

# FINANCIAL OPERATIONS AND MONETARY STATISTICS: IMPROVED CONCORDANCE IN THE FRENCH NATIONAL ACCOUNTS

BY JEAN-PAUL MILOT AND PIERRE TEILLET

*INSEE, Paris, France*

National accounts are a powerful means of coordinating different statistical systems. The better their classifications are adapted to the basic statistics or the information blocks one wishes to use, the better the national accounts play their part. This statement explains why, taking the opportunity of revising the whole system, French national accountants tried to improve the concordance between financial operation tables and monetary statistics. Other reasons leading to this attempt can be found in the dissatisfaction of users having to face different and inconsistent financial information such as the monetary statistics on one hand and the financial aggregates of the national accounts on the other; and even more reasons appear in the organizational field since those two statistical systems are issued by two neighbour services of the Banque de France, often depending on the same sources. Further, many propitious factors are converging at the same time: the French financial system is undergoing profound transformations originating as much in the behaviour of economic agents as in the law, and the statistical operations have to adapt to these changes. The national accounts will in the near future include balance sheets in which financial asset holdings are directly comparable to the money supply aggregates. In its first part our paper sets forth the detailed reasons for our attempts, the conditions in which it took place and the present results. We have reached a much better degree of consistency between the two systems, even if the final scheme has not yet been adopted in either the monetary field or in the field of national accounts. But an important question remains open about the durability of the harmonization: we think that it could be relatively uncertain because of the differences in the goals pursued by the two systems and the constraints which they face. That is why in the second part of the paper we tried to review the way such a pragmatic undertaking as ours could call into question the way in which financial operations are described in the system of national accounts. If one agrees with the present boundary between the real and the financial sphere, the articulation must remain somewhat elementary. But if one wants to revise the usual so-called dichotomy between financial and non financial phenomena, we think that a complete rebuilding of the conceptual framework of the accounts has to be done; this would necessitate a considerable amount of theoretical and practical work.

## INTRODUCTION

It is well known that national accounts play a double role as a quantified model of the economy on the one hand—a sort of simplified, reduced model describing overall economic mechanisms—and as an instrument of statistical synthesis on the other, through which we gather, compare, collate and finally criticize and improve basic statistics.

The current revision of international systems—the System of National Accounts and the European System of Accounts—concentrates heavily on this latter aspect: at the concept level first of all, with the debate on the structure and flexibility of the system and its ability to provide bridges to other statistical systems (building blocks, satellite accounts . . .); and also on the practical level, by aiming at increased compatibility with different internationally standardized statistical systems (balance of payments, public finance statistics, financial and monetary statistics . . .).

Our contribution falls into this last category. It describes the French experience over the last two years in coordinating monetary statistics with financial operations in the national accounts. The main points we wish to illustrate are the following:

—At the outset there is the institutional and organizational aim of improving comparability and coherence between national accounts and monetary statistics. This involves rationalizing the supply of statistics, since they are based in the main on common data which are all processed by the same body: the Bank of France. But it also means facilitating the combined use of national accounts and monetary aggregates, particularly in studies which try to incorporate “real” phenomena and financial movements.

—For this to succeed, national accounts must accept, at least in part, the role and the constraints of having to collate existing formalized information systems which have an internal coherence of their own in terms of concepts and data collection. This is by no means the first time this question has arisen. France and many other countries have solved it with varying degrees of success: in the case of general government, in the case of non-financial companies and insurance companies by using company accounts data, in the case of customs statistics and the balance of payments, using data generated by government controls, and also in the case of credit institution flow accounts, with the accounts data used by the competent supervisory bodies. But, as we shall see, the circumstances are somewhat exceptional. They led us to examine the degree of reciprocal constraints possible between an information system used to define and control short-term economic regulatory devices, i.e. monetary statistics, and a system whose main purpose is to serve as a basis for studies or models.

—In any case, collating highly formalized information systems with their own coherent structures gives rise to problems very different from those faced by the national accounts when they “simply” take information on the economic operations of the basic transactors from various sources and adjust it for coherence. The system is both simpler—since the formalized source supplies large amounts of pre-checked, coherent data—and more complex, on the one hand because the accountant can become involved in conflicts which are not his concern or are beyond his control (definition of amounts, aggregates, balances and so on), and on the other hand because during data collection he is required to arbitrate between sets of data of recognized quality (since they are extensively used) and he is not always able to explain his choices completely.

