Money Supply and Interest Rate in Recent Macro-economic Conceptions

A COMMENT

1. — It is one of the fundamental propositions of the theory of income and investment that an increase in the propensity to save, unless offset by an equal increase in the propensity to invest, inevitably and without exception leads to a reduction in the national income. Let us assume a national income of 1,000 million units of money a year. Out of this total let voluntary savings amount to 200 million a year and let voluntary net investments be 200 million as well. On that hypothesis, the national income will remain constant at 1,000 units of money a year. From the macro-economic point of view, the national income is in equilibrium.

Let us now assume that the propensity to save increases while the propensity to invest remains unchanged. Let savings now equal 300 million units of money a year and voluntary investment still be 200 million a year. No great effort of reflection is required to see that the increase in the propensity to save will bring about a process of contraction which is only arrested when voluntary savings out of the reduced income are exactly equal to voluntary investment. This process has been described so often that there is no need to give a detailed account of it. The theorem in question has long ceased to be a matter of controversy; and it is worth emphasising that it is universally valid in the present day economy in which savers and investors are not as a rule identical. The proposition holds good, *whatever the form of saving*.

It has, of course, never been contested that the process of contraction is inoperative when savers and investors are one and the same person, i.e. when any increase in savings out of a given income is *immediately* counterbalanced by a corresponding increase in investment. In the same way, it is a commonplace of modern theory that there is no automatic correlation in a contemporary economy between the volume of voluntary savings and that of voluntary investment in a given period where the decision to save is taken, broadly speaking, independently of the decision to invest. Current theory rejects the idea of a mechanism whereby an increase in voluntary savings by a certain amount (out of a given income) *brings about* a corresponding increase in voluntary investment by the same amount. Classical economic theory of course saw the matter in a different light. To their way of thinking, saving and investment were linked by the rate of interest which, on being forced down by an increase in saving (*out of a given income*) led to a corresponding increase in investment. Hence, alteration in the income initially postulated could only be a temporary aberration. And, in conditions of full employment, any deterioration in the level of employment would also be bound to be temporary. It is one of the major achievements of such modern theoreticians as Robertson, Keynes, Föhl, and Gestrich to have shown beyond question that this conception and approach are untenable (1). There is no longer any argument about that point either.

(1) For a simple outline of the question readers may best be referred to:

D. PATINKIN, *Price Flexibility and Full Employment*, « American Economic Review », 1948, pages 543-564.

H. GESTRICH, *Kredit und Sparen*, published by Walter Eucken. 2nd Edition, Godesberg, 1947.

2. — Nevertheless, the classical view, albeit in a modified form and based on different arguments, has cropped up again in a number of writings by Professor A. Gambino. He still argues that an increase in the propensity to save induces an increase in voluntary investment and thereby neutralizes the process of contraction, brought about by the increase in the propensity to save (2).

Gambino contends that a specific form of saving, i.e. deposit hoarding, can in certain circumstances nullify the contractive effect of an increased propensity to save and that it is therefore untrue « that saving channelled through the banking system can automatically exert depressive effects under all circumstances » (page 124). This is the point with which I wish to take issue.

Saving can take the form of hoarding cash, or of bank deposits (demand deposits) or of deposits in savings banks (savings deposits) and by acquiring shares or other long-term issues. Should the increase in savings (out of a given income) take the form of additional cash hoarding (i.e. hoarding of Central Bank money), the proposition that an increase in the propensity to save will have a depressive effect holds good. Gambino agrees. If, on the contrary, the new savings are kept in the form of bank deposits being left untouched (hoarding of deposits), Gambino maintains that the increased propensity to save does not always exert a depressive effect. For, and this is his central point of argument, the depressive effect may, in certain specific circumstances, be automatically neutralised by the increased capacity of the banking system to grant credits and by the use of these facilities for investment purposes:

« There exists — except in conditions of recession — a *continuing connection* between individual acts of saving and investments as a whole (pages 113; my italics).

