THE GENERAL THEORY OF EMPLOYMENT INTEREST AND MONEY

BY

JOHN MAYNARD KEYNES

FELLOW OF KING'S COLLEGE, CAMBRIDGE

Preface, Chapters 1 and 2

Written: 1935

Source: The General Theory of Employment, Interest and Money by John Maynard Keynes, Fellow of the King's College, Cambridge, published by Harcourt, Brace and Company, and printed in the U.S.A. by the Polygraphic Company of America, New York

First Published: Macmillan Cambridge University Press, for Royal Economic Society in 1936

Transcribed for M.I.A., corrected and formatted by Andy Blunden

This Edition: marxists.org 2002

Source:

http://www.marxists.org/reference/subject/economics/keynes/general-theory/

Preface

THIS book is chiefly addressed to my fellow economists. I hope that it will be intelligible to others. But its main purpose is to deal with difficult questions of theory, and only in the second place with the applications of this theory to practice. For if orthodox economics is at fault, the error is to be found not in the superstructure, which has been erected with great care for logical consistency, but in a lack of clearness and of generality in the premisses. Thus I cannot achieve my object of persuading economists to re-examine critically certain of their basic assumptions except by a highly abstract argument and also by much controversy. I wish there could have been less of the latter. But I have thought it important, not only to explain my own point of view, but also to show in what respects it departs from the prevailing theory. Those, who are strongly wedded to what I shall call “the classical theory”, will fluctuate, I expect, between a belief that I am quite wrong and a belief that I am saying nothing new. It is for others to determine if either of these or the third alternative is right. My controversial passages are aimed at providing some material for an answer; and I must ask forgiveness if, in the pursuit of sharp distinctions, my controversy is itself too keen. I myself held with conviction for many years the theories which I now attack, and I am not, I think, ignorant of their strong points.

The matters at issue are of an importance which cannot be exaggerated. But, if my explanations are right, it is my fellow economists, not the general public, whom I must first convince. At this stage of the argument the general public, though welcome at the debate, are only eavesdroppers at an attempt by an economist to bring to an issue the deep divergences of opinion between fellow economists which have for the time being almost destroyed the practical influence of economic theory, and will, until they are resolved, continue to do so.

The relation between this book and my *Treatise on Money*, which I published five years ago, is probably clearer to myself than it will be to others; and what in my own mind is a natural evolution in a line of thought which I have been pursuing for several years, may sometimes strike the reader as a confusing change of view. This difficulty is not made less by certain changes in terminology which I have felt compelled to make. These changes of language I have pointed out in the course of the following pages; but the general relationship between the two books can be expressed briefly as follows. When I began to write my *Treatise on Money* I was still moving along the traditional lines of regarding the influence of money as something so to speak separate from the general theory of supply and demand. When I finished it, I had made some progress towards pushing monetary theory back to becoming a theory of output as a whole. But my lack of emancipation from preconceived ideas showed itself in what now seems to me to be the outstanding fault of the theoretical parts of that work (namely, Books III and IV), that I failed to deal thoroughly with the effects of *changes* in the level of output. My so-called “fundamental equations” were an instantaneous picture taken on the assumption of a given output. They attempted to show how, assuming the given output, forces could develop which involved a profit-disequilibrium, and thus required a change in the level of output. But the dynamic development, as distinct from the instantaneous picture, was left incomplete and extremely confused. This book, on the other hand, has evolved into what is primarily a study of the forces which determine changes in the scale of output and employment as a whole; and, whilst it is found that money enters into the economic scheme in an essential and peculiar manner, technical monetary detail falls into the background. A monetary economy, we shall find, is essentially one in which changing views about the future are capable of influencing the quantity of employment and not merely its direction. But our method of analysing the economic behaviour of the present under the influence of changing ideas about the future is one which depends on the interaction of supply and demand, and is in this way linked up with our fundamental theory of value. We are thus led to a more general theory, which includes the classical theory with which we are familiar, as a special case.