—Thus far, only the conceptual phase of the work has been completed and the results seem quite satisfactory in practical terms: good coordination has been achieved. On the theoretical level, however, the basic dichotomy between financial and non-financial accounts still persists. We propose a brief review of the usual axioms quoted as helping to overcome what is commonly considered to be a regrettable situation: we feel that there is little hope of any short-term solution; indeed, the financial analyses carried out in each sector are so specific that integrating them all into the national accounts at once is a real challenge; the only alternative would be to build up a whole new quadruple entry accounting system, which would obviously be a long and laborious task.

## I. DESCRIPTION OF THE FRENCH EXPERIENCE

The work we are about to describe is part of the revision of the French national accounts initiated in 1980 and scheduled for completion in mid-1987, with the publication of new series for the years 1970 to 1986.

Like the previous changes to the base, this review provides an opportunity to integrate new statistical sources into the accounts, particularly when they give results which contradict existing data. But it is also an appropriate time to introduce conceptual and methodological modifications. In actual fact "base 80" will not give rise on the whole to many such changes, the rectifications being mainly minor ones, for over the last ten years France has opted for the strict application of the European System of Accounts, a version of the SNA for use by Common Market Member States.

### 1.1. *Organizational Reasons*

The production of national accounts in France is coordinated by the INSEE (Institut National de Statistiques—National Statistics Institute). But, as is the case in many other countries, the INSEE does not carry out all the basic conception and data gathering work: the accounts of Government bodies are drawn up by the Direction de la Comptabilité publique (Directorate of Public Accounting), and data on the rest of the world is drawn up by the Direction de la Prévision (Directorate of Forecasting), mainly on the basis of the balance of payments, which is assessed by the Bank of France.

The Bank of France is responsible for the main part of the system of information relative to the financing of the economy. In particular, it draws up the monetary statistics and the statistics on financial operations for the national accounts. For a long time now the basic sources of data common to both of these have been the same and have been treated in the same way. The departments responsible for each of these two information systems even operate under the same authority. So the Bank of France wished to bring the two systems more into line with one another.

### 1.2. *Institutional Reasons*

The start of work to bring monetary statistics into line with national accounts stems from the *decision to draw up regular accounts of financial balance sheets*. The decision on physical balance sheets will be taken after a critical examination of the work currently under way.

Experiments with balance sheets have been going on in France since 1976. They led to the publication in 1979 of accounts for years 1971, 1972, 1976 (collection INSEE C 89-90), and in March 1984 of "10 years of balance sheet accounts 1970-79" (collection INSEE C 116). Very clearcut conclusions were drawn with regard to claims and liabilities. Producing accounts of asset holdings as well as flow accounts does not involve in the long run a vast increase in workload since the basic sources are almost always data on asset holdings supplied by private accounts in the different sectors. Improved treatment of the flows is achieved by organizing the work around the transformation of variations in

balance sheets into annual flow and reconciliation operations. The more comprehensive information thus obtained leads to a closer examination of the nature of certain operations and the application of certain distinctions which might otherwise seem unnecessary.

Producing regular financial balance sheet accounts does in fact mean creating competition between different types of information on outstanding credit and debt. The best known and most commonly used data are *monetary statistics*, which are structured, as far as France is concerned, around three main aggregates assessed as "stocks": M1<sup>1</sup> *disposable money* (coins, banknotes and current bank accounts which can be used without notice of transformation), M2 *the money supply*, a central aggregate which adds to M1 liquid investments, such as savings accounts, and short-term investments, such as deposit accounts, managed by the banks and the Treasury, and M3 *total liquidities*, adding to M2 liquid and short-term investments managed by other financial institutions. As a complement to these aggregates an analysis is made of the statements of the banks showing only M2 in the liabilities column, together with different categories of assets net of non-monetary liabilities. Needless to say, these statistics are expressed as holdings. Up until now comparing monetary data with national accounts consisted in establishing a correspondence between variations of M2 and the flow of financial operations. But monetary specialists are not accustomed to working on flow movements and the link is an extremely complex one. The regular publication of complete financial accounts as a part of the national accounts removes one of the obstacles to the comparison.