« As I see it, increased saving in the form of hoarding of deposits should not be likened to the hoarding of cash », (page 114).

« Saving, even if hoarded in the form of bank deposits, does not automatically exert under all circumstances that income-depressing effect which is attributed to it by the doctrines with which I take issue. Hoarded saving, in involving an increase in the credit extended by the public to the banks, constitutes, explicitly or otherwise, one of the conditions required for the banks to extend more credit to the public: rather than as a check, it acts as a stimulus to the banks' ability to extend credit. The point therefore remains, as expressed in another phrase of mine quoted by Schneider, that « in the stages of normal economic development, the banks are induced by the hoarding of individuals to expand their credit to the public, thus introducing such a corrective to the hoarding as to eliminate any depressive influence of the latter on income and economic conditions » (page 124).

« The error lies in believing that the saving channelled through the banking system can automatically exert depressive effects, under all circumstances. This is a possibility which may come true under special circumstances, and particularly in periods of recession and stagnation, because then the *contribution of the necessary elements of deposit creation* may fail to act » (page 124; my italics).

And on page 114, he writes:

« Increased deposits or, to put it more exactly, the tendency of the public to extend more credit to the banks, do not act as a check, but rather as a stimulus to the Banks' lending potential ».

These extracts put Gambino's case in a nutshell. This is that:

(a) Increased savings in the form of deposit hoarding increase the banks' lending potential and are actually a prerequisite of an expansion of bank credit.

(b) Increased savings act as « a stimulus towards additional bank lending ».

(c) In certain circumstances, i.e. « in the stages of normal economic development »,

(2) A. GAMBINO, *Liquidity in the Economy and the Banking System*, « Banca Nazionale del Lavoro Quarterly Review », No. 18, Rome, 1951 (referred to as Gambino, 1).

Ditto. *L'offerta di moneta, tallone d'Achille dei modelli Keynesiani*, « Giornale degli Economisti » and « Annali di Economia », July-August 1952 (referred to as Gambino, 2).

Ditto. *Money supply and Interest Rate in Recent Macro-Economic Conceptions*, « Banca Nazionale del Lavoro Quarterly Review », No. 30, 1954 (referred to as Gambino, 3).

Unless otherwise stated, references are to the third article, in which the fallacy in the author's reasoning is particularly apparent.

sufficient additional credit is taken up by investors for new investments to offset the effects of the increase in savings (3).

Only in periods of recession and stagnation is it possible for saving channelled through the banking system to exert a depressive effect, « because there the contribution of the other necessary elements of deposit creation may fail to act » (page 124).

3. — To take point (a) first, recent writings on the theory of credit have proved beyond question that savings in bank accounts (deposit hoarding) *can never act as a stimulus to lending but always as a check and reduce the banks' willingness to grant new credits.* The most detailed demonstration of this case is by *Gestrich*, to whose study I would refer for a more detailed account (4). I will confine myself to some essential points of the argument. Since in a modern economy, most funds in bank accounts have been transferred from other bank balances, most savings in bank accounts have their origin in the immobilization of demand deposits. Non-entrepreneurs and entrepreneurs are not drawing on part of their bank balances. This process does not, of course, alter the banks' commitments, so that the banks' liquidity is not initially affected. Even when private individuals or firms who decide to save pay in money in cash to the banks, that is, create new balances and leave them there, the banks' liquidity is unchanged. This may easily be demonstrated as follows: If entrepreneurs pay out in cash 1,000 units of money for wages in January, the consolidated balance of the commercial banks is run down by 1,000. Cash in hand and business deposits drop by 1,000. Should the wage earners now decide to save 200 units in January by paying them into their bank account, i.e. to spend only 800 on consumer goods, then only 800 units will flow back to the banks via tradespeople. The other 200 units will be paid into the banks by the wage earners who have started to save. At the end of the month total deposits will be the same as at the start of the month. And there will be no change in cash in hand (cash liquidity) either (5). An increase in cash liquidity, together with an increase in current savings arises only when business men consider their cash in hand excessive in view of the slackness resulting from the increased propensity to save and when, in consequence, part of the public's cash finds its way back into the banking system. Business men then manage to do with smaller cash reserves and pay the balance into the banks (6).

