Keynes is alive and well: a survey article

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1. Introduction

With an important and timely initiative, Cambridge University Press and the Royal Economic Society made available in a paperback edition the photostatic reprint of the thirty-volume edition of *The Collected Writings of John Maynard Keynes* originally published in the early 1970s under the general editorship of Austin Robinson and Donald Moggridge (Keynes, 2012).

A fitting tribute to one of the greatest economists of all times – and a very good writer as well – the original edition made available to scholars most of Keynes's writings and important parts of his correspondence, together with scholarly introductions and editorial notes (important especially in the case of volumes 13, 14 and 29, devoted to correspondence and papers connected to the preparation, defence and development of the *General Theory*).

The availability of this mass of material favoured the development of an important body of studies on Keynes and the economists who were at Cambridge in the interwar period. Among these, we should recall at least Robert Skidelsky's magnificent three volume biography. Together with the contribution in the same vein by one of the editors of the *Collected Writings*, Moggridge, it superseded Harrod's occasionally biased and reticent contribution.¹

Biographical research shows that the development of Keynes's theoretical views was far from linear: it did not consist of the

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¹ See Skidelsky (1983; 1992; 2000), Moggridge (1992) and Harrod (1951). Other booklength writings on Keynes are rather more reconstructions of the development of his ideas and theoretical system than biographies: see e.g. Minsky (1975), Tonveronachi (1983) and Vicarelli (1984).

accumulation of new material of detail to the already existing corpus of economic theories, around a 'vision' of the economy and of economic analysis sufficiently well specified from the beginning, but of a continuous revision and modification of the very foundations of economics. Thus, any interpretation of Keynes's thought cannot focus exclusively on his main writings and in particular on *The General Theory* of Employment, Interest and Money (1936). Also, given the novelty of Keynes's ideas and his willingness to 'compromise' their presentation with traditional modes of thinking in order to ease their wider acceptance, it is useful, and it may be necessary, to consider similarities and differences between different writings in order to distinguish between 'substance' and its 'mode of presentation'. For these reasons, the corpus of the material made available in the *Collected Writings* is essential to the reconstruction of Keynes's thought. It also provides an abundance of textual material to vindicate the richness of his 'vision' of human societies (and of the human being, certainly not reducible to the neoclassical homo economicus construct), as well as of his policy recipes, against the simplistic textbook representations of Keynes's theory as limited to the aggregate demand-supply model and to the management of aggregate demand.

In what follows, an illustration of the content of *The Collected Writings* (§§2 and 3) provides the background for a tentative attempt at suggesting the multiplicity of lines of readings which can be followed in considering different theoretical or policy issues (§4) and for the (very sketchy) indication of a specific interpretation of Keynes's analysis and economic vision (§5). No attempt at providing an even cursory survey of the different interpretations of Keynes will be made; however, occasional hints at these may provide the reader with some pointers in this respect.

2. The Collected Writings: Keynes's books

The thirty volumes open with Keynes's first book, *Indian Currency and Finance* (1913). This is a study on the monetary institutions of the time: not only of the role of the Indian rupee and Indian banking, but also

and more importantly an analysis of the international monetary system based on the gold standard. Keynes's involvement with Indian monetary and financial institutions continued in subsequent years, when he was nominated a member of the Royal Commission on Indian Currency and Finance presided over by Austen Chamberlain. Volume 15 of the *Collected Writings* contains a selection of material (papers and correspondence) pertaining to this topic and concerning the years 1906-1914, which also saw Keynes's move, in 1908, from the India Office to Cambridge University.

The second, third and fourth volumes include, respectively, The Economic Consequences of the Peace (1919), A Revision of the Treaty (1922) and A Tract on Monetary Reform (1923). If we consider the three volumes together, we may perceive a shift in importance in their content, from a treatment of policy issues based on a political form of argumentation to a treatment increasingly based on theoretical reasoning. However, all three essays blend together these different elements - the first one also being a literary masterwork (and worldwide bestseller), with its subtle and perceptive illustration of the psychology of the protagonists of the Paris Peace Conference and of their interrelations. This blending of political, historical, theoretical and psychological elements is an important and persistent characteristic of Keynes's work, where it is clear that theory is not an end in itself, but the means for designing active interventions in the real world,² so that the different elements converge to a single purpose, the improvement of the current conditions of human societies by means of human intelligence: an inheritance of the Enlightenment, to which Kevnes adds a Romantic sensibility for human psychology and an Edwardian ideal of the 'good life', being one that is culturally and sentimentally rich.

