The Ascertainment of Savings Flows

1. - On various other occasions I have recalled how Pantaleoni, during the International Savings Banks Congress in October 1924, ruled out that it was possible to ascertain the total of savings flows and, in particular, the amount of savings that exist "in" or "behind" bank deposits. He stated at the time:

"The uses the saver makes run into thousands and thousands, without the savings passing by way of deposits. All this escapes statistical records, and escapes, too, the banks. The figures of deposits do not serve as an economic symptom of progress or regress, as the deposit is an unknown fraction of a likewise unknown fraction of an unknown whole" (1).

The "unknown whole" that Pantaleoni had in mind was apparently the total amount of the savings of the whole body of the economic system, while the unknown fractions seem to have been the quotas of that whole which could be attributed respectively to the total financial assets and to the banking deposits, as components of the assets in question. The recollection of this way of Pantaleoni's thinking serves to underline how much progress has been made since then in the ascertainment of savings flows, and it is this that I would like to make evident in the present study, even though the conclusion has to be reached that it is still rather problematical whether the degree of connection between savings and deposits can be ascertained.

2. - Where the most outstanding progress has been made is in the ascertainment of the total of the savings flows of the whole body of the economic system. So true is this that we now accept as something quite obvious the possibility of gathering from the "income account" of the national economic budgets, as these are published in the majority of the western countries, a precise indication of the total national savings, calculated on a residual basis, as the difference between income and consumption. And, of course, according to whether it is a case of income that is net or gross of amortizations, one obtains respectively the term of "net" savings or "gross" savings, considered in their total (ex post) as it is reflected precisely in the total of the investments, either net or gross of amortizations.

The uniformity that has been achieved in the criteria and methods of determining national economic budgets, thanks also to the framework suggested by international organizations (United Nations and O.E.E.C.) has made it possible to reach — and it is perhaps superfluous to recall this — international comparisons of satisfactory reliability as regards both the amount of the savings flows and the ratio between net savings and net income. It is this ratio which constituted, so to speak, the pivot on which turned, in its first formulation of 1948, the well known Harrod model

$$GC = s$$

in which the symbol "s" stands for savings (ex post) expressed as a fraction of income. As such, savings emerge in that model as a propulsive factor, upon whose trend is adjusted the rate of income growth (G), according to the extent of the ratio capital-income (C) It has thus been made possible to use the ascertainment of savings flows, regarded in their complete whole, in order to draw up, with that same model or others similar, forecasts on the developments of income which represent the premise of all economic programming.

3. - This first conquest regarding what was once "an unknown whole" has been followed by another that is no less important, especially for the purpose of economic programming. It deals with the distribution of total savings flows according to the "original sources" from which they come; this meets a fundamental requirement — as Guidotti emphasized in a memorandum of 1954 (2) — for the purpose of ascertaining how the financing of investments is carried out. The exact question is to ascertain, on broad lines, what part of overall savings is to be traced back to "households", "firms", the "public administration" or the "rest of the world".

⁽¹⁾ M. Pantaleoni, Studi storici di economia, Bologna, 1936, p. 530.

⁽²⁾ S. Guidotti, "Il finanziamento degli investimenti", in the Contributi all'analisi di alcuni fenomeni trattati nella relazione annuale, Banca d'Italia, Rome, March 1954.

The Ascertainment of Savings Flows

This stage has now been reached in several countries, though their circle is still somewhat restricted. To obtain a trustworthy distribution of overall savings it is not sufficient, in fact, to rely on the "economic accounts" which are at the base of the national economic budget. One must also have available the so-called "financial accounts" in which are registered the transactions, financial and non-financial, which take place between the different sectors of the economic system, giving rise to the "flow-of-funds", that is, to the transfer of money and credit (or, to be more precise, to transfers of credit, in both monetary and non-monetary forms) from one sector to another. This entails the adoption in the formation of the "sectors" of a criterion different from that adopted in the economic accounts, the adoption, that is, of the so-called "institutional" distribution, like that already foreshadowed, based on the economicojuridical units (households, firms, and so on) instead of the so-called "functional" distribution, based on the operative units (agriculture, industries and the like).

It is necessary that the financial accounts should then be reunited with the economic accounts: that is, an "integrated system" of the economic and financial accounts must be achieved, so as to be able to take as a basis in the development of the financial accounts the savings flows ascertained from the economic accounts. This entails a reclassification of the economic accounts according to the same institutional distribution adopted for the financial accounts.