However, the fact that book-keeping liquidity does not deteriorate and may even improve, is far less significant that the freezing of bank loans through the locking up of funds in bank accounts, as will be clear from a simple example. Entrepreneurs who have taken up short term working credits with the banks are unable, owing to lower entries on their accounts than expected to cover their credits, in whole or in part. This « freezing of existing credits naturally impairs the willingness to grant new credits » (Gestrich, loc. cit., page 130) and soon leads ao a curtailment of book-keeping liquidity (7). The obstruction of *immanent liquidity*, as Gestrich calls it in such cases, acts as a danger signal, warning the banks of serious developments:

« If repayment of debt becomes sluggish and difficult, it is a sign that the clients

(3) « Banks are induced by the hoarding of individuals to expand the credit they grant to the public, thus creating a corrective to hoarding that offsets its depressive effect on income and employment » (« Gambino 2 », page 8).

(4) H. Gestrich, *loc. cit.*, pages 125-135.

(5) If private individuals or firms pay into the banks in January savings previously accumulated in cash, that is, decide to hold previous savings in a different form, liquidity and lending potential will of course be that much increased.

The same happens in the present institutional set-up in the German Federal Republic when old savings are transferred from demand deposits to savings deposits, because a lower ratio of minimum reserves is required for savings deposits than for demand deposits. As a result of this transfer, the cash in hand available expands, and so does the lending potential. But the point at issue in the discussion is quite a different one. It is not a question of an alteration in the form of *existing savings* but of *new current savings*, in the form of deposit hoarding which do not affect the liquidity of the banking system.

(6) This is the process that Gestrich has in mind when he writes « Cash liquidity is actually increased to the extent that cash really flows back to the banks from circulation and forms bank accounts, because e.g., entrepreneurs who have been holding back are paying out smaller sums of money in wages ».

(7) Saving in the form of cash hoarding leads to the immediate curtailment not only of book-keeping liquidity (i.e. cash liquidity) but of immanent liquidity as well.

takings have dropped either because his customers are paying badly and irregularly, or because the banks' clients themselves are obtaining fewer orders and therefore experiencing a drop in income. Both factors give grounds for alarm. The prudent bank director will foresee a situation in which acceptances by customers domiciled with the bank will be presented which cannot be met from their accounts. In that event the bank will of course not leave an old client in the lurch. The more cautious clients will in any case already have taken steps to meet that eventuality by securing a book-keeping credit from the bank which will now be drawn upon. For the time being everything goes smoothly, the bills are honoured: there are only a few unforeseen debtors. At any rate the bank director, on observing that immanent credit is deteriorating, will foresee a flood of demands for credit which he cannot get out of. This will naturally induce him to take a guarded line towards applications which he can still turn down. Experience and reflection will suggest that the deterioration of immanent liquidity, unless in the case of a purely temporary phenomenon, is the prelude to a worsening of book-keeping liquidity. If we extend the investigation from one bank to banks as a whole and we assume that the process is the same throughout, the overall picture is that paper credit is replaced by book-keeping credit. On the one hand, banks must come to the rescue of their customers by extending book-keeping credits when old bills mature. On the other hand, both the volume and value of new bills will decline. For, if receipts are smaller, firms will be more reserved both as to issuing and accepting bills, and will prefer to finance their operations by obtaining book-keeping credits from their banks, or, alternatively, if the banks are unforthcoming, will cut down on new orders. In this way, the effect of a worsening of immanent credit is in due course to impair book-keeping credit » (Gestrich, *Kredit und Sparen*, 2nd edition, pages 117 to 119).

