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Underconsumption An Exposition and a Reply

By J. A. HOBSON

IN a modern economic system the productive powers of capital and labour are applied to making (1) consumption goods, (2) replacement goods, (3) new capital goods, in a right ratio. This ratio will be continually changing with changes in consumers' tastes and demands, with technological improvements, etc., but at any given time there will be a true equilibrium, a right proportion of productive energy directed along these three channels. That ratio will be governed by an intelligent anticipation of the use of the money incomes continuously distributed to the owners of the factors of production, as wages, interest, profits, rents, salaries. These incomes are grouped in selling prices for the three classes of product, and are sufficient to buy all products. These "payments" are the gross income of the community. After deducting the income spent on replacement (commonly furnished out of reserves), the net income is spent on consumption goods, or is saved and invested in the purchase of new capital goods. The net real income thus consists of new consumption goods and new capital goods : the net money income of the costs of making such goods. Consumption goods are produced in such kinds and quantities as it is expected will be bought without undue delay when offered in the market. New capital goods are similarly produced in such kinds and quantities as it is expected will be bought without delay by the savings of investors.¹ Orders for such goods will in many cases express this expectation and direct

¹ An element of secret or forced savings must also be taken into account. Any increase of "credits" granted by banks to business customers, in order to meet increased running expenses, in the shape of wages or purchase of materials, etc., is an addition to the money income of the community which alters the proportion between spending and saving. Its direct effect is to raise the prices of consumption goods and raw materials, and to cause an increased quantity of productive power to go into the production of such goods. By raising prices it takes some of the consumption goods which the current wages of formerly employed workers would have bought, and converts them into the real wages of newly employed workers, interest and profits in businesses that produce such materials.

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their production. The purchasing power for both consumption and capital goods will be vested in the current income, i.e. the costs distributed in payments for the use of the factors of production. In a rightly balanced economic system there should be no lack of effective demand for either class of production and no undue delay in its application. If all the productive work done within a year, or other short period, were available for purchase by the income distributed in respect of it (its costs), the process would be simplicity itself, money income being continuously translated into the real income it represents.

But, since the processes of producing many kinds of goods, consumable or capital, take a considerable time, the income distributed in "costs" during any year, or other short period, if spent without delay, will purchase products a large part of the "costs" of which fell within an earlier period.

How does this affect our problem ? Not at all, if the right ratio between spending and saving (the making of consumption and of capital goods) is unaltered. An increase of production and corresponding increase of money income would cause no disequilibrium, if the proportion spent and saved remains the same. If increased production were due to improved technique, so that "cost" per unit of the product was reduced, no trouble would arise, since the same money income as before could buy more consumption and capital goods at lower prices. A slow fall in price level, due to reduced costs, would not cause dislocation if the net general incomes were applied in the same ratio as before to consumption and capital goods.

Under such conditions the fact that the goods purchased this year were made in large part by work done and paid for last year would only signify that the prices paid for them had not sunk as much as they would sink next year, when more of the processes of production had come under the cheaper technique. More goods of both classes could be bought this year by the same volume of income : next year a still larger quantity of these goods could be bought.

This would be the situation on two assumptions. First that the new productivity had not altered the proportion of the general income applied respectively to consumption and to capital goods. Secondly, that no changes in supply of "money" altered the distribution of purchasing power and so upset the ratio between spending and saving (or investment).

Now on the face of things it would appear that the new increase of productivity through improved plant or power would require

increased quantities of money savings and that this increased saving would be furnished from the larger profits due to the increasing productivity of the improved technique. When new inventions are rapidly displacing old, and when machinery is rapidly "economising" labour, as in many agricultural and mining processes, not merely will the average " costs " per unit of a final product be less than previously, but a larger proportion of the reduced " costs " will be replacement charges and interest and profit in respect of the relatively greater part played by capital in production. This would seem to involve an increasing proportion of saving (and investment) to spending. There is, however, a counter-consideration. There will be cases where the increased productivity of new plant, or new materials or methods of production does not involve a more costly but a cheaper apparatus. A machine costing £1,000 to-day may displace one costing the same sum ten years ago, but the new machine may have an output, with the same or smaller labour cost, six times as great as the old machine. In our new power-revolution this is frequently occurring. Indeed, it is evident that a large part of the displacement of labour is attributable to this new economy of capital.

Though the monetary saving represented by the instalment of the new machines must be reckoned at $f_{I,000}$, minus any value attributable to the scrapped machine it displaces, the real saving as represented in the productive power of the new machine is much greater. The process of such replacement clearly affects the question we are considering, the right ratio of saving to spending. Having regard to this concealed saving and to the fact that a smaller amount of money saving invested in modern plant may represent a larger productivity of capital, we cannot assume *a priori* that the increasing part played by machinery and power requires an increase both in the volume of saving and in its ratio to spending.

If this increased productivity, or reduced costs per unit of production, were operative fully and speedily through the various marketing processes, so as to be represented in a corresponding fall of retail prices, it might seem that, as the whole gain passed in lower prices to consumers, there would be no disturbance between the earlier ratio of saving to spending. But this assumes, first, that the new productive powers are fully utilised by the controllers of industry, and, secondly, that workers as a body will get the same proportion of the enlarged " real" income as before.

Now neither of these assumptions is warranted. If free competition existed among the businesses in all the industries where the higher productivity was available, and if the new technique was equally available for all competitors, the output would be so enlarged as to hand over to the consuming public in lower prices the chief result of the productive economy. Not, however, necessarily, the whole result. For the installation of the new machinery by all the competing business might be limited by a rate of output which reached the "satiety" point in consumption. But though this issue may not arise, another does. If one or a few businesses got early access to the improved technique, it is their obvious interest to come together, and, after underselling the more backward firms or forcing them to come to terms, to make a cartel or some price agreement, based upon an estimate of the output to be marketed at a price that will yield the maximum profit. For this purpose they will restrict the use of the new productivity.

