, a common feature of almost all business cycle theories (cf. 1937a: 243 n. 1). Harrod's ignorance concealed the continuity of thought and created the "impression of deep-rooted dissensions between different groups of writers which is so discrediting for the reputation of economists" (Haberler 1937b: 691). Despite Harrod's use of what Haberler (1937b: 695) called "neo-Cambridge scholasticism" about saving, investment, hoarding and the velocity of circulation of money, Haberler was pleased with the similarity between the analysis of the crisis in PD and in Harrod's book. Actually, this was no mere coincidence, since Harrod learned of the application of the acceleration principle to the business cycle by reading the first draft of Part I of PD in October 1934 (cf. Besomi 2002: 43 and section 2 above). Haberler (1937b: 697; 1939: 369, n. 2) nevertheless disapproved of Harrod's neglect of other possible causes of the breakdown discussed in Part II of PD, a criticism that Haberler ([1953] 1958: 487 n. 1) would later extend to Hicks's (1950) model of the business cycle.

VI. CONCLUSION

In an obituary note on Haberler Paul Samuelson, who was his student at Harvard in the mid-1930s, recalled a conversation with him. "Gottfried, your trouble is that you are so damnably *eclectic*" (1996: 1680, italics in the original). Haberler replied: "Paul, how do you know mother nature is not eclectic?" Although the danger of eclecticism was not a big issue for Haberler, he was at pains to differentiate an open-minded from the purely eclectic attitude that he defined in his obituary article on Schumpeter as the attempt to "reconcile the irreconcilable, or merely to assemble unconnected and uncoordinated theorems and facts" (Haberler [1950] 1964: 456). From this perspective, *PD* was not a book where all rival explanations of the business cycle would find a room, but primarily an expression of the League's quest for a consensus that would allow the formulation of a testable synthesis. The notion of consensus as a key concept in scientific progress can be found in the pragmatic theory of truth put forward by the American philosopher Charles S. Peirce (b. 1839; d. 1914). According to Peirce, propositions are true just because they are universally accepted. Investigators would move towards a common conclusion because evidence takes the form of perceptions that are controlled by a single objective reality that is public to all. In this sense, a proposition is true if it accurately reflects the reality. However, according to Peirce, reality is just a construct of the community of investigators, that is, "the real is the idea in which the community ultimately settles down" (Peirce 1931-58, vol. 6: 610; see also Kirkham 1998 for a critical account of Peirce's theory of truth). In the same vein, Thomas Kuhn (1970: ch. 12) stressed that the ability to reach a consensus differentiates scientific from other communities. In Kuhnian terms, the situation of business cycle research in the early 1930s could be described as pre-paradigmatic.

The League's business cycle project in the 1930s was based on the belief that it would be possible to separate the terminological differences from the substantive ones, and thus generate agreement about the relevant hypotheses and how to test them. The circulation of the 1934 draft of Haberler's survey and the expert meetings on the 1936 draft of his synthesis were attempts to reach such a consensus. The reading of Haberler's correspondence about the 1934 survey and of the verbatim records of the 1936 meetings, as well as the comparison of the final 1937 text of *PD* with the drafts of parts I and II, indicates that, even though Haberler paid attention to criticism, he generally argued it out with his fellow economists and did not make many substantial changes in the text. Generally speaking, Haberler revised the draft of the "analysis" of theories to a larger extent than the "synthetic exposition". This may be interpreted as an attempt to avoid an excessive eclecticism that could jeopardize the internal coherence of the text, but it also reflects Haberler's efforts to convey a balanced view of the literature.

What was driving the League's quest for consensus in business cycle theory in the 1930s? As discussed by de Marchi (1991: 143-45) and Clavin (2003: 231-39), the League of Nation's effort to coordinate international monetary policy to combat the depression in the early 1930s failed together with the World Economic Conference held in London in June and July 1933. It became gradually clear after the conference that a return to the pre-1914 international economic order was not the solution. From the point of view of the League of Nations there was need to regain authority in the 1930s, after success in combating hyperinflation in Europe in the 1920s. As documented above, reaching an agreement about the causes of economic fluctuations was perceived by both the League's and the Rockefeller Foundation's officers as necessary to the coordination of national policies to stabilize the business cycle. The intrinsic weakness of macroeconomic theory at the time, as shown by the proliferation of competing theories, helps to explain the search for a consensus that could protect and give credibility to the League's effort to regain its role as a player in the world economy.

