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EXHAUSTIVENESS OF THE NATIONAL ACCOUNTS IN ROMANIA

Submitted by the Romanian National Statistical Commission ¹

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EXHAUSTIVENESS OF NATIONAL ACCOUNTS IN ROMANIA

1. Over the past seven years, Romanian statistics have undergone constant modifications and adaptations to enable them to furnish users at home and abroad with the information they need to evaluate the country's economic and social situation. One of the main areas concerned has been the introduction of SNA.

2. The first year in which non-financial national accounts - i.e. the two consolidated balance sheets: the comprehensive economic table and the input/output table (in current and constant prices since 1990) - were drawn up was 1989. The final version of the tables is available two years after the end of the period covered, and is published along with an economic analysis of the phenomena characterizing it, drawing on the data from the national accounts.

3. The introduction of national accounts in Romanian statistical practice has been a long-drawn-out process, requiring sources of data needed to calculate specific indicators to be modified and refined, the ultimate objective being to evaluate activity in the economy.

In view of the special features of the transition period, the numerous legislative changes affecting economic activity, and the tweaking of sources of statistical, financial-accounting and administrative data, the introduction of national accounts has passed through a number of stages:

- the period from 1989 to 1990, when aggregates specific to the material product system were converted to SNA indicators with adjustments and corrections;
- the period from 1991 to 1992, during which the collection of data under MPS was definitively abandoned and, in its place, the first surveys were assembled for use in calculating the input/output table in current and comparable prices. The introduction of SNA was made possible by changes to the accounting schedule of economic units and the classification system used in the national public budget - two important sources in the production of national accounts;
- the period from 1993 to 1995, during which there were significant improvements in the sources of data used in producing the national accounts, among them:
 - * the introduction of the structural statistical survey, the household survey and the employment survey;
 - * the finalization of the Statistical Registry - the base for the establishment of specific samples for statistical surveys;
 - * improvements in the balance of payments, and alignment of the balance with International Monetary Fund methodology;

- * the use since 1994 of the new chart of accounts, in keeping with international practice;
- * the introduction into the statistical and financial accounting systems of the new national classification of economic activity, comparable to that used internationally;
- since 1996, the data sources used have shown some stability, providing data consistent with international standards and enabling the accuracy of the national accounts indicators to be enhanced.

4. These stages bear witness to the concern among Romanian accountants to improve the content of indicators and wherever possible to cover all activity in the economy. The differences now apparent in methods of calculation and sources used by comparison with the early years of the transition period represent changes introduced with a view to obtaining exhaustive GDP figures and national accounts generally.

5. The normal working method for the Romanian national accounts is to evaluate GDP using the three approaches, which are not formulated separately or independently but always in conjunction so as to ensure comparability between them and between the data obtained for branches of activity and for institutional sectors. This requires interim corrections and trade-offs in order to arrive at a final, single figure for GDP. This value is exhaustive when account is taken of all the statistical and administrative units registered, units engaging in activities but not registered, and the units whose declarations as used in calculating the national accounts are, for diverse reasons, incorrect.

6. To convey the degree of exhaustiveness of the GDP value calculated, it is necessary to describe the content and quality of the data sources used to construct the national accounts, and the working methods followed.

2. Sources of the data used to calculate GDP and ensure exhaustiveness

2.1 One of the main sources of data for the annual national accounts, the in-out table in particular, is the annual business survey. The survey sample is established using information from the REGIS statistical register. The principal characteristic of REGIS is that it is compatible with the other registers in use in the economy: the trade register and the tax register, thus putting all units active in the economy in plain view.

2.2 The sample of units that fill in the annual survey questionnaire includes non-financial entities whose outturns are submitted to the Ministry of Finance, budgetary units, lending institutions, insurance companies and non-profit-making institutions. The extent of the data gathered is kept in line with the information covered in the outturns and other administrative sources, thus ensuring consistency among the sources used in compiling the national accounts.

2.3 It must be stressed that during the processing of the survey, the figures in the outturn for each unit in the sample are compared with the information obtained by the survey. Items compared include turnover, expenditure, stocks, remuneration of employees, investment and number of employees.

2.4 The account-sheet data are used to calculate operations in the institutional "non-financial corporations and quasi-corporations" sector, and the figures from the structural survey to estimate output, intermediate consumption and gross value-added in the branches of activity covered by the input/output table. Consistency between the two sources guarantees compatibility between the two tables.

2.5 Is this a way to ensure the exhaustiveness of GDP figures? As mentioned above, the statistical register at the heart of the sampling system is now operational, linked to other registers in use in the economy, and constantly updated, thus offering a high degree of certainty as regards the economic units covered. Additionally, outturns are filled in and submitted to the Ministry of Finance by all economic units, notably since the introduction of check-ups by the Ministry, especially over the past three years. In the circumstances, we are certain that the entire field of non-financial entities is covered.