This policy will have its necessary reaction upon the consuming power of the workers. If the new productive powers had free run, and the industry increased its output to the full, the elasticity of demand might have been such as to involve no reduction in the number of employees. Various English manufacturing industries, with rapidly expanding markets during the Industrial Revolution, bear testimony to this truth.

If industry in general thus applied fully the new economies of production, the fall of prices might place not only an increased quantity but an increased proportion of the real income in the hands of the workers, whose expenditure on consumption goods turned out by these cheaper methods would maintain in full working the capital and labour in the various productive processes.

There appears to be a whole school of economists which thinks that laissez faire, free competition, and mobility of capital and labour, are still operative forces strong enough to secure this result. If they are confronted by a situation, like the present, which seems to contradict their theories, exhibiting a general hold-up of productive forces, not in one trade but in most, not in one country but in most, they fall back upon the particular maleficence of post-war financial and trade disturbances for their explanation. But though post-war political and financial troubles have manifestly played their part in impeding traffic and destroying confidence, these disturbances cut across and blur the outlines of the real issue, which, had there been no war, must have matured at an even earlier date. The vast destruction of material resources and the withdrawal of immense bodies of producers during the war temporarily turned the economic balance in the direction of overspending, and it took several years after the war to recover the

state of over-saving which was already apparent in 1914 and which was then threatening to flood the world with unsaleable goods. Only when the new productive powers had time to spread throughout the "civilised world" and to exhibit actual or potential rates of output which brought down the world price-level for most foods and raw materials to a point which failed to cover costs of production, did the true character of the disequilibrium between spending and saving disclose itself. Those who impute to the growth of tariffs and other instruments of economic nationalism the chief blame for our troubles commit the radical error of mistaking effect for cause. Though considerations of political pride and military safety doubtless played some part in inciting nations to attempt economic self-sufficiency, the chief impelling reason for raising tariffs and placing other obstacles in the way of imports was the growing difficulty of finding markets abroad in order to maintain the new productive plant whose products could not find a sufficient home market. Each nation, by keeping out foreign goods that could undersell its own, helped to build up a system of trade and financial obstructions that was detrimental to the full use of the productive resources of the world by limiting the economy of "division of labour." But if these impediments had not been placed on world productivity, production would have advanced still further ahead of consumption. For complete world free trade under existing conditions, while greatly increasing the potential productivity of the economic system, would furnish no adequate security for a more equal distribution of income, so as to preserve a true equilibrium between spending and investment.

Free trade, if accompanied by free mobility of labour and exploitation of backward countries, would tend to place a larger proportion of routine and unskilled labour upon lowwaged workers in such countries as China, India and Russia. Capital would earn higher rates of profit from this use of low-waged labour, and though it might pay to raise the wage rates so as to secure more efficiency and a larger purchasing power for Western manufactures among these backward populations, the net effect would probably be to distribute the aggregate income more advantageously to capital, less to labour. Though the great increase of total productivity might yield an increase of products which gave to the workers in the world a somewhat higher standard of living, the distribution of the total income might be such as to disable the economic system from working at its full productivity. Unless some general international agreement on a shorter workday could be reached, the machinery of production would constantly tend to increase the output faster than the growth of effective demand, and gluts, stoppages and unemployment would recur.

But though there is to-day a wide acceptance of the view that the slowing-down of the machinery of production is due to underconsumption in the sense of an insufficiency of effective demand, many of those who accept this view refuse to relate this situation to a disequilibrium between spending and saving due to a maldistribution of income. Such a disequilibrium seems to them impossible. For, in the first place, they hold that there is no such right ratio between spending and saving, as is here assumed. Secondly any tendency towards excessive or deficient saving would be checked and rectified by the operation of economic laws. Even at the present time there are those who trace the trouble to a disequilibrium between the different classes of investment, too much capital put into certain post-war industries, too little into others. If you ask "what others?" you are pointed out various industries which require reconditioning with improved modern technique and cannot get the requisite capital. This reply is, of course, quite unconvincing at a time when increasing quantities of uninvested capital are in the banks available for this work of reconditioning provided that the industries in question can show that the reconditioning will so lower their " costs " that they will be able to market their enlarged and cheapened output at a profit.

Why is it so difficult for those who admit that disequilibria arise from time to time in the distribution of new savings among different industries to allow the possibility of the broader disequilibrium between spending and saving? Well, there are certain obvious explanations of this state of mind. Apart from the emotional value attached to "thrift" as the distinctive economic virtue (a view quite intelligible when capitalism was in its early stage and all saving could be put to obviously advantageous uses), there is the fact that the possibility of oversaving is a recent problem. During the greater part of last century, not merely any individual but any nation could save and effectively employ as capital any proportion of its income that it might choose. Up to the 'seventies and even later, this country could profitably export and employ abroad any savings in excess of what could be employed at home. Even when Germany, America and other countries, equipped as well as we, began to use their surplus capital largely in the development of backward countries, there was sufficient scope for all of us. But now that much of this early development work is done, and that other countries in Europe and Asia are taking on modern machine production with its new technique of accelerated productivity, while political and social disturbances cripple trade with great backward countries such as China, India and Russia, the limits imposed upon effective saving become manifest.

Any man or any group of men may save and invest as large a proportion of their income as they choose, but all men, the economic system as a whole, cannot. Even this statement will be contested. Saving means a sacrifice of present consumption, in order to furnish the material means which will enable production and consumption to be greater at some future time. Now just as an individual might be willing to stint himself during his active working life, in order to provide for a comfortable age of retirement, so it is conceivable that a whole community might be so deeply concerned for posterity that they would submit to an ascetic life in order that their grandsons might live in luxury. But what are the assumptions that underlie such illimitable saving? First, that men will prefer the satisfaction of their unknown descendants to their own and will yet deprive those descendants of the need for carrying on their own altruistic conduct. Secondly, that they are able to predict what will be the capital requirements of future ages in different areas, having regard to changes in production, transport and other economic apparatus. Thirdly, that they can predict the needs and tastes of their posterity. But it is unnecessary to labour the point, that having regard to these emotional and intellectual factors, there must at any given time be a limit to the proportion of the general income that can advantageously be saved for useful investment.