A Tract on Monetary Reform already includes the first bricks of the analytical edifice that was to be built over the next fifteen years, though it still deals with policy issues such as inflation and the control of foreign exchange rates, utilising material from the *Reconstruction in Europe* supplements to the *Manchester Guardian Commercial* that Keynes edited

 $^{^2}$ The instrumental role of theory, however, was never used by Keynes as a justification for the adoption of lowbrow theories.

during 1922. The distinction between internal and external monetary stability, which was missing in *Indian Currency and Finance* appears here, perhaps as a consequence of the first discussions with Sraffa, who stressed that point in his degree dissertation dating from 1920.³ The *Tract* also illustrates in a very clear way the determination of forward exchange rates, an element that will acquire importance in the debate with Hayek in the early thirties and in the important chapter 17 of the *General Theory*.⁴

Volumes 5 and 6, and volume 7, offer Keynes's main theoretical contributions: A Treatise on Money (1930, in two volumes: 1. The Pure Theory of Money and 2. The Applied Theory of Money) and The General Theory of Employment, Interest and Money (1936). These are not easy reading, and most contemporary economists' knowledge of Keynesian theory is unfortunately derived from cursory readings or from the secondary literature.

A Treatise on Money mainly deals with instability, occasionally utilising now unusual definitions (for instance, the term profits designates windfall, extraordinary profits, while 'normal' profits are included in costs of production) and – especially in volume 2, *The Applied Theory of Money* – relying on institutional details that underwent significant changes in the decades since publication of the book. Keynes's intelligence and perceptiveness shines in some pages, and there are important theoretical contributions unfortunately forgotten in the subsequent debate, such as the chapter on "The plurality of secondary price levels" (2012, vol. 5, pp. 58-67), which explains Keynes's (and the Marshallian Cambridge) opposition to Irving Fisher's quantity equation. However, it is *The General Theory of Employment, Interest and Money* that remains the main reference in the vast sea of Keynes's writings.

The book should be compulsory reading for anyone daring to write on Keynesian theory. This would avoid, for instance, attributing to Keynes such assumptions as downward rigidity of money wages, a topic

³ Sraffa (1920). On this, and more generally on the relationship between Sraffa and Keynes, see Roncaglia (2009, pp. 28-34 and 131-136).

⁴ Keynes's 1931 article in *Economica* in answer to Hayek's critical review of the *Treatise on Money* is reprinted in vol. 13, pp. 243-256, together with the ensuing correspondence, pp. 257-267; the main clash on these themes however took place between Sraffa (1932a; 1932b) and Hayek (1932).

that Keynes explicitly considers in chapter 19. It must be recognised that Keynes did not make things easy for us: in writing the book, he had in mind the Cambridge-trained economists of his time, raised on Marshall's *Principles*, and he was ready to accept some expository compromise in order to make his main points sufficiently acceptable to this readership; also, he did not stress the substantial differences between the concepts he uses and those utilised by traditional theory, in particular the relevance he attributes to uncertainty (on which more below). This was the starting point for a lot of misunderstandings, such as treating Keynes's analysis as a short-period one, leaving the traditional marginalist theory of value and distribution to reign supreme for the long run.

Let us give only two examples. In the brief chapter 3, entitled "The Principle of Effective Demand" (pp. 23-34), both supply and demand curves are defined from the point of view of the individual entrepreneur who relies upon her or his own expectations of costs and proceeds when deciding on production levels. Thus, the 'point of effective demand' is not the point where demand and supply meet in a market where the supply side confronts the demand side, but an analytic construct utilised for illustrating the entrepreneur's decision process. There is a long way, in terms of additional assumptions on realised expectations or in terms of the introduction of additional variables such as inventories, from here to the notion of aggregate demand and the ex post equality between aggregate supply and aggregate demand (the latter being the pillar of national accounting schemes).