4. - As is well known, the exploratory work in this field was carried out by Prof. M. A. Copeland, of Cornell University, under the aegis of the National Bureau of Economic Research, with the cooperation of the Board of Governors of the Federal Reserve System (3).

After the publication of a first series of annual accounts of the flow of funds for the period 1939-53 (in the "Federal Reserve Bulletin" of October 1955) and another series of annual accounts, more detailed than the preceding ones, for the period 1950-55 (in the April 1957 issue of the same Bulletin), periodic publication (again in the "Federal Reserve Bulletin") was begun, starting from 1959, of the quarterly data, in addition to the annual budgets, in which a start

is made based on the savings flows ascertained from the national economic accounts.

Similarly, in Federal Germany the Deutsche Bundesbank publishes every year, in its "Monatsberichte", a table on "the formation of capital and its financing", in which the "financial operations accounts", starting from 1950, are linked with the "formation of capital and savings", as this emerges from the national economic accounts (4).

Here in synthesis are the results that have been reached in the United States and Federal Germany as regards the distribution in question:

DISTRIBUTION OF SAVINGS BY ORIGINAL SOURCES

A A A A A A A A A A A A A A A A A A A	United	States, 19	61 (*)	Federal Germany, 1961 (**)			
		percenta	ges of	milliards	percentages of		
	milliards of \$	net savings	gross savings	of D.M.	net savings	gross savings	
Households:							
net savings	29.6	103.1	(25.6)	17.4	30.8	(21.2)	
amortizations	46.9	(163.4)	(40.6)	_	_	******	
gross savings	76.5	(266.5)	66.2	17.4	(30.8)	21.2	
Firms:							
net savings	11.2	39.0	(9.7)	15.9	(28.0)	(19.3)	
amortizations	39.9	(93.7)	(34.5)	25.6	(45.2)	(31.2)	
gross savings	51.1	(132.7)	44.2	41.5	(73.2)	50.5	
Public administration	- 9.7	- 33.7	- 8.4	26.6	47.0	32.3	
Rest of the world	- 2.4	- 8.4	2.0	- 3.3	- 5.8	- 4.0	
Totals:							
net savings	28.7	100,0	(28.0)	56.6	100.0	(68.8)	
gross savings	115.5	(358.1)	100.0	82.2	(145.2)	100.0	

^(*) From the Federal Reserve Bulletin of August 1962, p. 1064.

⁽³⁾ M. A. COPELAND, A Study of Moneyflows in the United States, N.B.E.R., New York, 1952.

^(**) From the Monatsbericht der Deutschen Bundesbank, of July 1962, p. 82.

⁽⁴⁾ Among the most recent illustrations of the methods followed in drawing up national financial accounts, with particular reference to the United States and Federal Germany as well-as to France and the Netherlands, is to be noted that published in the August-September 1962 issue of the Bulletin d'Information et de Documentation of the Banque Nationale de Belgique, under the title "Les comptes financiers nationaux".

These data reveal deep differences between the two countries as to the sources of savings. These differences, indeed, are in part only apparent as regards the households, since they can be attributed to the difference in the methods of ascertaining income savings, that is, whether purchases of durable consumer goods by the households are registered just once under consumption (as happens in Federal Germany) or whether they are regarded, at the time of purchase, as investments in tangible goods, and afterwards gradually registered among the amortizations for amounts corresponding to their wear and tear (as happens in the United States). Deep differences of structure remain, however, for while in the United States the public administration does not create savings but, on the other hand, consumes them, in Federal Germany, instead, public savings prevail over every other type, to the extent that they even exceed the household savings. It is superfluous to point out how important it is, as far as development programming is concerned, to know which savings sources can be relied on for investments expansion (5).

5. - In the case of Italy it cannot be said that the stores of knowledge in this sense are on the same level as reached in the United States and Federal Germany. In fact, notwithstanding the wealth of financial statistics elaborated and published by the Bank of Italy, the point has not yet been reached of possessing ascertainments of an official character of the distribution of savings by their original sources. The reason is that it has not yet been possible to introduce into those statistics the fundamental division of the "private" sector into households and firms, and much less has it been possible to achieve, officially, the integration of the economic accounts with the financial accounts.

