

Considerations about the Normalization of National Accounting

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Abstract: A country's economy becomes more complex, by emphasizing the interdependences of its structural. National accounting represents a tool for aggregating the information provided by accounting firms and other systems and providing data about the development of national economy. The twentieth century was the period of maximum development, marked by leading figures from economics and accounting. So far there have been developed five major systems of national accounts in the context of accounting harmonization and normalization. It remains current the debate between national and private accounting, a way of mediation being to establish new international accounting standards (IAS/IFRS).

Keywords: national accounting; system of national accounts; harmonization; normalization

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1. Introduction

National accounting is a global representation, detailed and ciphered of national economy in an accounting ⁵¹*framework*. Its object represents the reporting on activities of the economic structures of a sector, region and especially a nation in a given period. This involves aggregating data from accounting business and other information systems for the development of macroeconomic indicators for the analysis of national economic structure.

The evolution of this area has known his first moments since the Antiquity, and so far many approaches, currents, and a literature have emerged. National accounting, as currently exist in all countries of the world, was influenced by the ideas of Keynes and other personalities, regardless the future directions of the economic policies. Initially, for the states to implement effectively their recommendations, the national accounts were created. Consistency, accuracy and continuity have emerged as important tools for the analysis of macroeconomic activity.

2. Currents and Theories of National Accounting in the Twentieth Century

The first half of the twentieth century represents the transition to a system of national accounts. The history of national accounting retains some significant names of economists who have contributed, through their research and work in developing this area. During the years 1930-1945, a particular attention is paid to the national income, being yet presented also estimates of national or private wealth.

Thus, Irving Fisher (1890-1962) focuses on the accounting treatment of individuals and businesses. The advantages of national income estimated by a system of double entry accounts were supported by the American economist of institutional inspiration, Morris A. Copeland. The idea of an accounting system for

national economy was set by another American, Robert F. Martin. Applying these reformist ideas was initiated by the Frenchman André Vincent.

In Scandinavia, Ragnar Frisch (1895-1973) proposes a vision of a national accounting system, through an analysis of macroeconomic interdependences, thus establishing logical relationships between basic variables enshrined dedicated to the spirit of economic circuit. Frisch is known as one of the founders of econometrics and economics Nobel laureate in 1969. (Tabără, 2008, pp. 28) (Vanoli, 2002, p. 245).

In the context of the economic crisis of 1929 was published a series of annual input-output boards, during 1930-1939. In *The National Income*, Colin Clark has outlined the estimates about the consumer spending, the economy and investments, including transactions with the outside. His merits for the restoration of the synthetic vision of "political arithmetic" directed by an accounting approach is recognized by Stone. British economist and professor Richard Stone (1913-1991, Nobel prize in 1984) has developed the first system of national accounts in 1938. In parallel, John Maynard Keynes (1883-1946) presented a macroeconomic theory about the need for rigorous definitions of concepts of income, consumption, investments and economy.

Important developments of national accounting are raised during the two world wars, influenced by keynesian thinking. The first assessment of the macroeconomic indicators are related to the name of Simon Kuznets (1901-1985, Nobel prize for economics in 1971) in the USA, Colin Clark in the United Kingdom, Ragnar Frisch in Norway, Colin Colson and Alfred Sauvy in France. National accounts published in 1974 is a true system, consisting of correlations between a coherent assembly and macroeconomic aggregates. After a short time, through the efforts of Meade and Stone, was crystallized a number of factors related to prior periods.

In the '40s stands the work of Simon Kuznets in measuring the national income of factors and welfare. Also, there is a return to the work of Wassily Leontief (1906-1999, Nobel prize for economics in 1973). He presents the theory of general equilibrium, introduces an input-output analysis (1950) and develops boards closely linked to U.S. national accounts. In 1941, James Meade (1907-1995, Nobel prize in 1977) and Richard Stone, two of the disciples of Keynes, published in the UK the *White Paper*, thus shaped the modern national accounting subject. At that time, Jan Tinbergen (1903-1994, Nobel prize for economics in 1969) develops in Netherlands a series of articulated and integrated accounts. The economist André Vincent expects a system of accounts in France developed in 1946 by Claude Gruson, Robert Froment and Pierre Gavanier. There are known many works coordinated by François Perroux and Jean Marczewski, of the same age. (Tabără, 2008, pp. 29-31)¹

The end of the Second World War was indeed a development of the first systems of national accounts. For the first time have been met the three essential conditions for the emergence of national accounting:

- political will of states, which have the tools to intervene effectively in the national economic life;
- a dominant economic theory, which requires all of its concepts;
- performing statistical apparatus.

Stone, Aukrust and Marczewski publish, in the Organization for European Economic Co-operation (OECE), a normalized system of accounts, system restarted also of the United Nations Organization (UNO), in 1952.

