

Sorting out the issues: the two debates (1936/37; 1983-86) on Keynes's finance motive revisited*

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Summary: 1. Introduction; 2. The first round: in the aftermath of the general theory; 3. An interregnum: Tsiang (1956) and Davidson (1965); 4. The second round: 1983-86; 5. Sorting out the issues: lessons from the debates.

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Soon after the publication of *The general theory*, Keynes engaged in a debate with Ohlin, Robertson and others as to the relation between investment, saving, finance and interest rates. In the course of this debate, Keynes clarified his liquidity preference theory by arguing that investment expenditures could influence the interest rate through a fourth motive to demand money, the finance motive. This paper reconstructs Keynes's arguments and the criticisms he received from loanable funds theorists in the attempt to separate the issues that were at stake in the exchange.

Logo após a publicação da *Teoria Geral*, Keynes envolveu-se em um debate com Ohlin, Robertson e outros a respeito da relação entre investimento, poupança, financiamento e taxa de juros. No curso do debate, Keynes clarificou sua teoria da preferência pela liquidez argumentando que os gastos com investimento poderiam influenciar a taxa de juros através de um quarto motivo para demandar moeda, o motivo financeiro. Este texto recupera os argumentos de Keynes e as críticas que recebeu dos teóricos dos fundos emprestáveis, na tentativa de separar os temas que estavam em jogo.

1. Introduction

Despite the impact *The general theory of employment, interest and money* had on the economics profession, the debates that followed its publication received surprisingly little attention from academic economists, even though most of them treated fundamental points of macroeconomics.

Foremost among the forgotten arguments is the finance motive debate of 1937. One cannot help but being impressed by the lack of attention conferred to the discussions between influential economists, like Ohlin, Robertson, and Hawtrey, besides Keynes himself, on such commonly acknowledged fundamental issues in macroeconomics such as the determination of interest rates, and the relation between investment and savings, that occupied mainly the pages of *The Economic Journal* in the two years that followed the coming out of *The general theory*.¹

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¹ Practically no modern mainstream textbook on monetary theory even acknowledges the existence of a "finance motive" to demand money, even though Keynes's previous triad of transactionary, precautionary and speculative motives are still used to classify reasons to hold money.

After papers were written and letters were exchanged between the participants for over a year, the debate faded out at the end of the 30s just to reappear twice again in the literature much later. In the 50s, Klein, Fellner and others resumed the examination of the determinants of interest rates (Tsiang, 1955). In the early 80s, Asimakopulos, in a paper honoring Joan Robinson shortly after her death, reignited the debate, involving this time mainly post Keynesians, such as Kregel and Davidson, among others.

A curious outcome of all these rounds of discussions is the low level of agreement reached at the end of each round. In fact, agreement seemed to be out of reach even as to the nature of the issues being debated. The frequent use of different terms for the same phenomenon, and of the same word to designate different concepts contributed to blur the arguments and the contrasts that the authors seemed so eager to point out. In addition, seemingly distinct, although related, problems were treated as if they were one and the same by many authors, making it very difficult to understand and compare the arguments being put forth.

We would argue that at least three different issues were in dispute in these debates, especially in the first round and in the 80s, even though it is not always clear when one is being examined instead of another. First, concepts of investment and savings are presented, and their relations with income levels and interest rates are explored. A second dispute contrasts loanable funds models to liquidity preference theory as alternative determinants of interest rates. Finally, the process of financing economic activity and growth is explored, with some emphasizing that a financial process involved two different steps, that came to be known as *financing* and *funding*. Actual contributions to the debates do not always make these distinctions adequately. Sometimes the coincidence of terms, sometimes the failure to set clearly the boundaries between each issue in both rounds of discussions added to the difficulty of both participants and readers to grasp and evaluate the true nature of the arguments being advanced.

In this paper, we basically intend to contribute to dispel in some degree the obscurity of the arguments due to the latter cause. In sections 2 to 4, we reconstitute the central moments of this continuing debate. Section 2 examines the exchange between Keynes, Ohlin and others that gave origin to the whole case. Section 3 examines two contributions, Tsiang (1955) and Davidson (1965), that tried to reawaken the economists' interest in some of the issues that confronted Keynes and his critics. Section 4 tries to reconstitute the last round, initiated in 1983 and lasting until 1986, where the same points of the original exchange were resumed. Section 5, as a conclusion, tries to disentangle the three points of contention mentioned above.

2. The first round: in the aftermath of the general theory

One counts among the most important and most revolutionary arguments of the general theory the distinction between *time* preference (governing the propensity to save) and *liquidity* preference (governing the choice of assets).² According to Keynes, the determination of the interest rate has to do with liquidity preference, since interest is seen as the "reward for parting with liquidity" (Keynes, 1964:167). It is conceived as a compensation for the risks (particularly capital risk) one accepts when money (that is fully liquid) is exchanged for some other asset that is less liquid. The difference in liquidity (that is, in *risks*, as stated by Kaldor, 1980) is made up for the wealth-holder by the payment of interest. Thus, the rate of interest

² On the two choices, between consumption and savings and between liquid and illiquid assets, see Keynes (1964:166).

is determined in the margin of indifference between money and *the* alternative asset in the one-composite-non-monetary-asset world of the general theory.