There can therefore be no question of an increase in savings from current income in the form of deposit hoarding (and that is the point, *not* an alteration in the form of *previously accumulated savings!*) leading to an expansion in the banks' ability and willingness to extend credit. What happens is just the opposite.

4. — A completely different type of effect flowing from an increased propensity to save is to be found when savers deposit their new and increased savings out of current income with the savings banks. The savings banks use the banknotes thus supplied to buy e.g. mortgage debentures, that is, they grant long term credits to investors (e.g. for building houses) via the issuing houses. The investors employ the amounts so received to liquidate the short term prefinancing credits from the banks. The commercial banks' balances are relieved by the amount saved. The lending banks become more liquid and are in a position to grant more loans than previously (8).

The form of saving therefore exercises a decisive influence on the lending potential of the banking system by influencing, in a number of ways, the cash balances (cash liquidity) held by commercial banks. Since it decides what form saving will assume, the public also influences the lending potential of the commercial banks. Moreover, as is well known, the public influences commercial banking (9) given a certain level of cash balances and a certain policy on the part of the Central Bank (for example, the maintenance of stable minimum reserve rates) by its habits in the matter of payment, i.e. by the extent to which it effects payments in cash or by cheque or transfer. I may, I think, presuppose a knowledge of these points, to which Gambino, too, refers. Nevertheless, the proposition still holds

(8) It is not quite clear whether Gambino sees this distinction between the effect of deposit hoarding and that of saving with savings banks. On page 116 he speaks of the public « unceasingly making a choice between deposits and banknotes », which naturally refers to the manner in which funds are to be held. He then adds: « In its practical developments, this choice is determined also by the action of the interest rate which is disregarded if we consider only the « transactions motive », and which must, on the contrary, be kept clearly in mind when dealing with deposits, especially since « time deposits » and « savings deposits » are included among the latter as a whole ». The last remark might be taken as suggesting that he regards saving deposits and deposits on current account demand as having the same effect. He is not justified if putting them on the same footing.

(9) I shall deal with Gambino's remarks on the factors determining the volume of credit in a separate essay.

good that, in modern, highly developed economies the Central Bank still calls the banking systems tune, and by means of discount policy, minimum reserve policy and open market operations, has absolute control of the commercial banks' lending potential (10).

In any case, I have never refused « to admit that the amount of money lent by the banking system as a whole can depend upon « prvate enterprise » — that it can depend also upon the behaviour of the public as creditor of the banking system » (11) (Gambino 3, page 113).

The divergence between our conceptions therefore is to be sought elsewhere and more specifically in our complete disagreement with regard to the effects of increased saving (from current income) in the form of deposit hoarding on the banks' lending potential and on their willingness to lend. Besides, it is not true that «hoarded saving»... constitutes... *one of the conditions required for the banks* to extend more credit to the public » (my italics). *As the modern theory of credit has shown, the previous or simultaneous formation of cash savings is not a prerequisite of the extension of credit by the commercial banks* (12).

5. — This demonstration undermines Gambino's case in a number of other ways. On page 114 he says:

« While in periods of normal development or ininterrupted economic expansion the impetus given by the public to the creation of deposits *actually translates itself into a greater supply of money*, in the form of deposits, because under those circumstances the *other elements concurring in* their creation act in the same direction (or are « neutral »), in periods of recession or stagnation that impetus becomes ineffective, *lacking the concurrence of the other factors* as explained in detail in the paper on « Liquidity », 1.13-14. And this is why we can indeed have downward movements of income as an effect of hoarding in the form of bank deposits, but these depressive effects are not so automatic or so certain as is alleged in certain macroeconomic conceptions such as those advanced by Prof. Schneider » (my italics).

On page 124 he writes « In the stages of normal economic development, the banks are induced by the hoarding of individuals to expand their credit to the public, thus introducing such a corrective to the hoarding as to eliminate any depressive influence of the latter on income and economic condition ».

What Gambino means is clearly this:

(a) In a period of uninterrupted expansion there are sufficient profitable openings for investment to compensate for the depressive effects of increased saving.