The writer of a book such as this, treading along unfamiliar paths, is extremely dependent on criticism and conversation if he is to avoid an undue proportion of mistakes. It is astonishing what foolish things one can temporarily believe if one thinks too long alone, particularly in economics (along with the other moral sciences), where it is often impossible to bring one's ideas to a conclusive test either formal or experimental. In this book, even more perhaps than in writing my *Treatise on Money*, I have depended on the constant advice and constructive criticism of Mr. R. F. Kahn. There is a great deal in this book which would not have taken the shape it has except at his suggestion. I have also had much help from Mrs. Joan Robinson, Mr. R. G. Hawtrey and Mr. R. F. Harrod, who have read the whole of the proof-sheets. The index has been compiled by Mr. D. M. Bensusan-Butt of King's College, Cambridge.

The composition of this book has been for the author a long struggle of escape, and so must the reading of it be for most readers if the author's assault upon them is to be successful,— a struggle of escape from habitual modes of thought and expression. The ideas which are here expressed so laboriously are extremely simple and should be obvious. The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds.

J. M. Keynes

December 13, 1935

Chapter 1
The General Theory

I HAVE called this book the *General Theory of Employment, Interest and Money*, placing the emphasis on the prefix *general.* The object of such a title is to contrast the character of my arguments and conclusions with those of the *classical*[1] theory of the subject, upon which I was brought up and which dominates the economic thought, both practical and theoretical, of the governing and academic classes of this generation, as it has for a hundred years past. I shall argue that the postulates of the classical theory are applicable to a special case only and not to the general case, the situation which it assumes being a limiting point of the possible positions of equilibrium. Moreover, the characteristics of the special case assumed by the classical theory happen not to be those of the economic society which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience.

Author’s Footnotes

1. “The classical economists” was a name invented by Marx to cover Ricardo and James Mill and their *predecessors,* that is to say for the founders of the theory which culminated in the Ricardian economics. I have become accustomed, perhaps perpetrating a solecism, to include in “the classical school” the *followers* of Ricardo, those, that is to say, who adopted and perfected the theory of the Ricardian economics, including (for example) J. S. Mill, Marshall, Edgeworth and Prof. Pigou.

Chapter 2
The Postulates of the Classical Economics

MOST treatises on the theory of value and production are primarily concerned with the distribution of a *given* volume of employed resources between different uses and with the conditions which, assuming the employment of this quantity of resources, determine their relative rewards and the relative values of their products.[1]

The question, also, of the volume of the *available* resources, in the sense of the size of the employable population, the extent of natural wealth and the accumulated capital equipment, has often been treated descriptively. But the pure theory of what determines *the actual employment* of the available resources has seldom been examined in great detail. To say that it has not been examined at all would, of course, be absurd. For every discussion concerning fluctuations of employment, of which there have been many, has been concerned with it. I mean, not that the topic has been overlooked, but that the fundamental theory underlying it has been deemed so simple and obvious that it has received, at the most, a bare mention.[2]

I

The classical theory of employment — supposedly simple and obvious — has been based. I think, on two fundamental postulates, though practically without discussion, namely:

i. The wage is equal to the marginal product of labour

That is to say, the wage of an employed person is equal to the value which would be lost if employment were to be reduced by one unit (after deducting any other costs which this reduction of output would avoid); subject, however, to the qualification that the equality may be disturbed, in accordance with certain principles, if competition and markets are imperfect.

ii. The utility of the wage when a given volume of labour is employed is equal to the marginal disutility of that amount of employment.

That is to say, the real wage of an employed person is that which is just sufficient (in the estimation of the employed persons themselves) to induce the volume of labour actually employed to be forthcoming; subject to the qualification that the equality for each individual unit of labour may be disturbed by combination between employable units analogous to the imperfections of competition which qualify the first postulate. Disutility must be here understood to cover every kind of reason which might lead a man, or a body of men, to withhold their labour rather than accept a wage which had to them a utility below a certain minimum.