Monetary statistics are the most frequently and regularly published<sup>2</sup> and the most eagerly awaited form of internal financial data. But they only cover part of the financing of the economy. There are numerous other sources of information on financial institutions—the report of the bank control committee (containing accounting data), the public reports of different institutions (such as the Caisse des dépôts et consignations)—and on operations (stock exchange and money market data). But general analyses of balance sheets are rare and where they do exist they are seldom published: for example, the Direction du Trésor (Directorate of the Treasury), which oversees financial institutions and operations, has a *global economic financing table*, and other government departments and banks have less complete tables of sources and uses of funds. Finally mention must be made of *financial data from the balance of payments*, which cover one specific aspect of the question but are nevertheless the object of increasing interest. All the above work uses monetary statistics, often without modification. The tables of holdings of financial assets and liabilities which the authorities intend to publish regularly should gradually phase out the ad hoc series of statistics drawn up by each department. Thus it was not possible simply to juxtapose the new financial operations tables and the existing data without at least explaining the reasons

<sup>1</sup>Since 1984 these three aggregates have been called M1R, M2R and M3R since they only take into account the assets of residents, excluding those of non-residents.

<sup>2</sup>They are published monthly and an additional annual report is brought out by the National Credit Council containing a very complete set of information on the yearly accounts of financial institutions related to M1, M2 and M3.

for the discrepancies between the two. It was preferable to try to make them agree.

Other institutional considerations have also come together to favour improved coordination. French financial institutions are traditionally highly specialised (the saving banks, for example, handle popular savings, which are used in financing housing and local communities, whereas the deposit banks manage the means of payment and lend to the production sector; there are many institutions which specialize in loans to small businesses, to building, to exporters, to investors, etc. . . .). Recently, however, the trend has been towards a more open approach: saving banks have been authorized, for example, to maintain current accounts and credit card systems. Laws and regulations have had to be adapted to suit this changing trend: a *Bank Act* was passed in 1984<sup>3</sup> and credit control methods are gradually being modified. These reforms *have led monetary specialists and national accountants to examine the nature and functions of credit organizations and the role of the different schemes they operate, as well as the type of monetary aggregates to be produced as a result of the current reforms. This study was in part a joint effort.*

### 1.3. *The Problem of Adjustment Between Financial Accounts and Non-Financial Accounts*

The basic revision work has also included analysing and possibly reducing the only adjustment which remains in the French National Accounts—as in the accounts of many other countries—the discrepancy between financial and non-financial accounts. As we shall see, this question is not entirely unrelated to the improved coordination of monetary statistics and financial operations in national accounts.

Let us briefly recall the origin of this adjustment. If we were in the ideal situation in which we had access to complete and coherent accounts of all the institutional sectors, no adjustment would be necessary. Indeed the discrepancies facing national accountants would stem from the fact that the date of recording of the same operation could vary from one sector to another. The solution used at present would apply. It consists in making recording dates of non-financial operations coherent by laying down principles concerning recording dates, by supplying additional information or by establishing priorities between sectors. After arbitration the resulting discrepancy in the accounts of the sector affected can be corrected by entering a financial correction factor into an accounting discrepancy column.

But this is obviously not the way national accounts are drawn up. We have no accounts for certain sectors, such as households; and in the absence of adequately organized basic data it is difficult to exploit the financial side of accounts data. This is true of non-financial companies whose non-financial accounts are extensively exploited, but whose accounts of relations with financial concerns we shall not yet be able to exploit in “base 80”. Then again, the basic statistics may include an adjustment between non-financial and financial

<sup>3</sup>It provides legal definitions of credit operations, categories of financial institutions and the financial products they must, may or may not provide, and the advisory and supervisory bodies.

operations, as is the case with the balance of payments with its “errors and omissions” item.

What becomes of the adjustment in these conditions? The answer is a consequence of the overall coherence of the national accounts. These require both non-financial operations<sup>4</sup> and financial operations to balance out (the latter being essential in closing the financial account for households). The consequence in accounting terms is that *the sum of the adjustments in the economy as a whole, including the rest of the world, is zero.*

Whether or not to make the adjustment between financial accounts and non-financial accounts can thus be looked at from two viewpoints: it is one of the practical results of the theoretical and conceptual dichotomy<sup>5</sup> which does not encourage the coordination of financial and non-financial statistics. It also results from a choice made with regard to the cost of the operation. As long as the level or the variability of the adjustment does not weigh too heavily on the use made of the national accounts as a whole, the advantages to be gained by making the adjustment must be weighed against the means required to achieve it.

In practice the adjustment did not give rise to any major difficulties until the last five years<sup>6</sup>. Since then, however, its level, evolution and fragility of measurement—because of the substantial revisions—have cast doubts on the accuracy of our estimates of gross disposable income, savings and net borrowing or lending.