The second example refers to the traditional assumption of decreasing returns (namely, an inverse relationship between output levels and real wages), which Keynes accepts in the *General Theory* for convenience of exposition but which in fact is not necessary to his reasoning. Keynes stresses this in an article published in *The Economic Journal* in March 1939 and reprinted in the *Collected Writings* as an appendix to the *General Theory* (pp. 394-412). The point is important, since even nowadays most of contemporary macroeconomics relies on just such an inverse relationship. Commenting on two applied contributions, by Dunlop (1938) and Tarshis (1939), and on theoretical contributions by Kalecki (later collected in Kalecki, 1971), Keynes

accepts the fact that real wages appear to be positively (rather than inversely) related to output levels and shows that the assumption adopted in the *General Theory* is irrelevant to the main argumentation and the results of the book.

Volumes 8, 9 and 10 of the Collected Writings include the other three books published by Keynes: A Treatise on Probability (1921), Essays in Persuasion (1931) and Essays in Biography (1933). Thus they complete the series of books published by Keynes in his lifetime; in these three cases, however, the chronological order is violated. This is understandable in the case of Essays in Persuasion and Essays in Biography, since they are both collections of articles (and additional articles are included in each of the two volumes); in the case of A Treatise on Probability, the reason might be the non-economic subject of the book. This element of heterogeneity is stressed by assigning responsibility for the editorial foreword to this volume (pp. xv-xxii) to a well-known Cambridge philosopher, Richard Braithwaite, who briefly illustrates the relationship between Keynes's ideas on probability and those of other probability theorists such as Frank Ramsey, another Cambridge mathematician and one of the founders of the subjective probability approach.

However, it would be wrong to consider *A Treatise on Probability* as external to the series of Keynes's main publications (books) leading up to the *General Theory*. Keynes's work on the theory of probability took many years, beginning in the formative years of his immediate postgraduate studies, and it may be considered an important aspect of his 'vision of the world', with a crucial impact both on his method of analysis and on the inner structure of the analytical building blocks that constitute Keynes's theoretical edifice. In fact, an understanding of Keynes's views on probability is fundamental to an understanding of his economic theory and vice versa, keeping in mind the political purpose of Keynes's analysis may help readers to better understand his views on probability.

In the book Keynes discusses, and criticises, the classical (Bernoulli) and frequentist views on probability, and develops a different approach (which Braithwaite calls the "logical interpretation" of probability, a view that will also be shared by Rudolph Carnap, among others) – different, too from the subsequent 'subjective' approach developed by de Finetti (1931; 1937) and Frank Ramsey (1931).

What is relevant for economic analysis is Keynes's view of uncertainty as a continuum, with absolute certainty at one extreme and complete ignorance at the other. In the middle, which thus embraces most real-life situations, we have some (more or less solid) ground for our evaluation of the probability of any given event: in Keynes's terms, a greater or lesser 'weight of the argument'. Depending on the weight of the argument, to each event we may assign a numerical evaluation of its probability, or a range of numerical values, or even no numerical evaluation at all. The 'knowledge' upon which our evaluation of the probability of an event relies is subjective, in the sense that different individuals may have different knowledge; and may vary over time for any individual, who can acquire additional information over time, as well as become aware of additional elements of uncertainty. A 'rational' individual relies on what she or he knows of the situation at hand: compared with the 'subjective' approach where each individual's betting decisions are left totally unexplained, this means that the real world somehow constrains the evaluations of probability. Such constraints are potential objects of analysis for economists (as, in their fields, for other scientists such as medical scientists or sociologists); but in building their theories economists must recall that such rational reconstructions apply to agents active in an uncertain world. Thus, Keynes's declared preference for 'short chains of reasoning', an element belonging to Marshall's tradition but which here, in Kevnes's theory of probability, finds its rational foundation.⁵

⁵ If we consider a chain of cause-and-effect relationships, clearly the confidence in the connection between the initial and the final element in the chain depends on the confidence attributed to each individual relationship between two subsequent elements in the chain; however, unless we assume a normal distribution of probabilities for each step together with the possibility of compensation of errors (independence) between the different steps, the confidence in the connection between the first and the final element in the chain will be lesser, indeed much lesser, than the average confidence in the different steps. On Keynes's (and Marshall's) 'short chains of reasoning', see Roncaglia (2004).