Orthodox theory conceived interest, in contrast, as the reward for abstinence of present consumption. To save meant to postpone consumption, and this sacrifice was made up by an increase in the amount of goods to be consumed in the future. The interest rate was determined in the margin of indifference between present and future consumption. In fact, time preference was not enough to determine the *equilibrium* rate of interest: the goal of the saver had to be feasible and feasibility depended on the use of not-consumed income to produce more consumption goods later, that is, on the productivity of investment. Thus, the equilibrium rate of interest depended, for orthodox theory, on thrift (that determined the propensity to save) and productivity (that limited the interest that could be paid by the marginal investment project).

As Keynes rejected this theory of interest in favor of liquidity preference, he had to deal with the relation between investment and saving, that were left dangling in the air.³ In fact, a second fundamental proposition of the general theory related them through the concept of propensity to consume and the multiplier. Briefly, the idea was that when an investment project is implemented it increases the community's income as much as necessary to generate savings that are equal in amount to the original investment. Income, thus, was the adjusting variable charged with the task of equilibrating investment and saving decisions of individuals, and the way it did so was denominated the *multiplier*. It acted through consumption expenditures induced by the increase in income created by the spending in investment goods. In the end, income would have to increase the amount necessary to make private agents *voluntarily* hold the increased value of wealth as savings. In short, it is assumed that there is a desired proportion between savings and income on the part of individuals which may be aggregated into the economy's propensity to save. When an investment is made, income immediately rises by the same amount. As this increase in income cannot be used as consumption, it is necessarily saved in the aggregate, which means that the *actual* propensity to save is increased beyond what is *desired* by individuals. Those who are doing the excess saving try to balance their position consuming that part of their income that corresponds to excess savings, increasing income, now, for consumption goods producers, something that reinitiates a similar cycle. This *multiplier* stops when income has increased so much as to reach, in relation to the original investment, the desired proportion.⁴ Income, thus, that may be considered as given when one works out microeconomic choices of consumers, is endogenous to macro-

³ One will recognize the inversion of the famous comment by Keynes that he conceived first of the relationship between investment and savings (and the multiplier) and then created liquidity preference theory just because the interest rate was left without an explanation (Keynes, 1937a:250). For many authors, this account is very dubious in face of Keynes's published works. We are not interested, in any case, in the discussion of the chronology of the creation of concepts at this point. In *logical* terms, Keynes's alleged chronology of theoretical discovery does not make any difference.

⁴ One assumes thus that there is a desired ratio between savings and income, $(S/Y)^*$. When an additional investment is made, ΔI , capital-goods producers' income is immediately increased by the same value, so now total income becomes $Y + \Delta I$. As the increment in income cannot be consumed (there is not as yet additional available consumption goods), total savings is equal to $S + \Delta I$, so that the actual savings ratio becomes $(S + \Delta I)/(Y + \Delta I) > (S/Y)^*$. Individuals then will try to restore their desired savings ratio, by consuming part of their increased income ΔI , triggering the multiplier mechanism. Changes in aggregate income do not *equilibrate* savings and investment, because investment is non-available income (to use Keynes's language in the *Treatise on money*), so *the increase in income has to be saved*. The multiplier changes total income so as to balance *actual* and *desired* saving propensity. Alternatively to this description of a *multiplier process*, one could simply argue that, given an equilibrium savings ratio, $s = (S/Y)^*$, an increase in investment causes an amount of savings to be created that can only be sustainable, in equilibrium, if income rises to a new level which is greater than Y by $\Delta I + \Delta C$. Reference to equilibrium is important to bring out unambiguously the contrast between the multiplier and forced savings models (Keynes, 1964:117).

economic models (Carvalho, 1992, ch. 9). Say's law, as once pointed out by Alvin Hansen, is replaced by the concept of propensity to consume. Besides, one should not approach the relation between savings and investment in the same way one does with markets for other goods, through the employment of Marshallian independent scissors' blades of supply and demand. Savings are *created* by investment since they are allocations of income generated by the investment activity itself. Savings cannot exist without a previous act of investment. When one saves, he demands some form of claim against future income. If new assets are not being created by investment, the increased demand for claims can only be satisfied if someone else dissaves.⁵

The argument, which, to modern readers, may seem pretty straightforward,⁶ was foreign to classical reasoning that incorporated fixed-income assumptions through Say's law. It was further complicated by two digressions made by Keynes in *The general theory*. First, in a change of mind from his previous *Treatise on money*, Keynes reformulated his definitions of savings and investment, most notably the former, in such a way as to make them always equal in value. In fact, when Keynes first presented definitions of savings and investment in *The general theory*, they are both proposed as "the excess of income over consumption" (Keynes, 1964:63). For many critics (and to some followers) this meant that savings and investment were in fact two names for the same variable, which implied that no content could really be attributed to the equality between them. In the same vein, if they were merely two names for the same object, no multiplier or any other *equilibrating* mechanism between them could be more than definitional tautologies. Keynes, however, insistently denied that it was just a matter of definition.

As a second digression, Keynes stated that although in reality the multiplier is a process that takes place in *time*, with a value that depends on many factors, one could conceive of a *logical* theory of the multiplier that would operate all the time (Keynes, 1964:122-3). Again, critics interpreted Keynes to mean by the "logical" theory of the multiplier just another tautology that at every moment income is greater than investment by the value of consumption. Keynes strenuously insisted that this was not his point. These two digressions were to be taken up in the subsequent discussion by Olin, Robertson and Hawtrey (and, sometime later, by Lerner) to support their interpretations of the main issues at stake, that were the liquidity-preference theory of interest rates and the validity of Keynes's principle of effective demand.

In general, critics of *The general theory* tended to rally behind the view that Keynes's theory of determination of income and interest rates was specious, supported only by the very restrictive definitions he proposed for investment and saving. Only on those narrow definitions could one say that they are always equal so that interest could not be affected by imbalances between them.