Paradoxically, the choice of using unadjusted financial and non-financial statistics was adopted in the case of credit institutions. In working out the financial accounts of these units the most detailed documents and those which are considered to be most significant are not the statements for 31 December but the “situations” on the first day in the month of January on which all the counters are open. Now, these situations do not tally at present with the year-end accounts used to evaluate production and distribution operations (interest, for example). The deviation between the two is the result of passing from accounts prior to maturity to accounts after maturity, creating a spontaneous adjustment which is not easy to evaluate: the considerable mass of operations involved is irregular in structure and in level. This creates problems for balance sheet accounting and the evaluation of money supply M2 since part of the banking float is involved; the float is particularly high at the end of the year and on 31 December it is included under “liabilities to clients due upon cashing” (which are not included in M2), whereas after maturity they are counted as “ordinary client accounts”, which are included in M2.

National accounts also admit of an adjustment in the Rest of the World Account, among other things so as to remain coherent overall with their main source, the Balance of Payments.

The Balance of Payments includes an “Errors and Omissions” heading, i.e. the discrepancy between total credits and total debits recorded. The French

<sup>4</sup>Or the three methods for evaluating the GDP must give the same result, which amounts to the same thing. This accounting equation has a strong economic content, which is described in Section 2.1.

<sup>5</sup>See also 2.1.

<sup>6</sup>This was not so at the time of the wars in Indochina and Algeria: transfers of funds (in FF) were very badly traced particularly when the former colonists returned to France.

National accounts<sup>7</sup> are constrained on the one hand to the current balance, which is taken as the non-financial operations of the rest of the world, and on the other hand to the total balance of capital and reserves, which count as financial operations. Thus the errors and omissions item is interpreted as an adjustment between financial and non-financial accounts.

The counterpart of these adjustments in the rest of the world and in the credit institutions must be found in the accounts of the other agents<sup>8</sup>. So *to want to reconcile monetary statistics* with the financial operations of the national *is to accept the need for facing up to the economic, financial and statistical problems of adjustment.*

#### 1.4. *The Results and their Limitations*

The organization of this coordination work was a matter for the institutions involved. Since the work on both sides involved reprocessing unit accounting data the main problems which arose were problems of nomenclature. A relatively loosely structured working group took on the task. It was made up of representatives of the Direction du Trésor, the Direction de la Prévision (an advisory body to the Ministry of the Economy), of the INSEE and of course of various Bank of France departments.

##### 1.4.1. Money and Money Issuers

The coordination of monetary statistics and national accounts means clarifying the specific role attributed to what are considered to be monetary operations and to the institutions which handle them.

In the international systems (SNA, ESA) as in the French accounting system (SECN or enlarged system of national accounts), money was previously defined as “all the usual means of payment used throughout the nation”. For some time monetary statistics had added to that definition sight savings deposits and time deposits handled by the banks. This extension is all the more justified in view of the increased facilities for carrying out transactions directly with savings accounts and the fact that transfers from deposit accounts to current accounts can now be made over remote data processing networks:<sup>9</sup> the dividing line between short-term savings accounts and cheque accounts is growing fainter.

As we have already indicated, however, the trend in France is towards a lessening of the difference between traditional banks and savings institutions (“credit mutuel”, savings banks . . .).

The two information systems were thus aligned so as *to include under item F20, “Other Liquidities”, all those instruments which are readily transformable into means of payment*, listing them in order of decreasing liquidity and including

<sup>7</sup>The French balance of payments used to include another adjustment item which measured the residual deviation between customs statistics and payments for goods. But this gap, which was a clear-cut case of adjustment between financial and non-financial accounts, has been closed up.

<sup>8</sup>This does not mean that adjustment is the “responsibility” of these two sectors alone. For example, for the first time work on “base 80” includes financial operations between households and corporate or quasi-corporate enterprises which were previously neglected, such as partners’ current accounts and a part of intercompany lending.

<sup>9</sup>Not to mention link-ups between accounts which certain banks set up for their customers.

instruments of this type handled by credit institutions which do not always fit the institutional description:<sup>10</sup> the implicit monetary indicator is therefore M3R (total liquidities) and no longer money supply M2R.

Two further important decisions have been taken:

—*Inter-bank monetary operations have been isolated* (F12, inter-bank money made up of inter-bank current accounts and compulsory reserves; F23 and F24, inter-bank time deposit accounts . . .). From the monetary statistics standpoint it is a question of creating the means for consolidation of inter-bank operations, money being made up of deposits of non-financial agents with financial agents. From the standpoint of national accounts, it is a matter of accepting the specific economic nature of inter-bank operations, just as transfer operations between governmental units are considered to be different from the other income distribution operations.

