

Understanding 'Classical' Economics

Studies in long-period theory

Edited by

Heinz D. Kurz and Neri Salvadori

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UNDERSTANDING 'CLASSICAL' ECONOMICS

An introduction

Ludwig Wittgenstein once remarked, 'The classifications made by philosophers and psychologists are as if one were to try to classify clouds by their shape.' We do not pretend, of course, to know whether this is a fair assessment of the situation in the disciplines mentioned. We rather ask whether it would be true if it were applied to economics. More particularly, we ask whether classifying economic ideas in distinct analytical approaches to certain economic problems and even in different schools of economic thought is a futile enterprise. The title of this book implies that we think that it is not. We are especially convinced that there is a thing that may, for good reasons, be called 'classical' economics, which is distinct from other kinds of economics, in particular 'neoclassical' economics.

This view could immediately be challenged in terms of the indisputable heterogeneity and multi-layeredness of the writings of authors in the two groups. Moreover, whilst with regard to some aspects an author might be classified in one group, with regard to some other aspects he or she might be classified in the other group. Therefore, it should be made clear from the outset that we are not so much concerned with elaborating a classification of authors, which in some cases would be an extremely difficult, if not impossible, task. We are concerned rather with classifying various analytical approaches to dealing with certain economic problems, especially the problem of relative prices and income distribution. What we have in mind is a particular rational reconstruction of 'classical' economics which, in our view, is useful both for an understanding of certain important arguments found in several classical authors and for the development of these arguments. Our interest in these approaches is thus not purely and not even predominantly historical; we consider them rather as containing the key to a better explanation of important economic phenomena. Our concern with classical economics is therefore first and foremost a concern with its analytical potentialities which in our view have not yet been fully explored. If we were of the opinion that they had already been exhausted our interest in classical economics would be moderate. Hence an important element of

'understanding' classical economics, as we conceive it, consists of developing and using its explanatory power.

In this chapter an attempt will be made to specify what we mean by classical economics and to show that it is not an evanescent concept. We begin, in the next section (pp. 3–6), with a brief discussion of the complexity of most economic problems and of economic theory as an attempt to come to grips with that complexity. This leads us to the identification of a first characteristic feature of classical economics: its *long-period* method. As we shall see in the following section (pp. 6–7), a version of this method was also shared by all major marginalist authors until the late 1920s. However, the similarity of the methods adopted by two theories must not be mistaken for a similarity in the content of the theories. This aspect is dealt with in the subsequent two sections. The first (pp. 7–9) turns to the scope and content of traditional classical economics, whereas the second (pp. 9–13) is devoted to traditional neoclassical economics. The emphasis is on the sets of data, or independent variables, on the basis of which these theories attempt to explain the respective unknowns, or dependent variables, under consideration. It will be seen that in this regard classical economics differs markedly from neoclassical economics, the main difference being the way in which income distribution is determined. These two sections also raise the question of whether the sets of data contemplated by the theories are compatible with the long-period method or whether there exist tensions and contradictions between the method and content of a theory. It is argued that, whilst traditional classical theory can be formulated in a consistent way, traditional neoclassical theory faces insurmountable difficulties in this regard. The latter come to the fore in the shape of inconsistencies that undermine the logical foundation of the approach to the problem of income distribution in terms of the demand for and the supply of the factors of production collaborating in the generation of the social product, when there are produced means of production, i.e. 'capital', among these factors. The following section (p. 14) turns to the attempts of neoclassical authors from the late 1920s onwards to remedy this defect and at the same time render the theory more 'realistic', and indeed 'dynamic', in terms of models of temporary and intertemporal equilibria. It can be argued, however, that these alternatives are beset by a number of methodological difficulties and do not escape the problem of capital, the stumbling block of earlier, i.e. long-period, neoclassical theory. The final section deals with some more recent attempts to come to grips with economic change; some approaches belonging to the classical and some approaches belonging to the neoclassical tradition will be summarized. It is shown that long-period reasoning is flourishing in contemporary economics and that there is no reason to believe that it will be abandoned soon.

