

## Mr. Keynes and the Rate of Investment

### The General Theory of Employment, Interest and Money

By John Maynard Keynes. Pp. xii + 403. (London: Macmillan and Co., Ltd., 1936.) 5s. net.

FOR more than a century the problem of unused resources has occupied a conspicuous place in economic investigation, yet much remains to be done in a field of great intellectual difficulty. A large part of Mr. Keynes's own previous work, not least his important two-volume "Treatise on Money" published in 1930, has been occupied with this and allied topics. His present rather startling volume tears to pieces some portions (not always the weakest) of his earlier work, amends other portions and supplies much new analysis. In dealing with short run changes in the level of activity, the most important factors to consider are, of course, those which determine the rate of new investment—factors already analysed at some length in the author's "Treatise". He now believes, however, that the main weakness of his earlier analysis was that it relegated changes in aggregate output and employment to a secondary position, and involved a definition of income which was not the most convenient one. These defects it is the purpose of the present book to remedy.

Nevertheless, it should not be thought that the "General Theory" is in any sense a mere revision of the "Treatise"; for cyclical movements of activity now occupy a much smaller part of the picture. Instead of an alternate excess and deficiency of 'effective demand' (aggregate money demand for total output), Mr. Keynes now believes in the existence of a chronic tendency for it to become deficient. His analysis differs from that of the cruder underconsumptionists in that the trouble is imputed not to excessive, but to continuously insufficient investment. The failure of investment to come up to a level which would secure full employment is due, he explains, to the unwillingness, owing to institutional frictions, of the rate of interest to decline adequately. Each level of interest rates represents a perfectly stable equilibrium, and is correlated with a volume of unemployment, which is larger, the higher is the level of interest rates above a critical minimum. This critical minimum corresponds to full employment; if the rate of interest is forced down below this minimum the resulting increase of investment results merely in rising prices, and a state of 'true inflation' develops. Only after full employment is reached is there any danger of the situation

becoming unstable. Certain obvious practical conclusions emerge: the proper way to attack unemployment is not by lowering money wages (which is anyway impracticable) but by governmental measures to expand investment, or (better still) by direct measures (central banking or otherwise) to lower the prevailing level of interest rates. The argument also leads to an unreserved condemnation of the gold, or any other international, standard, since such a standard destroys national autonomy in interest rate policy.

It may be that many readers will think there is more to be said in favour of classical economics than Mr. Keynes allows: he seldom takes Ricardo and his followers on their own ground. It may be, too, that some readers will think the writings of several of the author's contemporaries scarcely deserve the asperity which is accorded them. But it is plain that the book will stand or fall by the relevance to real life of its central (and it should be realised highly unconventional) thesis outlined above. Mr. Keynes's main difference from other writers has to do with his judgments concerning the stability of the rate of investment. The crucial question may be put as follows: Is it possible by lowering interest rates to raise the current rate of investment by some defined amount, without releasing a tendency for investment to go on expanding? Or if this is possible, but only possible within certain limits, what are these limits? According to the "General Theory", these limits are set by that rate of investment which yields full employment. But many readers will undoubtedly feel that no sufficient grounds are advanced for believing that expansions of investment are non-cumulative on one side, and cumulative on the other side, of full employment. In effect, Mr. Keynes relies on the short run inelasticity of the supply of capital goods, coupled with the decline in their physical marginal product as they become less scarce, to save him from instability in the rate of investment. But the decline in the supply price of capital goods, as the resources for producing them are increased, will further stimulate investment. To argue that this tendency will be neutralised (within relevant periods of time) by a fall in the physical marginal product of these goods, is surely to lose all contact with reality.

The problem can also be posed in another way. Mr. Keynes develops 'multipliers' to relate the total increments of investment and employment, respectively, to the initial increments in these



quantities induced (say) by a dose of governmental loan expenditure. The multiplier is obtained in each case by summing the secondary, tertiary and other increments which follow as a result of the primary increment. In order that the multiplier shall be finite, or (put otherwise) in order that any tendency to *cumulative* expansion in the rate of investment and danger of ensuing crisis shall be absent, these increments must form a convergent series. But do they? This is a point that Mr. Keynes has scarcely argued; and that he should not have done so is all the more curious since most writers in the past have urged, both a priori and from experience, that, at any rate outside narrow limits by no means necessarily coincident with full employment, the series in question do *not* converge.

The practical question remains whether 'full employment' can be secured in a system of private enterprise merely by operating upon the rate of

interest. As Mr. Keynes justly remarks in his preface, "the matters at issue are of an importance which can not be exaggerated". He writes for a technical audience, and since his conclusions disagree with the results of most recent thinking on the subject, the sooner other economists decide whether it is they who are on the wrong side of the looking-glass or he, the better it will be. It scarcely needs saying that the book is written with charm and insight, and like everything from the author's pen has a frankness and an aptness of expression which are often disarming. Much of the book is highly original, and all of it is stimulating; especially penetrating and fruitful are the chapters on the long-term expectation and on the properties of interest and money. But on the fundamental problem, those readers may perhaps be pardoned who decide that the "Treatise" remains a safer, if a less ambitious, guide.

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## Fuels and Fuel Economy

### Fuel:

Solid, Liquid and Gaseous. By J. S. S. Brame and Dr. J. G. King. Fourth edition. Pp. xvi+422. (London: Edward Arnold and Co., 1935.) 25s. net.

THE subject of fuel grows in political, economic, technical and scientific importance. Though wood is no longer in the picture in competition with coal, oil is very much so. Raw coal is being displaced by coke, by low-temperature fuel and particularly by gas—either coal gas, or coke oven, producer, blast furnace, or water gas—and indeed should never be burnt as such. Liquid fuels are extending in every field of use; they include fuel oil, Diesel oil, petrol, tar, benzol and alcohol.

There is a large volume of technical and scientific knowledge available about these fuels, their properties and the methods of testing them, which is increasing every day, though it is far from being as widely spread as is desirable, particularly among engineers and fuel users in general.

Such books as the one before us are calculated to help greatly in developing the economic use of the most suitable type of fuel for any particular purpose. It is well to emphasise that fuel costs enter into the cost of every manufactured article, sometimes, as in the heavy industries, in transportation, and in certain chemicals to a very large

extent. If manufactured articles are to be competitive, the fuel costs must be kept low, with the result that as the prime cost of a fuel increases, there is every incentive to burn it more economically and therefore to a less extent. Those connected with the coal trade remain obstinately blind to this fact.

Fuel efficiency as a science is as yet in its infancy, and relatively few firms have whole-time fuel officers. In many industries this officer should be one of the most important of the staff, and it behoves our training centres to produce an adequate supply of them. Raw coal has had its day; the open grate fire is only useful to inspire poets and to counteract depression. Coal should be first distilled for its valuable products and ultimately burnt in forms which keep the tar and smoke and sulphur out of the atmosphere.

The actual loss of combustible matter in the smoke even of a domestic fire is far smaller than is supposed, and by far the greatest saving in an industrial boiler is effected by reducing the amount of air so that the flue gases contain a maximum of carbon dioxide. It is the escaping sulphur which is the real problem, which now requires dealing with drastically in our cities.

This is a fourth edition, a testimony that the authors know their subject, though it has needed a good deal of bringing up to date since progress is so rapid. This is particularly true in connexion with the poorer gaseous fuels. The book is