This postulate is compatible with what may be called 'frictional' unemployment. For a realistic interpretation of it legitimately allows for various inexactnesses of adjustment which stand in the way of continuous full employment: for example, unemployment due to a temporary want of balance between the relative quantities of specialised resources as a result of miscalculation or intermittent demand; or to time-lags consequent on unforeseen changes; or to the fact that the change-over from one employment to another cannot be effected without a certain delay, so that there will always exist in a non-static society a proportion of resources unemployed 'between jobs'. In addition to 'frictional' unemployment, the postulate is also compatible with 'voluntary' unemployment due to the refusal or inability of a unit of labour, as a result of legislation or social practices or of combination for collective bargaining or of slow response to change or of mere human obstinacy, to accept a reward corresponding to the value of the product attributable to its marginal productivity. But these two categories of 'frictional' unemployment and 'voluntary' unemployment are comprehensive. The classical postulates do not admit of the possibility of the third category, which I shall define below as 'involuntary' unemployment.

Subject to these qualifications, the volume of employed resources is duly determined, according to the classical theory, by the two postulates. The first gives us the demand schedule for employment, the second gives us the supply schedule; and the amount of employment is fixed at the point where the utility of the marginal product balances the disutility of the marginal employment.

It would follow from this that there are only four possible means of increasing employment:

(*a*) An improvement in organisation or in foresight which diminishes 'frictional' unemployment;

(*b*) a decrease in the marginal disutility of labour, as expressed by the real wage for which. additional labour is available, so as to diminish 'voluntary' unemployment;

(*c*) an increase in the marginal physical productivity of labour in the wage-goods industries (to use Professor Pigou's convenient term for goods upon the price of which the utility of the money-wage depends);

(*d*) an increase in the price of non-wage-goods compared with, the price of wage-goods, associated with a shift in the expenditure of non-wage-earners from wage-goods to non-wage-goods.

This, to the best of my understanding, is the stance of Professor Pigou's *Theory of Unemployment* — the only detailed account of the classical theory of employment which exists.[3]

II

Is it true that the above categories are comprehensive in view of the fact that the population generally is seldom doing as much work as it would like to do on the basis of the current wage? For, admittedly, more labour would, as a rule, be forthcoming at the existing money-wage if it were demanded.[4] The classical school reconcile this phenomenon with their second postulate by arguing that, while the demand for labour at the existing money-wage may be satisfied before everyone willing to work at this wage is employed, this situation is due to an open or tacit agreement amongst workers not to work for less, and that if labour as a whole would agree to a reduction of money-wages more employment would be forthcoming. If this is the case, such unemployment, though apparently involuntary, is not strictly so, and ought to be included under the above category of 'voluntary' unemployment due to the effects of collective bargaining, etc.

This calls for two observations, the first of which relates to the actual attitude of workers towards real wages and money-wages respectively and is not theoretically fundamental, but the second of which is fundamental.

Let us assume, for the moment, that labour is not prepared to work for a lower money-wage and that a reduction in the existing level of money-wages would lead, through strikes or otherwise, to a withdrawal from the labour market of labour which is now employed. Does it follow from this that the existing level of real wages accurately measures the marginal disutility of labour? Not necessarily. For, although a reduction in the existing money-wage would lead to a withdrawal of labour, it does not follow that a fall in the value of the existing money-wage in terms of wage-goods would do so, if it were due to a rise in the price of the latter. In other words, it may be the case that within a certain range the demand of labour is for a minimum money-wage and not for a minimum real wage. The classical school have tacitly assumed that this would involve no significant change in their theory. But this is not so. For if the supply of labour is not a function of real wages as its sole variable, their argument breaks down entirely and leaves the question of what the actual employment will be quite indeterminate.[5] They do not seem to have realised that, unless the supply of labour is a function of real wages alone, their supply curve for labour will shift bodily with every movement of prices. Thus their method is tied up with their very special assumptions, and cannot be adapted to deal with the more general case.

Now ordinary experience tells us, beyond doubt, that a situation where labour stipulates (within limits) for a money-wage rather than a real wage, so far from being a mere possibility, is the normal case. Whilst workers will usually resist a reduction of money-wages, it is not their practice to withdraw their labour whenever there is a rise in the price of wage-goods. It is sometimes said that it would be illogical for labour to resist a reduction of money-wages but not to resist a reduction of real wages. For reasons given below (section III), this might not be so illogical as it appears at first; and, as we shall see later, fortunately so. But, whether logical or illogical, experience shows that this is how labour in fact behaves.