ECONOMIC SYSTEMS IN MOTION AND THE LONG- PERIOD METHOD IN THE CLASSICAL AUTHORS

As is well known, the concern of the classical economists from Adam Smith to David Ricardo was the laws governing the emerging capitalist economy, characterized by wage labour, an increasingly sophisticated division of labour, the co-ordination of economic activity via a system of interdependent markets in which transactions are mediated through money, and rapid technical, organizational and institutional change. In short, they were concerned with an economic system in motion. The attention focused on the factors affecting the pace at which capital accumulates and the economy expands and how the growing social product is shared out between the different classes of society: workers, capitalists and landowners.

How to analyse such a highly complex system characterized by a dense network of interdependences and feedbacks, *vis-à-vis* which the observer might easily get lost in a myriad of facts and considerations, failing to see the wood for the trees? The ingenious device of the classical authors to see through these complexities and intricacies consisted of distinguishing between the *market* or *actual* values of the relevant variables, in particular the prices of commodities and the rates of remuneration of primary inputs (labour and land), on the one hand, and *natural* or *normal* values on the other. The former were taken to reflect all kinds of influences, many of an accidental and temporary nature, whereas the latter were conceived of as expressing the persistent, non-accidental and non-temporary forces governing the economic system. The classical authors did not consider the 'normal' values of the variables as purely ideal or theoretical; they saw them rather as 'centres of gravitation', or 'attractors', of actual or market values. This assumed gravitation of market values towards their natural levels was seen to be the result of the self-seeking behaviour of agents and especially of the profit-seeking actions of producers. In conditions of *free competition*, that is, the absence of significant and lasting barriers to entry in and exit from all markets – the case with which the classical authors were primarily concerned – profit seeking involves *cost minimization*. This was well understood by the authors under consideration, hence their attention focused on what may be called *cost-minimizing systems of production*.

The method of analysis adopted by the classical economists is known as the *long-period method* or the method of *long-period positions* of the economy. Any such position is nothing but the situation towards which the system is taken to gravitate, given the fundamental forces at work in the particular situation under consideration. A discussion of how the classical economists conceptualized these forces, or determining factors, is deferred to a later section. Here it deserves to be mentioned that in conditions of free competition the resulting long-period position is characterized by a

uniform rate of profits (subject perhaps to persistent inter-industry differentials), *uniform rates of remuneration* for each particular kind of primary input in the production process (such as different kinds of labour and natural resources); and prices that are assumed not to change between the beginning of the uniform period of production and its end, that is, *static prices*. Such a situation is to be understood as reflecting the salient features of a competitive capitalist economy in an ideal way: it expresses the pure logic of the relationship between relative prices and income distribution in such an economic system. The prices are taken to fulfil the condition of *reproduction*: they allow producers to just cover costs of production at the normal levels of the distributive variables, including profits at the ordinary rate. These prices have aptly been called also *prices of production* (Torrens, Ricardo). We might also talk of 'prices of reproduction'.

A frequent misunderstanding of the notion of the long-period position should be mentioned. According to it the classical economists' view was 'static': they dealt with a given and immutable economic world and were able to say nothing useful either about how that world had come into being or about how it would develop. In short, they are said to have been concerned exclusively with analysing a *given* system of production, turning a blind eye both to the question of the genesis of that system and the path it would take in the future. In this view classical economics is static, not dynamic. Such an interpretation overlooks, first, a very special property the classical economists attributed to a long-period position, i.e. that the actual system *gravitates* around such a position. This is a property which is most certainly obtained on the assumption that the dynamic process of the actual system converges to the long-period position at a speed that is sufficiently large compared with the rate at which technological change tends to upset any such position. However, the classical economists did not ask for *convergence* of the actual system to the long-period position. They were indeed less demanding: in their view gravitation means market values of prices and the distributive variables never moving 'too far away' from natural levels. Second, the classical economists were not concerned only with studying the properties of a given system of production. They were also interested in which system would emerge as a result of the choices of profit-seeking entrepreneurs from a set of technical alternatives at their disposal, where this set was taken to reflect the technological knowledge available at a given time and place. For example, with new methods of production becoming available alongside the growth in technological knowledge, the economic system was envisaged as gravitating towards a new long-period position, characterized by a new set of relative prices and new levels of the distributive variables. That is, it was assumed that the new long-period position would make itself felt immediately: the short-run

adjustment processes triggered would propel the economy towards that position.