As already recalled, the other two books are collections of essays. Volume 9, Essays in Persuasion, includes sections on the 1919 Treaty of Versailles, on inflation and deflation, on the return to the gold standard and on politics. The 1972 edition of the book, reproduced in the present volume, expanded on the original 1931 edition by including some of Keynes's pamphlets in full, among which are the well-known Can Lloyd George Do It?, The Economic Consequences of Mr Churchill, The End of Laissez-Faire, originally included only partially, as well as additional pamphlets (The Means to Prosperity, How to Pay for the War). This latter pamphlet is known among macroeconomists for its contribution to the theory of inflation (and to anti-inflation policy) when demand exceeds full employment supply; some of the other essays are necessary readings for those interested in Keynes's political ideas, in particular his not-solaissez-faire liberalism. All of them make for very pleasant reading: Keynes's political verve, his ability to characterise personalities with a few well-wrought sentences and his humour all recall his friend Lytton Strachey's masterpieces.

The same is true for the *Essays in Biography*. With a number of additions to the original 1933 edition, the book now includes nearly all of Keynes's biographical writings and the important autobiographical piece "My Early Beliefs", as well as portraits of politicians (mostly critical, occasionally savagely so) and economists and, among other vignettes, an interesting interpretation of Newton stressing his interests for alchemy.

3. The Collected Writings: articles and activities

Volumes 11 and 12 are devoted to *Economic Articles and Correspondence* (specifically, vol. 11: *Academic*; vol. 12, *Investment and Editorial*). Articles and correspondence are grouped together by topic: India, index numbers, statistics, the First World War and the reconstruction that followed, money, international economics and miscellaneous reviews in volume 11; Keynes as investor, investment policy and insurance, commodities, the tithe, Keynes's early lectures, and his work as an editor and referee in volume 12, the biggest – at 900 pages

– in the series. The two volumes give an idea of the breadth of Keynes's interests and even a cursory reading gives an idea of the depth and originality of his incursions into them. It is precisely because of these latter qualities that these volumes contribute to enriching our understanding of his 'vision of the world'; for instance, the section on index numbers helps us to understand Keynes's rejection of the notion of a general price level in the quantity equation; there are clear connections between his theory of finance and his activity as an investor (both personally and as advisor to a variety of institutions);⁶ the section on Keynes's activities as editor of the *The Economic Journal* gives a clear idea of the active way in which Keynes interpreted his role, often intervening in the content of the articles and often deciding on the acceptance or rejection of articles on the basis of his own views; this section also includes some interesting material on Keynes's (rather negative) attitude to Kalecki's ideas.

Volumes 13 and 14 – *The General Theory and After: Part 1, Preparation* and *Part 2, Defence and Development*, both originally published in 1973 – are the ones I referred to most (together with the *General Theory*, of course) in the course of my studies. They were joined, in 1979, by the supplemental volume 29, *The General Theory and After: A Supplement*, including material discovered during the winter of 1975-1976 by the Keynes family at Tilton, Keynes's country house and some additional material overlooked when preparing the first two volumes. This latter material is mainly made up of correspondence and short notes from the period in which Keynes was at Tilton, in 1937-1938, recovering from his heart attack.

The material included in volume 13 is essential for any historian of thought interested in the development of Keynes's ideas in the late 1920s and 1930s up to publication of the *General Theory*. Among other things, it includes accounts of the activities of the so-called Cambridge Circus, the group of Keynes's students and friends (Kahn, Joan Robinson, Sraffa, Meade and a few others) on whom Keynes tested his new ideas (pp. 337-342); the text of three lectures delivered at Chicago in 1931 on

⁶ On Keynes as investor, see Marcuzzo (2012).

"Unemployment as a World Problem" (pp. 343-367); correspondence with critics such as Pigou, Hayek, Robertson, Schumpeter and the important reply to Hayek's review of the *Treatise on Money* (pp. 243-256) and the variorum of the drafts of the *General Theory* compared to the final text (pp. 351 ff.), which continues as an appendix to vol. 14.