Moreover, the contention that the unemployment which characterises a depression is due to a refusal by labour to accept a reduction of money-wages is not clearly supported by the facts. It is not very plausible to assert that unemployment in the United States in 1932 was due either to labour obstinately refusing to accept a reduction of money-wages or to its obstinately demanding a real wage beyond what the productivity of the economic machine was capable of furnishing wide variations are experienced in the volume of employment without any apparent change either in the minimum real demands of labour or in its productivity. Labour is not more truculent in the depression than in the boom — far from it. Nor is its physical productivity less. These facts from experience are a *prima facie* ground for questioning the adequacy of the classical analysis.

It would be interesting to see the results of a statistical enquiry into the actual relationship between changes in money-wages and changes in real wages. In the case of a change peculiar to a particular industry one would expect the change in real wages to be in the same direction as the change in money-wages. But in the case of changes in the general level of wages, it will be found, I think, that the change in real wages associated with a change in money-wages, so far from being usually in the same direction, is almost always in the opposite direction. When money-wages are rising, that is to say, it will be found that real wages are falling; and when money-wages are falling, real wages are rising. This is because, in the short period, falling money-wages and rising real wages are each, for independent reasons, likely to accompany decreasing employment; labour being readier to accept wage-cuts when employment is falling off, yet real wages inevitably rising in the same circumstances on account of the increasing marginal return to a given capital equipment when output is diminished.

If, indeed, it were true that the existing real wage is a minimum below which more labour than is now employed will not be forthcoming in any circumstances, involuntary unemployment, apart from frictional unemployment, would be non-existent. But to suppose that this is invariably the case would be absurd. For more labour than is at present employed is usually available at the existing money-wage, even though the price of wage-goods is rising and, consequently, the real wage falling. If this is true, the wage-goods equivalent of the existing money-wage is not an accurate indication of the marginal disutility of labour, and the second postulate does not hold good.

But there is a more fundamental objection. The second postulate flows from the idea that the real wages of labour depend on the wage bargains which labour makes with the entrepreneurs. It is admitted, of course, that the bargains are actually made in terms of money, and even that the real wages acceptable to labour are not altogether independent of what the corresponding money-wage happens to be. Nevertheless it is the money-wage thus arrived at which is held to determine the real wage. Thus the classical theory assumes that it is always open to labour to reduce its real wage by accepting a reduction in its money-wage. The postulate that there is a tendency for the real wage to come to equality with the marginal disutility of labour clearly presumes that labour itself is in a position to decide the real wage for which it works, though not the quantity of employment forthcoming at this wage.

The traditional theory maintains, in short, *that the wage bargains between the entrepreneurs and the workers determine the real wage;* so that, assuming free competition amongst employers and no restrictive combination amongst workers, the latter can, if they wish, bring their real wages into conformity with the marginal disutility of the amount of employment offered by the employers at that wage. If this is not true, then there is no longer any reason to expect a tendency towards equality between the real wage and the marginal disutility of labour.

The classical conclusions are intended, it must be remembered, to apply to the whole body of labour and do not mean merely that a single individual can get employment by accepting a cut in money-wages which his fellows refuse. They are supposed to be equally applicable to a closed system as to an open system, and are not dependent on the characteristics of an open system or on the effects of a reduction of money-wages in a single country on its foreign trade, which lie, of course, entirely outside the field of this discussion. Nor are they based on indirect effects due to a lower wages-bill in terms of money having certain reactions on the banking system and the state of credit, effects which we shall examine in detail in Chapter 19. They are based on the belief that in a closed system a reduction in the general level of money-wages will be accompanied, at any rate in the short period and subject only to minor qualifications, by some, though not always a proportionate, reduction in real wages.