Saving in the form of deposit hoarding produces an expansion in the banks' lending potential, so that the means of financing these numerous investments are provided by saving; « The impetus given by the public to the creation of deposits actually translates itself into a greater supply of money in the form of deposits, *because under those circumstances the other elements concurring in their creation act in the same direction* » (13) (my italics).

(b) In periods of recession or stagnation, on the contrary, the number of profitable investments is small. Voluntary investments lag behind voluntary saving. The contractive effects of saving are not offset; « because then the contribution of the necessary elements of deposit creation (i.e. an adequate demand for investment credits) may fail to act » (page 124).

(10) I cannot imagine that Gambino will contest the fact that the central bank's influence on the commercial banks' lending potential is considerably greater than the public's. That is the point made by Keynes when he says that money « both in the long and in the short period has a zero, or at any rate a very small elasticity of production, *so far as the power of private enterprise is concerned as distinct from the monetary authority* ». (J. M. KEYNES, *General Theory*, page 230; Italics are mine).

(11) On page 11 of my article *Interesse e quantità di moneta nella teoria macroeconomica della formazione del reddito* (« L'Industria », 1954, page 1 et seq.) to which Gambino 3 refers, I wrote: « In a mixed monetary system the public can only influence the volume of lending potential and hence the extent to which the banks extend credit via a change in payment habits ». I should have added: « and via the form in which it decides to hold new and already accumulated savings ». I did, however, say explicitly on page 11: « Increased saving in the form of cash or deposit hoarding exerts... a check on the banks' willingness to grant credit ». There can therefore be no question of my ever having overlooked this influence of the public on the banks' lending potential.

(12) Readers are referred to e.g. the works of Gestrich, Föhl, Keynes' Treatise on Money, etc.

(13) I do not understand the other alternative « or are neutral » (page 114).

The proposition that in a boom (period of uninterrupted expansion) voluntary investments exceed current savings (from existing income) and lag behind voluntary savings in a period of stagnation is in line with modern theory. The modern view, in effect, is that the expansion and contraction of the national income and employment are explicable in terms of the continued fluctuations in the difference between voluntary savings and voluntary investments in each phase of economic development. Gambino, however, asserts that a *particular form of saving* (deposit hoarding) facilitates the financing of profitable investments in a boom. Quite the contrary! As we have already seen, saving in the form of deposit hoarding restricts rather than stimulates the flow of credit. This form of saving, therefore, does not act as an incentive to such investments but as a check on them. A check may of course be desirable if the boom is nearing conditions of full employment. It may be undesirable if the expansion is just getting under way and is going to lift a country out of a depression. In the latter event, the Central Bank must eliminate the negative effects of this particular form of saving by a policy of credit expansion. On the former hypothesis, it may, if necessary, buttress the restrictive effect by a contraction of credit. If savers had put their money into savings banks or into securities, banks would, as we know, have become more liquid and expanded their lending potential. In that case, no supporting action in the early stages of a boom is called for on the part of the Central Bank.

A recession, characterised by an excess of voluntary saving over voluntary investments, may be rendered more acute by the credit-inhibiting effects of savings on deposit account, if these effects are not neutralised by the expansion of credit by the Central Bank.

6. — In conclusion I should like to stress the following points:

(a) *The development of a demand for investment credits does not depend in the slightest on whether any private individuals save or not, but only on whether and to what extent profitable investments are available. The decision to invest is independent of the decision to save — except where saver and investor are one and the same person.*

(b) *All saving has a contractive effect, all investment an expansive one.* Economic trends therefore, are constantly affected by contractive and expansive influences which give rise to corresponding processes. It depends on the order of magnitude of the impetus communicated by the decisions on the one hand to save and on the other to invest, and of the relation between these two factors whether the outcome will be contractive, expansive, or neutral. *The form of saving, can impede or stimulate these movements by influencing the banks' lending potential and their willingness to lend.* This influence on the part of the public, however, is not a « deliberate action » aimed at influencing economic activity and policy in a particular direction. It can be modified at will at any time by the Central Bank, provided it possesses the necessary means to secure its ends. The Central Bank can alone determine the scope and aims of credit policy and nowadays, in most countries, possesses all the means for controlling the banks' lending potential (14). It is therefore incorrect to assert, as does Gambino:

« Under present day circumstances, money, too, like any other good, is produced accord-

(14) Gambino writes: « According to Schneider " increased savings in the form of hoarding of cash or deposits act rather as a check on the banks' lending ability ". And for *this very reason* (my italics) Schneider further asserts that saving by itself involves, under any circumstance, that income-depressing effect which is so much emphasised in the Keynesian doctrine » (page 113). He has misunderstood me. It is not deposit saving which causes the contractive effect of saving. *Any saving, whatever the form, has a contractive effect.* Only when it is counterbalanced by a corresponding volume of voluntary investment is the outcome of the contractive effect of saving and the expansive effect of investment not a contractive process. When Gambino also imputes to me the view that such an increase in investments « can be brought about » only by deliberate action on the part of the monetary authorities (page 113), I must refer to my article in « L'Industria » (*loc. cit.*, page 10) where I said: « A demand for credit in excess of the lending potential can only be satisfied by deliberate action on the part of the monetary authorities ». That is an entirely different point.

The Central Bank can only create a credit climate favourable to investment. But it can not do more. It can never force investors to use existing credit facilities. The Central Bank's power to lift an economy out of a depression by means of credit policy is notoriously considerably weaker than the power to check an expansion.

ing to demand » (page 124). The banks can only satisfy the demand for credit as far as their lending potential allows. If demand exceeds that potential, applications for credit, even those offering the necessary guarantees, have to be turned down.

(c) Deposit saving has only one kind of influence on the banks lending potential and willingness to lend: a restrictive one. There are other forms of saving (saving in securities and with savings banks) which stimulate credit. Gambino is therefore right in saying that the public has an influence on lending potential — *but not on the actual volume of credit* — not only through the change in the habits of payment but also by the form of saving adopted. But this fact, which is well known to modern economists and often emphasized by them does not alter the fact that any increase in the propensity to save by itself — whatever the form of saving — has a contractive (15) effect on the national income while the effect of any increase in the propensity to invest is by itself expansive — and what is more, *under all circumstances*, and not, as Gambino believes, only in *certain* circumstances. The assertion that an increase in the propensity to save exerts a contractive effect only in a recession is untenable.

ERICH SCHNEIDER

A REJOINDER

Professor Schneider's diffuse reply makes it easier to identify the nature and scope of our disagreement as to the influence on income formation of saving in the form of bank deposits.

But first I must seek to clear up certain possible misunderstandings to which Professor Schneider's approach to my arguments may have given rise. For one thing I disclaim any intention of seeking to revive, lock, stock and barrel, the classical theories, according to which there is always a close link between individual acts of saving and investments as a whole. I have tried to show that the link may be inoperative in specific circumstances and particularly in periods of recession and stagnation. And I have stressed, too, the fact that the adjustment of savings to investment is a far more complex process than the classical economists had assumed.

My case was made out, as Schneider admits, « in a modified form, and based on different arguments », not only from those of the « classical economists » but also from those of the « Keynesians ». For I showed that, while the flow of savings is one of the factors which may give rise to variations in the volume of deposits, that volume may and usually does vary without any corresponding variations in the volume of real goods «saved ». That is to say, this variation may take place not only without « genuine » saving, but even without « forced » saving. On the other hand, I showed that, in considering the process of adjustment of savings to investments, and particularly that part effected through the banking system one must take account of the fact that the adjustment is effected by the interplay not only of variations in the rate of interest but also and above all of variations in the volume of supply and demand (of « loanable funds ») at a more or less stable rate of interest. The latter eventuality is more closely connected than the former one with those variations in income about which so much has been written in the recent years.