Richard Stone presented in 1947, a report by the League of Nations Committee of Experts on national income, the banks and the balance of payments situation. It is undisputed its key role in national accounting development, giving the guidance and support for outstanding direction of its normalization. He managed

¹ <http://nobelprize.org/>, 16.11.2010 accessed.

an original synthesis of the concept of double entry accounting, economic circuit and equations Keynesian scheme. Thus, in his opinion, the operations are classified by type of counterparty currency movements. Each transaction is recorded twice in accounting, but the bilateral relations between the sectors are not systematically described.

Stone gave a special attention to theoretical justification of the coherency of national accounts and their balance on the basis of various indicators constituent of the accounting boards. He looks national accounting, primarily as a balanced system of accounts, as confirmed in his speech of 1984, when receiving the Nobel prize for economics. A direction followed by Stone is that about the soldier and balanced accounts.

For reasons of normalization, the UN adopted a system intended to serve as a basis for accounts of all countries. It was however not adopted everywhere, so in a schematic way was possible to distinguish three main schools of national accounts in the late '50s:

- *Anglo-Saxon school*, by liberal inspiration;
- *soviet school* that has implemented a system of accounts tailored to his very special way of central planning;
- *French school*, for meet the needs of planning created an original system, intermediate between the Anglo-Saxon and the soviet system.

In 1958, Paul Studenski, born in Russia and became professor of economics at New York University, has published the work *The Income of Nations* that presents a comprehensive history of estimates of national income, from the emergence of the concept in seventeenth century (William Petty, Gregory King), to its spread in the first three decades of the twentieth century (Simon Kuznets, Colin Clark).²

In 1968 was published under the auspices of the United Nations, a revised system of national accounts (SNA 68), which also included changes made by the national statistics of Canada (Statistique Canada) about of Canadian national accounts. In accordance with these concepts and methodologies, the gross domestic product has been adopted as the main concept of production, around which were prepared accounts and other related units. 53

An international system of national accounting has been fully developed in a long time. Among the anglo-Canadian-American meeting in 1944 and the adoption of SNA 95/SEC 93 half a century has elapsed, focused on the normalization of the aggregates and the interrelationships in the simplified accounts, despite Stone's proposal for a system of accounts for sectors, facing then to building an integrated system. Thus, in 1970 was published an improved system accounts, influenced by the efforts for an accounting harmonization, from which is then derived the European system of accounts 1979 (ESA 1979), the latter replacing the SNA 68.

The concerns for a more accurate rendering of the image of financial and economic activity have led to several variants of practical application. Among them was noted the national accounting system in terms of stocks and flows denominated in accounting. O special importance has the Cambridge system (the accounting system of product and national income), dedicated to the relations between the mains homogeneous systems of the national and international economy and Leontief system (the system of structural interdependencies) that renders the internal structure of the productive system as a two-column matrix board array is inserted where the entrances and exits of each branch of the economy, including population. These two systems are complementary, having as a common failure the missing of cash flows

² <http://www.insee.fr/fr/insee-statistique-publique/colloques/acn/pdf/histoire-cnate.pdf>, 2.12.2010 accessed.

and trade credits, as a result does not explain monetary and financial aspects of economic activity. (Piriou, 2008, p. 4-6)

The last part of the twentieth century was a remarkable advance for national accounting, through a representation analogous to that of the accounting business. The French system manages information obtained directly from the individual accounts of the entity, restates them, then they are placed in a database. To assist those interested, directly or indirectly, on the various aspects of national accounts, in the year of 1983 was established in Paris, the National Accounting Association (ACN), by the University of Paris I and the National Institute of Statistics and Economic Studies (INSEE).

At the European level, the establishment in 1989 of a new European Commission's own resources - the fourth resource (GDP) - was the reason for accelerating the process of harmonization of standards and methods of national accounts. Since each country's contribution to be fair, it has become essential that methods of calculating GDP to be comparable in the European Union countries. This effect was created through a directive of the European Council, a committee consisting of representatives of all member states, called the GNP Committee. It was responsible for verifying compliance with the SEC's recommendations about the methods of calculating GDP and take steps to increase the comparability and representativeness of the GNP.

3. Normalization of National Accounting

Overall, the publication of the System of National Accounts 1993 (SNA 1993) marks the beginning of a real harmonization of different national accounting systems existing in the world. For this process were responsible Eurostat (European Commission), International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD - former OECE until 1961), World Bank and UN.

The French influence was especially important through André Vanoli and Peter Hill, the principal authors of books reviewed. The 1993 SNA is a significant national accounting progress. Its adoption was proposed 54
unanimously by the United Nations Economic and Social Council, at its session in New York on 22 February and 3 March 1993. The aim was to promote the integrity of economic statistics as an analytical tool and as an internationally presentation of comparable data regarding the national accounts.

