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Money and Capital: A Reply

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## MONEY AND CAPITAL: A REPLY

I. WITH an article devoted to a critical discussion of my *Prices and Production*, Mr. Sraffa has recently entered the arena of monetary controversy.<sup>1</sup> There is no denying the fact that reviewing books on money, at a time when monetary theory is in a state of violent fermentation, is not an easy, and perhaps not even a pleasant, task. I can easily understand Mr. Sraffa being a little upset at having spent so much time on a work from which he has obviously derived no profit and which appears to him merely to add to the prevailing confusion of thought on the subject. But it seems to me that, in expressing indignation without making his own position quite clear, he has run the risk of doing himself less than justice and of taking up a position which is, to say the least, somewhat confused. I am not anxious to indulge in controversy for its own sake. But it seems to me that, in replying to Mr. Sraffa's strictures, I may be able, not only to defend myself against what appear to me to be needless misunderstandings, but also to make clearer certain matters which do present, to use Mr. Robertson's phrase, "appalling intellectual difficulty." Hence I have asked the Editors of this JOURNAL to give me space for reply.

Mr. Sraffa objects that I tried to say too much in four lectures, but his criticism really demands that I should have said a great deal more. In fact, many of his objections concern points which are implied rather than specifically developed in *Prices and Production*, this being partly due to the fact that I had discussed them in some detail elsewhere and partly to the fact that I thought that they must be sufficiently clear to an economist without further elaboration. In a short reply it is obviously impossible to discuss the relation between the general theory of equilibrium and the theory of money—one of the points on which Mr. Sraffa disagrees with my method of approach. Fortunately, however, a translation of my earlier treatment<sup>2</sup> of these *prolegomena* to a discussion of the rôle of money in the theory of industrial fluctua-

<sup>1</sup> See his article, *Dr. Hayek on Money and Capital*, ECONOMIC JOURNAL, Vol. XLII, No. 165, March 1932, pp. 42 *et seq.*; Vol. XLII, No. 165, March 1932, pp. 42 *et seq.*

<sup>2</sup> *Geldtheorie und Konjunkturtheorie*, Vienna 1929.

tions has just been completed, and will be published before very long; so that I hope I may be permitted to refer Mr. Sraffa to this book for a reply to his methodological criticisms, and to ask him to return to the points which I do not discuss here should he still feel dissatisfied.

If he does so, I should also like to ask him to define his own attitude to these problems more clearly than he has yet done. From his article one gains the impression that his attitude is a curious mixture of, on the one hand, an extreme theoretical nihilism which denies that existing theories of equilibrium provide any useful description of the non-monetary forces at work; and, on the other hand, of an ultra-conservatism which resents any attempt to show that the differences between a monetary and a non-monetary economy are not only, and not even mainly, "those characteristics which are set forth at the beginning of every textbook on money." I am, however, not quite sure whether Mr. Sraffa has perceived that the refutation of this idea is one of the central theses of my book. What he certainly has not seen—though I should have thought that this was a rather obvious point—is where the essential differences between a monetary and a non-monetary economy are to be sought. I have been assuming that the body of existing pure economic theory demonstrates that, so long as we neglect monetary factors, there is an inherent tendency towards an equilibrium of the economic system; and what I tried to do in *Prices and Production*, and in certain earlier publications, was to show that monetary factors may bring about a kind of disequilibrium in the economic system—which could not be explained without recourse to these monetary factors. I do not quite understand whether Mr. Sraffa thinks that, in order to show this, it would have been necessary first to re-state the whole of equilibrium economics. I thought that this was not only impossible within the limits of a small book, but also quite unnecessary.

Mr. Sraffa's suggestion that I am surreptitiously shifting my position from the theoretical analysis of "neutral" money to the defence of one particular maxim of monetary policy is entirely due to his misunderstanding of this point (p. 43). I am, indeed, assuming that it is generally thought desirable to avert any developments which lead the system away from an equilibrium position, and which, therefore, make a revulsion inevitable sooner or later. But there is no justification for the suggestion that, after this, my exposition illegitimately takes certain aims of economic policy for granted—which I assume "will be found

desirable by every right-thinking person." However, I must not devote too much space to these general methodological questions, but must turn now to Mr. Sraffa's criticism of more specific points in my theory.