At least three of the 1937 articles published by Keynes in answer to the comments and criticisms received by his book, and republished in volume 14 with important accompanying correspondence, are in my opinion compulsory readings. The first, originally published in the The Quarterly Journal of Economics in February 1937 under the title "The General Theory of Employment" (pp. 109-123) is an answer to four reviews of his book (by Taussig, Leontief, Robertson and Viner) published in the preceding issue. Rather than answering on specific points, Keynes prefers to issue a restatement of his theoretical position; he does so beginning with the notion of uncertainty, perhaps feeling that Knight's simple dichotomy between (measurable) risk and (nonmeasurable) uncertainty may have been a source of misunderstanding on the part of his American readers. Thus, the monetary-financial side of the economy acquires a role different from the traditional one, of a veil with possibly short-run adjustment problems; also, the notion of effective demand appears as clearly distinct from a traditional notion of equilibrium between aggregate demand and aggregate supply: it is an analytical tool aimed at representing the way in which the individual entrepreneur decides on output (and employment) levels, on the basis of foreseen costs and earnings. There can thus be a distinction between a static, a stationary and a shifting kind of analysis: in the first one, both long and short run expectations are validated; in the second one, short run expectations may be disappointed and a process of adjustment can be analysed; in the third, both short run and long run expectations may change over time.⁷

The second and third articles were published in *The Economic Journal* in the June and December 1937 issues, and are reprinted with the accompanying correspondence and a few notes, including a detailed

⁷ On Keynes's method of static, stationary and shifting equilibrium, see Kregel (1976).

comment on Keynes's analysis by Ohlin (pp. 183-223). They illustrate well the differences between Keynes's use of the ex ante – ex post distinction and the one developed by the so-called Swedish school, leading to a sequential type of analysis which has been re-proposed in recent times by Hicks (1973) and followers. The difference between ex ante and ex post is recognized by Keynes as the distinction between expectations and realizations; but sequential analysis is rejected, as requiring the definition, for which there is no objective ground, of a unit of time at the beginning of which there is the expectation and at the end of which there is the result and expectations are accordingly revised for the decisions concerning the subsequent periods.

There is much more of interest in this volume; let me signal out as an instance the text of a lecture at the Eugenic Society in April 1936, "Some Economic Consequences of a Declining Population" (pp. 124-133), where Keynes adopts a rather conservative Malthusian position, one that favours a stationary or slowly declining population, but also stresses the dangers of a too rapid decline.

Volumes 15-27 go under the unifying moniker of Activities, covering in succession groups of years and related topics. Their interest and importance is great, but their content cannot be illustrated in detail here: readers may discover in them precious items, depending on each reader's specific interests. Briefly, volume 15 covers the years 1906-1914, under the title India and Cambridge (and contains, in fact, much more India than Cambridge). Volume 16 spans 1914-1919, when Keynes worked at the Treasury during the war and participated in the Paris Peace Conference, up to his resignation in dissent from what he considered impossible conditions for the German reparations (his ideas are illustrated in The Economic Consequences of the Peace, reprinted as volume 2, as recalled above). Volume 17 deals with Activities 1920-1922: Treaty Revision and Reconstruction; it includes articles, letters and an apparently uninterrupted flow of memoranda on the Treaty of Versailles, its consequences and the debate on its revision, but also on Britain's postwar monetary policy and international financial policy.

In the case of volumes 18-20, the chronological sequence is slightly violated in favour of a better grouping of the material by topic. Thus, the

relatively short volume 18 spans a full decade, 1922-1932, covering – in direct sequence to volume 17 – the issues arising out of the peace treaty, up to Britain's own default on her war debts, but mainly focusing on the German hyperinflation with the ensuing social and political unrest and the attempts to find some workable solution with the Dawes and Young Plans and the Hoover Moratorium. The bulky volume 19 covers a shorter time span, 1922-1929, and includes *The Return to Gold and Industrial Policy*, as well as journal articles, evidence presented to official committees and correspondence. Volume 20 covers *Activities 1929-1931: Rethinking Employment and Unemployment Policies*; it is mainly focused on Keynes's time serving as a member of the Macmillan Committee on Finance and Industry. Volume 21 is then devoted to *Activities 1931-1939: World Crises and Policies in Britain and America*.

The ensuing three volumes, 22-24, illustrate Keynes's part in the war effort: *Internal War Finance* (vol. 22, which should be read in conjunction with the widely read and influential pamphlet *How to Pay for the War*, reprinted in vol. 9, but also includes other interesting material such as that concerning the 1941 budget, considered by many as the first explicitly Keynesian budget, and the related material on the development of national accounts estimates), *External War Finance* (vol. 23, of great interest to economic historians of US-British relations and the decadence of the sterling area), *The Transition to Peace* (vol. 24, with material on the Lend-Lease Act and the negotiations surrounding the 1945 US loan to Britain).