Given this approach, I cannot — as Schneider suggests — be held to « contest the fact that the central bank's influence on the commercial banks' lending potential is considerably greater than the public's » (page 218). Indeed, I explicitly criticised certain contentions currently advanced in Italy, arguing, against those contentions, that even in Italy the monetary authorities had always had and still have a decisive influence on variations in the volume of deposits and hence on the « commercial bank's lending

(15) Incidentally, I did *not* say in my article in « L'Industria » that « the reduction is in direct proportion not only to the " level " but also to the " gradient " of the propensity to save » (Gambino, page 111).

potential ». But I also joined issue with certain views current in countries other than Italy, and maintained that the public, too, had a considerable, though not decisive, influence on the volume of deposits. And, as regards the « direction » of that influence, I contended that saving in the form of bank deposits acted as a stimulus and not as a check on the banks' lending potential, since increased saving, leading to an increase in the credits extended to the banks by the public, satisfies one of the necessary conditions (though not of itself a sufficient condition) for the banks in their turn to grant increased credits to the public.

2. The preceding sentence brings out most clearly the point on which Professor Schneider and I disagree — i.e. the direction in which the public can exert an influence on the volume of deposits and hence on the banks' lending potential. His standpoint is diametrically opposed to mine. He believes that increased savings in the form of deposits always and without exception act as a check and not as a stimulus. He never tires of insisting on the point: « Savings in bank accounts *can never act as a stimulus to lending but always only as a check and reduce the banks' willingness to grant new credit* » (page 216). « Saving in the form of deposit hoarding restricts rather than stimulates the flow of credit » (page 219). « Deposit saving, has only one kind of influence on the banks' lending potential and willingness to lend: a restrictice one » (page 220) (1).

My case is that the link between individual acts of saving in the form of bank deposits and investment as a whole can be inoperative only in certain circumstances. Schneider on the contrary holds that this link is inoperative in all circumstances, always provided that savings are channelled through bank deposits.

To sum up, my contention involves a modification of the classical approach, but only by adapting and qualifying it to take account of the different sets of circumstances relevant to the problem (and more especially the different phases of the trade cycle). Schneider's interpretation, as against this, involves the radical rejection of the classical conception and conclusion is, as he puts it, « that any increase in voluntary savings by itself — whatever the form of saving — has a contractive effect on the national income... and, what is more, under all circumstances, and not... only in *certain* circumstances » (page 220).

3. Since that is the position, I fear there is no alternative but to agree to disagree.

In fact Professor Schneider's reply does not so much get to grips with my arguments as dogmatise on some aspects of the Keynesian theory which he still regards as the be-all and end-all of the « new » credit theory, in the face of my detailed analytical demonstration of its flaws, particularly as it is documented by references to the original Robertsonian formulation of these aspects. And so Professor Schneider imagines he need do no more than provide a summary numerical illustration (on page 216) and quote *in extenso* a passage from Gestrich (on page 216-217).

The trouble is that both illustration and quotation merely serve to confirm my case, since the process schematised in the one and outlined in the other is observable only in periods of recession and stagnation. In fact Schneider starts from the assumption that «in a modern economy most funds in bank accounts have been transferred from other bank balances, most savings in bank accounts have their origin in the immobilization of demand deposits » (page 216). Which would mean that the bank's liquidity and hence their lending potential would be unchanged. But this assumption is valid only in a slack period. In fact, when business is normal, the upward trend in deposits (considered as a whole and not as individual items) does not lead to less use being made of the deposits themselves, i.e. to a lower velocity of circulation. On the contrary, it involves a greater preference by the public for deposits to banknotes and hence, provided there is no change in the note issue, an increase in the banks'

(1) I must admit that I was wrong in saying that Professor Schneider refused « to admit that the amount of money lent by the banking system as a whole can depend on private enterprise »: I should have said that he ruled out the possibility of the influence of private enterprise operating in the « direction » I had in mind.