2. It is against two cardinal points in my theory that Mr. Sraffa directs most of his criticism: one being the concept of a money rate of interest which is different from the "equilibrium" rate—a concept which it has in common with the theories of a number of other contemporary writers—the other being the tendency for capital accumulated by "forced saving" to be, at least partly, dissipated as soon as the cause of the "forced saving" disappears. This latter point is, in a certain sense, a peculiar characteristic of my own theory of the credit cycle, since it has, so far as I know, never been as explicitly stated before; and it is upon the truth of this point that my theory stands or falls. Following the order of Mr. Sraffa's criticism, I shall deal with this latter point first.

Before it is possible to reach the central point, however, it will be necessary to discuss two closely related questions which are essential to the understanding of the main problem—in spite of the fact that Mr. Sraffa considers them to belong to the "preliminaries" which he thinks "so utterly irrelevant" that he relegates them to two footnotes (pp. 45, 46). In *Prices and Production* I have used the concept of the proportion between the demand for consumers' goods and the demand for producers' goods in two senses—a "real" and a monetary one. This procedure was justified by a special simplifying assumption, on which the greater part of the argument was based, and which made the two proportions identical. In the *real* sense, the concept of this proportion corresponds<sup>1</sup> to the concept of the average investment period, as is easily seen when we regard all goods and services which are already within a unit period of time of becoming ripe for consumption, as consumers' goods; and all other unfinished goods and services as producers' goods. Then the proportion between the amount of consumers' goods and the amount of producers' goods existing at a moment of time (required in order to continue production by the same method) will correspond (except for a small difference which stands in a definite relationship to the arbitrary unit period chosen) to the average investment

<sup>1</sup> This is strictly true only if the proportion is expressed not as a simple algebraical expression, but as a differential quotient of the function expressing the rate at which the original factors are applied during the production period. Cf. the German edition of the book in question: *Preise und Produktion*, Vienna 1931, p. 39.

period measured in the same units. The proportion between the demand for both types of goods and services, as exercised in the form of *money* offered for them, will correspond to the real proportion *only* under the special assumption made for convenience of exposition in the earlier parts of *Prices and Production*, viz. that all goods and services used in the process of production are exchanged against money every time they advance one unit period of time nearer to the consumption stage. That this is a case which is hardly ever likely to occur in the real world is obvious from the fact that it could never occur where any of the durable goods used last for more than one unit period of time. And I think that I have amply indicated in *Prices and Production* that, in the real world, the monetary proportion will be very different from the real proportion.<sup>1</sup>

But the first essential point which Mr. Sraffa seems to have overlooked is that there is some relation between the monetary and the real proportion in the sense that a change in the former will tend to bring about a like change in the latter. Of the fact that, when once this simplifying assumption, made in the earlier part of *Prices and Production*, is dropped, this relation becomes extremely complex, nobody could be more conscious than I am. But how Mr. Sraffa, in view of the discussion of this point on pp. 104–6 of *Prices and Production*, could suggest that I have overlooked it, is beyond my comprehension. In any case, it is the demand as expressed in money which determines the prices of goods in the successive stages of production, and it is these relative prices which determine the physical quantities of goods directed to the several stages.

The second essential point on which Mr. Sraffa has obviously misunderstood me concerns the reasons why these proportions (in the first instance the monetary proportion—which will lead to a similar change in the real proportion) may alter. The monetary proportion (for the system as a whole) is the proportion between the sum of the amounts spent by individuals on consumers' goods and the sum of the amounts spent by them on producers' goods; and it may therefore alter *either* in consequence of a change in the proportion of their income which individuals devote to each of these objects of expenditure, *or* in consequence of a change in the relative amount which the different individuals have to divide,

<sup>1</sup> Cf. pp. 42, 63, 105. I should like to take this opportunity of particularly stressing the importance of the qualifications introduced in lecture IV of *Prices and Production* which Mr. Sraffa has entirely neglected; for, if these qualifications are overlooked, the argument of the earlier lectures, which was based on highly simplified assumptions, must of necessity seem somewhat unrealistic.