—*We have grouped establishments with liquid deposits as liabilities and those with the corresponding claims as assets under one sub-heading* (bank credit establishments and the like). Thus with the banks we have included establishments which are refinanced directly by the banks; with the Caisse d'Épargne (savings banks), the Caisse des dépôts et consignations (and its subsidiaries), whose job it is to manage most of the funds the savings banks collect. This way the counterpart entries to the money supply can be easily seen in the semi-detailed national accounts.

#### 1.4.2. The Overall Structure of Operations and Sub-sectors

In more general terms, operations have been grouped into three main categories:

—Money, which we have already touched on and which plays the very specific role of a medium of exchange, a reserve of value and instrument of speculation. In commodity producers' accounts it can practically be substituted for stocks of raw materials and products. For the issuers, money is created or destroyed for very little cost depending on the demand from depositors: it is not reimbursed, so it is not really like a debt, obtained by deduction from the savings of other agents, unlike their other resources (particularly their long-term loans or the bonds they issue).

—Combined credits, negotiable bills and bonds which are clearly liabilities for the one party and claims for the other.

—Shares, which only really fit into the simple symmetrical transfer scheme into which financial operations generally break down (money in return for shares) when they are first issued. As wealth the shares form part of the owner's assets but are no longer a debt as far as the issuer is concerned.

An attempt was also made to show operations between financial agents whenever this was possible, which it seemed to be in the case of short-term loans and medium and long-term credit, still bearing in mind the specific nature of the operations. Similarly, commercial loans (F65, F75), i.e. loans between non-financial agents, are presented separately.

<sup>10</sup>This is the case of the CODEVI savings accounts, which are legally coparcenaries, the depositors acquiring securities from the bank involved and also from a specialized institution which itself lends to companies.



Following on from this breakdown, the following categories were introduced: banks and related establishments, non-monetary financial intermediaries operating essentially on credits + negotiable bills + bonds, and finally, collective investment bodies (SICAV and FCP: see below).

#### 1.4.3. Problems to Which No Satisfactory Solution Has Been Found

Three issues were either not dealt with or left unresolved:

—For the purposes of monetary analyses the State is counted as a financial agent in its roles as issuer of coinage, collector for the Post Office Giro accounts and short-term borrower (the Treasury), but no clear definition has been found to distinguish between these activities and its other financial operations.

—The description of shares and bonds leaves no explicit place for their function as short-term value reserves (company investment bills and bonds), or role of purchases and sales on the financial market. Similarly the role of “institutional investors” and particularly insurance on the monetary and financial markets has not really been clarified. The same goes for the role of the SICAVs<sup>11</sup> and the FCPs<sup>12</sup>.

—Finally, *the possibility of creating a non-bank currency* was not envisaged. Yet there has been rapid development of short-term FCPs and SICAVs, which play a part similar to fixed-term accounts, especially for large companies, in that they place their members’ treasury for example in bonds nearing maturity, which makes for high liquidity and a good yield in certain market conditions. The imminent introduction of certificates of deposit negotiable between non-financial agents could serve the same purpose.

#### 1.4.4. Durability of Harmonization

The results presented here are approached from the viewpoint of the national accountant, since this is our role. But the concordance achieved is due also to monetary statistics, which managed in certain cases, as we have seen, to favour the economic approach over the institutional description. The collaboration in fact went even further since those responsible at the Treasury and at the Bank of France worked together to decide which future money supply indicators they should suggest to the government and how to incorporate them in the joint system.

These favourable results must not, however, obscure the fact that the two work to very different time scales and that neither can formally undertake to maintain a high degree of integration of the two systems on a permanent basis. In the case of monetary statistics this is because they must adapt constantly to the monetary policy in force, and in the case of the national accounts it stems from the fact that nomenclatures must remain constant at least between two major revisions.

But the concordance of the “concrete logic” underlying each of the two information systems seems to have been achieved, which is very important.

<sup>11</sup>*Société d’investissement à capital variable* (variable capital investment companies): they provide collective investment of their shareholders’ savings in shares and bonds.

<sup>12</sup>*Fonds commun de placement* (joint investment fund): these are coparcenaries, with the same role as the SICAVs.