The debate, to consider the direct confrontation between Keynes and his critics, was initiated by Ohlin's paper on what he called the *Stockholm school* and its relationship to Keynes's *General theory*. Mostly a friendly critic, Ohlin tried to restore the loanable funds theory

⁵ "If an increment of saving by an individual is *not* accompanied by an increment of new investment (...) then it necessarily causes diminished receipts, disappointment and losses to some other party, and the outlet for the savings of A will be found in financing the losses of B" (CWJMK, 29, p. 14, Keynes's emphases, see also p. 103-4). The collected writings of John Maynard Keynes, which began to be published in 1971 and extended into the 80s, is referred to in this article as CWJMK, followed by its volume number.

⁶ Although perhaps not so familiar to those who are trained in the new classical or new Keynesian traditions. One does not find the multiplier, for instance, in the subject index of Blanchard and Fischer's *Lectures on macroeconomics*.

of interest against liquidity preference by arguing that there was a methodological mistake in Keynes's model, that, in his view, took *ex post* identities to explain the behavior of economic variables (which involves *decisions* that, by definition can only be informed by *ex ante* [expected] value of variables). This same argument would also be advanced by Robertson and Hawtrey: investment and savings are equal only in an accounting sense. Keynes was thought to have been misled by his own use of empty definitions.

Ohlin agreed that in *ex post* terms investment and savings are equal in value, and presented his own algebraic manipulations to show it (Ohlin, 1937a). But he also argued that what matters to understand the behavior of interest rates is not realized investment and savings, that are always equal, but *desired* or *intended* investment and savings. *Ex ante* savings and *ex ante* investments were assumed to be decided independently since they referred to different people and different motives. But how are they to interact to make such diverse plans reach a common final value?

Ohlin began by arguing that not all investment that is expected to be profitable is in fact carried out. In particular, financial resources may be unavailable to investors. To invest, the entrepreneur may need a larger amount of resources than he has. He depends on credit. On the other hand, credit may be supplied, among other means, by individuals demanding assets with which to store their savings. *Plans* of investors and savers may not coincide. Credit conditions are also subject to choices made by others, notably banks. Demand and supply of credit were supposed to depend on interest rates (Ohlin, 1937a:221). Equilibrium interest rates could be such as to lead to divergent amounts of desired investment and desired savings. Ohlin, then, proposed that an adjustment mechanism would be triggered to make *actual* investment equal to *actual* savings. As part of the mechanism, even something close to Keynes's multiplier, i.e., induced variations in the level of income could be considered.⁷

This is the role of the credit market in Ohlin's view, which, despite the eventual idiosyncrasies in definitions, is shared by loanable funds approaches. Keynes had argued that interest rates are not determined by supply and demand for credit but by the supply and demand for money. Ohlin counter-argues that the distinction is only valid for the narrow definitions adopted by Keynes. Ohlin defines net and gross concepts of credit supply and demand. Net supply and demand curves refer to *increments* in the holdings of claims while gross curves refer to total *availability* of claims. In the latter, one can include holdings of money, as Keynes suggested, but also other claims. Net and gross concepts of credit would take us to the same result: interest is governed by the desire of savers to accumulate claims (including money) and of investors to issue claims. Savings and investment would be closely related to supply and demand for credit, even if only indirectly (Ohlin, 1937b:425): the desire to save and to invest would be very important, if not the most important, determinants of the demand for and of the issuance of claims. In Ohlin's view, Keynes was unable to see it because he was blinded by his exclusive concentration on *ex post* investment and savings, that were equal *ex definitione*.

⁷ "If the interest level is reduced, or the profit expectations raised or public works started, and thereby the total volume of investment expanded, while the planned saving is, to begin with, unchanged, how then is a larger volume of saving — corresponding to the increased investment — called forth? The answer is simple. At the end of each period some individuals and firms find that they have had larger incomes than they expected. In other words, realized savings exceed planned savings. Secondly, the negative incomes which reduce the net savings for society as a whole are reduced. Thirdly, as incomes and expected incomes rise, planned savings grow also" (Ohlin, 1937a:68).

Keynes rejected the dichotomy *ex ante*/*ex post*⁸ but accepted Ohlin's point that planned investment could affect interest rates. The connection between them, however, was not the same as suggested by Ohlin and other loanable funds theorists. In fact, Keynes stated that planned investment, as any other kind of expenditure, should give rise to a demand for money to allow the transaction to be effected. The entrepreneur should seek to gain control of *cash* in advance of the date when actual payments were due, either by borrowing from banks or by placing longer term securities in the financial markets.

The finance demand for money had the same nature as the transactions demand for money, that is, the holding of money balances to effect payments when they came due. The entrepreneur had to get hold of money to effect the desired investment expenditures. Thus, it should "bridge th[e] gap between the time when the *decision* to invest is taken and the time when the correlative investment and savings actually occur" (Keynes, 1937a:246, Keynes's emphasis). This is the same reason to explain any other demand for money for transaction purposes. The distinction between the two motives was that the finance demand had its own logic of fluctuation, dependent as it was on discretionary expenditures like investment, while the transaction demand is traditionally imagined as marked by a smoother behavior (Keynes:247). It is demand for cash, to be satisfied by the creation of money, having nothing at all to do with savings.