*i.e.* a change in the distribution of purchasing power. Mr. Sraffa must have overlooked this when he accused me of making contradictory statements in connection with the question as to whether it is the decisions of entrepreneurs or those of consumers (or both) which determine the changes in the proportion (p. 45 *n.*). In fact, of course, entrepreneurs are also consumers—though not all consumers are entrepreneurs—and individuals of both groups may change their proportions <sup>1</sup> (by saving or consuming capital); but the social proportion may be affected not only by the decisions of individuals, but also by changes in the buying power of different groups of individuals—due to additions of new money. Now the essential point to note here is that the additional money is, in the normal course of things, lent to somebody who, at that lower rate of interest, is willing to invest more money than before—and to borrow for this purpose.<sup>2</sup> As I think I have sufficiently emphasised in *Prices and Production* (cf. *e.g.* p. 11), it is the fact that, when additional money is lent at interest to the highest bidder we are able to draw certain general conclusions as to where it will be used, which enables us to analyse the effects of the increase of money beyond mere generalities. If it is used—and in this case there is every likelihood that it will be so used—to purchase more producers' goods, a further train of effects will inevitably follow, which may be summarised as temporary forced saving, with a subsequent destruction of at least part of the capital so accumulated; or as a misdirection of production with a consequent crisis.

3. To simplify matters for the analysis of the process of "forced saving," it is expedient to start from a situation where no new savings are accumulated and where, therefore, the proportion is entirely determined by what is necessary to maintain the existing capital. This means that persons who possess capital

<sup>1</sup> I do not understand why Mr. Sraffa should suggest that a consumer who is not an entrepreneur will not affect the proportion between the demand for consumers' goods and the demand for producers' good by his decision to save. It is certain that when he invests his savings by lending them out at interest he is instrumental in directing part of his money income to the purchase of producers' goods, without himself becoming an entrepreneur.

<sup>2</sup> I do not suggest, and my argument does not rest on the assumption, as Mr. Sraffa believes, that the banks have "the power to settle the way in which money is spent" (p. 49). The only essential assumption which I actually make is that money lent at interest will normally, for the reasons discussed in the text, go to the purchase of producers' goods. It is, however, possible that the loans are made in such a way that they are used to increase the demand for consumers' goods; *e.g.* when they are made to the government in order to increase the salaries of civil servants. That I *do* discuss the case of consumers' credits separately is due to the fact that it has actually been suggested that we should "maintain purchasing power" by financing consumption in this way.

must consume only their net income from that capital, and re-invest such parts of their gross receipts as are necessary to keep the capital intact. Now if, through a relative lowering of the money rate of interest, people who find it profitable to invest at that rate borrow additional money from the banks (*i.e.* money which has not been saved but which is the product of credit expansion), then the proportion of expenditure on producers' goods to the expenditure on consumption goods will be raised, prices of producers' goods will rise and their production will increase relative to that of consumers' goods.

Every individual entrepreneur can increase his real capital only by spending more on capital goods and less on labour<sup>1</sup> used in current production (or, what amounts to the same thing, more on labour which is invested for a relatively long period). He can, however, spend more on capital goods than on wages only so long as wages have not risen in proportion to the additional money which has become available for investment. Ultimately, incomes must rise in that proportion, since even the money used for the purchase of new capital goods must ultimately be paid out to the factors which make these new capital goods.<sup>2</sup> But they will rise to the full extent only when all the new money has passed backwards through the successive stages of production until it is finally paid out to the factors. There will, therefore, always be a considerable lag between the increase in the money used for productive purposes and the corresponding increase in the incomes of the factors—and consequent increase in the demand for consumers' goods. And, so long as money keeps on increasing (and for some time afterwards—because of this lag), the demand for producers' goods will be increased relative to the demand for consumers' goods. But as the effect of this rise in wages is no longer compensated by new money becoming available for investment, a point must come when the proportion of his money receipts which is left to every individual entrepreneur to spend on capital goods is no greater than before.

