

TEACHING OF THE SYSTEM OF NATIONAL ACCOUNTS - THE UKRAINIAN EXPERIENCE

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The important task for Ukraine is the training of specialists of the system of national accounts (SNA) for the market economy. Therefore content of teaching of the SNA has transition to the International Standards. In 1993 the new government of the Ukraine confirmed conception of the transition of the National Ukrainian Statistics to the International Standards. Now the Ukraine has transition from planned to market economy in the areas of productive forces, structure of economy, the integration of economy to international economy and the social role of the state institutions. Knowledge about the SNA is needed for specialists of economics, management, statistics, international economy and other. I elaborate the course of the system of national accounts for the training of official statisticians and teaching of students in Universities of Economics in Ukraine.

1. EDUCATIONAL SYSTEM OF STATISTICS IN UKRAINE

In recent years the system of education in the field of statistics in Ukraine has undergone noticeable changes as a result of economic reforms. There are several changes in the institutional set up, in organisation and methodology of official statistics. These changes have had a profound impact on the educational programs (curriculum) in statistics, the textbooks, the contents of lectures and practical exercises suggested to students at the seminars, more intensive use of modern information technologies in educational process.

Statistical education in Ukraine was always and still is an integral element of the system of high economic education in Ukraine. At the present time statistics is taught at the universities and at the institutions with economic orientation such as economic academies, universities, institutes and colleges. It is also taught at the institutes with so called humanities orientation. The largest statistical educational establishments are located in Kyiv, Charkiv, Odessa, Lviv, Donetsk and some other towns.

Broadly speaking, there are two types of economic institutions where statistics is taught. The institutions where statistics is a predominant subject and where future professional statisticians are trained belong to the first type; the majority of graduates from these institutions work in national or regional statistical offices of the country, though some graduates may find jobs elsewhere: in government, research institutions or in business.

The Kiyv National University of Economics (KNEU) is a leading centre of statistical education in Ukraine (it belongs to the first type). It was established in 1906 and its major objective was to train statisticians as professionals who could work in national and regional statistical offices of the former USSR. The KNEU also carried out intensive research in the field of economics and statistics, published textbooks and teaching programs on various branches of statistics, released recommendations on the methods of teaching of statistics and rendered assistance to statistical departments of other institutes and universities. The KNEU had a system of post-graduate training which made it possible to release specialists of high level of qualification capable to work as teachers in statistics and in other capacities in various government bodies and branches of economy.

KNEU took over the above mentioned functions of the MIES on a larger scale and a range of subjects taught at the university has been considerably expanded to include computerisation of statistical process, econometrics, information technology and some other topics. The statistics is taught during the third, fourth and fifth years of studying and accounts for 30 per cent of the overall time. The students study the following subjects: theory of statistics, statistical modelling and forecasting, economic statistics, system of national accounts, social statistics, statistics of population, international statistics, statistics of market of goods and services, statistics of labour, statistics of firm (micro level), financial statistics.

A number of subjects are taught in the context of the course on mathematical statistics. They are as follows: elementary methods of analysis of statistical series; theory of probability; econometrics; econometric models; multidimensional statistical analysis; forecasting. Efforts are normally undertaken to involve the students in the actual practical work carried out by statistical national and regional statistical offices. For example, students normally participate in the censuses of population as interviewers or in other types of surveys; some students are provided opportunity to practice at government agencies or at enterprises.

The educational institutions with economic orientation where statistics is taught not as a predominant and yet as an important subject belong to the second type. There is a number of such institutions, but the most important among them is the Kyiv National University which has the economic faculty.

The statistical departments in the above institutions are responsible for organisation of teaching process. They compile programs (curriculum), organise lectures and seminars where students are urged to discuss the topics introduced to them during the lectures and are requested to carry out some exercises using the PCs, and organise exams (as a rule, in written form). The statistical departments are also involved in the research work, which is carried out in co-operation with other organisations and quite often on a contractual basis for the national original statistical offices, and for enterprises or research organisations. The departments are also responsible for steering the research work of the postgraduates.

The teaching process assumes the following forms: lectures (50 per cent of the overall time); practical seminars where students discuss certain topics and issues, introduced in the lectures (50 per cent) or have to do some exercises, such as, for example, compilation of various indices, construction of certain national accounts and so forth. During this course the students are requested to write an essay on the topic suggested by the teacher and to write a test. As a rule, the students work with the actual statistical data during the seminars. However, in some cases numerical exercises refer to hypothetical situations.