2.6 To produce national accounts in other institutional sectors, specific, exhaustive data sources are used, viz.:

- the balance sheets of insurance companies (which numbered 33 in 1996) and lending institutions (34 banks were in operation in Romania in 1996) to draw up the sequence of accounts in the "financial corporations" sector and calculate indicators for the corresponding branch;
- the performance report on the national public budget for the "public administration" sector;
- the balance of payments, which, since 1993, has been produced following the IMF methodology, thus ensuring that all activity by economic units domiciled in Romania with the rest of the world is covered and evaluated;
- income declarations filled in by individual entrepreneurs and family associations, used to evaluate operations in the "household" sector and indicators in specific branches of activity;
- statements of accounts filled in by non-profit-making enterprises, used to calculate indicators specifically for this sector.

2.7 Another important source of statistics, particularly for the calculation of final consumption expenditure by the general public, is the integrated household survey. This was introduced in 1994 to replace the old survey of family budgets. It is conducted monthly and covers a rotating monthly sample of 3,000 households throughout the country at 501 observation points.

2.8 If GDP is to be calculated using these three methods, then they must be compatible and integrated. This can be arranged using the input/output table. The fact that different sources are used for the three methods means that the values obtained need to be analysed and trade-offs made between them to produce the best evaluation of GDP. The trade-offs made improve the exhaustiveness of the national accounts.

3. Improving the exhaustiveness of the national accounts - the underground economy

3.1 Obtaining reliable, comparable and exhaustive estimates for specific indicators of the national accounts, and of GDP especially, was not easy, particularly while Romanian society was in transition, owing in part to the changes undergone by the sources of data used and in part to socio-economic phenomena that are hard to identify and evaluate. Some phenomena gave rise to the emergence and development of a parallel, hidden, underground economy.

3.2 The underground economy appears in the trade, transport, construction, vehicle repair, tourism, hotel, restaurant, health, teaching and personal service sectors. Some economic actors engaging in legal activity to obtain goods and services do not declare these administratively or statistically, either to avoid paying income tax, social-security contributions, wages tax or other levies, or because they are not observing legal requirements as regards minimum wages, working hours and so forth.

3.4 As mentioned above, the main sources of data for financial and non-financial entities are the outturns they fill in and the annual business survey, which covers all units. But the data used to calculate the national accounts may be under-estimates for the reasons indicated above. To avoid this, information from checks conducted by the Financial Police are used. Every year, one third of the country's economic units are checked, irrespective of their size or form of ownership; following the model adopted, their conduct as regards tax evasion is generalized and ascribed to the entire economy. Tax evasion by non-financial corporations was calculated at 5.3% of GDP in 1995.

3.5 Declarations of income are used to estimate activity by family associations and individual entrepreneurs. As these are filled in at the beginning of the year for the current year, individual entrepreneurs and family businesses are considered to be a source of involuntary tax evasion. Why? Because the declarations made are based on the outcome of the preceding year's activity and it is hard, particularly in a high-inflation economy, to estimate how much business one will do during the current year. Thus income declared in year n is attributed to the year $n-1$, the difference representing the tax evasion ascribed to the household sector.

3.6 To round out the national accounts, besides estimates of tax evasion an estimate is also made of "moonlighting". The method employed is based on analysis of supply and demand on the labour market, to identify people pursuing a legal activity who are not officially registered. It has been usable since 1994, when the AMIGO labour survey was also introduced. For the first two years the survey was conducted once a year, in March; since 1996 it has been a quarterly event, providing more reliable information.

3.7 The labour supply is estimated using the annual AMIGO survey, which provides information on the number of people declaring themselves to have a job during the reference period, the type of business and the branches of the national economy in which they have worked.

3.8 Demand for labour is estimated from the annual business survey (the structural survey), which furnishes information on the number of people who have had a job and have been registered, both statistically and administratively.

3.9 In the light of the sources used, labour demand and supply are compared in each branch of the economy, and the extent of "moonlighting" is thus established for units in the "non-financial corporations and quasi-corporations" and "non-profit-making institutions" sectors. Moonlighting workers' output is estimated by multiplying the values established among small businesses by the difference (in numbers of workers) between the demand for and supply of labour in each branch of the economy separately.

4. Future prospects

4.1 Since work on the calculation of national accounts began, an effort has been made to keep data sources under constant review, to improve the methods used, in order to make the SNA indicators substantially more exhaustive. Although by introducing statistical surveys and calculating the size of the underground economy better results have been obtained every year, considerably increasing the exhaustiveness of GDP, which remains the principal objective of the country's accountants.

4.2 At present, much of the work programme is devoted to applying and refining the methodology for validating national account indicators, GDP especially, using employment statistics. This will become possible as of 1996, when the AMIGO employment survey goes quarterly.

4.3 Special attention will also be paid to ways of estimating and incorporating benefits in kind and gratuities into the national accounts.