This is modified only to the extent that entrepreneurs may not consume part of the extra profit made during that period, but may invest it. In such a case, the shift of incomes from a class less inclined to save to a class more so inclined will ultimately have produced some real saving. But, as Mr. Sraffa rightly remarks, it is not necessarily true that the persons who now possess more

<sup>1</sup> The term "wages" is used throughout this discussion as a short term for the remuneration of all the original factors of production used.

<sup>2</sup> Except for such amounts as may be absorbed in cash holdings in any additional stages of production.

capital will, in consequence, get a greater *proportion* of the total real income (p. 47 *n.*), and, in any case, the effect of this can hardly ever be sufficient to prevent any increase in the relative demand for consumers' goods.

Now, before wages rose in proportion to the increase in money (and, therefore, all the time when money kept on increasing at a constant or increasing rate), although the increased amount of money capital in the hands of entrepreneurs had put them in a position to buy (or produce) more capital goods than before, and so to increase their equipment and stocks; yet as soon as the competition of entrepreneurs for the factors of production has driven up wages in proportion to the increase in money, and no additional credits are forthcoming, the proportion which they are able to spend on capital goods must fall. This means, however, not only that they must stop adding to the existing capital, but also that they will be unable to maintain and replace all the capital which is the product of the forced saving. Except in so far as they are able, and find it profitable, to make up for this at the expense of their own increased income (see above, p. 242), they will be able to replace their capital only at the same rate as before the forced saving took place, and their capital will, therefore, be gradually worn down to something approaching its former state.

To describe in detail the process by which the additional capital is consumed would be a lengthy task, which I hope to undertake soon in another place. Here it must suffice to point out that if entrepreneurs in one stage of production find it impossible or unprofitable to replace *e.g.* their machines, then this will cause the capital instruments which are devoted to the production of these machines to lose their value. That the physical quantity of these capital goods will, for some time, continue to exist unchanged does not mean that their owners have not lost the greater part, or all, of their capital. It is of very little use for the machine manufacturer to hold on tight to his capital goods when the producer who used to buy the machines is either unable, or finds it unprofitable at the higher rate of interest, to do so now. Whether he likes it or not, the actions of other people have destroyed his capital.<sup>1</sup>

It is a surprisingly superficial objection to this analysis to say simply that "one class has, for a time, robbed another class of a part of their incomes; and has saved the plunder. When the

<sup>1</sup> He does not, of course, necessarily lose all of it. So far as he has definitely committed his capital to the purpose in question, he will write off part of it and will go on producing and selling below cost, thus transferring part of the loss to his competitors who, perhaps, have not profited from the inflation.



robbery comes to an end, it is clear that the victims cannot possibly consume the capital which is now well out of their reach" (Mr. Sraffa, p. 48). Is Mr. Sraffa really unfamiliar with the fact that capital sometimes falls in value because the running costs of the plant have risen; or does he belong to the sect which believes in curing such a situation by stimulating consumption? And would he really deny that, by a sudden relative increase in the demand for consumers' goods, capital may be destroyed against the will of its owners? Surely the case which we are discussing is just the same: as incomes rise in consequence of the preceding credit expansion and the mass of consumers, who under our assumption spend all their income on consumption goods, increase their expenditure accordingly, while the money available for investment in capital goods does not increase any longer, the value of some capital goods produced under the inducement of a relatively stronger demand for such goods will fall below their cost of production.