It is true that the Bank of Italy has since 1949 published in its Annual Reports a complete picture of the monetary and financial transactions carried out during the year, grouping them by intermediary bodies (banks, Central Post Office Savings Fund and so on),

by users' sectors (the Treasury, "economy" and so on) and by the kinds of funds collected (notes, current accounts and the like). That picture, termed "monetary budget", has made it possible, by means of continuous refinements from year to year, to ascertain the trend of the total available monetary and financial funds: that is, the trend both of the funds collected by the banking system (including the Bank of Italy) and of the funds which have flowed to the financial market. And it has served above all to illustrate — by means of the contraposition of the flow of the said funds and the flow of investments of the banking system and the financial market — the "residual effect on monetary circulation". In those monetary budgets, on the other hand, the starting point was not the savings data ascertained from the economic budgets. It is therefore always the "financial funds" that have been dealt with, and these - as is intuitive and as we shall see better later on — are in no way to be identified with the aforesaid savings.

Subsequently, starting in 1961, the Bank of Italy's Annual Reports published instead of the "monetary budget" other tables that preserve the essential lines of the preceding ones but introduce into them certain somewhat complex innovations which aim at underlining the effects of the formation and use of the monetary and financial funds on the primary and secondary liquidities rather than on the note circulation alone. But even with these new tables — and neither have these been linked with the economic accounts' savings — the elaboration of financial accounts of the type previously mentioned has not been achieved, since the division of the "private" sector into the two fundamental sectors of households and firms is still lacking, consequenty making it impossible to follow the transfers between one and the other sector as well as between each of them and the other sectors of an institutional character (public administration and the rest of the world).

Precisely because appropriate financial accounts are lacking, Guidotti, in his memorandum mentioned earlier, has presented a largely approximate estimate of the distribution of savings by their original sources, and stated that he gave this estimate "solely as a rough guide". And there is nothing to indicate that so far, even during the work of the Commissions that have been discussing development programming, any deeper knowledge has been acquired, officially, of the trend of the components of savings as a whole, a

⁽⁵⁾ For the purpose of economic programming, in the Netherlands the financial accounts have been amply developed, with the presentation of a national monthly budget and of manifold sectoral budgets linked together. This has been done by collaboration between the Central Planning Office, the Central Statistics Office, and the Central Bank. It is to these Dutch bodies, and in particular the Central Planning Office, that credit is due for having defined the various aggregates to be borne in mind, such, for example, as those of income surplus (or deficit), finance, liquidity, etc.

knowledge which is essential if forecasts on the future possibilities of investment expansion are to be made less hazardous.

6. - To fill as far as possible the gap which thus exists, an "attempt to apply to Italy" the "integrated system of the economic and financial accounts" has recently made its appearance, the work of Prof. Antonino Giannone, of the Central Statistical Institute (6).

Giannone has achieved a junction between the economic accounts and the financial accounts by taking as his basis the "capital account", after unification of the two accounts of production and income in a special "current transactions account", the balance of which represents the gross savings of each of the sectors that he has taken into consideration and is carried forward to first place in the above mentioned capital account. This account therefore shows, for each sector, the difference between savings and investments in plants and stocks (net of the non-financial transfers effected primarily by the public administration). It is this difference which represents the "net financial investment" of each sector, the amount of which provides the extent, if a credit, of the funds that the sector has placed at the disposal of the other sectors, and if a debit, of the funds that the sector has received from the other sectors. The "financial account" therefore reveals how the net financial investment, either credit or debit, of each sector ends by finding its counterpart in the assets and liabilities of the other sectors, by means of the financial transfers taking place between them. For this purpose, as is intuitive, it is not sufficient to divide the public into households and firms. In fact, in Giannone's tables separate consideration is given to "the non-financial firms" and the "financial firms", the latter including the firms or institutions which in some way carry out financial intermediation (banks, insurance companies, social insurance institutes and the like). Thus, in the final analysis, the financial account allows us to ascertain exactly the different types of available financial funds (from notes and coin to bonds and so on) created on the basis of the net financial investment. These funds are attributed to the individual sectors under the twofold aspect of each of them: as "financial liabilities" as regards the debtor sectors, which create the funds by means of their indebtedness, and as "financial assets" as regards the creditor sectors, which maintain the funds in question by means of their holding capacities, the origin of which can be their own savings or credits received from other sectors.

Working on these lines, Giannone has presented an integrated system of Italy's economic and financial accounts for 1959, from which we reproduce below, with the author's permission, one of the final tables. Giannone has given express warning that "the statistical material at present available... proves to be wholly inadequate in the case of the sectors for the non-financial firms and the households" (p. 55), so much so that "for those sectors several items have been obtained by means of procedures which do not allow a verdict to be expressed on the degree of reliability of the results reached" (ibid.). He has therefore meant that the publication of the data should act as a "stimulus to further deep researches, elaborations and surveys of data in the economic and, above all, the financial fields" (p. 56) in the hope that "our Central Bank could contribute to a decisive improvement in this field" (p. 55).