Now the assumption that the general level of real wages depends on the money-wage bargains between the employers and the workers is not obviously true. Indeed it is strange that so little attempt should have been made to prove or to refute it. For it is far from being consistent with the general tenor of the classical theory, which has taught us to believe that prices are governed by marginal prime cost in terms of money and that money-wages largely govern marginal prime cost. Thus if money-wages change, one would have expected the classical school to argue that prices would change in almost the same proportion, leaving the real wage and the level of unemployment practically the same as before, any small gain or loss to labour being at the expense or profit of other elements of marginal cost which have been left unaltered.[6] They seem, however, to have been diverted from this line of thought, partly by the settled conviction that labour is in a position to determine its own real wage and partly, perhaps, by preoccupation with the idea that prices depend on the quantity of money. And the belief in the proposition that labour is always in a position to determine its own real wage, once adopted, has been maintained by its being confused with the proposition that labour is always in a position to determine what real wage shall correspond to full employment, i.e. the *maximum* quantity of employment which is compatible with a given real wage.

To sum up: there are two objections to the second postulate of the classical theory. The first relates to the actual behaviour of labour. A fall in real wages due to a rise in prices, with money-wages unaltered, does not, as a rule, cause the supply of available labour on offer at the current wage to fall below the amount actually employed prior to the rise of prices. To suppose that it does is to suppose that all those who are now unemployed though willing to work at the current wage will withdraw the offer of their labour in the event of even a small rise in the cost of living. Yet this strange supposition apparently underlies Professor Pigou's *Theory of Unemployment*,[7] and it is what all members of the orthodox school are tacitly assuming.

But the other, more fundamental, objection, which we shall develop in the ensuing chapters, flows from our disputing the assumption that the general level of real wages is directly determined by the character of the wage bargain. In assuming that the wage bargain determines the real wage the classical school have slipt in an illicit assumption. For there may be *no* method available to labour as a whole whereby it can bring the general level of money-wages into conformity with the marginal disutility of the current volume of employment. There may exist no expedient by which labour as a whole can reduce its *real* wage to a given figure by making revised *money* bargains with the entrepreneurs. This will be our contention. We shall endeavour to show that primarily it is certain other forces which determine the general level of real wages. The attempt to elucidate this problem will be one of our main themes. We shall argue that there has been a fundamental misunderstanding of how in this respect the economy in which we live actually works.

III

Though the struggle over money-wages between individuals and groups is often believed to determine the general level of real wages, it is, in fact, concerned with a different object. Since there is imperfect mobility of labour, and wages do not tend to an exact equality of net advantage in different occupations, any individual or group of individuals, who consent to a reduction of money-wages relatively to others, will suffer a *relative* reduction in real wages, which is a sufficient justification for them to resist it. On the other hand it would be impracticable to resist every reduction of real wages, due to a change in the purchasing-power of money which affects all workers alike; and in fact reductions of real wages arising in this way are not, as a rule, resisted unless they proceed to an extreme degree. Moreover, a resistance to reductions in money-wages applying to particular industries does not raise the same insuperable bar to an increase in aggregate employment which would result from a similar resistance to every reduction in real wages.

In other words, the struggle about money-wages primarily affects the *distribution* of the aggregate real wage between different labour-groups, and not its average amount per unit of employment, which depends, as we shall see, on a different set of forces. The effect of combination on the part of a group of workers is to protect their *relative* real wage. The *general* level of real wages depends on the other forces of the economic system.

Thus it is fortunate that the workers, though unconsciously, are instinctively more reasonable economists than the classical school, inasmuch as they resist reductions of money-wages, which are seldom or never of an all-round character, even though the existing real equivalent of these wages exceeds the marginal disutility of the existing employment; whereas they do not resist reductions of real wages, which are associated with increases in aggregate employment and leave relative money-wages unchanged, unless the reduction proceeds so far as to threaten a reduction of the real wage below the marginal disutility of the existing volume of employment. Every trade union will put up some resistance to a cut in money-wages, however small. But since no trade union would dream of striking on every occasion of a rise in the cost of living, they do not raise the obstacle to any increase in aggregate employment which is attributed to them by the classical school.

IV

We must now define the third category of unemployment, namely ‘involuntary’ unemployment in the strict sense, the possibility of which the classical theory does not admit.