It is difficult to understand why Mr. Sraffa thinks that it is a contradiction to say that an inflation for productive purposes will cause little *permanent*<sup>1</sup> increase of capital, while an inflation for consumptive purposes will actually cause a consumption of capital. The fact is simply this, that any increase of incomes used for consumptive purposes relatively to the sums available for productive purposes, will tend to decrease the "purchasing power" of these sums (*i.e.* the purchasing power of money-capital); and that, whereas in the former case, where the relative rise of incomes follows only a preceding relative rise in the demand for capital goods, only part of the capital created by the inflation is destroyed again, in the latter case, the destruction of capital is not offset by any preceding gain.

Finally, Mr. Sraffa levels against this part of my argument the further objection that "if the banks increased the circulation but apportioned the additional money between consumers' and producers' credits so as not to disturb the initial proportions, nothing would happen" (p. 48). I wonder whether this curious "objection" is not the product of an unconscious recollection from the German edition of *Prices and Production*, of which Mr. Sraffa has made so ingenious a use at the end of his article. There I have stated explicitly that a stabilisation of incomes "without causing a misdirection of production, could be effectual only if it were possible to inject the additional quantities of money, required

<sup>1</sup> I have, of course, never said, as Mr. Sraffa suggests here—thus contradicting his earlier, more correct, interpretation—that the banks cannot cause *any* accumulation of capital.

for that purpose, into the economic system in such a way that no change in the proportion between the demand for consumers' goods and the demand for producers' goods would be brought about." <sup>1</sup> In any case, I welcome Mr. Sraffa's endorsement of one of the obvious corollaries of my theory of the influence of the money stream on the structure of production. But if he accepts this, how can he reject the other corollary, that if the increase in circulation is not so distributed then changes in the time structure will result? And how can he ignore the fact that an expansion of credit via the Bank Rate mechanism will *not* "apportion the additional money between consumers and producers so as not to disturb the initial proportions," but will certainly favour the "higher" stages at the expense of the "lower"? <sup>2</sup>

4. I have occupied a relatively large amount of space in demonstrating the way in which at least part of the forced savings are lost because, as I have already stated, this point seems to me to be the most fundamental. I can, however, deal much more briefly with the second main point raised by Mr. Sraffa, since his confusion here must have been obvious to most readers. Mr. Sraffa denies that the possibility of a divergence between the equilibrium rate of interest and the actual rate is a peculiar characteristic of a money economy. And he thinks that "if money did not exist, and loans were made in terms of all sorts of commodities, there would be a single rate which satisfies the conditions of equilibrium, but there might, at any moment, be as many 'natural' rates of interest as there are commodities, though they would not be 'equilibrium' rates" (p. 49). I think it would be truer to say that, in this situation, there would be *no single rate* which, applied to all commodities, would satisfy the conditions of equilibrium rates, but there might, at any moment, be as many "natural" rates of interest as there are commodities, *all* of which would be *equilibrium rates*; and which would all be the combined result of the factors affecting the present and future supply of the individual commodities, and of the factors usually regarded as determining the rate of interest. There can, for example, be very little doubt that the "natural" rate of interest on a loan of strawberries from July to January will even be negative, while for loans of most other commodities over the same period it will be positive.

The inter-relation between these different rates of interest is

<sup>1</sup> *Preise und Produktion*, Vienna 1931, p. 100.

<sup>2</sup> That the second case which Mr. Sraffa mentions in this connection (pp. 48-9) is not analogous to a case of inflation, but to a case of saving will, I think, be obvious. Certainly, a man who repays a consumer's credit performs saving.

far too complicated to allow of detailed discussion within the compass of this reply. It becomes particularly complex when we take into account the fact that—as Mr. Sraffa points out—any single one of these rates may be out of equilibrium, just as any price may be out of equilibrium. But the only essential point at issue here is whether the fact that any of these “natural” rates, in terms of a single commodity, may be out of equilibrium in consequence of a disparity between the supply of and demand for this particular commodity can have effects which are anything like those of a divergence between the actual money rate and the equilibrium rate which is due to an increase in the quantity of money. I certainly believe that it is possible in this case to change “artificially” the rate of interest in a sense in which this (with the exception of one particular case which I shall mention) cannot be said of any commodity.