The corollary follows that if there is any normal tendency to exceed this limit, such disequilibrium between spending and investment must cause stoppages, unemployment and waste. But why, it will be urged, should you assume that any tendency to such excess exists?

In a consciously planned economy, that of an isolated pioneer family or of a communist group, no such disequilibrium should occur. The pioneer family would apportion its working time and energy to the production of immediately consumable goods and to capital goods in the shape of seeds, tools, soil improvement, roads, etc., by a rational calculation of the present and prospective utilities of their various products. Mistakes would occur and be corrected by experience. But the balance between production of consumptive and capital goods as a whole would be as carefully planned as the balance between the different activities which contributed to these two classes of products. So with the planned economy of a community. Its governing body would apportion its available labour, land and capital, in accordance with a plan, to produce consumptive and capital goods of different sorts in predestined quantities, having regard to the calculable present and future requirements of a perhaps increasing population. Grave errors might occur by miscalculation of the processes of production, or of the amount of present privation which workers would undergo for the benefit of the coming generation, as is evident in Soviet Russia to-day. But a consciously planned economic system which took due account of the human incentives to the performance of the different sorts of productive activities would show no natural or normal tendency to the cyclical fluctuations which carry so much waste owing to the stoppage of large quantities of capital and labour. There would, in other words, be no tendency towards the excessive creation of capital goods from a diversion of too much capital and labour into the making of these goods, with the subsequent wastage from their non-employment. But it will be objected: "You speak of a planned economic

But it will be objected: "You speak of a planned economic system as a security against disequilibrium of spending and saving. But the price system in our economic system furnishes the needed security. Applied to our particular problem, it distributes productive energy between the making of consumptive and the making of capital goods (spending and saving) by fluctuations in the rate of interest which is the price of saving."

Perhaps the most common refutation of the charge that overinvestment is a cause of depression is that over-investment would signify a zero rate of interest. So long as interest is offered for investment capital, the presumption must be that this capital can be utilised in reducing the " costs " of production so as to sell goods at a profit. Professor Robbins relies upon this argument.¹ "When the total volume of accumulation is small, the increase of productivity-that is the reduction of costs-due to an additional increment of investment, will be relatively large. When the total volume of accumulation is great, other things having remained the same, the increase will be relatively small (Law of Diminishing Returns). But until the rate of interest which depends upon the difference between prices and costs in different stages of production falls to zero, we are not entitled to say that the increase of productivity has ceased ; that is to say that the gap between costs and prices has been obliterated."

Since during the deepest depression some new investment takes place at a rate of interest above zero, that fact seems to Professor Robbins a sufficient refutation of the charge that over-saving and over-investment have been taking place. But in an economic system so plastic as ours, alike in the technique of production and in change of tastes, there will always, even in the deepest depression, be some opportunities for profitable investment. This fact does not refute the charge of excessive saving, which is testified by the amount of idle capital on deposit. For why does not this idle capital beat down the actual price for invested capital to zero? There are several contributory answers to this question. One is that in depressed times the few opportunities for profitable investment are kept in the hands of a knowledgeable group who prefer to find a profitable use for a limited amount of their own capital than to admit a flood of outside capital at a lower rate. That free competition which Professor Robbins desiderates does not operate. Secondly, the maintenance of a low positive rate of interest for new capital in depressions contains a payment for risk often so large as to cover or exceed the interest. The British capital invested in new issues in 1928 is a case in point. Most of this capital, subscribed to bogus or wildcat schemes, disappeared within three years' time. Thirdly, the urgent needs of Government for long- and short-term loans enabled much saving that was superfluous for genuine economic investment, to find a temporary occupation through banking investments. These government borrowings were, of course, mainly attributable to the depressed conditions of state finance, of tax revenue and of foreign trade, which were themselves the registers of under-consumption and unemployment.

Professor Robbins makes a point of "the stubborn fact that perhaps the obvious and invariable concomitant of the break in prosperity is not the *lowness* of interest rates but their rise " (p. 423). When the inability to market consumptive or capital goods at profitable prices brings about a fall of prices which definitely checks production and shows signs of a general collapse, the rise in rate of interest both for business loans and for investment capital is a natural result. It does nothing, however, to refute the view that over-saving and over-investment had been taking place. After the "break in prosperity" has passed into a long and deep collapse, the low interest testifies to the abundance of investment capital and bank credit available for any enterprise which can show the probability of working at a profit. "A fall in the rate of interest," says Professor Robbins, "makes

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possible all sorts of enterprises hitherto unprofitable. Why then should it be regarded as a cause of depression? "Now I am not aware that anyone has charged a low rate of interest with being a cause of depression. It is quite manifestly a result, or if one prefers, a concomitant of depression. But it does not "make possible all sorts of enterprises hitherto unprofitable." Though cheap investment money and cheap bank credits are helpful when for other causes recovery begins, experience shows that until definite signs of recovery have appeared in the shape of rising prices and increased orders, cheap money has very little influence in promoting recovery. So likewise when trade is good and prices rising, dear money has little influence in checking production.