The essential point, thus, was that the finance motive was an element of the *demand for money* (Keynes, 1937a:248), leading Keynes to maintain that the explicit consideration of planned investment did nothing to change his view that interest rates do not bring investment and savings into balance, but the desire to hold liquid assets, such as money, with the available stocks of such assets. Interest rates had to be such as to set the prices of non-monetary assets in levels that balanced their marginal efficiencies with that of money.

Two consequences followed from this approach. First, the whole problem has to do with money and money is supplied by the banking system, not by savers (Keynes, 1937a:247). The finance motive does not change Keynes's fundamental assertion that interest rates are monetary variables. Second, the demand for money exhaust the supply of money because, given the various motives to do it, individuals have to take money out of circulation for some time. *Active* balances, such as those held according to the transactions motive, return quickly to circulation because they are held in anticipation of dated transactions. *Inactive* balances refer to money held for indefinite periods, be it because of a precaution against unforeseeable events, or because of some expected change in the conditions of markets. Any demand for money⁹ makes some pressure on the available stock of money to be relieved when money is spent and returns to circulation. As it happens with money held for any other motive, that held to satisfy the finance motive also represents a pressure on the available stock of money that is relieved when that money is spent. Keynes stated this conclusion when he sustained that investment *expenditure* "released finance", or when he stated that finance as a "revolving fund", as long as investment was not changing, or still that unexecuted or incompletely executed investment could maintain the pressure on liquidity (Keynes, 1937a:246-7).¹⁰ These propositions were to enrage Keynes's critics in both rounds of debates.

⁸ As a matter of fact, Keynes accepted the concept of *ex ante* investment but not of *ex ante* saving (Keynes, 1937b).

⁹ Including the finance motive, "lying half-way between the active and the inactive balances" (Keynes, 1937a:247).

¹⁰ Because unexecuted investment means that money held idle in anticipation of the planned expenditure ends up remaining idle.

Later in the same exchange, Keynes introduced another, related but distinct, matter. Trying to dispel some confusion that seemed to have emerged from his use of the term *finance*, that evoked the idea that it necessarily requires the existence of savings, Keynes proposed the following distinction:

“The entrepreneur when he decides to invest has to be satisfied on two points: firstly, that he can obtain sufficient short-term *finance* during the period of producing the investment; and secondly, that he can eventually *fund* his short-term obligations by a long-term issue on satisfactory conditions” (Keynes, 1937b:664, my emphases).

The point Keynes intended to make, judged by the nature of the debate, was that two *steps* had to be distinguished in the process of investment. The first, to allow the investment expenditure to be effected, involved creation of money, the *finance* stage. This requires the creation of money or someone accepting to become less liquid, lending money to the investor in exchange for some financial claim.¹¹ The second step involved the issuance of claims by the investor to allow him to retain the newly-created assets. The placement of these issued claims involved the allocation of savings (generated in the process of investment itself, as already argued), the *funding* stage, that was nevertheless strongly influenced by liquidity preference anyway.

Unfortunately, the terms and explanations given by Keynes did not help much to enlighten the debate. Although Ohlin showed some sympathy to Keynes’s ideas while maintaining his own, other critics, like Robertson and Hawtrey, were more severe. Robertson took liquidity to refer to a property of balance sheets. An agent would have a liquid position when he was not tied to debt or when he could cover his financial outlays with his assets’ yields. Finance, then, was seen as a process in which illiquid long-lived assets are bought with short-term bank credit. Both the investor and the bank would then be in an illiquid position that could only be remedied by the placement of long-term issues to absorb savings of the population. To restore liquidity meant repaying debt, not just spending, as Keynes suggested. For Robertson, thus, liquidity was a question of debt; for Keynes, a property of money circulation.¹² None of them is necessarily wrong, since they are referring to different problems. Both kept talking at cross-purposes, and no convergence was produced. Also, the true difficulties of each one’s approach were left broadly untouched since a major part of the debate was devoted to an attempt to persuade one’s opponent about the most adequate meaning one should attribute to words like finance, liquidity, investment and saving. This dialogue, that also involved Hawtrey in a position broadly similar to Robertson’s, ended up by exhausting the participants, rather than exhausting the subject.

The inconclusiveness of the exchange led to the visibly reluctant acceptance of Hicks’ synthesis. According to Hicks (1939), the debate was vitiated by its *partial* equilibrium perspective, that forced the participants to look for the market where interest rates were determined to the exclusion of all others. Investment and saving, demand and supply for credit, demand and supply for money, all of them should be recognized as operative forces determining the interest rate in a *general* equilibrium perspective, where any price depends on all

¹¹ Naturally, this is enough in what concerns the individual investor, but not from the point of view of the economy as a whole. Whoever accepted to become less liquid, lending money to the investor, had either to finance this act himself or to sell another asset, affecting its prices. Ultimately, the only way to avoid these side-effects is to assume that banks are the ones who accept to become less liquid, which means that money is created.

¹² This interpretation supports Amadeo & Franco’s (1988) view that different meanings of liquidity were being proposed by Keynes and Robertson.

markets. In a sense, all were right but unnecessarily restrictive in their answers to the question.

Not everybody, however, was pleased with this solution, and from time to time new attempts would emerge to show that there was more to the debate than just the narrow concentration on individual markets. Kaldor (1980; 1939 reprint) explored Robertson's arguments in a much more complex setting involving speculators and arbitrageurs besides entrepreneurs and banks. He built a bridge between Keynes's and Robertson's concerns by examining the former's argument that finance requires somebody accepting to become less liquid and the latter's point about how to restore the liquidity of balance sheets and the implications of failures to achieve it. Kaldor's point is that an increased saving propensity may help financing investment because it can speed up the relief of the position of those speculators that accept less liquid positions to support entrepreneurs. This argument will be resumed later by Asimakopulos (1983) to become an important point of contention between the participants in the second round of debates on the finance motive (see section 4).