The last three volumes of *Activities*, volumes 25-27, concern the war and immediate post-war years when Keynes, notwithstanding his failing state of health, provided a flow of suggestions on the reconstruction of the post-war world, supporting with his intelligent leadership the fragile British position in the negotiations with the stronger USA. Volume 25, *Activities 1940-1944: Shaping the Post-War World: The Clearing Union*, is concerned with the origins of what became the International Monetary Fund and the World Bank, up to the eve of the Bretton Woods Conference, and includes correspondence with eminent British economists (Robertson, Meade, Harrod) and with Harry Dexter White, who was to act as Keynes's American counterpart in the Bretton Woods negotiations. Volume 26, Activities 1941-1946: Shaping the Post-War World: Bretton Woods and Reparations, is most interesting not only for the historian interested in how the post-war international monetary and financial landscape took shape, but also for understanding the different scene which Keynes had in mind, with a drive for balancing restrictive policies made necessary by external unbalances with expansionary policies on the side of balance-of-payments surplus countries: elements which are quite relevant in the present context of the European crisis. Volume 27, Activities 1940-1946: Shaping the Post-War World: Employment and Commodities, is again of persistent interest, dealing with a scheme to stabilise the prices of primary products and the debate around the Beveridge programme for a welfare state and full employment policies.

Volume 28, *Social, Political and Literary Writings*, includes Keynes's published and unpublished writings on non-economic subjects; many pages are devoted to the correspondence with Kingsley Martin, the editor of *The New Statesman* and of which Keynes was the chairman. Together with writings on ancient currencies, the book also includes a magnificent piece of scholarship, the preface to a facsimile reprint of the *Abstract of a Treatise of Human Nature* written together with Piero Sraffa, where the two friends show that the pamphlet published anonymously in 1740 should be attributed to David Hume, contrary to the then prevailing opinion.⁸

After volume 29, which as indicated above is an appendix to volumes 13 and 14, the concluding volume 30 of the *Collected Writings*, *Bibliography and Index*, contains a 380-page index which can be very useful indeed to anyone interested in specific issues or specific aspects of Keynes's thought, plus some additional material, a long bibliography including all previously unpublished material inserted in the *Collected Writings* and a list (with volume and page references) of correspondents or authors of notes.

⁸ The attention to Hume is interesting in view of the influence that Hume may have exerted on Keynes, particularly his ideas on the role of conventions in human behavior for reducing uncertainty that however cannot ever be fully eliminated. Conventions also play a role in Keynes's ideas on the working of the stock exchange.

In all, this is an impressive amount of material, well organised for the use of contemporary economists and historians of economic thought. In what follows, we shall suggest some examples of possible uses for this material.

4. Tentative suggestions for readers of Keynes's Collected Writings

Obviously, the first possibility for readers of the *Collected Writings* is to consume them sequentially and in full. This would be a tribute both to Keynes and to the general editors of this weighty editorial enterprise, Donald Moggridge and Austin Robinson. However, this is possible only for the few who have selected Keynes as the topic for their life-long research work. But there are many intermediate possibilities between a full reading of the many volumes and leaving them on the library shelves, possibly with some occasional perusal in search of some witty sentence to be utilised out of context as an ennobling quote. Let us consider briefly some of these possibilities.

First, there is the issue of Keynes the man: his education, his views of the world, his life philosophy. In this case, together with a few selected pages from the *Essays in Persuasion* (vol. 9: mainly the four political essays, in particular "Am I a Liberal?" and the two essays on the future) and most of the *Social, Political and Literary Writings* (vol. 28), the interested reader should take advantage of the main biographies: not so much the one by Harrod, too worried about presenting a polished picture of Keynes, as the magnificent three volumes by Skidelsky (1983; 1992; 2000) as well as the very useful, shorter, but by no means short contribution by Moggridge (1992). Skidelsky has also produced a much smaller book (Skidelsky, 2010), which could prove precious for the reader desiring to get a flavour of Keynes the man before embarking on a journey into his economics.