On the other hand, the publication in question, in view of the greater reliability of the current transactions account data (established apart from the financial accounts), already by itself enables, precisely on the basis of the aforesaid account, a distribution to be made of savings for the year 1959 by sources of origin. We reproduce this distribution, completed by the amortization figures inferred from the economic budget, contrasting it with that of Guidotti for the year 1952.

As is seen, in spite of the changes that have occurred in the Italian situation from 1952 to 1959, there are no very marked differences between the two evaluations regarding the weight to be attributed to the various original sources of savings. In both evaluations the household savings are of major importance in the creation of net savings, while in the creation of gross savings it is the firms' savings, or in other words, the "self-financings", which prevail. These last, on the other hand, from what the evaluations indicate, should be attributed primarily to the amortizations, the total for which is almost double the net savings, which must be linked with the firms' profits, including the cyclical and development profits, in addition to those arising from monopolies.

⁽⁶⁾ A. GIANNONE, "Il sistema integrato dei conti economici e finanziari", in the Rivista italiana di economia, demografia e statistica, No. 3-4, 1961.

7. - These evaluations, as is clearly shown — let it be repeated — by both Guidotti and Giannone, are largely approximate. Reliable forecasts on the possibilities of investment expansion cannot therefore be based on them, also as far as self-financing is concerned, the trend of which cannot fail to be the subject of special attention, particularly for the purpose of programming. The hope therefore appears justified that in Italy, too, an advance will be made from the first "attempts" to a systematic application of the new systems of integration of the economic accounts with the appropriate financial accounts.

DISTRIBUTION OF SAVINGS IN ITALY BY ORIGINAL SOURCES

	 						
		tti's calcul 1e year 195		Giannone's calculations for the year 1959			
	milliards	percentages of			percentages of		
	of lire	net savings	gross savings	milliards of lire	net savings	gross savings	
Households	669	53.4	32.5	1,614	68.5	41.0	
Firms:							
net savings	400	31.9	(19.5)	812	34.4	(20.6)	
amortizations	800	(63.8)	(38.9)	1,577	(66.9)	(40.1)	
gross savings	1,200	(95.7)	58.4	2,389	(101.3)	60.7	
Public administration	185	14.7	9.1	404	17.1	10.3	
Rest of the world				- 472	~ 20,0	- 12.0	
Totals:							
net savings	1,254	100.0	(61.1)	2,358	100.0	(50.9)	
gross savings	2,054	(163.8)	100.0	3,935	(166.9)	100.0	

^(*) Excluding the rest of the world.

On the other hand, Giannone's attempt in itself, because of its method of approach, presents — independently of the degree of approximation of the figures given — an outstanding advantage, since it allows identification of the elements that assist in determining the creation of the available funds (henceforth to be understood in a broad sense, including in them also the monetary funds). The attempt, that is, allows one to establish the degree of connection between such availabilities and savings availabilities, seen in their total as shown by the national economic budget. And from this

point of view, confirmation is forthcoming of the point developed in my previous studies and recently resumed, in a systematic overall picture, in my *Economia Creditizia* (in Part II, which, in fact, is devoted to "The connection between credits and savings") (7).

In this connection, the data of Giannone's table may well be synthesized as follows:

SOURCES CREATING FINANCIAL FUNDS (in milliards of lire)

		Creation of fit cial funds			
	Savings	Invest- ments (*)	Financial surplus (+) or deficit (-)	as liabili- ties for credits received	as assets for credits given
	(1)	(2)	(3=1-2)	(4)	(5=3+4)
Households	1,614.0	45.7	+ 1,568.3	63.5	1,631.8
Non-financial firms	2,327.2	3,174.2	- 847.0	1,411.0	564.0
Financial firms	61.8	- 61.2	+ 123.0	3,242.7	3,365.7
Public administration .	404.0	776.3	- 372.3	937.1	564.8
Rest of the world	- 472.0		→ 472.0	552.6	80.6
Total	3,935.0	3,935.0	+ 1,691.3 - 1,691.3	6,206.9	6,206.9

^(*) Investments in the same sector, more or less non-financial transfers made to, or received from other sectors.