It should be noted that additional statistical education exists in Ukraine for the employees of national and regional statistical offices. The objective of this additional education is to raise the level of qualification of staff, to introduce to them international standards, and to acquaint them with the changes in methodology and in information technologies. The lectures and other forms of educational process are provided by the staff of the Kyiv Institute on Professional Training in Statistics that exists under the auspices of Goskomstat of Ukraine. The major current limitations and shortcomings of the present system of statistical education in Ukraine are, in our view, as follows:

- Insufficient participation of many teachers of statistics in active research work; in many cases this participation exist only on paper;
- Insufficient participation of many teachers in the seminars and conferences on important issues of economics and statistics and especially those held abroad; this limitation is largely due to the lack of resources;
- Insufficient involvement of many teachers in writing articles and textbooks;
- In many cases the system of evaluation of teachers' performance by the students does not exist;
- On the whole still insufficient use of the modern technologies in teaching process;
- The system of the post graduate training has deteriorated during recent years because graduates do not have sufficient incentives to continue their education as the postgraduates; in most cases the graduates of universities and institutes look for the jobs in private sector (in banks, companies, etc.);
- Although conferences on education in statistics are held regularly in Kyiv relatively small number of teachers attend and many educational institutions located outside of Kyiv do not send their representatives due to lack of resources and therefore many teachers of the country do not participate in the discussion of existing problems.

Thus, further progress in education in the field of statistics in Ukraine requires concrete steps needed to overcome the above mentioned limitations and shortcomings.

2. TOPICALITY OF THE SYSTEM OF NATIONAL ACCOUNTS

SNA course is part of the minimum curricula in Economics for undergraduates in Ukraine. In accordance with the standards on general orientation of teaching in statistics approved by the government the subjects of SNA are taught. The SNA is introduced to the students when they have got acquainted with principles of the theory of statistics. It is worth noting that this course is intended to familiarise the students with both methodology used by official national statistics as well as with the respective international standards that is with the recommendations elaborated by the international organisations. Such approach is employed in the most consistent manner by the statistical department of Kyiv State University.

The main purpose of the course is to provide the students with the knowledge of the basic macroeconomic aggregates. The definition of the contents is rather vague, inducing the teachers to a common practice of developing the course with a strong emphasis on theoretical macroeconomic concepts. The result is that, by the time students graduate, they are better trained in academic debates than in manipulating economic data, or even on interpreting macroeconomic figures.

The body of knowledge of a National Accounts course should put emphasis on explaining the SNA, the analytical instruments attached to them and the extensions that can be developed based on the main structure of the SNA. In this sense the course contributes to prepare students in Economics to do empirical research. In a world where the 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.

Therewith, decisions made by relevant economic agents, those who organise 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. Surely, SNA should not be seen as a prosaic course.

The difference in concern between Macroeconomics and the SNA as fields of study is important. SNA deals with records of the economic activity. Those records, organised 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 (Kurabayashi, 1994).

3. CONTENTS OF THE SYSTEM OF NATIONAL ACCOUNTS COURSE

The topics covered by this course, as a rule, include: the source of the SNA, the history of the UN SNA, general description of the UN SNA-93, the Current Accounts block, the Accumulation Accounts block, the Balance Sheets block, Goods and Services Account, the Rest of the World Account aggregates in the SNA, the peculiarities of the SNA structure in Ukraine, implementation of the SNA data for macroeconomic analysis and modelling and some other topics.

1. The sources of the SNA

The role of the English school of macroeconomic accounts used to make up the SNA. Peculiarities of the Dutch school of national accounting. Peculiarities of the French school of national accounting. The role of National Economy Balance for making up the SNA.

2. The History of the UN system of national account (UN SNA)

The role of the UN SNA. The structure of the UN SNA - 53

Changes in the UN SNA - 1968.

Directions in the development of the UN SNA -93.

3. General description of the UN SNA - 93.

Macroeconomic concepts. Basic categories and classification. The structure of the SNA. The rules of accounting. Institutional units. Economic sectors. The system in operation. Production units and the product. Integrated economic accounts. The table of financial transactions, financial assets and elasticity. Full sequence of accounts for institutional sectors.

Matrix form of accounts. Prices in the SNA. National peculiarities in implementation of the SNA.

4. Current accounts.

Production account. Income account. Initial income account. The account of secondary distribution of income. The account of redistribution of real income. Real income flow account.

5. The accumulation accounts.

Stock accumulation account. Finance account. Other stock changes account. Reestimation account. Neutral reestimation. Real profit and loss from ownership. Balance changes. Final balance.

6. Transaction accounts.

Foods and services account.

7. The Rest of the World account

Current operation accounts. Foreign trade accounts. The account of the initial income from foreign trade and current transfers. Accumulation accounts. Stock transactions account. Finance account. Other stock changes account. Assets and liabilities statements.

8. Aggregates in the SNA and links between them.

Gross domestic product (GDP). Three methods of SNP calculating. Real GNP. Gross accumulation of stock. Ultimate consumption. Gross national savings.

9. The peculiarities of the SNA structure in Ukraine.

Main tapes of classification. Sources of information. Foods and services account. Production account. Income account. Accumulation accounts. Foreign account. Input – output balance.

10. Implementation of the SNA data for macroeconomic analysis and modeling.

Analysis possibilities of the SNA. Main directions of the analysis of the SNA data. Quarter three month calculations of GNA and its seasonal correlation analysis of production effectiveness with the data of the SNA. Statistical modeling of macroeconomic indexes.

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