Clearly we do not mean by ‘involuntary’ unemployment the mere existence of an unexhausted capacity to work. An eight-hour day does not constitute unemployment because it is not beyond human capacity to work ten hours. Nor should we regard as ‘involuntary’ unemployment the withdrawal of their labour by a body of workers because they do not choose to work for less than a certain real reward. Furthermore, it will be convenient to exclude ‘frictional’ unemployment from our definition of ‘involuntary’ unemployment. My definition is, therefore, as follows: *Men are involuntarily unemployed if, in the event of a small rise in the price of wage-goods relatively to the money-wage, both the aggregate supply of labour willing to work for the current money-wage and the aggregate demand for it at that wage would be greater than the existing volume of employment.* An alternative definition, which amounts, however, to the same thing, will be given in the next chapter (p. 26 below).

It follows from this definition that the equality of the real wage to the marginal disutility of employment presupposed by the second postulate, realistically interpreted, corresponds to the absence of ‘involuntary’ unemployment. This state of affairs we shall describe as ‘full’ employment, both ‘frictional’ and ‘voluntary’ unemployment being consistent with ‘full” employment thus defined. This fits in, we shall find, with other characteristics of the classical theory, which is best regarded as a theory of distribution in conditions of full employment. So long as the classical postulates hold good, unemployment, which is in the above sense involuntary, cannot occur. Apparent unemployment must, therefore, be the result either of temporary loss of work of the ‘between jobs’ type or of intermittent demand for highly specialised resources or of the effect of a trade union ‘closed shop’ on the employment of free labour. Thus writers in the classical tradition, overlooking the special assumption underlying their theory, have been driven inevitably to the conclusion, perfectly logical on their assumption, that apparent unemployment (apart from the admitted exceptions) must be due at bottom to a refusal by the unemployed factors to accept a reward which corresponds to their marginal productivity. A classical economist may sympathise with labour in refusing to accept a cut in its money-wage, and he will admit that it may not be wise to make it to meet conditions which are temporary; but scientific integrity forces him to declare that this refusal is, nevertheless, at the bottom of the trouble.

Obviously, however, if the classical theory is only applicable to the case of full employment, it is fallacious to apply it to the problems of involuntary unemployment — if there be such a thing (and who will deny it?). The classical theorists resemble Euclidean geometers in a non-Euclidean world who, discovering that in experience straight lines apparently parallel often meet, rebuke the lines for not keeping straight as the only remedy for the unfortunate collisions which are occurring. Yet, in truth, there is no remedy except to throw over the axiom of parallels and to work out a non-Euclidean geometry. Something similar is required today in economics. We need to throw over the second postulate of the classical doctrine and to work out the behaviour of a system in which involuntary unemployment in the strict sense is possible.

V

In emphasising our point of departure from the classical system, we must not overlook an important point of agreement. For we shall maintain the first postulate as heretofore, subject only to the same qualifications as in the classical theory; and we must pause, for a moment, to consider what this involves.

It means that, with a given organisation, equipment and technique, real wages and the volume of output (and hence of employment) are uniquely correlated, so that, in general, an increase in employment can only occur to the accompaniment of a decline in the rate of real wages. Thus I am not disputing this vital fact which the classical economists have (rightly) asserted as indefeasible. In a given state of organisation, equipment and technique, the real wage earned by a unit of labour has a unique (inverse) correlation with the volume of employment. Thus *if* employment increases, then, in the short period, the reward per unit of labour in terms of wage-goods must, in general, decline and profits increase.[8] This is simply the obverse of the familiar proposition that industry is normally working subject to decreasing returns in the short period during which equipment etc. is assumed to be constant; so that the marginal product in the wage-good industries (which governs real wages) necessarily diminishes as employment is increased. So long, indeed, as this proposition holds, *any* means of increasing employment must lead at the same time to a diminution of the marginal product and hence of the rate of wages measured in terms of this product.

But when we have thrown over the second postulate, a decline in employment, although necessarily associated with labour's *receiving* a wage equal in value to a larger quantity of wage-goods, is not necessarily due to labour's *demanding* a larger quantity of wage-goods; and a willingness on the part of labour to accept lower money-wages is not necessarily a remedy for unemployment. The theory of wages in relation to employment, to which we are here leading up, cannot be fully elucidated, however, until Chapter 19 and its Appendix have been reached.