It thus in the first place becomes evident that, as far as the formation of financial funds is concerned, the total amount of savings (3,950 milliard lire) plays no part, but only their quota (1,691.3 milliard) that is transferred, by those who create them, to the credit of those who use them. In other words, according to the expression I used, it is necessary first and foremost to take into account the "degree of credit mobilization" of savings, as a reverse manifestation of the "degree of retention" of savings for investments in tangible goods, in the same sector in which the savings are created. Thus, while as regards the formation of "real" investments, it is necessary

⁽⁷⁾ U.T.E.T., Turin, 1962.

to look to the overall total of savings and therefore mainly to savings of the non-financial firms, as regards the formation of "financial" investments, as these emerge in the financial funds, it is necessary, instead, to look to the savings flows which are transferred, by means of financial transactions, from one sector to another as "financial surpluses", since they are not invested in the sector in which they are formed. In the situation presented by Giannone, therefore, it is necessary to look almost exclusively to the household sector.

It thus becomes evident how the savings flows that come from the household sector, while they end by being destined to balance the "financial deficits" of the deficient sectors, are transferred in these same sectors not only directily but also, and indeed primarily - as is very well known - through the intermediation of the financial firms. This gives rise to a dilatation ("lievitazione") of the financial assets created through the mobilization of household savings. In fact, if the savers were to transfer directly the whole asset surplus of their savings to the deficient sectors, which typically we can identify - also to simplify things - in the non-financial firms' sector, the creation of financial assets for the whole of the economic system would not go beyond the amount of that asset surplus (1,568.3 milliard lire) (8). But if, instead, as actually happens, a notable part of the household savings is transferred to the nonfinancial firms through the intermediation of the financial firms, there is then a duplication of the financial assets for the whole of the economic system. On the one hand, that is, financial assets are created (in the shape of bank notes, deposits and so on) within the households' sector as a result of the credit that the latter has granted to the financial firms' sector, and, on the other hand, financial assets are created (in the shape of bonds, bills of exchange and so on) as a result of the credit that these financial firms have granted to the nonfinancial firms. It can therefore be stated that "in" the financial assets in the hands of the households there exists a corresponding amount of savings, that is, that amount of savings which the households do not invest directly. And at the same time it can again be stated that "behind" the financial assets in the hands of the financial firms savings likewise exist, that is, that amount of savings which is transferred to the firms in question by the households. Thus, it is a question of always the same savings that exist, at one and the same time, in the credits of the households towards the financial firms and behind the credits of the financial firms towards the non-financial firms, which afterwards end by turning the savings received into real investments. And there is in all these operations a typical dilatation of the financial assets.

It is then easy to deduce that this dilatation, instead of engendering a simple duplication, can lead to a more or less high multiplication of the financial assets created by means of the mobilization of savings; and this according to the more or less high number of the sectors or of the individuals through which the savings can be channelled by means of successive contrapositions of debits and credits. These contrapositions can give rise to "credit concatenations", sometimes quite extensive and intricate, not only between the different sectors but also within the sphere of a single sector as the result of inter-sectoral transactions. In both cases, indeed, one can even reach the creation of financial assets without there being either "in" or "behind" them any savings basis. This is because those concatenations can end by forming a "closed circuit", in which against the credit of a sector (A) towards another sector (B) is set a debit of the same sector (A), which may, in the final analysis, prove to be fed, even only in part, by that same credit, with or without the intermediation of other sectors (C, D and so on). In other words, it is possible for financial assets to be created by "autogeny", by means of cross credits simultaneously given and received (9). In that case the dilatation can be pushed almost without limits, especially in relations between financial firms and non-financial firms, as well as in the sphere of inter-sectoral transactions between individual firms or sub-sectors (10).

All this can be glimpsed from the preceding table. One sees, that is, that while the creation of 1,631.8 milliard of financial assets in the hands of the households can be traced back, almost entirely, to the mobilization of 1,614 milliard of savings of these households, the creation of the remaining 4,575.1 milliard of financial assets in

⁽⁸⁾ This, of course, when one leaves out of consideration, as generally happens, the inter-sectoral transactions within the sphere of the household sector.

⁽⁹⁾ The creation of financial activities by autogeny occurs also in the international field, precisely by means of cross credits or reciprocal credit facilities, such as the swap operations which have become very widespread in recent times (see "Treasury and Federal Reserve Foreign Exchange Operations", in the *Federal Reserve Bulletin* of September 1962, p. 1147).

⁽¹⁰⁾ Giannone has managed to divide the sector (or group) of the financial firms into six sub-sectors (or sectors): banks, insurance companies, other financial institutes and so on).

the hands of the other sectors (up to the total amount of 6,206.9 milliard) must be traced back in great part to the dilatation of the credits resulting from the aforesaid mobilization. On the other hand, it does not seem possible to ascertain, and neither to assume, the extent to which the assets resulting from the dilatation may have behind them real transfers of savings, and to what extent they derive, instead, from a pure and simple autogeny.