Indeed, in Professor Robbins' reckoning, it is difficult to see why cheapening of capital or of credit should have *any* influence in promoting recovery. For he does not seem to regard interest as a cost. He holds that the rate of interest " depends ultimately upon the difference between prices and costs in different stages of production." Now an unprofitable industry can only become profitable (interest paying) if there is a margin between costs and prices. This margin may come from lower costs or higher prices. But whether rate of interest be a " cost " or a payment out of " profits," it quite evidently cannot be assigned the determinant point accorded to it, as a regulator of production.

pionts, it quite evidently cannot be assigned the determinant point accorded to it, as a regulator of production. Holding this view of the part played by rate of interest in regulating industry, Professor Robbins might have been brought to the conclusion that no disequilibrium was possible between spending and investment, i.e. between production of consumptive goods and production of capital goods. For if there were a tendency to upset the balance this would be checked by a relative rise and fall of interest in the two classes of production. But Professor Robbins is not content to repudiate the belief that trade depression is due to under-consumption. He affirms the opposite. "There is," he says, "considerable reason to believe that the coming of depression is due to the fact that consumption has become excessive in relation to the productive operations to be carried out."¹

The brief contribution made by Professor Robbins to a positive theory of the causation of depressions is more fully expanded in Mr. Durbin's little book *Purchasing Power and Trade Depression*. Both appear to hold that the trouble is initiated by the supply of what Mr. Robbins terms "forced saving" into the investment system. This "forced saving" is usually termed inflation and

takes the shape either of note-printing or credit creation. This addition to ordinary savings from income means that increased quantities of capital and labour will be applied in those industries where the "forced savings" raise prices and so stimulate industrial activity. Now these industries, so runs the argument, will be the constructional industries and other industries directly subsidiary to their requirements. For, according to Professor Robbins, "the entrepreneurs who are prepared to initiate those timeconsuming, long-lasting processes of investment " were previously prevented from getting the requisite capital because of the high rate of interest. As new cheap money passes into those industries, the prices of certain raw materials and machines employed in them will rise and more labour will flow into their production. But as the new spending power gets into general circulation more of it will pass into the purchase of consumers' goods. This will reverse the original result, the profitability of producers' goods. The producers of consumers' goods and their distributors will bid for the new money and wages will rise in all industries, involving a general rise in labour costs. This rise of labour costs will now make unprofitable those trades which had profited by the first supply of inflation. A new dose larger in amount will be required to prevent collapse. This can't go on for ever. Hence an inevitable collapse from the temporary boom in the constructional trades, the prelude to a general depression.

Now, as I understand this argument, it hinges upon the contention that the new profitability brought about in the production of capital goods by inflation is sapped by the rise of wages in these and other industries which in time draws into the production of consumptive goods the bulk of the new money, so that the old insufficient proportion of saving to spending is again restored. The assumption is the strange one that there is a normal tendency towards over-spending and under-investment, which is temporarily met by a subsidisation of saving and investment but yields to the forces which make for excessive wages and excessive consumption. A most unsatisfactory defence for a capitalist system, unless it means that capitalists as a body ought to combine more closely and successfully to keep down wages. For it is clear that too high wages are the *fons et origo malorum*!

There is, however, some difference in the presentation of that case by Professor Robbins and Mr. Durbin. According to the former the constructional industries were crippled of their proper growth by a high rate of interest and were recuperated by the dose of inflation. But Mr. Durbin finds in this process an over-investment by which there is a permanent surplus capacity in the capital goods industries which is always available for increased capital production and which strongly predisposes the whole system to fluctuation.¹ Putting it otherwise, "There is, so to speak, a 'bulge' in the real structure of production, a surplus capacity in certain types of industry which is very likely to be filled out, or taken up, by the very least impulse to inflation."² Here is an admission of over-investment as a cause of crisis, collapse, depression. For there is no evidence of insufficiency of capital in other than constructional industries. But this "over-investment" is not attributable to over-saving or investment of those parts of the net income which are unspent, but entirely to the pumping in of doses of inflation. Now is this a satisfactory or even a plausible account of what takes place? Why is it necessary to evoke this inflation of money? If there is in the normal distribution of income, as I hold, a tendency to save and invest a larger proportion of the income than can and does find profitable employment, here is a sufficient explanation of what happens. It is perhaps reasonable to expect that such excessive savings will be predominantly invested in basic industries of more permanent utility and less subject than the final industries to fluctuations of demand.

If, as I contend, the amount of saving and its proportion to spending are not under any reasonable regulation by which any proper balance is assured between present and future values, but that saving consists largely of an almost automatic storage of large surplus elements of income, no inflation need be involved. Nor is there any ground for supposing that successive doses of inflation are in fact applied to the constructional industries. There is no ground for Mr. Durbin's assumption that investment capital is normally furnished by "inflation." That capital represents the unspent portion of the general income, and the plant and other capital goods it buys are the product of the capital and labour currently applied to make production goods in anticipation of their purchase by these investments. In this and most other countries banks do not normally create money to finance investments on their own account. Though they often assist in floating new issues, portions of which sometimes lie on their hands for the time being, and occasionally advance money to known customers for the purchase of shares which these customers cannot buy out of their immediately available resources, these bits of inflation, if such they be, are of purely temporary operation and do not imply a lasting addition to the voluntary savings by which investment is effected. In certain

¹ Page 150.

² Page 151.

countries, e.g. Germany and the United States, banks use some bank-made money for investment purposes, though even then the normal course is to unload them upon the outside investing public as soon as this can be done profitably. Mr. Durbin's attribution of the excessive plant found in constructional industries to inflation for investment rests on a mistaken idea of the part played by bank-made money. In the working of our capitalist system the two chief parts played by the banks are to hold the money savings of their customers for investment, and to advance money through loans and overdrafts for the running expenses of businesses. It is in this latter, not in the former function that inflation plays a part. Strictly speaking, all bank-loans or overdrafts may be classed as inflation, additions to the volume of purchasing power representing incomes. But the term is usually applied to such increases of credit as do not immediately stimulate a corresponding increase of goods and, therefore, cause a rise of the price level. If this rise of prices evokes a corresponding increase in output of goods, the temporary act of inflation is said to be cancelled. It is this sort of inflation that seriously counts in the trade cycle. When trade is on the upgrade and prices and profits are rising, every business striving to expand its productive activity seeks an enlargement of credit from the banks for its larger running expenses, or in the case of merchants for purchasing and holding larger stocks for an anticipated further rise in prices. If this process halted as soon as full employment of productive resources was reached, all might go well, provided consumers were able to purchase the growing volume of consumers' goods. But in each boom, the financing of the purchase and holding both of stocks of goods and of share purchases in expectation of a further rise is conducted by bank advances made regardless of the fact that those advances can only operate in a gambling game such as was exhibited in America in 1929 when values of stocks and shares were artificially boosted to heights that had no relation to the earning capacity of the productive resources they represented. When this over-supply of bank money (inflation) both for running expenses and for speculation is found to be inoperative for further stimulation either of production or of prices, and a slump of prices both in the industrial and financial markets begins, the sudden calling in of banks loans notoriously acts as the accelerator in the downward process, forcing customers to realise their holdings on a falling market.