The recommendations for a revised system were included in the world and particularly in Europe and specified in the European System of Accounts 1995 (ESA 1995). ESA 1995 is part of an EU Council regulation dated 25 June 1996, which becomes mandatory for all Member States. After adoption, the gross national income (GNI) has replaced the gross national product to calculate the allocation of the fourth resource and the GNP Committee has become the GNI Committee. SEC 95 was the introduction of a revised classification of activities and products. The main change is related to services, which are described in more detail. The first accounts under the new basic have been available since April 1999. Another review took into account the choice of the statistical material, which serves as reference for the calculation method itself.

In 2000, have been published textbooks comparing the Anglo-Saxon tradition with the German-French one. The first system involves blockages caused by the lack of standardization. To minimize such differences, it was imposed the adoption of IAS/IFRS, the result being the revision of methods of collecting and analyzing data, to meet the needs of various users of financial statements. Normalization of the system, through the development of IAS/IFRS, jeopardizing a certain degree of freedom as national accountants, but the technical quality of the information advantage. They shall, in particular, can aggregate business accounts in the context of groups, sectors and nations. (Colasse, 2010, p. 528)

An important step to mitigate the differences between IAS/IFRS and U.S. GAAP American standards was made in 2002, through the pact of Norwalk, when the IASB and FASB have agreed to identify all points of disagreement to ensure the necessary convergence.

The proposed methodology of MSFP 2001 (*Manuel de statistiques the finances publiques*, 2001) continued the harmonization with the System of National Accounts 2008 (SNA 2008), which allows the use of Financial Operations Board (FOB) as a component of public administration and national accounts. SNA 2008 has introduced new categories of financial instruments that could be adopted in the public finance statistics.

Like SNA 1993, SNA 2008 expected valuation of assets and liabilities at the transaction price, and when the assets are tradable, this corresponds to market price. Have appeared discussing about the implementation of such methods. The evaluation of marketable assets or sparsely traded assessment should be made by reference to assets comparable or update future income based on a rate more or less regulatory services (capital assets of non-financial). Loans are recorded at face value, being necessary also an additional information on problem-loans and their depreciated value. (2010, National Accounts of OECD Countries: Detailed Tables, Volume IIA and IIB, p. 6, p. 32)

The emergence of SNA 2008 was considered a breakthrough in the field of national accounting, in particular by the impact of changes from the SNA 93 on the boards of resources and uses, input-output boards, and through measures such as multifactor productivity indexes. Changes also occurred in the collection of data and their estimates. The following table is a summary of the national accounts systems presented in this paper.

Table 1. Systems of National Accounts

	Organization responsible	Contributions	Apply
SNA 52	United Nations	- the first international system of national accounts - three major schools of accounts: Anglo-Saxon, soviet and French.	In all UN member countries, but with notable differences, especially in Europe.
SNA 68	United Nations	- a more developed and integrated system - recognizes the literary and artistic works as intangible assets.	UN member countries and OEDC.
SNA 70/ESA 79	United Nations	- a synthesis of Anglo-Saxon and French systems.	UN member countries and OEDC.
SNA 93/ESA 95	Eurostat, International Monetary Fund Organization for Economic Cooperation and Development, World Bank and UN.	- actual start of a global accounting harmonization - the measurement of GDP - system of valuing goods and services transactions - changes in accounting structure and heritage (current accounts, accumulation accounts, balance sheets) - expand the concept of capital formation and the artworks included in production now.	OECD member countries UN member countries Many African countries have succeeded very hard to make the transition from SNA 68.

SNA 2008	UN – Statistical Commission.	<ul style="list-style-type: none"> - changing the resources and uses boards and input-output boards - multifactor productivity indexes - new financial instruments for public finance statistics. 	<p>Some African countries have encountered difficulties</p> <p>Among OECD countries, only Australia has implemented the system.</p>
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4. Conclusions

History of national accounts present debates of substance on its conceptual and methodological content, as well as controversy about the relationship between national accounting and economic theories. It can be said therefore that it presents updated information on the value of a nation's economic activity, respecting the conditions of a rigorous accounting framework. An integrated system of national accounts is not a guarantee of representation of the economy in its whole, even as the normalization of the accounting system does not ensure the effective homogeneity of the national accounts estimates.

Normalization process continues today, the United Nations system review conducted under the joint responsibility of Eurostat, IMF, OECD, World Bank and UN ends and the European system review is still the responsibility of Eurostat.

Therefore, national accounting cannot avoid the discussion with the private one. On the one hand, it draws information, on the other must demonstrate that the analysis of economic and financial situation may differ from that of the accounts published by companies. Thus, the establishment of new international accounting standards (IAS/IFRS, ISA) launched a major challenge for national accounting.

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