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Balance Sheets, Transaction Matrices and the Monetary Circuit

2.1 Coherent stock-flow accounting

Contemporary mainstream macroeconomics, as it can be ascertained from intermediate textbooks, is based on the system of national accounts that was put in place by the United Nations in 1953 – the so-called Stone accounts. At that time, some macroeconomists were already searching for some alternative accounting foundations for macroeconomics. In the United States, Morris A. Copeland (1949), an institutionalist in the quantitative Mitchell tradition of the NBER, designed the first version of what became the flow-of-funds accounts now provided by the Federal Reserve since 1952 – the Z.1 accounts. Copeland wanted to have a framework that would allow him to answer simple but important questions such as: ‘When total purchases of our national product increase, where does the money come from to finance them? When purchases of our national product decline, what becomes of the money that is not spent?’ (Copeland 1949 (1996: 7)).

In a macroeconomic textbook that was well-known in France, Jean Denizet (1969) also complained about the fact that standard macroeconomic accounting, designed upon Richard Stone’s social accounting, as eventually laid out in the 1953 United Nations System of National Accounts, left monetary and financial phenomena in the dark, in contrast to the approach that was advocated from the very beginning by some accountants (among which Denizet) in the Netherlands and in France. In the initial standard national accounting – as was shown in its most elementary form with the help of Table 1.1 – little room was left for banks and financial intermediaries and the accounts were closed on the basis of the famous Keynesian equality, that saving must equal investment. This initial system of accounts is a system that presents ‘the sector surpluses that ultimately finance real investment’, but it does not present ‘any information about the flows in financial assets and liabilities by which the saving moves through the financial system into investment. These flows in effect have been consolidated out’ (Dawson 1991 (1996: 315)). In standard national accounting, as represented
by the National Income and Product Accounts (NIPA), there is no room to
discuss the questions that Copeland was keen to tackle, such as the changes
in financial stocks of assets and of debts, and their relation with the transac-
tions occurring in the current or the capital accounts of the various agents
of the economy. In addition, in the standard macroeconomics textbook,
households and firms are often amalgamated within a single private sec-
tor, and hence, since financial assets or debts are netted out, it is rather
difficult to introduce discussions about such financial issues, except for
public debt.

The lack of integration between the flows of the real economy and its finan-
cial side greatly annoyed a few economists, such as Denizet and Copeland.
For Denizet, J.M. Keynes's major contribution was his questioning of the
classical dichotomy between the real and the monetary sides of the econ-
omy. The post-Keynesian approach, which prolongs Keynes's contribution
on this, underlines the need for integration between financial and income
accounting, and thus constitutes a radical departure from the mainstream.\(^1\)
Denizet found paradoxical that standard national accounting, as was initially
developed by Richard Stone, reproduced the very dichotomy that Keynes had
himself attempted to destroy. This was surprising because Stone was a good
friend of Keynes, having provided him with the national accounts data that
Keynes needed to make his forecasts and recommendations to the British
Treasury during the Second World War, but of course it reflected the initial
difficulties in gathering enough good financial data, as Stone himself later
got involved in setting up a proper framework for financial flows and balance
sheet data (Stone 1966).\(^2\)

By 1968 a new *System of National Accounts* (SNA) was published by the
national accountants of the UN. This new system provided a theoretical
scheme that stressed the integration of the national income accounts with
financial transactions, capital stocks and balance sheet (as well as input-
output accounts), and hence answered the concerns of economists such as
Copeland and Denizet. The new accounting system was cast in the form
of a matrix, which started with opening assets, adding or subtracting pro-
duction, consumption, accumulation and taking into account revaluations,
to obtain, at the bottom of the matrix, closing assets. This new integrated
accounting system has been confirmed with the revised 1993 SNA.

\(^1\) Such an integration of financial transactions with real transactions, within an
appropriate set of sectors, was also advocated by Gurley and Shaw (1960: ch. 2) in
their well-known book, as it was by a number of other authors, inspired by the work
of Copeland, Alan Roe (1973) for instance, whose article was appropriately titled ‘the
case for flow of funds and national balance sheet accounts’.

\(^2\) Various important surveys of flow-of-funds analysis and a stock-flow-consistent
approach to macroeconomics can be found, among others in Bain (1973), Davis (1987),