Analysing economic change and development in these terms involves, as indicated, a short cut. The adjustment process to any such position is simply taken for granted. This is perhaps expressed too strongly, because the classical economists put forward an argument in support of the supposed gravitation of market values to their natural levels. The discussion of this problem in Smith and the authors following him is based on essentially two propositions. First, the market price of a commodity depends on the difference between current supply and 'effectual demand' for that commodity, where the latter is defined as 'the demand of those who are willing to pay the natural price of the commodity' (Smith, *WN* I.vii.8). If the difference is positive, negative, or zero, the market price is taken to be lower, higher, or equal to the natural price. A positive (negative) deviation of the market price from the natural price is reflected in a deviation of the actual levels of the distributive variables from their normal levels and especially in a positive (negative) deviation of actual profits obtained in the industry from normal profits. Second, this latter deviation provides an incentive to profit-seeking producers to reallocate their capital. Profit rate differentials trigger movements of capital (and labour) and, as a consequence, adjustments in the composition of production: the output of a commodity increases (decreases) if the market price is above (below) the natural price. These movements tend to annihilate the deviations and (re)establish a uniform rate of return on the capital invested in the various industries of the economy. Accordingly, in a long-period position actual outputs equal 'effectual demands' and actual prices are at their normal levels.

The above argument in support of the assumed gravitation process cannot, of course, replace a proper dynamic theory, not least because there are particular difficulties the earlier authors were not aware of. For example, it cannot be presumed that a positive (negative) difference between market and natural price is equivalent to an above (below) normal rate of profit, since the positive (negative) difference between the respective prices of the inputs entering into the production of the commodity under consideration may be even larger (cf. Steedman 1984). The question at issue is whether such a possibility does not prevent the ultimate tendency of the market price to gravitate towards the natural level, by causing the output of the commodity to decrease, thereby raising the market price even more.¹

Ever since the advent of systematic economic analysis in the seventeenth and eighteenth centuries economists have aspired to elaborate a proper dynamic theory, and many ingenious and hard-working people have made great efforts in this regard. However, given the complexity of the object of their analyses – a socio-economic system incessantly in travail – they

realized that the long-period method was the best they had. The latter indeed quickly proved to be a powerful tool in studying certain properties of complex interdependent systems, that is, systems which would be extremely difficult to model and analyse in a dynamic framework even with the advanced tools of modern mathematical economics. Moreover, the classicals themselves occasionally ventured probing steps in the direction of such a dynamic analysis. Think, for example, of David Ricardo's discussion of the introduction and diffusion of improved machinery in the additional chapter 'On machinery' in the third edition of his *Principles*, published in 1821. However, a general dynamic analysis of the highly complex system under consideration was regarded as impossible at the time. The analytical tools available did not allow of such a dynamic theory, paying due attention to all relevant interdependences. The long-period method was seen as the best available in order to come to grips, however imperfectly, with an ever-changing world characterized by on-going technical progress, the depletion of natural resources, a changing distribution of income, etc. Long-period analysis was devised precisely to overcome the *impasse* in which the social scientist found himself, confronted with a reality which, at first sight, looked impenetrable, made up of a myriad of relationships between people and natural objects. The long-period method introduced some transparency to the complex object of study and allowed the theorist to derive a large number of interesting insights into the functioning (and the sources of malfunction) of the economic system. Because of its fecundity the long-period method was almost universally adopted in political economy until the 1930s.

This does not mean that there was no interest among economists in short-run problems; there was, of course. However, the important point is that the short-period analyses elaborated by the majority of authors dealing with such problems had – as their backbone, so to speak – fully specified long-period theories. In other words, the long-period theory was considered the core of economic analysis, from which there derived several short-period analyses designed to tackle special problems of a short-run nature, such as the implications of a capital stock not fully adjusted to the other data of the system or a sudden increase of the quantity of money in circulation.

THE ADOPTION OF THE LONG-PERIOD METHOD IN TRADITIONAL NEOCLASSICAL THEORY

The appeal exerted by the long-period method can be inferred from the fact that all early major marginalist authors, including William Stanley Jevons, Léon Walras, Eugen von Böhm-Bawerk, Alfred Marshall, Knut Wicksell and John Bates Clark, fundamentally adopted it. Like the classical economists and Marx they were concerned with explaining the normal rate of profits and normal prices: the concept of long-period 'equilibrium' is the

neoclassical adaptation of the classical concept of normal positions. For example, in Marshall's *Principles of Economics* it is stated:

The actual value at any time, the market value as it is often called, is often more influenced by passing events, and by causes whose action is fitful and short-lived, than by those which work persistently. But in long periods these fitful and irregular causes in large measure efface one another's influence so that in the long run persistent causes dominate value completely.