Haberler (1937a) was not the first attempt to build a synthetic approach to the business cycle based on a careful discussion of different theories. Hansen (1927, ch. 8) and especially

Mitchell (1913: 19-20; 1927: 47-60; 1934) had adopted partly similar strategies of investigation . In a letter to Haberler Mitchell (5 March 1936) actually reacted positively to Haberler's (1936c) article, which summarized central elements of *PD*:

"My liking is perhaps pre-determined by the fact that you take much the same ground on various basic points that I took in my book of 1913. Thus we both see the task of business cycle theory as explaining the four phases of the business cycle that you mention; we both treat the fear of eclecticism in combining hypotheses as superstition... You go on, of course, to make analytical use of the later theories concerning cyclical turns of which I have not yet had occasion to consider analytically."

However, while Mitchell stressed the difficulty of using deductive arguments to choose among multiple hypotheses, Haberler focused on the discussion of the logical structure of the competing theories. According to Mitchell (1913: 19) "there is slight hope of getting answers" to questions about choice among multiple hypotheses "by a logical process of proving and criticizing the theories. For whatever merits of ingenuity and consistency they may possess, these theories have slight value except as they give keener insight into the phenomena of business cycles. It is by study of facts which they purport to interpret that the theories must be tested". Hence, the use of a survey of theories is to "reveal certain facts" to be investigated statistically. Mitchell (1927: 59) claimed that this is the correct order of argument, instead of a "treatment which begins with a 'theory' and then looks for 'facts'". In contrast, Haberler's (1937a) approach was based on the idea that the construction of the theoretical set-up should precede the statistical work, in the sense that the relations between variables are postulates and not results (cf. Schumpeter 1954: 1163). Reaching a consensus on the relevant theoretical issues was only the first stage of the League's project. The researchers at the Economic Intelligence Service were aware that "there are many points where no definite solution can be proposed, but where the existence of a number of possibilities will be indicated. The choice between these can then be made only on the basis of empirical investigations" (Haberler 1937a: 2).²³ The task of statistical testing of the synthesis put forward in Part II of PD would be faced by Tinbergen (1939), who started to work for the League in autumn 1936, when Haberler had left for Harvard.

²³ Haberler's approach to methodology was heavily influenced by the philosopher Felix Kaufmann (b. 1895; d. 1949) who, like Haberler, was a member of Mises's famous private seminar in Vienna in the 1920s. Kaufmann stressed the distinction between "tautological" and "empirical" statements, adopted by Haberler (cf. Kaufmann 1936; Boianovsky 2000: 158-59). Kaufmann's philosophy of science was consistent with Karl Popper's (1934) falsificationism, whose invitation (by Hayek) to come to the LSE in 1936 was probably influenced by Haberler (cf. Howson 2001: 374).

By the time Tinbergen published his reports, a new consensus had started to form around Keynesian macroeconomics, which addressed a different set of questions. The essentially static nature of Keynes (1936) framework was pointed out by Haberler (1939: 249) in the second edition of *PD*. Keynes's *General Theory* did not and could not deal with cumulative processes of expansion and contraction. The various hypotheses concerning the forces which may bring about the upper and lower turning-points could nevertheless be expressed in Keynes's terms of changes in the propensity to save, marginal efficiency of capital, or liquidity preference. This indicated that Keynes's theoretical apparatus was not incompatible with the theories reviewed in Part I of *PD*. Keynes, who had had no sympathy for the League's project since the beginning, reviewed anonymously the second edition of *PD*, noting that "Prof. Haberler accepts the broad line of Mr Keynes' theory as valid, but finds nothing significantly new in it" (Keynes 1939: 275). In a letter to Austin Robinson (28 August 1939) Keynes remarked that "the truth is that [Haberler] has come the whole way round and swallows [*The General Theory*] bait, hook and line. But his digestion tells him that it is all very familiar diet... and that [the previous theories] can be shown to be compatible with my theory, - with all of which I cordially agree!" (Moggridge 1979: 274).