Thus there have been identified, as we set out to do, the elements that contribute to determining the creation of financial funds, so as to establish what degree of connection exists between these funds and savings funds. In the case in question, this degree of connection turns out to be 157.7 per cent (6,206.9: 3.935) from the combined effect of a degree of mobilization of 43 per cent (1,691.3: 3,935) and of a degree of dilatation of 366.9 per cent (6,206.9: 1,691.3).

8. - These verifications on the possibilities of ascertaining savings flows and on the limits of such possibilities enable some conclusive considerations to be reached about the precautions to be taken in using the ascertainments in question. This is particularly necessary, let it be emphasized, in order to render less hazardous, in economic programming, forecasts on the future possibilities of "real" investments expansion.

First and foremost — although this may appear superfluous the warning must be given that there would be no justification for inferring from the trend of the total amount of the financial funds the trend of total savings, and neither the trend of savings that are made available by means of their credit mobilization. Between the two trends notable discordancies can exist, primarily according to the trend of the degree of credits dilatation, which by its nature is subject to notable and also sudden variations. Therefore, what is now generally agreed for that part of the financial funds represented by the liquid funds (as "supply of liquidity"), holds good for the whole of the financial funds: one must not, that is, confuse financial funds with savings availabilities, since there is no question of these being two aspects of the same thing; they are two things which are substantially different. And, obviously, what applies to liquid funds and to financial funds (which, in the final analysis, are nothing but particular forms of outstanding credits) holds good for credits in all other forms. Nevertheless, it is by no means rare for such confused ideas to be held, not only among the "laymen" but also among the "clerics". To take only one recent case, it can be recalled that, among the observations made on the "Report of the American Committee for Money and Credit" there was, to my mind, the well-grounded criticism of Beckhart, who stated that "the conclusion implicit in the Report is that no difference exists between credit and savings" (11).

This having been said in regard to the economic system as a whole, it is not to be ruled out that, in the case of the household sector alone, the financial assets which it has at its disposal can be tendentially identified with savings of the same sector, provided of course that certain conditions, which we will try to define, are realized. There could then be justification for regarding — as generally happens — as "monetary savings", gathered by means of the credit system and the financial market, the monetary funds (in bank notes and deposits) and the other financial funds (in shares, bonds and Government securities) held by the households as their own financial assets. This, however, would depend upon a real separation being achieved between the household sector and the non-financial firms' sector, instead of lumping them together as "public".

At any rate, in this case, too, it is necessary not to lose sight of the fact that the identification between financial assets and savings can come about only in so far as, and to the extent that, the indebtedness of the household sector towards the other sectors is relatively slight: that is, only in so far as the contraposition of debts and credits in the case of the household sector is almost imperceptible and the dilatation of credits created through the mobilization of savings is therefore practically inexistent. And it is this that is shown by Giannone's figures, in which a very close approach is made to the identification in question, inasmuch as, among other things, the financial liabilities of the household sector (63.5 milliard) constitute only a modest figure compared with the savings surplus of this sector (1,568.3 milliard). But the doubt comes to mind that, in Giannone's figures, the household sector, because of the inadequacy of the documentation at present available, has not been debited with the debts it has incurred towards other sectors: for example, towards the non-financial firms' sector (for consumption credits) and

⁽II) B. H. BECKHART, "Il Rapporto della Commissione americana per la moneta e il credito", in *Moneta e Credito*, June 1962, p. 191.

Receipts

7,427 5,427 5,286 23,906

42,046

3,935.0

454.2

22,1

454.2

3,808.1

INTEGRATED SYSTEM OF ITALY'S ECONOMIC By groups of sectors [including

AND FINANCIAL ACCOUNTS FOR THE YEAR 1959 the inter-sectoral transactions (*)] (in milliards