Second, there is the issue of Keynes's method. Here, *A Treatise on Probability* (volume 8) is unavoidable reading. Though this might raise a smile, I would advise accompanying this with the biographical essays on Newton and Ramsey (included in volume 10) and with some pages from

Keynes's and Sraffa's editorial introduction to *An Abstract of a Treatise on Human Nature* (from volume 28). Material from volume 14 can also be useful. Perusal of the index in volume 30 might provide a lot of other suggested readings. Then, the hypotheses developed on this basis should be tested on the *General Theory* (volume 7) and perhaps on some applied policy issue.

Third, there is the main issue of Keynes's theory considered in its final formulation. Strange as it may appear, here too I would advise to start with *A Treatise on Probability*, before going on directly to *The General Theory* and to volumes 14 and 29. Quite obviously, much insight can be gained from an appreciation of the road followed by Keynes before arriving at the *General Theory*; hence, in particular, the importance of the *Treatise on Money* and volume 13.

Keynes's role in politics, and his views on applied policy issues, can offer many different selections of readings. His role in, and his opposition to, the Versailles peace treaty involve, of course, volumes 2 (*The Economic Consequences of the Peace*, which is also most entertaining reading, a masterwork of English literature) and 3 (*A Revision of the Treaty*), together with the accompanying volumes of *Activities* (vols. 16 and 17). At the other extreme of an intense life, there is Bretton Woods (volumes 26 and 27).

As editor of *The Economic Journal*, Keynes played an important role in shaping British economic thought and British academic life (for this, see in particular volume 11); as chairman of *The New Statesman* and in many other ways he influenced English culture in general (on this, a starting point – but no more than that – might be his long correspondence with Kingsley Martin; Skidelsky's biography on his relations with the Bloomsbury group – Lytton Strachey and Virginia Woolf in particular – is also essential reading). Keynes himself can be considered an important representative of English literature: at least some of his biographical essays, for instance, can be compared to those by his friend Lytton Strachey, a master of this form, sharing as they do an extraordinary ability to illuminate the character of a person or a time with a few wellchosen words. As we can see, there are many keys for approaching the vast mass of material contained in the *Collected Writings*; those indicated above are but a few most obvious examples, and other keys may be easily imagined. In the next section I shall try to briefly outline my own reading.

5. A few words on Keynes's thought

If we look at the *Collected Writings* as a whole, two aspects emerge: the breadth of Keynes's interests, both in general and as a professional economist, and the amount of time and energy he devoted to applied economic policy.

Both aspects speak to his general view of the world, which is clearly, though implicitly, conceived as too complex by far to allow for a unifying theoretical representation, but also possessing relations between its different elements that are too strong to be left to one side when focusing the analysis on any specific issue. This explains the centrality of his notion of uncertainty and the adoption of the Marshallian method of short chains of reasoning.⁹ It is also clear that, in these conditions, theory cannot pretend to reach general and definitive results with absolute validity independent from the context of theorising: logic and applied knowledge must be accompanied by the art (a term Keynes explicitly used in this context) of choosing the most appropriate assumptions for theoretical analysis and in each case the most appropriate theoretical models for use in the particular historical context and considering the specific policy issue to be tackled.¹⁰ Our problem is to intervene in the

⁹ The Marshallian method of short chains of reasoning is obviously declined in different ways by Marshall and Keynes. The first of the two utilised it to oppose the Walrasian general equilibrium approach and to support as an alternative to it the analysis of partial equilibriums. Keynes, well aware of the Sraffian criticisms to the partial equilibrium approach (it was Keynes who invited Sraffa to publish in *The Economic Journal* his views already developed in a long article in Italian, see Sraffa, 1925; 1926), aimed at a 'general' analysis, as stated in the very title of his magnum opus, utilising simplifying assumptions for focusing on a specific issue, namely a specific limited set of causal connections.

 $^{^{10}}$ The idea of economics as a social science, conditioned by historical developments, and the related idea of its use in applied policy as an art, are part of the British (Adam Smith – John Stuart Mill – Alfred Marshall) tradition.

real world and theoretical models are but a tool for this purpose, not a purpose in themselves – though the tool must have its own validity, satisfying the requirements of internal consistency as well as of the reasonableness of the simplifying assumptions, and cannot be chosen at will looking only to its policy usefulness.