## II. DICHOTOMY AND CONCEPTUAL OUTLINES

### 2.1. *In the National Accounts*

#### 2.1.1. The Stance of National Accounts

The national accounts quantify balances *ex post*. These are balances of operations, which can be interpreted in terms of market balance. In non-financial accounts, for example, one can read the balance of the commodities and services market and different balances related to income and the redistribution thereof. The distinguishing feature of these accounts is that they are linked through the accounts. The balance of commodities and services starts in the production account and ends in the capital account. At each step its components are associated with elements of income. There is thus a high level of integration manifest in that overall intermediate balances are not zero (added value, gross operating surplus, gross disposable income, gross savings). From this point of view the financial flow table is the synthesis of the balances on the different financial markets. Its integration with non-financial operations is far less marked. Indeed everything “stops” after the capital account: total net lending is equal to total net borrowing, and the balance is nil. The structure of the accounting system takes into account the existence of a financial/non-financial dichotomy. *Ex post* the “real” and financial markets balance out independently. This also tallies with the fundamental equation of so-called Keynesian representations: investment = savings (not counting relation with the rest of the world). This is why national accounts remain a preference basis for building models of the ISLM type.

One clear illustration of this thesis is supplied by Pierre Villa in his presentation of the DEFI model.<sup>13</sup> “The problem in describing the French financial system is in imagining a double, overlapping hierarchical structure where financial assets can be classified by companies according to their order of preference and where the agents are different bodies. To achieve this, the model distinguishes several financial markets: shares, bonds, non-bank loans, long and short term bank loans. Companies turn first of all to the financial markets, which is where they find more reliable, longer-term resources, but the supply is limited. Then they turn to specialized bodies for their long-term resources . . . To show that short-term bank loans are the least useful form of financial assets as far as companies are concerned, one simply has to express their financial accounts for this item net . . . To show that the banks can always go to the Bank of France for refinancing, simply express their accounts net for the refinancing item. *In this case the accounting system constitutes the model and is vital to the understanding of financial mechanisms*” (underlined by P. Villa). But the model is based on the relative independence of the financial and non-financial markets. In other words, financial problems are merely financing problems: their repercussions on non-financial results are indirect, i.e. the two do not go hand in hand.

The national accounting scheme is particularly well suited to this type of analysis. One wonders what sort of modifications would be brought about if financial and non-financial mechanisms were more closely connected in the system. The SNA does not really change this state of affairs by bringing in the

<sup>13</sup>Modélisation macroéconomique des structures financières (macroeconomic model of financial structures), P. Villa, Archives et documents, No. 53 INSEE.

notion of imputed bank services, on the one hand because it is only partially taken into account (there is no imputed use<sup>14</sup>) but also and above all because the undifferentiated nature of this production does not allow for any connection between financial holdings and production.

Behavioural analysis would consider for example that costs differ from one type of financial resource to another, which is why income is classified according to the type of financial asset while only dividends are kept separate from the other types of interest. This would also imply that meaningful categories of financial agents would appear in non-financial accounts, distinguishing the functions of monetary institutions, for example, from those of other institutions. But thus far little progress has been made in shedding light on the non-financial consequences of specific elements of financial accounts.

### 2.1.2. The Situation of Monetary Statistics

The stance adopted by monetary statistics is different. The description is based entirely on the viewpoint of the agent, or more precisely on the consolidated balance sheets of a given group of agents. Analyses are made comparing part of their liabilities (what we call the monetary part) and part of their assets (the counterpart entries, which are usually made up of Foreign, State, "Economy"<sup>15</sup> and the Rest<sup>16</sup>). This analysis is clearly not applicable to the other sectors, for it only presents their "monetary" situation through the analysis which monetary agents make of it. If the national accounting scheme shows a (partial) mirror effect between financial and non-financial *operations* (there is in fact another one between money and other operations) it can be seen at the level of financial *agents* and non-financial agents with regard to monetary statistics. One consequence of the "orthogonality" of this viewpoint is that the implicit balance which monetary statistics trace in the integrated statement on which they are based—it could be called the financing requirement after long-term investments net of non-monetary resources—cannot be carried over to the statements for the other sectors. Moreover, in order to integrate a complete description of the economy using this view throughout, one would need to reconstitute a non-financial account of financial agents using this same logic. In this account the total cost of debts, for example, would be shown by grouping together repayments, interest and net residual debts apart. We feel that this would only give a very partial description and that attempts at integration are thus even more difficult than from the national accounts standpoint. Even if the complete scheme of national accounts at present only allows a relatively weak integration of financial operations, insufficient to take into account all the needs of monetary analysis, it does have the merit of being exhaustive, at least in theory. A scheme based on the viewpoint of monetary statistics would find this difficult to match in our view, for the simple reason that such analyses are usually more "dichotomous" than those carried out under the national accounts scheme.

<sup>14</sup>The previous version of the SNA was unconvincing in its breakdown of financial service consumption by user, and was therefore not retained in revision 3.