Another dissident from the Hicksian consensus was Lerner (1947). He radically refused the widespread views that the equality of investment and savings was merely a matter of definition and the implied idea that the multiplier was an empty tautology. He reconstructed the liquidity preference/loanable funds debate to show that both theories were in fact compatible, being the second subsumed in the former. Lerner offers a model where interest rates are ultimately affected both by supply and demand of credit and of money. The credit market is driven by evaluations as to the productivity of capital given its available stock. The money market is driven by evaluations of the value of liquidity. According to Lerner, the quantity of capital is slow-moving while the quantity of money is not. Thus, interest rates equate supply and demand for money rather than supply and demand for capital. Liquidity preference, for Lerner, prevails over loanable funds theory.

3. An interregnum: Tsiang (1956) and Davidson (1965)

Lerner's papers came out when the first round of debates was already fading out. His conclusion, however, that the liquidity preference could subsume the loanable funds theory led Tsiang to revive the subject in the 50s. Tsiang tries to show that the relationship between the two theories is the other way around: it is liquidity preference that can be developed to become a loanable funds theory. According to Tsiang, it was Keynes himself who gave the first step in this direction when he accepted Ohlin's point that *planned* investment could affect interest rates independently of variations in the level of income. Tsiang built a model combining Robertsonian period analysis with Hicksian temporary equilibrium. The introduction of a lag between the moments in which income is earned and spent allows him to relate demand for idle balances in the first moment and demand for loanable funds in the second, with income and expenditure flows. He then evokes Keynes to consider the finance motive to demand money just a subcategory of the transactions demand, to work directly in terms of the latter.

The basic proposition of the loanable funds theory is that the interest rate is determined by supply and demand for loanable funds. Manipulating definitions of supply and demand established according to the principles above, Tsiang shows that equality between them is equivalent to the equality between the existing stock of money plus the net creation of new money, on the one hand, and current demand for finance (for all transaction purposes) plus

demand for money to hoard, on the other. In this sense, liquidity preference with its curves of supply and demand for money was shown to be equivalent to the loanable funds theory stressing credit and the need to support transactions. The latter should be the general theory, however, since the demand for money could be shown to depend on expenditure plans (conceded by Keynes with his finance motive) and on savings propensities (since they affected consumption expenditures and, thus, the transactions demand for money). Productivity and thrift were restored to their places of honor as the ultimate determinants of the interest rate.

Some time later, Davidson (1965) also contributed to a revival of interest in the finance motive, initiating a reflection on a subject to which he would still much contribute through the years that followed. Davidson also stressed that Keynes, when introducing the finance motive, made it clear that it was a variant of the transactions demand for money. Davidson's point, however, is to examine the question within the Keynesian model. In the latter, the really interesting case to examine was that of increasing investment, since in these circumstances there should emerge some pressure on the available resources, given that investment would be made before any additional saving could have been generated.

Davidson would later provide a much more complete analysis of the implications and repercussions of a finance demand for money than he did in this first paper.¹³ In fact, his initial goal was limited to showing that the real and monetary "sides" of the economy could not be studied in isolation, as if real variables had their behaviors determined independently of monetary variables, and vice-versa. Davidson shows that the finance motive allows Keynes to work with a transactions demand for money that is sensitive not only to total money income but also to its composition, in terms of consumption and investment, and, thus, by the profile of income distribution, pricing practices etc., that determined this composition. In other words, *real* variables were also *monetary* in nature. Of course, the converse had also to be true. The integration of real and monetary analysis was a goal of Keynes's and it was to be made later a central tenet of post-Keynesian economics, to which creation Davidson was to give a central contribution.

4. The second round: 1983-86

From the late 60s on, the emergence of an economics-of-Keynes criticism of the dominant strand of Keynesianism, known as *neoclassical synthesis*, reawakened interest in a revaluation of Keynes's own works. This effort was much helped by the publication of his *Collected writings*, beginning in 1971 and extending into the 80s. In particular, a *post-Keynesian* school gradually took shape with a research program defined by Keynes's original attempts to found a *new economics*, concerned with the workings of a monetary production economy. Not only the finance motive was regularly incorporated in money demand analysis but also some of the concepts originally proposed by Keynes were modeled and developed, for instance, in Davidson's finance/funding model or in Minsky's financial instability hypothesis, that starts from the diversity of financial combinations that are open to an investor as to his finance and funding needs.

¹³ In the next section we will analyze another one of his later contributions.

It was mainly among post-Keynesians¹⁴ that the second round of debates centered on the finance motive took place. It was initiated by Asimakopulos in his 1983 contribution to the memorial issue in honor of Joan Robinson of the *Cambridge Journal of Economics*. Asimakopulos resumed the arguments of Robertson and Kaldor that the mere investment expenditure could not close just by itself the financing cycle, that is, that spending was not enough to “release the finance” committed to investment, as Keynes suggested in the earlier debates. Finance was provided either through a bank loan (Robertson’s view) or by a speculator that accepted to go illiquid (Kaldor’s assumption). To state that finance was released and liquidity restored by the act of spending the money borrowed previously, said Asimakopulos, amounted to assuming the consumption multiplier to operate instantaneously. The assumption was necessary because at the moment of the expenditure, the investor would still be indebted to the banks (or to the speculator). The debt could be retired only when the general public were voluntarily saving the value of the investment, which would happen only after the multiplier had increased incomes to such an extent that the increased savings would now be desired by the public. Desired savings would be available to absorb issues of long-term securities by the firms that could then use the resources to retire their debts with the banks (or speculators). In Asimakopulos’s view, to state, as Keynes and Kalecki had done, that spending was enough to restore liquidity and release finance implied that all this took place at the very moment the investment expenditure was effected. To Asimakopulos, as for the early critics, Keynes had been misled into this conclusion by his own *logical* theory of the multiplier, expounded in *The general theory*, that was supposed to be timeless.