Indeed, as is obvious from the verbatim records, Haberler referred often to Keynes (1936) in the Geneva 1936 meetings. Although many of his references were critical, the argument of Part II of PD is generally compatible with the Keynesian framework (pace Kahn 1937), as indicated by many passages where a reasoning similar to Hicks's later IS-LM approach was deployed. Abba Lerner (1936, p. 436) pointed out that, in the process of writing his well-known article on the General Theory, "I have learnt much from innumerable discussions with economists in London, Cambridge and Geneva, and of these certainly the most helpful was Dr. Gottfried Haberler, who has been working towards similar results along a quite different route." As has been shown by Laidler (1999), the IS-LM model was itself a synthesis of different traditions of macroeconomics in the 1930s. That model was mentioned often by Haberler (1939, ch. 8) in his assessment of Keynesian economics. Furthermore, many aspects of Haberler's account of economic fluctuations in part II of PD became integrated, through Hicks (1950) and others, into the nonlinear multiplier-accelerator formulation that came to dominate business cycle theory in the post-war period. Although from Haberler's perspective Keynes (1936) was largely part of the common ground discussed in Part I of PD, he acknowledged that the publication of The General Theory had changed the terms of discourse as far as economic policy is concerned (Haberler 1937a: 236). The dearth of clear-cut economic policy propositions in PD was noticed by contemporary reviewers (see above) and by modern commentators (Endres and Fleming 2002: 35). This is underlined by the final paragraph of Haberler's (1937b: 697) review of Harrod, where

he criticized the latter for supporting public works as the best policy in the depression. According to Haberler, Harrod's prescription was based on a diagnosis that allows for only one type of maladjustment and overlooks the fact that "the process of contraction may be in the main features always the same, but the cause by which it is initiated need not be and probably is not always the same. Therefore the policy... can hardly be invariably identical". This conclusion, based on Haberler's (1937) synthetic view, was just too sophisticated to gain common consent from economists and policy makers in general.

References

- Andvig, Jens (1991). Verbalism and Definitions in Interwar Theoretical Macroeconomics. *History of Political Economy* 23: 431-55.
- Besomi, Daniele (2002). Löwe's and Hayek's Influence on Harrod's Trade Cycle Theory. *European Journal of the History of Economic Thought* 9: 42-56.
- Besomi, Daniele (2003). *The Collected Interwar Papers and Correspondence of Roy Harrod*. Aldershot: Edward Elgar.
- Boianovsky, Mauro (2000). In Search of a Canonical History of Macroeconomics in the Interwar Period: Haberler's *Prosperity and Depression* Revisited. In Michael Psalidopoulos (ed). *The Canon in the History of Economics - Critical Essays*, ch. 9. London: Routledge.
- Boianovsky, Mauro (2004). The IS-LM Model and the Liquidity Trap Concept: from Hicks to Krugman. *History of Political Economy*, annual supplement (forthcoming).
- Clavin, Patricia (2003). "Money Talks": competition and cooperation with the League of Nations, 1929-40. In *Money Doctors – The experience of international financial advising 1850-2000*, ed. by Marc Flandreau. London: Routledge.
- Craver, Earlene (1986). The Emigration of the Austrian Economists. History of Political Economy 18: 1-32.
- de Marchi, Neil (1991). League of Nations Economists and the Ideal of Peaceful Change in the Decade of the Thirties. In Craufurd Goodwin (ed.). *Economics and National Security: A History of Their Interaction*. Durham: Duke University Press (*History of Political Economy*, annual supplement).143-78.
- Ellis, Howard (1938). Notes on Recent Business Cycle Literature. *Review of Economic Statistics* 20: 1111-19.
- Ellis, Howard (1941). Review of Haberler (1939). Journal of Political Economy 49: 289-91.
- Ellsworth, Paul T. (1938). Review of Haberler (1937a). American Economic Review 28: 108-110.
- Endres, Anthony and Grant Fleming (2002). *International Organizations and the Analysis of Economic Policy, 1919-1950.* Cambridge: Cambridge University Press.
- Fisher, Irving (1933). The Debt-Deflation Theory of Great Depressions. Econometrica 1: 337-59.
- Flanders, June (1989). *International Monetary Economics 1870-1960*. Cambridge: Cambridge University Press.
- Haberler, Gottfried (1931). Review of *Geldtheorie und Konjunkturtheorie*, by Friedrich A. Hayek. *Quarterly Journal of Economics* 39: 404-07.
- Haberler, Gottfried (1932a). Die Kaufkraft des Geldes und die Stabilität der Wirtschaft. Schmollers Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft 55: 993-1023.
- Haberler, Gottfried (1932b). Money and the Business Cycle. In Quincy Wright (ed). Gold and Monetary