Let us take Mr. Sraffa’s case in which the farmers “arbitrarily changed” the quantity of wheat produced—which I understand, from what follows, to mean that they, for example, so increased the supply of wheat that its price fell below its cost of production and, as a consequence of its temporary abundance, loans of wheat were made at a much lower rate of interest than loans of other commodities. But would that fall in the rate of interest on wheat-loans cause anyone to start round-about processes of production for which the available subsistence fund is not sufficient? There is no reason whatever to assume this. In so far as people live on wheat, they will actually be provided with food for a longer period; and in so far as the lower price of wheat will induce people to eat more of it—instead of something else—these other goods will also be available for a longer period of time, and interest in terms of these goods will also fall. The effects will be just the same as if a corresponding amount of wheat had been saved, and when, as a consequence of the fall in the price of wheat, its output falls again, the accumulation of capital made possible by the surplus of wheat will simply cease.<sup>1</sup>

The case would, however, be different if the actual supply of wheat were not changed, but if, under the mistaken impression that the supply of wheat would greatly increase, wheat dealers sold *short* greater quantities of future wheat than they will actually be able to supply. This is the only case I can think of where, in a barter economy, anything corresponding to the deviation of the

<sup>1</sup> That large fluctuations in the rate of saving may have effects similar to those of changes in the quantity of money, I have already pointed out in *Geldtheorie und Konjunkturtheorie*, p. 120.

money rate from the equilibrium rate could possibly occur. And if we assume that, in the community where this happens, wheat is the most important consumption good, then the consequences might be similar to those which occur when the money rate is below the equilibrium rate. The relatively low price at which (*e.g.* in terms of machines) consumers' goods are offered for the immediate future will, in this case, make it worth while to secure sufficient supplies of them to start longer processes of production. But a time must come when the error is noticed, prices of consumers' goods rise, and it becomes obvious that it is not possible to wait as long as had at first seemed practicable for the product of the investment. Although I am tempted to follow this example further, I must leave it here, and trust that this sketchy outline will be sufficient to show the main differences between this and the former case.

If we generalise this second case, and assume that it is not the promise of a particular kind of consumers' good, but the claim on present goods in general which is offered in exchange for promises of future goods in excess of present goods available for that purpose, then we have the case of an increase of money by means of additional loans for investment purposes. Investment will exceed saving; *i.e.* processes of production will be started which will be longer than is justified by the available subsistence fund, and which must, therefore, be discontinued as soon as consumers in general are no longer "robbed" by means of more and more issues of new money. The further effects of such a process have already been discussed in the preceding section.

Mr. Sraffa, it appears, sees no reason why the demand for new capital should be limited to the amount provided by saving, and he obviously sees only one reason why the rate of interest should not be lowered to zero—*viz.* the danger of a general rise of prices. But this is not surprising as coming from an author who considers a discussion of the real aspects of the capitalistic structure of production as being "utterly irrelevant" to the problems of money and inflation.

5. So far, Mr. Sraffa's criticisms, although they seem to me to be based upon a misconception of the problems at issue, are fairly intelligible. But in the last paragraphs of his article he adds some remarks which I confess I find it more difficult to follow. They begin with the paragraph at the bottom of p. 52, where Mr. Sraffa tries to make use of the fact that, at one part of my exposition, I use—for want of a better expression—the phrase "supply of real capital" for that part of the total money stream