Asimakopulos then proceeds to criticize Keynes and Kalecki for not realizing that the process depended on the time taken by the actual (not the logical) multiplier to unfold. The duration of the multiplying process was then proposed to depend on the propensity to save that establishes how many rounds of consumption expenditures will take place before the general public is ready to keep voluntarily the savings they own and to use them to buy long-term securities. While the process is going on, finance is still tied and agents are not liquid, so new investment cannot be made. If the propensity to save is high, on the other hand, the multiplier takes less time to operate (the *leakages* exhaust the process rapidly), so the economy finds itself ready for another round of investments sooner.

Asimakopulos’s theses met three kinds of replies. First, Richardson (1986)¹⁵ argued that Asimakopulos had misunderstood Keynes’s concepts of liquidity and finance. Keynes was not referring to balance sheets and indebtedness but to the availability of money in circulation to be held in anticipation of investment. Richardson offers a simple numerical example with banks’ balance sheets to show that liquidity, meaning money supply, is restored by the investment expenditure, as Keynes suggested. Asimakopulos replied to this comment reaffirming his different understanding of the concept of liquidity, along the lines already described, and showing that *according to his (Asimakopulos’s) concept*, Richardson’s example showed

¹⁴ Some schools of economic thought that are very close to post-Keynesian theory gave even higher importance to propositions related to the finance motive. The main group to be mentioned is, of course, the French *circuit* school. As it did not take part directly in the debate that is summarized in this section, although references to it are made in their literature, I will not examine it here. Any work trying to build some positive theory of the demand for money stressing the finance motive, however, has to consider carefully the propositions of that school. To have a general idea of what the circuit school is about, see Graziani (1990). A most interesting journal publishing works of the group is the French *Economies et Sociétés, Series Monnaie et Production*.

¹⁵ One should also see Snippe (1985) and Terzi (1986).

that liquidity (as indebtedness) was not restored since debts were not repaid when money was spent.

Davidson (1986) approaches the question by a different angle. In his view, the point of Keynes's arguments is to show that it is money, not income or savings, that one needs to make a *purchase* in a monetary economy. So the main point is the distinction between finance and funding, that is between the creation of money that allows the investor to order the investment good and the placement of long-term securities that allows him to fund his debt. Davidson's view of the elementary financial processes involved in the realization of an investment does not seem to differ on fundamentals of Asimakopulos's but he rejects the latter's concentration on the period during which the multiplier is supposed to be operating. Davidson stresses, on the other hand, the interplay between investors, banks and investment banks that allows both finance and funding to be realized. In his model, the key is not the propensity to save (and the duration of the multiplier) but liquidity preference that determines the conditions under which the funding stage will occur. A high liquidity preference (or, in Davidson's terms, a low propensity to buy securities out of savings) may make the funding of investment difficult, no matter what the propensity to save is, because savers would prefer to place their savings in money or short-term assets instead of long-term securities. We are probably safe to assume that, for Davidson, a high propensity to save is neither necessary nor sufficient to guarantee that the necessary funding will be available. Total savings will always be equal to total investment. But the existence of savings is not the same thing as demand for securities.

The most heated exchange, however, opposed Asimakopulos (1983; 1986) to Kregel (1984/5; 1986). In his first contribution, Kregel raised two points. First, that *real* savings can really be thought to increase instantaneously when an investment is made so it will never be an obstacle to investment. Second, in a rather more obscure argument, that Keynes did not conceive the relation between finance and funding as a sequential process but as a simultaneous one. The investor would place long-term securities right from the beginning so the whole point was to determine who was to absorb these placements.

Asimakopulos replied that the latter assumption was too restrictive and could not be showed to correspond to what Keynes wrote. In his closing contribution, Kregel made his argument much more clear. While still refusing the period analysis method employed by Asimakopulos, Kregel argued that the important point was that for Keynes what the investor needed was to obtain credit or to place securities on favorable terms, and the determination of these terms was not a problem of savings but of money. Banks could accommodate the need for financial resources without exercising any pressure on interest rates, independently of the multiplier or of the behavior of savers. In apparent agreement with Davidson, Kregel's point seemed to be that the propensity to save was not a relevant factor to determine how adequately funding facilities could be provided. It was all a problem of liquidity preference, especially that of banks, for that matter. The matter seemed to be left to rest at this point closing the second round of debates.

5. Sorting out the issues: lessons from the debates

At first sight, these debates seemed to have been mostly a failure. The participants talked most of the time at cross-purposes, unable to agree on basic points as the meaning of the concepts under examination not to speak of a common model to allow the assessment of arguments. Nevertheless, in the course of the exchanges, some very important concepts were created, some others had their content set with greater precision and theoretical arguments

were formulated to improve Keynes's monetary theory and to allow its further development. Little was gained towards the construction of a unified body of economic theory, if that is in fact possible, but Keynesian economics certainly profited from these debates.

Three issues were at stake: the relation between investment and savings, and the meaning of the consumption multiplier; the determination of interest rates; the development of a Keynesian approach as to how to provide financial support to capital accumulation.