VI

From the time of Say and Ricardo the classical economists have taught that supply creates its own demand; meaning by this in some significant, but not clearly defined, sense that the whole of the costs of production must necessarily be spent in the aggregate, directly or indirectly, on purchasing the product.

In J. S. Mill's *Principles of Political Economy* the doctrine is expressly set forth:

What constitutes the means of payment for commodities is simply commodities. Each person's means of paying for the productions of other people consist of those which he himself possesses. All sellers are inevitably, and by the meaning of the word, buyers. Could we suddenly double the productive powers of the country, we should double the supply of commodities in every market; but we should, by the same stroke, double the purchasing power. Everybody would bring a double demand as well as supply; everybody would be able to buy twice as much, because every one would have twice as much to offer in exchange. [*Principles of Political Economy*, Book III, Chap. xiv. § 2.]

As a corollary of the same doctrine, it has been supposed that any individual act of abstaining from consumption necessarily leads to, and amounts to the same thing as, causing the labour and commodities thus released from supplying consumption to be invested in the production of capital wealth. The following passage from Marshall's *Pure Theory of Domestic Values*[9] illustrates the traditional approach:

The whole of a man's income is expended in the purchase of services and of commodities. It is indeed commonly said that a man spends some portion of his income and saves another. But it is a familiar economic axiom that a man purchases labour and commodities with that portion of his income which he saves just as much as he does with that he is said to spend. He is said to spend when he seeks to obtain present enjoyment from the services and commodities which he purchases. He is said to save when he causes the labour and the commodities which he purchases to be devoted to the production of wealth from which he expects to derive the means of enjoyment in the future.

It is true that it would not be easy to quote comparable passages from Marshall's later work[10] or from Edgeworth or Professor Pigou. The doctrine is never stated today in this crude form. Nevertheless it still underlies the whole classical theory, which would collapse without it. Contemporary economists, who might hesitate to agree with Mill, do not hesitate to accept conclusions which require Mill's doctrine as their premise. The conviction, which runs, for example, through almost all Professor Pigou's work, that money makes no real difference except frictionally and that the theory of production and employment can be worked out (like Mill's) as being based on 'real' exchanges with money introduced perfunctorily in a later chapter, is the modern version of the classical tradition. Contemporary thought is still deeply steeped in the notion that if people do not spend their money in one way they will spend it in another.[11] Post-war economists seldom, indeed, succeed in maintaining this standpoint *consistently;* for their thought today is too much permeated with the contrary tendency and with facts of experience too obviously inconsistent with their former view.[12] But they have not drawn sufficiently far-reaching consequences; and have not revised their fundamental theory.

In the first instance, these conclusions may have been applied to the kind of economy in which we actually live by false analogy from some kind of non-exchange Robinson Crusoe economy, in which the income which individuals consume or retain as a result of their productive activity is, actually and exclusively, the output *in specie* of that activity. But, apart from this, the conclusion that the *costs* of output are always covered in the aggregate by the sale-proceeds resulting from demand, has great plausibility, because it is difficult to distinguish it from another, similar-looking proposition which is indubitable, namely that income derived in the aggregate by all the elements in the community concerned in a productive activity necessarily has a value exactly equal to the *value* of the output.

Similarly it is natural to suppose that the act of an individual, by which he enriches himself without apparently taking anything from anyone else, must also enrich the community as a whole; so that (as in the passage just quoted from Marshall) an act of individual saving inevitably leads to a parallel act of investment. For, once more, it is indubitable that the sum of the net increments of the wealth of individuals must be exactly equal to the aggregate net increment of the wealth of the community.

Those who think in this way are deceived, nevertheless, by an optical illusion, which makes two essentially different activities appear to be the same. They are fallaciously supposing that there is a nexus which unites decisions to abstain from present consumption with decisions to provide for future consumption; whereas the motives which determine the latter are not linked in any simple way with the motives which determine the former.

