

# **An Approach to the teaching of Social Accounts in the Brazilian University Curricula**

Carmem Feijo

*Brazilian Statistical Office*

*R. Timoteo da Costa, 1033-bloco 1-201*

*Rio de Janeiro RJ 22 450-130 Brazil*

*cfeijo@ibge.gov.br*

## **1. Introduction**

Social Accounts course is part of the minimum curricula in Economics for undergraduates in Brazil. The main purpose of the course, according to the official minimum curricula, is to provide the students with the knowledge of the basic macroeconomic aggregates. The definition of the contents is rather vague, what induces the teachers to a common practice of developing the course with a strong emphasis on theoretical macroeconomic concepts. The result is that, at the time students graduate, they are better trained in academic debates than in manipulating economic data, or even on interpreting macroeconomic figures.

My point in this paper is to discuss what the body of knowledge of a Social Accounts course should be. I suggest that this course should be developed to provide students with the understanding of the main economic aggregates, how they are consistently built, and their importance to allow interpretations about economic phenomena. In sum, the course should put emphasis on explaining the National Accounts, the analytical instruments attached to them and the extensions that can be developed based on the main structure of the system of National Accounts. In this sense the course contributes to prepare students in Economics to do empirical research. Furthermore, I advocate that the teaching of Social Accounts should be extended to other Social Sciences courses, in order to capacitate students in the reading of economic figures. Since the focus of the course should be on macroeconomic aggregates, I shall refer to it as National Accounts course thereafter. (see Feijo and Ramos et al., 2000)

## **2. Introducing the subject: the relevance of information to economic decisions**

With these multiple objectives in mind, I suggest that the starting point of the course should be what Sir John Hicks once described as the main concern of Economics “the consequences that follow from decisions”. (Hicks, 1979, p. 5.) According to this point of view, in market oriented economies, governed by monetary contracts, decisions are causes of changes. In a world where future is unknown, decisions are taken based on expectations, and so the formation of expectations and the degree of confidence attached to them are decisive to understand economic development. Moreover, decisions made by relevant economic agents, those who organize and carry on productive and trade activities, are strategically important to the determination of the dynamics of the economies. In this sense, relevant information about the functioning of economic activities, which can describe different economic contexts, is essential to the work and debates in economy. Therefore, National Accounts should not, at any circumstance, be seen as a prosaic topic.

One important distinction should be introduced in so far. This is the difference in concern between Macroeconomics and the National Accounts as fields of study. National Accounts deals with records of the economic activity. Those records, organized in a coherent way, following accounting rules, are always in balance at the end of a period. Macroeconomics on the other hand, aims at providing the analytical tools which allow the explanation of the results shown in the accounts. Causal relations that explain how the economy works are important, and so the theoretical support to interpret relevant information is fundamental in the training of students. The strength of the National Economic Accounts is that they have a solid inspiration in the Macroeconomics of Keynes.

### 3. The Keynesian origins of the National Accounts: the theoretical background

Aggregate results must be explainable in terms of the decisions and acts of the agents that actually caused them. However, atomistic individualism misses the essential point that goals and methods are not only historically and institutionally specific, but also that they are restrictions on individual behaviour explainable only at the macro level.

Macroeconomics emerges as a field of study when it is recognised that the logic of aggregate behaviour is not simply given by the sum of individual actions. This means that the accommodation in the macroeconomic level of the action of individual agents may lead to a different result that was originally intended by agents.

Keynes builds his theory moving the focus of theoretical debates in economics from the micro level to the macro level. In order to develop his arguments, he departed from the conventional wisdom showing that market economies do not function at full capacity all the time, given that there is no built-in mechanism to guarantee full employment. Resources can go idle, involuntary. With this assumption, room is open to the role of political economy as the main co-ordinator of expectations in market economies. Following this line of reasoning, official statistics have a privileged space in such a theoretical perspective.

This introductory topic of the course should be referred to the historical context in which Keynes' ideas were developed. It is also interesting to call attention to the fact that in Keynes' most famous book, *The General Theory of Employment, Interest and Money*, there is no explicit mention to what came to be developed as the National Accounts. According to Kurabayashi (1994) it was in another book, *How to Pay for the War*, that Keynes started to work out on figures to estimate aggregate product and income.

Assuming that market economies operate in equilibrium below full employment, Keynes' theoretical concerns turns to the development of a theory that would explain how aggregate product is determined. He formulates the theory of effective demand, to show that aggregate product and income are determined by what agents are willing to spend over a period of time. Plans to spend by an individual agent are based on expectations of future earnings, that in market economies depend on other agents' plans to spend. But agents make their plans on mutual ignorance, which means that they may or may not come true. What is measured in the National Accounts, aggregate output and demand, is what really happened, not what has been planned.

To build the bridge between Macroeconomic concepts and National Accounts concepts, a useful idea to be introduced is the distinction between *ex-ante* and *ex-post*. The effective demand concept can be understood as referring to expected income, or *ex-ante*. As there is no guarantee that expected income will be realised, income is only known *ex-post*. The theoretical concept of effective demand translates an expectation of the agents in relation to future expenditures of the economy, and aggregate demand is the measure reached through the system of National Accounts. The first is a notional concept, the second a quantifiable one.