But even if it were true that inflation took the form of capital investment, why should it flow into constructional businesses in any different proportion from the flow of actual savings? There may well be a tendency of voluntary savings to flow excessively into constructional businesses, if industries concerned with making consumptive goods are more easily seen to be amply supplied. The "bulge" would thus be explained without involving a sort of inflation which is not wanted and does not occur.

Professor Robbins and Mr. Durbin are agreed that this overinvestment of "forced savings" in the constructive industries must, if possible, be stopped. But neither of them suggests any practicable way of achieving this object. Professor Robbins holds that "the situation can be saved only by such an increase of voluntary saving, i.e. a *diminution* of consumption—as will sustain the demand for producers' goods which the artificially lowered rate of interest seemed to make it legitimate to expect."¹ Now Mr. Durbin rightly holds that there is only one way of increasing voluntary saving, viz. by "redistributing the income in favour of those who save a larger fraction of their incomes than other people—that is the rich."² This, however, involves cutting wages, "a difficult and unsavoury business." So far as I understand certain rather cryptic expressions of Professor Robbins, he would agree with Mr. Durbin that wage-cutting would by greater inequality of distribution stimulate the increased rate of saving in which the former finds salvation. That wage-reduction throughout the economic system would react injuriously on all productive processes by reduced demand for their products is an objection that has no purchase upon either mind. Mr. Durbin, indeed, states that "Wage reductions will undoubtedly increase the permanent demand for the output of the capital goods industries,"'s though how and why this strange result will be attained he does not explain.

"The other alternative is to reduce the size of the capital goods' industries. This policy involves the maintenance of the existing distribution of income and leaving the capital goods' industries to disappear slowly as the old workers die off and the old capital wears out and the streams of young labour and new capital move into the less unprofitable production of consumption goods."⁴ This Mr. Durbin speaks of as a " slow and painful readjustment of the structure of production to a lower rate of capital accumulation."⁵ It is difficult to understand what this alternative means. Firstly, if the existing distribution of income continues, why should any such readjustment occur at all? Secondly, if it is so slow as he suggests, why should it be " painful "? Thirdly, why should he regard this transfer of capital and labour to production of

¹ Page 427. ² Page 170. ³ Page 170. ⁴ Page 171. ⁵ Page 172.

consumption goods as involving any "lower rate of capital accumulation"? For there is another alternative which would not diminish the volume of capital accumulation. If a more equal and equitable distribution of income led, as it would, to a reduced proportion of saving to spending, it would almost certainly validate a larger *amount* of saving. This would be both possible and desirable, because the small proportion of saving would be fully and continuously employed in supplying the increased demand for consumers' goods. The larger waste of unemployed capital goods visible in each depression could not then occur. The larger demand for consumers' goods would chiefly take shape in increased sales of standardised commodities produced by machine methods and more regular in its character than the demand for goods where taste and fashion play larger parts, as in the expenditure of the rich. The other effect of a more equal distribution of income would be an increased demand for leisure. The long bouts of excessive leisure for a large proportion of the workers in periods of depression would be distributed in a regular policy of shorter hours for the whole working population, a double gain, first in human costs of production, secondly in larger opportunities for free personal activities and enjoyments.

Such a policy cannot, however, emerge from an economic system based on the supposition that order and security can be maintained by apportioning work and its products according to the respective economic "pulls" of the separate persons engaging in industry, with no attempt at any conscious planning of this co-operative system as a whole.

The under-production and under-consumption of a trade depression are the plain register of certain "irrational " factors in the operation of the economic system. These irrational factors consist of the rents, surplus profits, and chance gains, which as income not merely are not necessary to evoke or sustain useful human efforts, but which actually repress them. This " unearned " gain from economic force or chance, irrational in origin, is irrational in its use. For most of it is an addition to the income of those who have already a sufficiency to supply the necessaries and comforts of their standard of living. Such increments might, of course, be squandered in luxurious and wasteful living. But a large part of them is not. There is a satiety point in most standards of high living. Income beyond this point is saved, not by any deliberate calculation about present and future consumption

values, but as an almost automatic process. The great accretions to capital in "good times" thus proceed by large sums put to reserves and large savings of superfluous incomes by the rich. This irrational element in distribution carries its irrationality into its investment activities which are based on no reasonable calculations of the net effect of this saving, proceeding from a number of separate unknown sources, upon the total productive power of the future in relation to the rate of consumption. So long as the excessive application of capital and labour to the productive industries continues, the malady does not show itself. Employment and wages are sufficient to maintain a high demand upon final commodities and the wasteful accumulation of productive power in the instrumental industries is not yet visible. But as soon as the failure of sufficient orders from the merchants and the higher-up manufacturers, with price-cuts in the sales, attests this excess of capital in the lower regions of capitalism, the flow of rich men's savings into these channels stops, and since every regular trade is amply supplied, the surplus savings have only two chances before them. They can employ themselves by investment in speculative new enterprises, mostly rotten, or in gambling with stocks and shares, handing over surplus income to others who will squander it or save it. Those too cautious for such activities leave their savings in bank deposits, waiting for better times. When this period of under-investment sets in, unemployment spreads, the general level of prices falls and the net income from profits or other unearned sources falls. Even the profits from retail trade which are maintained in the early period of depression collapse in time, and the depression reaches a low level in which undersaving and insufficient maintenance provision take place. The efforts, public and personal, to maintain even a low level of consumption, with decaying plant and no additional investments and credits, must in time react in some stimulation of prices, the first step in a "recovery" which will last until full prosperity brings another burst of excessive saving.