Stabilization. Chicago: Chicago University Press. As reprinted in Anthony Koo (ed) (1993). *The Liberal Economic Order: Essays by Gottfried Haberler*, vol. 2, ch. 9. Aldershot: E. Elgar.

- Haberler, Gottfried (1933a). Der Internationale Handel. Berlin: Springer.
- Haberler, Gottfried (1933b). [Contribution]. In Gustav Clausing (ed.), *Der Stand und die nächste Zukunft der Konjunkturforschung. Festschrift für Arthur Spiethoff*. Munich: Duncker & Humblot. 92-103.
- Haberler, Gottfried (1934). Systematic Analysis of the Theories of the Business Cycle. Unpublished typescript. League of Nations Archive.

Haberler, Gottfried (1934-36). Correspondence with:

- Johan Åkerman (1934), Haberler Papers, Hoover Institution, Stanford University, and League of Nations Archive, Geneva.
- Einaudi (1935), Haberler Papers, Hoover Institution.
- Harrod (1934), Haberler Papers, Hoover Institution, and League of Nations Archive (also reproduced in Besomi 2003).
- Hayek (1934-36), Haberler Papers, Hoover Institution.
- Hawtrey (1934), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Kahn (1934), Kahn Papers, King's College Archive, Cambridge.
- Kaldor (1934), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Keynes (1934), Keynes Papers, King's College Archive, Cambridge, and Haberler Papers, Hoover Institution.
- Lederer (1934-35), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Loveday (1934), League of Nations Archive.
- Marget (1934-35), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Marschak (1934), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Mills (1934), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Mitchell (1936), Mitchell Papers, Butler Library, Columbia University.
- Morgenstern (1934-36), Morgenstern Papers, Special Collections Library, Duke University.
- Neisser (1935), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Nurkse (1935), Haberler Papers, Hoover Institution.
- Robertson (1934-36), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Schultz (1935), Haberler Papers, Hoover Institution.
- Tinbergen (1934-35), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Viner (1935), Haberler Papers, Hoover Institution, and League of Nations Archive.
- Haberler, Gottfried (1936a). Enquiry into the Causes of the Recurrence of Periods of Economic Depression. Part I Systematic Analysis of the Theories of the Business Cycle. Unpublished typescript. League of Nations Archive.
- Haberler, Gottfried (1936b). *Enquiry into the Causes of the Recurrence of Periods of Economic Depression. Part II Synthetic Exposition of the Nature and Causes of the Business Cycle*. Unpublished typescript. League of Nations Archive.
- Haberler, Gottfried (1936c). Some Reflections on the Present State of Business Cycle Theory. *Review of Economic Statistics* 18: 1-7.
- Haberler, Gottfried (1936d). Mr. Keynes' Theory of the "Multiplier": A Methodological Criticism. *Zeitschrift für Nationalökonomie* 7: 299-305.
- Haberler, Gottfried (1937a). *Prosperity and Depression: A Theoretical Analysis of Cyclical Movements*. Geneva: League of Nations.
- Haberler, Gottfried (1937b). Review of Harrod (1936). Journal of Political Economy 45: 690-97.
- Haberler, Gottfried (1938). Some Comments on Mr. Kahn's Review of Prosperity and Depression.