Given that in Keynes' conception the economy can operate below full employment, a different concept of aggregate equilibrium has to be proposed. The concept of aggregate equilibrium in Macroeconomics implies that investment be equal to savings. This idea differs from the equilibrium being associated to a particular market being able to clear, what in aggregate terms would imply that demand and supply in all markets be in balance. This insight allows him to identify which are the relevant decision processes in explaining macrodynamics.

The main decisions processes in market economies are connected to production and capital accumulation. Production implies the transformation of inputs into outputs. In market oriented economies production decisions are oriented by expectations of money profits gains. In this context, it is in the production process that the basic economic relations among economic agents are established. Firms play a special role in this scenario as they engage themselves in monetary contractual commitments to produce. In addition, in order to survive in a competitive world, firms must invest to expand their productive capacity. Investment decisions in fixed assets demand

financial resources in order to be carried over. So we have to add that besides firms, financial institutions, that provide necessary funds to firms expand their capacity, are also important agents in the decision process of capital accumulation.

It is the purpose of National Accounts to identify and classify institutional groups of agents and economic transactions that allow to describe the performance of a market economy over time. Economic actions, such as production, consumption, savings and investment, generate economic flows that can create, transform, exchange, transfer or extinguish economic value. National Accounts offer rules and procedures that allow economic flows to be observed and followed systematically.

This theoretical introduction should prepare students to become familiar with the logic of functioning of a market economy in the aggregate, and to clearly set up the field of study of National Accounts. The next step is to introduce the definitions of the main macroeconomic aggregates and, based on macroeconomic textbooks model, to introduce a system of macroeconomic identities, which helps to understand the sequence of accounts of the system of National Accounts.

#### **4. Introducing the System of National Accounts**

The discussion above aimed to prepare the field to a more practical part of the course: the one which deals with the problems of measuring economic activity and the building of the macroeconomic aggregates. The first point to be made is that the definitions of macroeconomic aggregates follow from the manner in which the economic system is being defined and the function attributed to that system within the larger set of social institutions.

Put in this way, students attention should be drawn to the fact that what is to be measured depends on the question being addressed. For example, GDP is a good measure of the level of market activities, but if the objective of a study is to measure economic welfare, the performance of the overall economic system, both the market and non-market sectors, should be accurately considered.

The presentation of the discussion about the building of the main macroeconomic aggregates and their meaning should be followed by the presentation of the structure of the new system of National Accounts.

For the total economy, the sequence of accounts starts with the production account (in the Current Accounts block), in recognition of the central role that production plays in the economy. The Accumulation Accounts block opens with the amount of Savings registered in the last account of the Current Accounts block, which is compared to investment in fixed assets. The balancing item is the Capacity (net lending) or Necessity (net borrowing) of financial funds. Next, the sequence of accounts registers changes in financial assets and liabilities as a result of transactions, and also events other than transactions, and changes in the level and structure of prices.

It should be pointed out to students at this moment that a more detailed form of presenting the financial and monetary flows in the economy is through the Flow of Funds Accounts. The development of this subject should be of special interest to students in Economics. For all students, given the theoretical discussion in the first part, connections between the Current Accounts and Accumulation Accounts should be clearly understood.

In the final block of accounts, the Balance Sheets block, stocks of assets and liabilities are registered. This block aims to explain changes in Net Worth, derived from three sources already indicated on the previous blocks: saving and net capital transfers, other changes in volume of assets, and nominal holding gains and losses. So the three blocks of the system of National Accounts describe the flow of income, production, consumption, savings, investment in fixed assets, how they are financed and how they affect stocks in the economy.

A step further is to introduce the Rest of the World Account and the Goods and Services Account. Finally it should be discussed that the new system of National Accounts, besides grouping flows and stocks for total economy, it also groups information according to institutional units. This

form of presenting the aggregate measures increase considerably their informative content.

Another important characteristics of the new system of National Accounts to be exploited next in the course is that it allows for the expansion and alterations of boundaries for estimating income, product, accumulation and assets. This possibility is open through the Satellite Accounts. The discussion about the measure of welfare should be touched again, in special the concern with growth sustainability and the possibilities to evaluate the environment within the National Accounts system framework. (Eisner, 1995.)

The above discussion should strengthen two important aspects of the new system: it is comprehensive and flexible. These two characteristics are essential to the understanding of the role of the National Accounts as the co-ordinator of the production of official statistics.

To conclude the presentation of the main body of accounts of the National Accounts system, the course should present the Supply and Uses tables. These tables desegregate total supply and total demand (from the Goods and Services tables) and the components of Value Added of the economy by sectors of activity. In this sense, students are introduced to a different way of looking at the main macroeconomic aggregates.

The final part of the course should acquaint students with a broader range of tools, such as input-output matrix and index numbers. Both instruments are linked to the main body of the system. The input-output matrix, which allows for the study of technical relations among the economic sectors, is obtained through the Supply and Uses tables. For students in Economics, the discussion about Leontief's model and its applications should be of great interest for their basic formation. Price and quantity index numbers are widely used in the estimations of the aggregates in the National Accounts. In this sense I suggest the introduction of this subject as a final topic in the course, which should capture the interest of students, mostly in the aspect of the measurement of the impact of price changes on the nominal figures.

## REFERENCE

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## RESUME

Le but de cet travail est fait une proposition pour le enseignement de la Comptabilité Social pour les étudiantes de graduation en Économie. Le objectif du cours devait être aider l'étudiant en la recherche empirique. La rapport bibliographique devait être Keynes, pour l'introduction, et le *System of National Accounts* des Nations Unies em séquence.