(Marshall [1890] 1977: 291)

And Böhm-Bawerk, agreeing with the classical authors, suggested that the investigation of the permanent effects of changes in what are considered the dominant forces shaping the economy should be carried out by means of comparisons between long-period equilibria. Such comparisons are taken to express the 'principal movement' entailed by a variation in the basic data of the economic system (cf. Böhm-Bawerk [1889] 1959 II: 380). This view was shared by Ludwig von Mises, one of the most radical subjectivists of the Austrian school of economic thought, who advocated the long-period method, or, as he preferred to call it, the 'static method', in the following terms:

One must not commit the error of believing that the static method can be used only to explain the stationary state of an economy, which, by the way, does not and never can exist in real life; and that the moving and changing economy can be dealt with only in terms of a dynamic theory. *The static method is a method which is aimed at studying changes*; it is designed to investigate the consequences of a change in *one* datum in an otherwise unchanged system. This is a procedure which we cannot dispense with.

(von Mises, 1933: 117; emphasis added)

However, the adoption of the long-period method was not, of itself, prejudicial as to the *content* of the theory. In order to see this we have to turn to the forces which the classical approach on the one hand and the traditional neoclassical approach on the other conceptualized in order to determine normal income distribution and the corresponding system of relative prices. The emphasis is on the respective sets of data, or independent variables, from which the two types of theory start. We begin with a brief discussion of the classical approach.

THE TRADITIONAL CLASSICAL APPROACH

It is a first characteristic feature of the classical economists' approach to the problem of value and distribution that the data contemplated all refer to magnitudes that can, in principle, be observed, measured or calculated.

This point of view, which may be called 'objectivist' or 'naturalistic', is present, for example, in William Petty's *Political Arithmetick*, in François Quesnay's *Tableau économique* and in the writings of Adam Smith and David Ricardo.² These authors refrained from having recourse to any non-observable, non-measurable or non-calculable magnitudes, or metaphysical concepts, in determining the general rate of profits and relative prices.³

Second, the many differences between different authors notwithstanding, the contributions to the theory of value and distribution of 'classical' derivation typically start from the same set of data. In general, the data concern:

- (i) The set of technical alternatives from which cost-minimizing producers can choose.
- (ii) The size and composition of the social product, reflecting the needs and wants of the members of the different classes of society and the requirements of reproduction and capital accumulation.
- (iii) The ruling real wage rate(s) (or, alternatively, the rate of profits).
- (iv) The quantities of different qualities of land available and the known stocks of depletable resources, such as mineral deposits.

The treatment of wages (or alternatively, in some theories, the rate of profits) as an independent variable and of the other distributive variables, the rate of profits (the wage rate) in particular, as dependent residuals exhibits a fundamental *asymmetry* in the classical approach to the theory of value and distribution. In correspondence with the underlying long-period competitive position of the economy the capital stock is assumed to be fully adjusted to these data, especially to the given levels of output. Hence the 'normal' desired pattern of utilization of plant and equipment would be realized and a uniform rate of return on its supply price obtained. Prices of production are considered the means of distributing the social surplus in the form of profits between different sectors of the economy and hence different employments of capital and, with scarce natural resources, in the form of differential rents of land and mines.

It deserves to be emphasized that these data, or independent variables, are sufficient to determine the unknowns, or dependent variables, that is, the rate of profits (the wage rate), the rent rates, and the set of relative prices supporting the cost-minimizing system of producing the given levels of output. No other data, such as, for example, demand functions for commodities and factors of production, are needed. The classical approach allows the consistent determination of the variables under consideration: it accomplishes the task it sets itself. It does so by separating the determination of income distribution and prices from that of quantities, taken as given in (ii) above. The latter were considered as determined in another part of the theory, that is, the analysis of capital accumulation, structural change and socio-economic development.