A Reply to Mr. Hobson

By E. F. M. DURBIN

IN his article Mr. Hobson sets forth his reasons for rejecting the view, common to Professor Robbins' "Consumption and the Trade Cycle" (ECONOMICA, Nov. 1932) and my own book *Purchasing Power* and Trade Depression, that industrial depression cannot be due

to excessive saving. Mr. Hobson, in refutation of this view, sets forth his own position, very much as he has stated it ever since his *Industrial System* was published in 1909. In his present article, however, he begins by laying down certain principles which are not stated in his earlier work and which constitute fundamental grounds of agreement between him and most other economists. I should like, therefore, to make plain where I agree with Mr. Hobson before I make any attempt to defend my own position from his attack.

Ι

Mr. Hobson starts with two propositions about the theory of money and saving upon which general agreement among economists has now been reached :

1. That there is an underlying tendency in the normal circulation of money for net consumers' income to equal the total cost of producing the current output of consumption goods and new capital. As Mr. Hobson says :

". . . The net real income thus consists of new consumption goods and new capital goods : the net money income of the costs of making such goods. . . In a rightly balanced economic system there should be no lack of effective demand for either class of production and no undue delay in its application. . . ."

This proposition is of importance in refuting the more extreme theories of under-consumption to which Mr. Hobson does not subscribe. A superficial deduction from it would be that since the consumers' income is equal to the cost of producing consumption goods and finished capital goods taken together, the proportions existing between these two elements in both sides of an identical quantity should not greatly affect final equilibrium—that however large a fraction of net income is devoted to the purchase of capital goods and however small a fraction to the purchase of consumption goods the identity between the total costs of both types of output and of the consumers' net money income will remain unchanged. But this apparent corollary Mr. Hobson is at pains to deny. He does, however, lay down a second principle which is of great importance.

2. Mr. Hobson states that if the Rate of Saving (defined as the fraction of net consumers' money income spent on new capital) is *constant* it will lead to a slow and steady reduction of money costs which precedes and justifies a subsequent decline of prices.

"An increase of production and corresponding increase of money income would cause no disequilibrium, if the proportion spent and saved remains the same. If increased production were due to improved technique, so that ' cost ' per unit of the product was reduced, no trouble would arise, since the same money income as before could buy more consumption and capital goods at lower prices. A slow fall in price level, due to reduced costs, would not cause dislocation if the net general incomes were applied in the same ratio as before to consumption and capital goods."¹

This view is of the greatest theoretical importance, and again, it would seem at first sight to follow that its truth is independent of the actual or absolute size of the constant rate. If all saving and investment reduces costs below prices in the manufacture of consumption goods then it surely follows that a high rate of saving would reduce costs rapidly and a low rate of saving would reduce them slowly, without disturbing the fundamental relation between prices falling at one rate and costs falling at an equal rate. So far, I believe that Mr. Hobson, Professor Robbins and myself would be in complete agreement.

Π

Mr. Hobson next succeeds in dividing the opposition against him because he goes on to assume that the institutions of capitalism will turn a constant rate of saving into an *increasing* rate of saving, and that an *increasing* rate of saving will destroy the equilibrium between prices and costs which a constant rate of saving maintains. Whether or not the rate of saving does tend to rise in a capitalist society is a matter for statistical analysis, but the argument that general monetary equilibrium cannot co-exist with a rising rate of saving is capable of logical analysis. And here I should be inclined to agree with Mr. Hobson rather than Professor Robbins. As I argued at length in my book,² it does appear to me that an increase in the rate of saving, in the absence of off-setting changes and in the presence of contracts enduring through time, will lead to the appearance of net losses in the production of consumption goods, and that this check to confidence will reduce the absolute volume of monetary investment. If this happens, it follows that an increase in the rate of saving is capable of inducing a divergence between saving and investment as defined by Mr. Keynes, and may lead to the existence of a general depression whose intensity will depend upon the extent to which the rate of saving has risen and upon the rate at which existing contracts can be revised.

Mr. Hobson does not seem to be aware that I agree with him in ¹ Italics mine. ² Purchasing Power and Trade Depression, ch. iii, §2. his implicit analysis of the result of an increase in the rate of saving, and with the more general proposition that the absolute volume of monetary investment varies directly and not inversely with the price level of consumption goods. (See p. 403 of Mr. Hobson's article.) Yet I argued at length, in criticism of Dr. Havek's position, that an expansion in the profits of industries producing consumption goods would stimulate confidence and would increase the number of capital investments undertaken, and so force up the *absolute* volume of monetary investment. Whether this rise in the absolute quantity of monetary investment will be accompanied by any increase in the volume of real capital produced, or a rise in the *proportion* of capital goods produced to consumption goods, will depend entirely, in my view, upon whether or not there are unemployed resources in the capital goods industries. If there are factors of production attached to the industries producing fixed capital whose monetary supply price is above the previous monetary demand price for their services, then the rise in the quantity of money spent upon fixed capital will lead to an immediate expansion in the absolute physical output of capital. This absolute expansion will also be a relative expansion if there are no unemployed resources in the consumption goods industries and if there are barriers to mobility between the two groups of industries. Should these two conditions be fulfilled at the same time, the production of real capital will increase before the production of consumption goods can rise. All this would be acceptable to Mr. Hobson. Hence in so far as Mr. Hobson is pleading, as he appears to be pleading in the second part of his article (page 407) for a more careful control of the relation between saving and investment, I should agree with him in a way that Professor Robbins would not

III

Where I disagree with Mr. Hobson is in the use he makes of these foregoing propositions and with the fundamental reason that he gives for the appearance of cyclical depression and unemployment.