Investment, savings and the multiplier

Keynes's insistence on the necessary equality of aggregate investment and saving was confusing to critics and friends alike. Two senses in which this equality was acceptable were explicitly rejected by Keynes. On the one hand, he refused to accept that investment equaled savings because both were *defined* to be the same thing. Related to this view, it was proposed later that the equality was of the type one finds in national accounting: investment and savings are conceived in such a way that residuals (like inventory changes) are always added to one or the other so as to make them equal. Double-entry accounting would guarantee the equality between them. A second interpretation was also rejected, namely that savings and investment were equal *in equilibrium*, which, of course, was no different from the "classical" view of the time.¹⁶

Keynes insisted that although equality was maintained at all times this did not mean that investment and savings were *identical*:

"Aggregate saving and aggregate investment are equal in the same sense that the aggregate quantity of sales in the market is equal to the aggregate quantity of purchases. It does not follow from this that sales and purchases have identically the same meaning or that one term can be substituted for the other" (CWJMK, 29, p. 253).

The continuously-maintained equality between investment and savings did not mean, however, that the state of the economic system was independent from them. But, in contrast to those who would look for equilibrating mechanisms between the two in the consumption multiplier, Keynes showed that the latter would explain how total income would adjust to a given amount of savings that was automatically created when an act of investment was performed. Income changes in order to allow agents to reach their desired *savings ratio*, not to *generate* savings equal in amount to realized investment. Aggregate savings are not an operative element determining the behavior of agents but individually-determined savings ratio (with respect to income) is. The plans of individuals as to how to allocate their income between consumption and savings are essential elements to explain the multiplier. Consumption expenditures are induced because when an investment is made somebody's income is increased and, unless part of this additional income is consumed, his or her savings will be accumulated in greater proportions than desired. Consumption expenditures result from the individual's attempt to restore his desired consumption/saving ratio. The expenditures that were induced will increase somebody else's income, on their turn, inducing the latter to restore his or her savings ratio, and so forth. The multiplier shows how many rounds of new expenditures will happen

¹⁶ In the first case, one finds Robertson's (1937:429) statement: "[the critics] have merely maintained that he has so framed his definitions that Amount Saved and Amount Invested are identical: that it therefore makes no sense even to inquire what the force is which ensures equality between them". On the second, Hawtrey (1937:437) puts it as follows: "Old-fashioned orthodoxy never held that saving and investment *could not* be unequal; it held that their inequality, when it did occur, was inconsistent with equilibrium".

until income has increased to the required extent for the original amount of savings, generated by the investment expenditure, to be *voluntarily* retained. Total savings do not change in the multiplier process: it is total income that is adjusted to make the amount of savings created by the act of investment desired. The aggregate equilibrium savings ratio is restored when income (the denominator) increases in the required amount given the increase in savings.

Thus, the multiplier was not just a glorified tautology as some critics implied. It referred to an operative mechanism in the adaptation of the economic system to a shock represented by some discretionary spending. It allows the calculation of what total income has to be in equilibrium, that is, in order to be compatible with the savings that were created by the very act of investment. As such, that is, as a *logical* theory or as an equilibrium condition, it is really timeless, which is not the same thing as saying that it operates instantaneously. As Leijonhufvud (1968) pointed out, the period involved in equilibrium definitions in *The general theory* is set precisely as the duration required for the multiplier to operate. It does not make sense to inquire thus how long it takes for the multiplier to work its effects: *it takes one period*. One changes the subject when a sequential analysis is adopted, as demanded by Robertson and his followers.¹⁷

Thus, the first issue to be sorted out of this debate refers to the relation between investment and savings and the multiplier process. Keynes insisted in his debate with Ohlin that the equality between the former two concepts was not *ex post*. On the contrary, he refused to accept the relevance of Ohlin's *ex ante* (desired) saving because the whole point of the multiplier (and a central aspect of his principle of effective demand) was to show that aggregate savings were endogenously determined, since aggregate income was the adjustment variable. In this sense, aggregate saving could never define an independent restriction on investment, be it *ex ante* or *ex post*. The oblivion into which this debate fell certainly made it much more difficult for the following friends and foes of Keynesianism to work with the new concepts of savings and investment.

The finance motive

The debate around the finance motive was not sufficient to settle the dispute between liquidity preference and loanable funds theories. It contributed, however, to make much more precise and clear-cut the issues that separate them. In particular, *in both rounds of the debate liquidity preference proponents made it clear that, for them, the decisive argument in favor of this theory is that no matter what reason there may be for an increase in the demand for money, the latter may be satisfied by the banking system, without any intervention of "real" variables, such as savings*. In contrast, *loanable funds theorists also made clear their point that no matter what immediate influence variables such as supply and demand for money or, more precisely, for credit have, ultimately it is the determinants of the demand and supply of credit that count, and, among the latter, investment and savings stand out as the most important variables*.

Keynesians, thus, stress that planned investment, as, in fact, any other planned discretionary expenditure, really does tend to increase the demand for money, since it involves transactions to be completed in a future date, and money is required to do it. But money is not created by savers, but by the banking system. Interest rates do not have to rise when

¹⁷ Hicks (1974) illustrates the adjustment dynamics that relies on induced consumption rather than in the multiplier as an equilibrium condition.

planned discretionary expenditures rise, because the banking system can accommodate this increase in money demand, as it can accommodate the demand for money stemming from any other planned expenditure. As both Tsiang and Davidson, the former a critic and the latter a follower of Keynes, have emphasized, the finance demand shares the same basic nature of the transactions demand for money. Keynes differentiated between the two mainly because of the specific fluctuations to which the finance demand is subject, since it relates to discretionary expenditures.