<sup>15</sup>Loans to the non-financial sector

<sup>16</sup>The balance between relations with the non-monetary financial sector and non-monetary liabilities towards the non-financial sector.

This conclusion must, however, be put into perspective bearing in mind that attempts at integration from the “monetary” viewpoint usually take a different approach from those we are exploring here.

## 2.2. *Thoughts on Improved Integration*

### 2.2.1. Integration and Coherence of Evaluations

The national accounting system was largely inspired by the company accounting system, even if there are considerable differences between the two. The initial model was often modified to accommodate the descriptive constraints of the other sectors. The modifications are nevertheless limited by the need to maintain some form of common scheme. An example of this point is the need felt by public finance specialists to calculate different balances in order to analyse the operations of the State.<sup>17</sup> Most of the traditional ways of presenting public finance surpluses or deficits count State loan operations “above the line”, considering that this activity is part of the State’s role in the same way as the supply of non-market services, subsidies or social benefits. From this point of view the problem of how to spend a surplus or how to finance a deficit only arises after these “temporary outlays” have been entered in the accounts. For reasons indicated in Section 2.1.1. above this approach cannot be used directly in the national accounts. The situation is similar in the case of financial agents, but considerably more reclassification is required. In the case of monetary agents only their monetary operations and their counterpart entries remain “below the line”.

One answer to the problem would be to adopt the same type of solution as in the case of public finance and set up a complementary scheme with elements compatible with national accounts but also particular balances which are not transposable to the other sectors. This solution can clearly be very useful in practical terms, but it is a very poor solution to the problem we are concerned with here since by its very structure it abandons conceptual integration. The public finance example shows, nevertheless, that the problem is not specific to financial phenomena, and we know that it is possible to take into account a whole range of sectoral viewpoints at the descriptive level. But this means that the only solution lies in perfecting the descriptive system so as to obtain a cross classification, which would be much more cumbersome.

### 2.2.2. A Critical Review of the Overall Accounting Set-up

A pragmatic approach would be to try to get as much as possible out of the system of national accounts in its most formal state. The complete entry system for each operation involves four entries<sup>18</sup> (or more if we count a separate account for commodities and services).

In practice we do not “follow” an operation through all its entries. The use of screen accounts and the practice of compiling non-financial accounts largely independent of financial accounts make it impossible to trace all the counterpart entries of an operation. The development of new, more coherent statistical

<sup>17</sup>IMF public finance statistics, work by the EEC “budget comparison” group.

<sup>18</sup>One financial and one non-financial entry in the accounts of the two institutional units carrying out the transaction. If the operation is complex it can be broken down into several simple operations.

resources could, however, bring progress in this respect. One could then imagine financial accounts as an exact and above all a complete reflection of non-financial accounts.<sup>19</sup> There would then be nothing to stop one carrying out the required monetary analyses purely in the financial accounts and working out the required balances without any loss of non-financial information. Thus loans to companies could be analysed both by their origin (financial sector, nature of financial resources) and by how they are used.

Such a device would evidently be more complete than current monetary statistics. Building up a descriptive scheme specific to the financial side would nevertheless pose great conceptual difficulties, not to mention the extraordinarily cumbersome statistical system it would generate. The balancing items calculated for the financial agents would have to be given an interpretation in the case of non-financial agents. Considerable groundwork would need to be done, but it is probably the most promising solution in the long term if this objective is to be given priority.

*A priori* there is another possibility. It involves a total change of outlook, with the financial viewpoint taking priority throughout the system. The basis of recording becomes the transfer of means of payment instead of "economic entitlement". This radical solution is an extreme version of certain proposals to modify the system of national accounts in favour of the effective expenditure notion. But it also boils down to following the preceding suggestion retaining only its financial aspect. This would make for a simpler process since only the financial counterparts of real flows—when they exist—would be entered directly.

This generalized cash accounting has sometimes been suggested, but the consequences have never really been fully measured in our opinion. First of all, it does not do away with the dichotomy between financial and non-financial, it merely displaces it a little.<sup>20</sup> But the outlook is totally different. We should stand to gain a complete development of the logic of monetary statistics, which are quite general at present as far as analysing non-financial agents goes. It would be a matter of carrying out the second part of the solution programme outlined above. But it would obviously entail an enormous loss insofar as the whole descriptive system of the real sphere would be deprived of all the operations with non-immediate translation into payments: analysis of production, storage and delivery, for example, would disappear in favour of analysis of receipts. The same goes for purchases and ICs which are replaced by payments. We do not recommend that attempts of this sort be abandoned, but it is obvious that they must be carried on in parallel with the current system, for which they are not substitutes. They would then have the advantage of giving a preview of what the complete system might look like.