It is, then, the assumption of equality between the demand price of output as a whole and its supply price which is to be regarded as the classical theory's 'axiom of parallels'. Granted this, all the rest follows — the social advantages of private and national thrift, the traditional attitude towards the rate of interest, the classical theory of unemployment, the quantity theory of money, the unqualified advantages of *laissez-faire* in respect of foreign trade and much else which we shall have to question.

VII

At different points in this chapter we have made the classical theory to depend in succession on the assumptions:

(1) that the real wage is equal to the marginal disutility of the existing employment;

(2) that there is no such thing as involuntary unemployment in the strict sense;

(3) that supply creates its own demand in the sense that the aggregate demand price is equal to the aggregate supply price for all levels of output and employment.

These three assumptions, however, all amount to the same thing in the sense that they all stand and fall together, any one of them logically involving the other two.

Author's Footnotes

1. This is in the Ricardian tradition. For Ricardo expressly repudiated any interest in the *amount* of the national dividend, as distinct from its distribution. In this he was assessing correctly the character of his own theory. But his successors, less clear-sighted, have used the classical theory in discussions concerning the causes of wealth. *Vide* Ricardo's letter to Malthus of October 9, 1820: "Political Economy you think is an enquiry into the nature and causes of wealth — I think it should be called an enquiry into the laws which determine the division of the produce of industry amongst the classes who concur in its formation. No law can be laid down respecting quantity, but a tolerably correct one can be laid down respecting proportions. Every day I am more satisfied that the former enquiry is vain and delusive, and the latter only the true objects of the science."

2. For example, Prof. Pigou in the *Economics of Welfare* (4th ed. p. 127) writes (my italics): "Throughout this discussion, except when the contrary is expressly stated, the fact that some resources are generally unemployed against the will of the owners is ignored. *This does not affect the substance of the argument,* while it simplifies its exposition.". Thus, whilst Ricardo expressly disclaimed any attempt to deal with the amount of the national dividend as a whole, Prof. Pigou, in a book which is specifically directed to the problem of the national dividend, maintains that the same theory holds when there is some involuntary unemployment as in the case of full employment.

3. Prof. Pigou's *Theory of Unemployment* is examined in more detail in the Appendix to Chapter 19 below.

4. *Cf.* the quotation from Prof. Pigou above, p. 5, footnote.

5. This point is dealt with in detail in the Appendix to Chapter 19 below.

6. This argument would, indeed, contain, to my thinking, a large element of truth, though the complete results of a change in money-wages are more complex, as we shall show in Chapter 19 below.

7. Cf. Chapter 19, Appendix.

8. The argument runs as follows: n men are employed, the nth man adds a bushel a day to the harvest, and wages have a buying power of a bushel a day. The $n + 1$ th man, however, would only add .9 bushel a day, and employment cannot, therefore, rise to $n + 1$ men unless the price of corn rises relatively to wages until daily wages have a buying power of .9 bushel. Aggregate wages would then amount to 9/10 $(n + 1)$ bushels as compared with n bushels previously. Thus the employment of an additional man will, if it occurs, necessarily involve a transfer of income from those previously in work to the entrepreneurs.

9. p. 34.

10. Mr. J. A. Hobson, after quoting in his *Physiology of Industry* (p. 102) the above passage from Mill, points out that Marshall commented as follows on this passage as early as his *Economics of Industry*, p. 154. “But though men have the power to purchase, they may not choose to use it.” “But”, Mr Hobson continues, “he fails to grasp the critical importance of this fact, and appears to limit its action to periods of ‘crisis’.” This has remained fair comment, I think, in the light of Marshall’s later work.

11. *Cf.* Alfred and Mary Marshall, *Economics of Industry*, p. 17: “It is not good for trade to have dresses made of material which wears out quickly. For if people did not spend their means on buying new dresses they would spend them on giving employment to labour in some other way.” The reader will notice that I am again quoting from the earlier Marshall. The Marshall of the *Principles* had become sufficiently doubtful to be very cautious and evasive. But the old ideas were never repudiated or rooted out of the basic assumptions of his thought.

12. It is this distinction of Prof. Robbins that he, almost alone, continues to maintain a consistent scheme of thought, his practical recommendations belonging to the same system as his theory.