This attitude is the result of in-depth reflection, as it would appear from A Treatise on Probability. Keynes considers as limited the applicability to the real world of the results which can be obtained from abstract a priori reasoning, such as classical probability theory which deals with 'pure' situations such as the throwing of a perfect dice; and, following a path opened by Hume, considers as dangerous the reliance on empirical knowledge concerning the previous history of any specific phenomenon predicated by the frequentist approach (which implies his lack of confidence in the then newly born science of econometrics: see his discussion with Tinbergen in volume 14, pp. 285-297). At the same time, he rejects the idea of a purely subjective approach such as the one developed by his friend Frank Ramsey (1931) and by de Finetti (1930; 1931), which focuses solely on the internal consistency of each individual agent's evaluation of the probability of the different events occurring. What Keynes has in mind is the need to search for some 'objective' foundation for each agent's views: foundations which will never be complete and absolutely reliable but which are in any case the result of enquiries and analyses on the part of the agent. The 'degree of confidence', which is associated with the - numerical or qualitative evaluation of probability, reflects this aspect, and is a sort of measure of the amount of 'objective' knowledge available. What Keynes stresses here is not so much the existence of 'objective' foundations external to human agents but rather the fact that each agent has acquired a certain amount of knowledge, specific to her or himself, which not only is incomplete but may also include errors, but which nonetheless is the necessary ground for the decision making process, so that each agent needs to try and acquire knowledge in a 'serious' way, in particular trying not to be influenced by prejudices and personal preferences.

These aspects are necessary for an understanding of Keynes's theoretical contributions to the fields of money and employment, as well

as certain aspects of his policy stance, for instance on the reconstruction of international institutions after the Second World War.

Money is not solely a standard of measure and a means of payment; it is also a store of value. But it is a store of value different from any other possible one (gold, houses, paintings and so on) because of the institutional role it has acquired over time, so that its 'liquidity premium' – namely, the *ceteris paribus* preference for holding it relatively to any other asset expressed as a percentage of the amount held – is higher than for any other asset. It is uncertainty that determines the size of such a liquidity premium. For instance, even a long period of stability in the housing market does not provide a full guarantee that in the case of necessity we may be able to sell a flat quickly and at the expected price; obviously uncertainty is greater in a period of volatile housing markets; laws and customs also play a relevant role in this context.

As for the theory of employment, Keynes's aim is to establish that there is no automatic tendency to full employment in a market economy, even when there is downward flexibility of money and real wages. More generally, what Keynes maintains is both that capitalism (the 'monetary production' economy) is unstable, and that under-employment equilibriums may be persistent positions for the economy. The point is made by considering the way in which entrepreneurs take their decisions on production (hence employment) and -separately - on investment levels. In both cases, expectations over an uncertain future play an important role. Hence, any adjustment process imagined by traditional marginalist theory is vitiated by the fact that it does not keep into account the role of (changing) expectations: if money wages fall, this is a signal for expecting increases in money prices more than a fall in real wages; and even if real wages fall, the influence this may have on the capital to labour ratio in new investments is dominated by the fall in investments, hence in aggregate demand, which takes place due to the worsening of entrepreneurs' expectations engendered by the very same fall in real wages.

The reason for keeping distinct the two kinds of decisions, ones concerning production levels and others on longer-term investments, is precisely that the kind of uncertainty involved is qualitatively different, since production decisions involve evaluating expectations of proceeds and costs over a short period of time, while investment decisions involve evaluating them over the whole time span of the investment. By their nature, these latter expectations are much more uncertain, so they are also much more volatile in the face of new information, which is continuously acquired. Investments are thus much more unstable than production levels. This explains the analytical structure of the *General Theory*, in which investments are taken as exogenous while attention is focused on the circular flow of production and consumption.

It is clear that in this context one of the main aims of policy intervention, even more than that of supporting aggregate demand, is that of reducing uncertainty and stabilising expectations. This is mainly realised through an adequate institutional and regulatory framework, such as the one designed by Keynes for the international post-war economy. And, with reference to what is nowadays a crucial point in confronting the present crisis, this explains why Keynes was opposed to the financialization of the economy (as is evident from his comments in chapter 12 of the General Theory on the stock exchange as a beauty contest): since we do not live in a world in which financial markets can be efficient (in a Fama, 1970, sense), financialisation increases macroeconomic instability and hence the amount of 'structural' uncertainty in the economy, with depressive effects on investments diverting entrepreneurs' attention away from crucial investment and technological decisions and towards the prospects of immediate financial (speculative) gains.

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