S	Sectors	1		п		
		House	eholds	Non-finan	cial firms	
Categories		Expenditure	Receipts	Expenditure	Receipts	
A. Current transactions account						
 Wages and salaries Incomes from capital and others 		<u> </u>	7,415 5,241	5,631 5,353		
3. Taxes and transfers		162	2,358	2,509	240	
4. Goods and services		13,238	_	3,191	18,833	
5. Gross savings		1,614		2,389		
Tota	ıl	15,014	15,014	19,073	19,073	
B. Capital account						
1. Gross savings		_	1,614.0	<u> </u>	2,327.2	
2. Transfers		45.7		1 -	344.6	
3. Fixed investments		<i>-</i> -	_	3,369.8	_	
4. Variations in stocks		_	_	149.0		
5. Net financial investments .		1,568.3		847.0	,	
Tota	al	1,614.0	1,614.0	2,671.8	2,671.8	
C. Financial account						
1. Net financial investment		_	1,563.8		- 847.0	
2. Gold and convertible currencies .		–	<u> </u>			
3. Notes and coin		174.5	,	- 40.0		
4. Sight and other deposits		1,032.1		604.0		
— inter-sectoral		_	_	-		
with abroad		-	_		_	
— others		1,032.1	_	604.0		
5. Bills of Exchange			_		305.€	
6. Bonds		236.3	_		30.0	
7. Shares and investments		- 73.0	_	'-	175.5	
8. Government securities		150.9		<u> </u>	<u> </u>	
9. Various loans		<u> </u>	63.5	_	806.7	
— inter-sectoral		-		November		
— with abroad		-		_	0.6	
— others		_	63.5		806.7	
10. Other financial securities		0.111		<u> </u>	93.2	
Total	al	1,631.8	1,631.8	564.0	564.0	

/*\	Limited	to	the	deposits	and	various	loans.

⁽a) Sectors of banks, insurance companies and the "Other financial institutes".

111	III IV		v v			VI Tot:	
Financial firms (a)		Public Administration (b) Rest of the world					
Expenditure	Receipts	Expenditure	Receipts	Expenditure	Receipts	Expenditure	
_	_	1,705	_	91	12	7,427	
-	<u>·</u>	15	125	59	61	5,427	
<u> </u>	_	2,430	2,671	185	17	5,286	
- {		937	2,695	2,605	2,378	19,971	
	_	404		- 472		3,935	_
		5,491	5,491	2,468	2,468	42,046	

7.8

8.101

						140.0	_	ŀ
123.0		- 37 2.3		- 472.0	_	—	_	
163.6	163.6	433.9	433.9	- 472.0	- 472.0	4,411.3	4,411.3	İ
								ŀ
_	123.0		- 372.3	_	- 472.0		<u></u>	
548.3		l · —	- '	_	548.3	` 548.3	548.3	
8.001	178.0	→ 25.0	- 6.7	- 39.0		171.3	171.3	ĺ
22.2		69.2	170.5		_	1,589.1	1,589.1	ŀ
~ 32.2	69.8		_			- 32.2	69.8	l
				_	_		_	l
54.4	1,348.8	- 69.2	170.5	-		1,621.3	1,519.3	ŀ
305.6		_	_	_		305.6	305.6	
229.1	403.2	- 32.2	_		_	433.2	433.2	l
97.7	49.5	84.8	_	115.5	_	225.0	225.0	l
401.0	_	16.9	568.8				568.8	Į
1,566.4	1,082.8	513.8	127.1	4.2	4.3	2,084.4	2,084.4	j
556.4	548.3		_		<u> </u>	556.4	548.3	l
257-7	224.3			_		257.7	224.3	l
752.3	310.2	513.8	127.1	4.2	4.3	1,270.3	1,311.8	ŀ
94.6	110.6	75.7	77-4	- 0.1	<u> </u>	281.2	281.2	ŀ
3,365.7	3,365.7	564.8	564.8	80,6	80.6	6,206.9	6,206.9	
	163.6 548.3 100.8 22.2 - 32.2 - 54.4 305.6 229.1 97.7 401.0 1,566.4 556.4 257.7 752.3 94.6	163.6 163.6 163.6 123.0 548.3 100.8 178.0 22.2 1,418.6 32.2 69.8 54.4 1,348.8 305.6 229.1 403.2 97.7 49.5 401.0 1,566.4 1,082.8 556.4 224.3 752.3 310.2 94.6 110.6	163.6 163.6 433.9 - 123.0 - 548.3 - - 100.8 178.0 - 22.2 1,418.6 - 32.2 69.8 - - - - 54.4 1,348.8 - 69.2 305.6 - - - 229.1 403.2 - 32.2 97.7 49.5 84.8 401.0 - 16.9 1,566.4 1,082.8 513.8 556.4 548.3 - 257.7 224.3 - 752.3 310.2 513.8 94.6 110.6 75.7	163.6 163.6 433.9 433.9 - 123.0 - -372.3 548.3 - - - 100.8 178.0 -25.0 - 6.7 22.2 1,418.6 - 69.2 170.5 - 32.2 69.8 - - - - - - - 54.4 1,348.8 - 69.2 170.5 305.6 - - - - 229.1 403.2 - 32.2 - 97.7 49.5 84.8 - - 401.0 - 16.9 568.8 1,566.4 1,082.8 513.8 127.1 556.4 548.3 - - 257.7 224.3 - - 752.3 310.2 513.8 127.1 94.6 110.6 75.7 77.4	163.6 163.6 433.9 433.9 -472.0 - 123.0 - -372.3 - 548.3 - - - - 100.8 178.0 -25.0 - 6.7 -39.0 22.2 1,418.6 - 69.2 170.5 - - - - - - 54.4 1,348.8 - 69.2 170.5 - 305.6 - - - - 229.1 403.2 - 32.2 - - 97.7 49.5 84.8 - 115.5 401.0 - 16.9 568.8 - 1,566.4 1,082.8 513.8 127.1 4.2 556.4 548.3 - - - 257.7 224.3 - - - 752.3 310.2 513.8 127.1 4.2 94.6 110.6 75.7 77.4 - 0.1	163.6 163.6 433.9 433.9 -472.0 -472.0 548.3 - - -372.3 - -472.0 548.3 - - - 548.3 100.8 178.0 -25.0 -6.7 -39.0 - 22.2 1,418.6 -69.2 170.5 - - -32.2 69.8 - - - - 54.4 1,348.8 -69.2 170.5 - - 305.6 - - - - 229.1 403.2 -32.2 - - - 97.7 49.5 84.8 - 115.5 - 401.0 - 16.9 568.8 - - 1,566.4 1,082.8 513.8 127.1 4.2 4.3 257.7 224.3 - - - - 752.3 310.2 513.8 127.1 4.2 4.3 94.6 110.6 75.7 77.4 - 0.1 -	163.6 163.6 433.9 433.9 -472.0 -472.0 4,411.3 - 123.0 - -372.3 - -472.0 - 548.3 - - - 548.3 548.3 548.3 100.8 178.0 - 25.0 - 6.7 - 39.0 - 171.3 22.2 1,418.6 - 69.2 170.5 - - 1,589.1 - - - - - - - 22.2 - - - - - - - 32.2 - <td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