In the first place I disagree radically with the view that the analysis of the effect of an increasing rate of saving, however true it may be, throws any real light upon the cause of the trade cycle. If it were true that it is an increase in the rate of saving which causes the crisis in the process of expansion, then there would be no escape from the conclusion that the depression must be preceded by a steady fall in the rate of expansion in the demand for consumption goods and a steady fall in the rate of profits made in their production. Now, in fact, that is not the case. The depression supervenes at a time when the rate of expansion in the demand for consumption goods is still on the increase, when the general level of profits in the production of consumption goods is still rising, and when the derived monetary demand for new capital is still expanding. It is a familiar fact that the profits in the production of consumption goods continues to expand for a considerable period after the general recession has begun. This is contrary to the expectations of any theory which can sensibly be called " under-consumptionist." It is not the market for consumption goods which actually fails.

I cannot think that Mr. Hobson has understood the full importance of the proposition that investment reduces the average costs of production. He does not seem aware of the real significance of the existence of "forced saving" when that forced saving is due to the inflation of the consumers' income by the creation of producers' credits. He writes :

"... Strictly speaking, all bank loans or overdrafts may be classed as inflation, additions to the volume of purchasing power representing incomes. But the term is usually applied to such increases of credit as do not immediately stimulate a corresponding increase of goods and, therefore, cause a rise of the price level. If this rise of prices provokes a corresponding increase in output of goods the temporary act of inflation is said to be cancelled. ... If this process halted as soon as full employment of productive resources was reached all might go well, provided consumers were able to purchase the growing volume of consumers' goods. ..."

This strongly suggests that Mr. Hobson believes that new credits associated with expanding production and issued with a view to *stabilising* prices are not inflationary. But the significance of his own proposition that investment will reduce costs has escaped him at this point. If prices are stabilised when costs are falling, then profits are necessarily forced higher and higher and a cumulative process of inflation will begin which can only be brought to an end by a positive deflationary check imposed by the banking system. This check to further credit expansion constitutes, in my opinion, the only necessary element in the proximate cause of depression. But to subscribe to this view of the significance of investment, as Mr. Hobson does, is to remove the final operative cause of the trade cycle from the realm of under-consumption to that of credit expansion. It is not possible for Mr. Hobson to hold that capital construction reduces costs and that price stabilisation policies are not inflationary.

In the second place I am bound to disagree, as Professor Robbins disagreed, with the deeper reason which Mr. Hobson gives for the existence of unemployment and cyclical depression. I cannot understand Mr. Hobson's reasons—set forth in the last section of his article—for connecting the inequitable distribution of income and the existence of "automatic saving" with purely monetary disequilibrium. This is the fundamental ground of dispute between Mr. Hobson on the one hand and Professor Robbins and myself on the other. It is, of course, perfectly true that the existence of inequality in distribution determines the rate of monetary saving in modern society. It is also almost certainly empirically true that if the degree of inequality were greater the volume of saving would be greater, while if the inequality were less the volume of saving would be smaller. But this has nothing to do with the view that the actual rate of saving set up within an inequalitarian society will destroy monetary equilibrium by bringing prices below costs in the production of consumption goods. In the same way, although it would be equally true that the degree of inequality determines the number of cars which are produced, and that if there was less inequality there would be less cars, and more urgent human needs could be satisfied, yet it would not follow that monetary equilibrium in the production of cars could not be attained in an inequalitarian system. A certain rate of saving will be set up by the degree of inequality which exists. Why is it impossible that that rate of saving-supposing it to be constant -should not reduce costs below prices in the same way as any other rate of saving? What conceivable connection can there be between the social considerations raised by the inequality of incomes and the conditions of monetary equilibrium consonant with any constant rate of saving?

May I ask Mr. Hobson a crucial question? Suppose that income became equally distributed but that everyone became much more thrifty in the resulting society, so that the equalitarian system had just as high a rate of monetary saving as the old inequalitarian order, would monetary equilibrium exist or not?

I cannot help thinking that Mr. Hobson has failed to distinguish three different conceptions :

1. That of the *ideal social rate of saving*—the rate of saving which will maximise the anticipated satisfaction of the whole of society over the indefinite period of its existence. The height of this rate of saving is determined by the balance between present

satisfactions and future satisfactions of all the individuals composing the community on the one hand, and the technical opportunities for investment on the other. In relation to the determination of this rate, the distribution of income to individuals is significant.

2. The maximum safe rate of monetary saving—or the rate of monetary saving which will not, at any given moment, reduce the price level of consumption goods below that of their costs of production.

3. The *actual rate of saving* is the rate of saving, given the distribution of income, that satisfies the consumers' preferences.

Now it is true that the distribution of income will affect the actual rate of saving and it is also true that it will lead—or may lead-to divergences between the actual rate of saving and the ideal rate of saving. Inequality will lead-or may lead-to more saving than is compatible with the maximisation of the satisfaction of the representative individual enjoying the average income. But this has nothing to do with the determination of the maximum safe rate of saving. At one point-when Mr. Hobson attacks inequality—he is proving that the actual rate of saving will diverge from the ideal rate of saving. But he speaks as though this were the same thing as proving that it will depart from the rate of saving compatible with monetary equilibrium in the market for consumption goods. This is a complete non sequitur. As I have already argued, the truth appears to be that monetary equilibrium is compatible with any constant rate of saving-however high and however determined : but that it is not consistent with an increasing rate of saving-however small the rate of increase may be. This is the central difference of analysis between Mr. Hobson and myself.

IV

Finally, I should like to say something more about the possibility of curing the trade cycle. Mr. Hobson finds the opposition between credit expansion and the cure of cyclical depression quite unreal.

"So far as I understand certain rather cryptic expressions of Professor Robbins, he would agree with Mr. Durbin that wagecutting would by greater inequality of distribution stimulate the increased rate of saving in which the former finds salvation. That wage reduction throughout the economic system would react injuriously on all productive processes by reduced demand for their products is an objection that has no purchase upon either mind. . . . Mr. Durbin, indeed, states that 'Wage reductions will undoubtedly increase the permanent demand for the output of the capital good industries,' though how and why this strange result will be attained he does not explain '' (see p. 415). From what I have already said it should be clear that Mr.