Economic Journal 48: 322-33.

- Haberler, Gottfried (1939). *Prosperity and Depression: A Theoretical Analysis of Cyclical Movements*, 2nd edition. Geneva: League of Nations.
- Haberler, Gottfried (1943). *Prosperity and Depression: A Theoretical Analysis of Cyclical Movements*, 3rd edition. Geneva: League of Nations.
- Haberler, Gottfried ([1950] 1952). Haberler on Schumpeter. In Henry W. Spiegel (ed). *The Development of Economic Thought*, pp. 432-460. New York: Wiley and Sons.
- Haberler, Gottfried ([1953] 1958). Notes on the Present State of Business Cycle Theory. In Gottfried Haberler (1958). *Prosperity and Depression: A Theoretical Analysis of Cyclical Movements*, 4th edition, pp. 483-94. London: George Allen and Unwin.
- Haberler, Gottfried (1964). *Prosperity and Depression: A Theoretical Analysis of Cyclical Movements*, 5th edition. London: George Allen and Unwin.
- Haberler, Gottfried (1976). Some Reminiscences. Quarterly Journal of Economics. 90: 9-13.
- Haberler, Gottfried (1986). Reflections on Hayek's Business Cycle Theory. Cato Journal 6: 421-35.
- Hansen Alvin (1927). Business-Cycle Theory: Its Development and Present Status. Boston: Ginn and Company.
- Harrod, Roy (1936). The Trade Cycle: An Essay. Oxford: Clarendon Press.
- Harrod, Roy (1938). Review of Haberler (1937a). International Affairs 17: 101.
- Hart, Albert (1937). Review of Haberler (1937a). Journal of Political Economy. 45: 697-99.
- Hawtrey, Ralph (1937). Professor Haberler on the Trade Cycle. Economica 5: 93-97.
- Hayek, Friedrich August (1931). Prices and Production. London: Routledge and Kegan Paul.
- Hayek, Friedrich August ([1929] 1933). Monetary Theory and the Trade Cycle. London: Jonathan Cape.
- Hicks, John (1937). Mr. Keynes and the "Classics": A Suggested Interpretation. Econometrica 5: 147-59.
- Hicks, John (1950). A Contribution to the Theory of the Trade Cycle. Oxford: Clarendon Press.
- Howson, Susan (2001). Why Didn't Hayek Review Keynes's *General Theory*? A Partial Answer. *History* of *Political Economy* 33: 369-74.
- In Search of a Remedy. The Economist. 31 July 1937: 248-49.
- Kahn, Richard (1931). The Relation of Home Investment to Unemployment. Economic Journal 41: 173-98.
- Kahn, Richard (1937). The League of Nations Enquiry into the Trade Cycle. *Economic Journal* 47: 670-79.
- Kaufmann, Felix (1936). Methodenlehre der Sozialwissenschaften. Vienna: Springer.
- Keynes, John Maynard (1930). A Treatise on Money. London: Macmillan.
- Keynes, John Maynard (1936). *The General Theory of Employment, Interest and Money*. London: Macmillan.
- Keynes, John Maynard ([1939] 1979). Review of Haberler (1939). *Economic Journal*. Sept 1939. As reprinted in Moggridge (1979), pp. 274-75.
- Kirkham, Richard (1998). Truth, Pragmatic Theory Of. In Edward Craig (ed). *Routledge Encyclopedia of Philosophy*, vol. 10: 478-80. London and New York: Routledge.
- Klausinger, Hansjörg (2003). The Austrians on Relative Inflation as a Cause of Crisis. *Journal of the History of Economic Thought* 25: 221-37.
- Kuhn, Thomas S. (1970). *The Structure of Scientific Revolutions* (2nd edition). Chicago: University of Chicago Press.
- Laidler, David (1999). Fabricating the Keynesian Revolution: Studies of the Interwar Literature on Money, the Cycle and Unemployment. Cambridge: Cambridge University Press.
- Lerner, Abba (1936). Mr. Keynes' "General Theory of Employment, Interest and Money". *International Labour Review* 34: 435-54.
- Mitchell, Wesley (1913). Business Cycles. Berkeley: University of California Press.