⁽b) Public Administration in the strict meaning, social insurance institutes, Central Post Office Savings Fund and the State Treasury.

towards the sector of the financial or the non-financial firms (for mortgage loans). Support for this doubt is found when comparison is made with the financial accounts of the United States, in which the household sector is shown to have acquired in 1961 \$33.6 milliard of financial assets, this acquisition being based on the savings surplus not invested to the amount of \$17.8 milliard, and on the assumption of financial liabilities to the amount of \$15.8 milliard (of which \$11.9 milliard for mortgage loans). Therefore, if in Italy, too, a not negligible indebtedness on the part of the household sector should exist towards the other sectors, it would be at least erroneous to consider as savings (even with the qualification of monetary savings) the total of the financial assets held by the households.

It should rather be borne in mind that also in the case of the households the formation of financial assets is based not on one but on two factors: that is, not only on the mobilization of savings but also on the dilatation of credits. Nevertheless, one must not lose sight of the fact that the play of these two factors differs greatly in importance in the different sectors. While the mobilization of savings is the most important factor in the household sector, the dilatation of credits is the most important factor in the firms' sectors, and especially in the sector of the financial firms, whose activity hinges exactly on the contraposition of debits and credits, which gives rise to the dilatation. In the final analysis, therefore, good grounds appear to exist for assuming that, as regards the households, even if no identification may be found between financial assets and savings, there is at any rate a degree of connection between one and the other far greater than exists in any other sector.

For analogous considerations, which need not be developed here in detail, the same conclusions now submitted with regard to the whole of the households' financial assets can be applied in connection with the different forms which such assets take. Thus, in the case of some of these assets, savings deposits for example, one can assume that the degree of connection between them and savings is far greater than it is in the case of other forms, shares and bonds for example, whose holders can, in most cases, have recourse to the credit of other sectors with greater facility and to a greater extent than the holders of savings deposits. But, notwithstanding the reliability of these and other similar assumptions, it appears more than ever problematical — unless further deep research into the financial accounts is carried out — whether it will be possible to

ascertain to what extent the different forms of financial assets of the households' sector have "behind" them real transfers of savings and can, in this sense, be identified with the savings themselves. And such "indetermination" subsists for deposits, too, as the prevalent form of the households' sector's financial assets. Thus, if one would wish to paraphrase Pantaleoni's statement of many years ago, it can still today be asserted that deposits constitute "an unknown fraction" of a whole that now is well known.

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