Hobson is quite wrong to suggest that I am indifferent to the disturbing effects of a reduction in the demand for consumption goods. On the contrary, I am very alive to its reality. But if it is true, as I have argued, that a series of disguised inflations have attracted a larger fraction of the community's resources into the capital good industries than can be profitably employed in them by the rate of voluntary saving, then it must follow that the only way in which these resources can be permanently employed is by an increase in the rate of saving secured by some policy or other. If they are re-employed by forced saving of an inflationary character the resulting situation is unstable and must inevitably lead to a new crisis and depression. But Mr. Hobson does not understand how wage reductions will help the matter. The result of wage reductions, which he neglects, and which provides the connecting link between wage reductions and re-employment, is the effect of an all-round wage cut upon the level of costs in the various types of production. Wage reductions in the consumption good industries will restore the margin of profit there. Wage reductions in the capital good industries will reduce the cost of new capital. Meanwhile the effect of general wage reductions will be to increase the inequality of distribution and, therefore, the rate of saving. As the process of wage reduction is carried out, and the size of the gross money income is reduced, a larger and larger fraction of that income will be spent upon capital goods, thus bringing the relative demand for consumption goods and capital goods to the proportion in which the factors of production are actually invested in these two types of employment. Permanent equilibrium will be attained with a lower general level of prices, and with costs and prices declining more rapidly than they have ever done before, because a greater rate of voluntary saving has been permanently induced by a redistribution of the social income in favour of large incomes. I fail to see that this is a "strange result," although it is unquestionably an "unsavoury business."

But I should now add a different conclusion. I do not now believe that the two courses of wage reductions and wasted resources exhaust the possible policies. I still believe that they are the only alternatives within a system of private enterprise. If, however, we assume a central authority capable of co-ordinating credit and taxation policies a third possibility becomes available.

The quantity of resources invested in the capital good industries can only be employed at existing prices by forced saving. Forced saving can only be secured in an uncontrolled system by an unstable inflation. But it could be secured equally well in theory by taxation. If a Planning Government chose to pursue an expansionist monetary policy until the whole of the unemployed resources in the consumption good industries were brought back into employment and then stabilised the expenditure on consumption goods by taxing the rising consumers' income at an increasing rate, it could use the funds it obtained in this way for financing capital schemes which would employ the idle resources in the capital good industries. By this method the Planning Authority could maintain the same rate of saving (regarded as a fraction of net income) at a higher level of prices as the reduction of wages would secure at a low level of prices. It is not my business to expand this argument here, but only to make clear that the real problem of permanent monetary equilibrium is to secure, by some method or other, an identity between the fraction of net income saved and the fraction of real resources invested in the capital good industries. This is the only requirement for monetary equilibrium and not, as Mr. Hobson thinks, a further identity between this fraction and the fraction which will maximise utility to the representative consumer.

A Rejoinder

By J. A. HOBSON

LET me take Mr. Durbin's chief points of disagreement in the order he gives them. My view that a depression is due to an excessive rate of saving does not hinge upon the contention that the first phase of a depression is a collapse of demand for consumption goods. The collapse of demand admittedly shows itself first in a reduced demand for plant and materials in the fundamental production industries, into which investment capital has been flowing at a pace proved now to be excessive. Unemployment in these industries ensues, and the new savings designed for investment thus remain uninvested. When this unemployment has had its necessary effect on reducing the general purchasing power of the workers the demand for consumption goods will be reduced, and the depression will proceed along its usual course.

Mr. Durbin seems to miss the full significance of the distinction

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between over-saving and over-investment. So long as over-saving is translated without delay into over-investment, i.e. the creation of capital goods at a pace proved later on to be excessive, the seeds of the depression thus sown in the economic body are not visible. This check on credit expansion which Mr. Durbin regards as "The only necessary element in the *proximate* course of depression" is a result of the recognition of an excessive investment in these industries and an important secondary cause of further depression.

I do not feel sure that I grasp correctly Mr. Durbin's argument based upon "monetary equilibrium." If he means by this term an equilibrium between "costs" and selling prices, I cannot see its relevancy to my position, that an inequalitarian distribution of real and monetary income causes an attempt to create by saving and investment an excessive amount of plant and other capital.

Here I may remove two misconceptions of my argument. First, I am not in this argument concerned at all with what Mr. Durbin calls "the ideal social rate of saving" as interpreted in terms of human satisfaction, important as that consideration is. In fact none of the three conceptions which Mr. Durbin thinks I fail to distinguish touches the core of my argument. The second comes nearest, viz. "the maximum safe rate of monetary saving." But here for "rate" I should substitute ratio, for it is not the amount but the proportion of saving to spending that goes wrong. In an equalitarian society a larger *amount* of saving could and would occur, because the increased demand for consumption goods would validate an increase of production and a larger use of plant throughout the economic system. A monetary equilibrium in the sense of a price level equal to costs, is consistent with a continuous stabilised depression.

As to Mr. Durbin's " cure " through wage reduction and lower " costs " thus brought about, I cannot understand how he can believe that the immediate effect of this policy will cause an increased amount of demand for capital goods. On the contrary, the first and certain effects will be a reduction of demand for consumption goods from the wage-earners. The lower " costs " from wage cuts will be offset by this fall of demand as it percolates through the various productive processes. Mr. Durbin appears to conceive the desirable equilibrium in terms of the production of consumption goods and of capital goods, whereas the equilibrium I deem desirable is that between productivity and consumption (effective demand for commodities).

I recognise that this reply cannot seem satisfactory to Mr. Durbin, partly because I am conscious, in some places, of missing 1933]

his point, partly because he does not appear to recognise what I would call the fundamental logic of my position, viz. that rents, excessive interest and profits constitute an irrational surplus income, the irrationality of which must be represented in an attempt to save and invest a larger proportion of the total income than can be utilised as capital.