It is frequently claimed that an integral part of classical economics is the *labour theory of value*. According to that theory relative normal prices are proportional to the quantities of labour needed directly and indirectly in the production of the various commodities. Classical economics is said to stand or fall by the correctness or otherwise of that theory. Although it is true that the labour theory of value was adopted by several classical authors, and played an important role in the course of the development of classical economics, the latter does not depend on it. Relative prices (and the dependent distributive variables) may consistently be determined on the basis of data (i)–(iv) and will only in very special cases be proportional to the relative quantities of labour 'embodied' in the different commodities. Hence, while in some earlier authors, most notably Ricardo, the labour theory of value was elaborated as a simplifying device to see through the complexities of the system under investigation, once a satisfactory and logically coherent theory of value and distribution had been developed, the labour theory of value was dispensable. From the higher standpoint of the advanced theory, the labour theory of value turned out to be untenable in general. However, the fact that it applies in some special circumstances may be taken as a sign of sound intuition on the part of authors like Ricardo who adopted it and were able with its help to derive several interesting results.⁴

The abandonment of the classical approach and the development of a fundamentally different one, which came to predominate in the wake of the so-called 'marginalist revolution' in the later nineteenth century, was motivated by the deficiencies of the received analysis. The main targets of criticism were the labour theory of value and the failure of Ricardo and his followers to develop 'a unified general theory to determine the prices of all productive services in the same way' (Walras [1874] 1954: 416). Walras contended that such a unified general theory can be elaborated by generalizing the principle of *scarcity*, which the classical economists had limited to natural resources only, to *all* factors of production, including 'capital'. Let us take a closer look at how the neoclassical authors sought to effectuate this generalization.

THE TRADITIONAL NEOCLASSICAL APPROACH

Since the new theory was to be an alternative to the classical theory, it had to be an alternative theory about the same thing, in particular the normal rate of profits and normal prices. However, the set of data in terms of which the neoclassical approach attempted to determine these variables exhibits some striking differences with respect to the classical approach. First, it introduced independent variables, that is, explanatory factors, that were not directly observable, such as agents' preferences. Second, it took as given not only the amounts of natural resources available but also the economy's

'initial endowments' of labour and 'capital'. The data from which neoclassical theory typically begins its reasoning are:

- (i) The set of technical alternatives from which cost-minimizing producers can choose.
- (ii) The preferences of consumers.
- (iii) The initial endowments of the economy with all 'factors of production', including 'capital', and the distribution of property rights among individual agents.

The basic novelty of the new theory consisted of the following. While the received classical approach conceived the real wage as determined prior to profits and rents, in the neoclassical approach all kinds of income were explained simultaneously and *symmetrically* in terms of the forces of supply and demand with regard to the services of the respective factors of production: labour, 'capital' and land. It was the seemingly coherent foundation of these notions in terms of *functional relationships* between the price of a service (or good) and the quantity supplied or demanded elaborated by the neoclassical theory that greatly contributed to the latter's rapid success in economics.

As has already been indicated, historically long-period neoclassical theory derives from a generalization of the theory of rent in terms of land of uniform quality and 'intensive' margins to all factors of production, including 'capital' (see Bharadwaj 1978). This generalization presupposes a strict analogy between land, labour and 'capital'. On this premiss the principle of scarcity rent, which the classical economists had limited to natural resources in given supply, was thought to be applicable also in explaining the incomes of labour and 'capital', that is, wages and profits. However, in order to be able to conceive of the rate of profits as some kind of index expressing the relative scarcity of a factor called 'capital', that factor had to be assumed to be available in a given 'quantity'. The degree of (relative) scarcity of the given 'quantity of capital', which was taken to be reflected in the level of the rate of profits, was then envisaged as the result of the interplay of data (i)–(iii). The smaller the overall amount of capital at the disposal of producers, other things being equal, the greater in general the relative scarcity of that factor and the higher the rate of profits, and vice versa.

As regards the conceptualization of the 'capital' endowment of the economy, the advocates of the 'marginalist revolution', with the exception of Walras (at least until the fourth edition of the *Eléments*), were aware of the following fact. Whereas different kinds of labour and land can be measured in terms of their own physical units, 'capital', conceived of as a bundle of heterogeneous produced means of production, had to be expressed in terms of a *single magnitude*, related in a known way to the *value* of capital goods, allowing 'capital' to assume the physical composi-