Mitchell, Wesley (1927). Business Cycles: The Problem and Its Setting. New York: NBER.

- Mitchell, Wesley (1934). Business Cycles. In Edwin Seligman (ed). *Encyclopaedia of Social Sciences*, vol. 3: 92-107. New York: Macmillan.
- Moggridge, Donald (ed., 1979). The Collected Writings of John Maynard Keynes, vol. 29. London: Macmillan.
- Moggridge, Donald (1995). The Diffusion of the Keynesian Revolution: The Young and the Graduate Schools. In Allin Cottrell and Michael Lawlor (eds). *New Perspectives on Keynes*. Durham: Duke University Press (*History of Political Economy*, annual supplement). 223-41.
- Myrdal, Gunnar (1933). Der Gleichgewichtsbegriff als Instrument der geldtheoretischen Analyse. In Friedrich A. Hayek (ed.). *Beiträge zur Geldtheorie*, pp. 361-487. Vienna: Julius Springer (tr. *Monetary Equilibrium*. London: William Hodge, 1939)
- Neisser, Hans (1934). Monetary Expansion and the Structure of Production. Social Research 1: 434-57.
- Officer, Lawrence (1982). Prosperity and Depression And Beyond. *Quarterly Journal of Economics* 97: 149-59.
- Ohlin, Bertil (1931). *The Course and Phases of the World Economic Depression*. Geneva: League of Nations.
- Peirce, Charles (1931-1958). *Collected Papers of Charles Sanders Peirce*. Cambridge, MA: Harvard University Press, 8 vols.
- Pigou, Arthur Cecil (1943). The Classical Stationary State. Economic Journal 53: 343-51.
- Proceedings of the Conference Called by the Rockefeller Foundation to Consider the Desirability and Feasibility of Encouraging Co-ordination of Fundamental Economic Research upon Problems of Economic Change. Annecy, 3-5 July 1936. Unpublished typescript. Rockefeller Foundation Archive.
- Robertson, Dennis (1934). Industrial Fluctuations and the Natural Rate of Interest. *Economic Journal* 44: 650-56.
- Samuelson, Paul (1996). Gottfried Haberler (1900-1995). Economic Journal 106: 1679-87.
- Schumpeter, Joseph. Alois (1954). History of Economic Analysis. New York: Oxford University Press.
- Tinbergen, Jan (1935). Annual Survey: Suggestions on Quantitative Business Cycle Theory. *Econometrica* 3: 241-308.
- Tinbergen, Jan (1939). Statistical Testing of Business Cycle Theories. Geneva: League of Nations.
- Trautwein, Hans-Michael. Money, Equilibrium and the Cycle. Hayek's Wicksellian Dichotomy. *History of Political Economy* 28: 27-55.
- Van Sickle, John (1936). League of Nations Conference on the Business Cycle. June 29- July 2 1936. Unpublished typescript. Rockefeller Foundation Archive.
- Verbatim Records of the 1936 Meetings of the Committee of Experts on the Business Cycle. Ohlin Papers, Riksarkivet, Stockholm.
- Wicksell, Knut (1898). *Geldzins und Güterpreise.Eine Untersuchung über die den Tauschwert des Geldes bestimmenden Ursachen*). Jena: Gustav Fischer (tr. *Interest and Prices*. London: Macmillan, 1936).
- Woodford, Michael (2003). *Interest and Prices. Foundations of a Theory of Monetary Policy*. Princeton: Princeton University Press.