Two central messages are conveyed by Keynes's insistence that, notwithstanding objections like the ones raised by Robertson or, later, Tsiang, the coining of a finance motive to demand money, related to planned investment, did not change liquidity preference. First, Keynes does not give up his monetary theory of the interest rate. For Keynes, money demand is not just a veil over real transactions, because some of it seeks for money as an end in itself: this is the case of both the precautionary and, to a lesser extent, the speculative demands. The finance motive enriches the analysis of how planned transactions influence the demand for money and interest rates but has no bearing on Keynes's central proposition that interest is the reward to part with liquidity, which is an attribute money has in a degree higher than any other asset. Second, Keynes maintains that the interest rates are not determined by the interaction between spenders and non-spenders but between spenders and the banking system (including the monetary authority). This is a point that is emphasized by Keynes: savers do not create money, banks do. A crucial opposition between liquidity preference and loanable funds theorists, thus, has to do with the nature of the banking system and the restrictions under which it operates. Loanable funds theorists tend to see banks as an *intermediary* between savers and credit seekers. Liquidity preference theorists see banks as *creators* of money.

For this reason, Keynes's admission that discretionary expenditures such as investments do have an influence on the demand for money is not accompanied by an admission that saving increases the supply of resources. The only effect saving is allowed to have on the liquidity state of the economy is by being a non-purchase, a subtraction from expenditures that would otherwise need money to be completed.

Keynes's argument that finance is then a revolving fund and that finance is released when the spending is made just strengthens the interpretation than he is dealing with supply and demand for money. Finance is released because money that was being retained in advance of a planned act of investment returns to circulation when the expenditure is made. The overall liquidity of the economy is restored, which does not mean that individual agents are freed from their debts just by spending, what is obviously absurd. It was the liquid funds that were idle that became available for the next would-be investor to accumulate, not the debts that were liquidated by the act of spending. On the other hand, it is undeniable that difficulties remain for the theoretical description of how this process can take place, as noticed by Kaldor and Asimakopulos.¹⁸

Finance and funding

The final issue to be sorted out is the distinction between finance and funding. Again, the debate allowed Keynes to refine his analysis by making clear the financial side of his prin-

¹⁸ An interesting treatment of this point, that is, to show how the act of spending restores overall liquidity, is given, from the perspective of the banking system, by Richardson (1986).

ciple of effective demand. The immediate point of this debate, for Keynesians, is the specification of the roles reserved to short-term credit, created by banks, and to long-term credit, resulting of the joint behavior of savers and of financial intermediaries, in the process of financial sustaining of investment. The finance stage is seen by some (e.g., Kregel) as consisting basically in the creation of money, relating directly this point to the preceding examination of the finance motive. Others, most notably Davidson, identify the same stage as the creation of credit to finance *production* costs (working capital) of capital goods. Funding, in this picture, is the transformation of short-term debt issued by investors into long-term securities, more adequate to sustain the accumulation of long-lived assets. The Keynesian view emphasizes that even the latter, although it does involve directly or indirectly (through financial intermediaries) the allocation of savings, is also subject to liquidity preference limitations that determine the kind of claims savers are likely to seek.

The importance of the distinction is to separate the functions of banks and of other financial institutions. Banks are crucial to Keynes's analysis because it is their autonomous capacity to create purchasing power that allows investment to be made in advance of any act of saving. Once investments are made, savings are created and redistributed through the multiplier process until they are voluntarily held. In this final stage, savers will be looking for assets in which to hold their increased wealth. That is the adequate moment for the investor to place his securities in the capital market to fund the previous debt.

This approach does not hold that savings are unimportant. The amount of savings is not an effective restriction on investments, but the form in which they exist may be. Savers that strongly prefer liquidity may force the prices of securities down, raising interest rates and making life difficult for investing entrepreneurs. The finance/funding model proposes that, first, there is a right time to place securities.¹⁹ Second, that eventual funding difficulties are not to be solved by stimulating thrift, but by finding means to satisfy the liquidity preference of the public and of offering acceptable terms to investors. This is achieved through the development of financial institutions able to intermediate the two groups. This is not the role of banks as such, but of other financial intermediaries.²⁰ Loanable funds theories tend to treat the financial system as an undifferentiated whole, the term "banks" being short for financial intermediary in general. Keynes's distinction between finance and funding is at the same time a hypothesis about the functions performed by different segments of the financial system and also a hypothesis about the place occupied by savers in the process of capital accumulation. This whole point was in fact missed in *The general theory*.

The distinction between finance and funding, between creation of money and short-term credit and the intermediation of savings was very important in the development of some lines of Keynesian thought. Minsky's financial instability hypothesis, in which investors are supposed to finance their investments with both short and long-term securities, is a more complex treatment of this distinction that illustrates the fruitfulness of the proposition.

¹⁹ As Keynes put it with respect to government expenditures: "I am not advocating an unlimited expansion of Treasury bills [that is, short-term obligations like the ones entrepreneurs sell to banks in the finance stage]. On the contrary, I am saying that, if the Treasury is moderately patient, the weight of natural forces will by themselves render a funding policy possible at a reasonable cost" (CWJMK, 21, p. 540).

²⁰ Of course, it does not mean that actual firms operating in the banking business and in other segments of the financial markets cannot perform all the roles. The remark made refers to the *function* that Keynes's theory attributes to banks and to non-banking financial institutions.

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