These quite simple hypotheses are not short-term solutions, not even medium-term. We are obliged to recognize that integration defies any simple solutions. This does not mean, however, that no progress can be made within a reasonable time scale. Marginal improvements are possible. They consist mainly in an

<sup>19</sup>Such a device would mean all financial entries being gross, i.e. accounting for the total volumes negotiated and not the final result of the movements.

<sup>20</sup>In the case of commercial loans for example.

enhanced description of financial operations. As already stated, it does not seem to us possible to propose a more complete structuring of the financial tables (flow and stock) bringing to light new intermediate results which are significant for all sectors. Certain distinctions, on the other hand, are useful in behavioural analyses. Systematically separating operations into national and foreign currency for each category (loans, deposits, shares, etc. . . .) would give precious information for the analysis of movements with the rest of the world and balance sheets, for example. Similarly, separate entry of gross flows and reimbursements-collections would make it easier to analyse the "discretionary income" of households and perhaps the 'discretionary savings" of companies. Company analysis would also doubtless be easier if we could distinguish between shares held as investments and for active participation on the asset side which imply fundamentally different forms of behaviour.

This list is obviously not exhaustive, for these distinctions are meant above all to facilitate the partial reclassifications needed to work out the most significant results in each sector. Nevertheless, the generalization of this type of approach would involve not only the conceptual problems we have already mentioned but also considerable practical difficulties.

#### ANNEXE

*Tableau 1: Opérations Financières*

F00	<i>Moyens de Paiement Internationaux</i>
F01	Or
F02	Devises
F03	D.T.S.
F04	Ecus
F05	Comptes avec le F.M.I.
F06	Comptes avec le FECOM
F10	<i>Moyens de Règlement en Francs</i>
F11	Moyens de paiement
F12	Monnaie interbancaire
F20	<i>Autres Liquidités</i>
F21	Compte d'épargne et bons en francs
F211	Placements à vue
F211	Comptes sur livret dans les banques
F2112	Livrets B
F2113	CODEVI
F2114	Livrets A et livrets bleus
F2115	L.E.P.
F2116	Comptes d'épargne-logement
F212	Placements à échéance
F2121	Comptes à terme
F2122	Bons de caisse
F2123	Bons d'épargne
F213	Epargne contractuelle
F2131	Epargne des travailleurs manuels

- F2132 Plan d'épargne logement
- F2133 C.E.L.T.
- F22 Comptes d'épargne et bons en devises
- F23 Comptes à échéance en francs de correspondants financiers
- F24 Comptes à échéances en devises de correspondants financiers
- F25 Autres dépôts non transférables
- F30 *Bons Echangeables sur le Marché Monétaire*
- F40 *Obligations*
- F50 *Actions et Autres Participations*
  - F51 Actions
  - F52 Autres participations et dotations
  - F53 Titres participatifs
- F60 *Prêts a Court Terme*
  - F61 Crédits en francs des agents financiers aux agents non-financiers
  - F62 Crédits en devises des agents financiers aux agents non-financiers
  - F63 Prêts à court terme entre agents financiers
  - F64 Refinancements
  - F65 Prêts et crédits commerciaux
  - F66 Décalages comptables
- F70 *Crédits a Moyen et Long Terme*
  - F71 Crédits en francs des agents financiers aux agents non financiers
  - F72 Crédits en devises des agents financiers aux agents non financiers
  - F73 Prêts à long terme entre agents financiers
  - F74 Crédit-bail
  - F75 Prêts et crédits commerciaux
- F80 *Réserves d'Assurances*
  - F81 Réserves mathématiques
  - F82 Réserves-primés et réserves-sinistres

Par agents financiers on entend l'ensemble des institutions de crédit résidentes et non résidentes et le Trésor Public.

*Tableau 2: Institutions de Crédit*

- S40 Institutions de crédit
  - S41 Etablissements de crédit bancaires et assimilés
    - S411 Banque de France et FSC
    - S412 Banques et autres établissements de crédit de caractère bancaire
      - S4121 Banques
      - S4122 Autres établissements de crédit de caractère bancaire
    - S413 CDC et caisses d'épargne
      - S4131 Caisses d'épargne
      - S4132 CDC
  - S42 Autres institutions financières
    - S421 Etablissements de crédit de caractère non bancaire
    - S422 Autres institutions financières non bancaires
    - S423 Organismes de placement collectif