available for investment which comes from real sources (saving or the amortisation of existing capital), and not from additional credits, in order to prove that I confound, or define as synonymous, real capital and money capital. He does so in spite of the fact that, at the point at which I do this, a footnote expressly warns the reader that “ ‘ real capital ’ stands here as the only short (but probably misleading) expression which I can find for that part of the money stream which is available for the purchase of producers’ goods and which is composed of the regular receipts of the turn-over of the existing producers’ goods (i.e., in the case of durable goods, the reserves accumulated to make up for depreciation) plus new savings.” Mr. Sraffa quotes part of this footnote. But he omits the essential part, which I have italicised here, and thus makes my use of the term look entirely silly, though the term “ real,” in this connection, has a perfectly definite—even if not quite usual—meaning. I cannot believe that Mr. Sraffa wants to misrepresent me, but I confess I find it difficult to understand the state of mind in which he singles out this footnote and then leaves out the qualifying phrase, the inclusion of which would deprive his criticism of its point. Can it be that Mr. Sraffa does not understand that that part of the money stream I thus single out must necessarily have a special economic significance? Certain of his remarks about forced saving lead me to suspect that this may be the case.<sup>1</sup>

But in the spectacular conclusion of his article Mr. Sraffa makes an even more absurd suggestion. In the discussion which followed the delivery of my English lectures, I became aware that, obviously owing to the influence of Mr. Keynes, the term “ saving ” was frequently understood in a sense different from the one in which I employed it. As a consequence, when, a few months later, I prepared for the press the German edition of *Prices and Production*, I inserted, among other additions which were intended to clear up the more difficult points, a paragraph which, I hoped, would mark off my concept of saving from, e.g., that used by Mr. Keynes. Nothing could have surprised me more than that this attempt to make the difference between Mr. Keynes’ theory and my own more clear should be interpreted by anyone as “ landing me right in the middle of Mr. Keynes’ theory.” (That I meant it in this sense is obvious from the fact that I quoted this paragraph against Mr. Keynes in my Rejoinder to his Reply to

<sup>1</sup> I need not go into the other supposed “ modification ” of my theory which Mr. Sraffa mentions in this connection, as it ought to be obvious that the case in which the amounts saved are not invested is a case of a change in the velocity of circulation; i.e. a case which, in the English edition of *Prices and Production*, I had already expressly stated to be an exception to the general rule.

my criticism of his *Treatise*.<sup>1</sup>) I venture to believe that Mr. Keynes would fully agree with me in refuting Mr. Sraffa's suggestion. That Mr. Sraffa should have made such a suggestion, indeed, seems to me only to indicate the new and rather unexpected fact that he has understood Mr. Keynes' theory even less than he has my own.<sup>2</sup>

F. A. VON HAYEK

### A REJOINDER

THIS specimen of Dr. Hayek's manner of arguing is by itself such an eloquent illustration of my review that I am reluctant to spoil it by comments. I shall therefore confine my reply to the two "cardinal" questions, whilst for the other points referring the patient reader (if there be any) to my previous contribution.

The first question is whether, as Dr. Hayek asserts, the capital accumulated by "forced saving" will be, "at least partly," dissipated as soon as inflation comes to an end: "it is upon the truth of this point that my [Dr. H.'s] theory stands or falls." My simple-minded objection was that forced saving being a misnomer for spoliation, if those who had gained by the inflation chose to save the spoils, they had no reason at a later stage to revise the decision; and at any rate those on whom forced saving had been inflicted would have no say in the matter. This appeal to common sense has not shaken Dr. Hayek: he describes it as "surprisingly superficial," though unfortunately he forgets to tell me where it is wrong. I must therefore make another attempt to follow him a little way into "profundity."

I shall take up his argument (§ 3) at the point where the inflation which has caused the accumulation of capital comes to an end. In order that the case may be comparable with Dr. Hayek's case of "voluntary saving," inflation must have proceeded at a gradually decreasing rate until it ends just when the longest among the newly started processes of production begin to yield consumable products: from that moment onwards the entrepreneurs will be able to meet their outgoings for current production and for maintenance of the increased capital entirely out of their receipts from sales, without need of any additional inflationary money. This, of course, as Dr. Hayek says, is possible "only so long as wages [*i.e.* incomes] have not risen in proportion

<sup>1</sup> See *Economica*, No. 34, November 1931, p. 402 n.

<sup>2</sup> [With Prof. Hayek's permission I should like to say that, to the best of my comprehension, Mr. Sraffa has understood my theory accurately.—J. M. KEYNES.]