# TRANSITION IN STATISTICS – SEVEN YEARS EXPERIENCE

## GYÖRGY SZILÁGYI

The manifold process – transition in the statistics of Central and Eastern European Countries – was launched seven years ago, in the year 1990s. This article provides an overview on the development of the statistical services along with this process.

Two major periods of these seven years can be identified, with further breakdown into two subperiods each.

1. From 1990 to 1993; the period of early works, up to the multilateral Common Declaration:

the first steps in 1990–1992. beginning of institutionalization, 1992–1993.

2. From 1994 to 1997, when the issues of EU accession became more articulated:

actions in the interest to accession, 1994–1995. transition to integration support, 1996–1997.

#### **COVERAGE AND CONCEPTS**

The term "transition countries" covers a very heterogeneous set, in terms of general economic level, the functioning of the market economy, the institutional set-up etc. Consequently the level of statistical activity substantially differs in the various countries. The success of the transition process, the proper selection of the operations being carried out depends on the recognition of these differences. Two fundamental circumstances may determine the position of a national statistical service.

- *a*) The general level of the official statistics at the beginning of the transition process. In this respect three categories of countries can be identified.
- Countries in which the official statistical service was at a relatively high level at the beginning of the transition process. (Example: Hungary)
- Countries with relatively high level in a number of fields of statistics but with little experience in a market-oriented statistical activity. (Example: Bulgaria)
- Countries which just begin the transformation of their statistical systems towards modern statistical service and international standards. (Example: some Republics of the former USSR)

b) The time of establishing an independent statehood. Official statistics of those countries that became independent later than 1990 are handicapped as compared to the others. Previously they have had to constitute a region, in terms of statistical organization, in the framework of a larger country; now they are developing a full scale national system.

The present article is focusing on the most developed group of transition countries. Most of them belong to the "CESTAT" group (Central European Co-operation in Statistics).<sup>1</sup>

According to its terms of reference the co-operation takes multiple forms and includes a creation of network of training centres for statistics, organization of seminars, common consultations, exchange of information and experience, publication of a Joint Bulletin of Economic Indicators and other forms that will be considered as beneficial for these statistical offices.

On 16–18 June 1996 CESTAT held a seminar on "Results and prospects of the transition period" in Budapest, in order to provide a forum for an exchange of views on the experience with technical co-operation in transition countries and to consider the ways in which success of future initiatives can be reached.<sup>2</sup> A number of statements of this article are based on the outcome of that seminar.

It should be empahasized however, that Hungarian statistics is an "atypical" one in many respects from the point of view of transition. Hungary differed – apart from the early 1950s – from other countries with central planning. Statistical activity was never fully subordinated to central planning, and constraints of the planning system decreased gradually in the course of time. The role and impact of central plans was reduced almost every year, especially with the deletion of "compulsory variables" stipulations. The Statistical Office did not consider measuring the performance of central plans as its basic tasks.

Application of international standards has belonged traditionally to the strategy of the official statistics in Hungary. In this respect, however, transition has changed the approach to considerable extent: previously, national statistics was linked to international recommendations through various bridges (e.g. conversion keys). The present strategy is the direct adjustment of national practice to international standards. This approach is needed in the interest of accession to international organizations (EU, OECD); but has further advantages: the work needed for conversion is not necessary any longer, and operation of international comparison itself becomes faster and more accurate.<sup>3</sup>

In this article special emphasis is laid on the participation of Hungarian statistics in the transition process.

There is a general agreement regarding the concept of "transition" as a process underway in Central and Eastern Europe. From statistical point of view, a more specific

<sup>&</sup>lt;sup>1</sup> CESTAT was established in 1991 by the National Statistical Institutes of the Czech and the Slovak Federal Republic, Hungary and Poland. At present CESTAT has five members: the Statistical Offices of the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia.

<sup>&</sup>lt;sup>2</sup> The seminar was attended by heads or leading officials of the CESTAT countries, of National Statistical Institutes of Canada, Denmark, France, the Netherlands and the United Kingdom; the United Nations Statistical Division, the Statistical Division of UN-ECE, OECD, EUROSTAT, IMF and the Overseas Development Administration (UK).

<sup>&</sup>lt;sup>3</sup> Szilágyi, Gy.: Development program of Hungarian statistics. *Journal of Official Statistics*. 1993. Vol. 9. No.1.

inventory of objectives and measures might be of help. The list below was compiled by *Saunders* in an early phase of the process and proved to be an adequate description.<sup>4</sup>

- a) Privatization as perhaps the most essential and also the most complex element of the transition;
- b) A general abolition of price controls (but possibly retaining some controls, e.g. on "basic necessities" at least temporarily);
  - c) Abolition of subsidies to enterprises (again with qualifications);
  - d) Liberalization of foreign trade;
  - e) A new foreign trade policy, acceptance of realistic exchange rates;
  - f) Reform of the tax system; introduction of V.A.T., wider use of personal income tax and corporate taxes;
  - g) Need to balance state budget;
- h) Establishment of a Western-type system of commercial and investment banking and a capital market (including the re-establishment of stock exchanges). All these associated with the objective of operating an effective system of monetary and credit policy;
  - i) Abolition of administrative central planning and replacement by monetary and fiscal instruments;
- j) An updated social security and welfare system to cope with the unemployment and inequalities now emerging:
- k) Establishment of a soundly based system of collective bargaining between employers' and employees' organizations;
- 1) Restructuring the economy in the sense of modernizing the composition of industry, agriculture and services, combined with technological modernization;
- m) Construction of a new pattern of saving by individuals, firms and government together with mechanisms for the channelling of funds to useful investments;
  - n) Political democracy as a framework for the success of all these measures.

With these aspects in mind, transition for the statistical service can be identified as a development of the statistics with the objective of:

- monitoring the above mentioned processes and their effects on the economy and the society;
- operating the statistical system on new conditions.

#### FROM 1990 TO 1993

1. First steps in the early 90s. The consultations in the framework of the Conference of European Statisticians held in February 1990 can be regarded as the starting point of transition in statistics and of organized international assistance. This consultation was followed by a number of workshops as well as by the first seminars, etc. It became obvious, that plans and needs of the various countries differed, although similar priority areas and similar problems of statistics were generally identified.

In this early period various actions were initiated and carried out by donor countries/organizations with more emphasis on the assumptions of the donors regarding the necessities of the countries than the actual needs and level in the country concerned. It happened in this period that elementary knowledge was explained to highly qualified (or even internationally acknowledged) statisticians, some topics were considered redundantly and others were not treated at all. It turned out that actions of assistance were in need of co-ordination.

Along this line the Seminar of the Conference of European Statisticians (March 1991) marked a turning point. It was recognized that each statistical office should co-

<sup>&</sup>lt;sup>4</sup> Saunders, Ch. T.: Economics and politics of transition. East-West European economic interaction. Workshop Papers. Vol. 13. The Macmillan Press Ltd. 1992.

ordinate the projects involving its own country and thus maintain authority over the process. From that moment on, actions became "tailor-made" for the recipient countries, needs and wishes of the beneficiaries were taken into account, programs were discussed prior to their implementation, with the respective offices.

2. Towards institutionalization. Another step towards co-ordination meant the signature of a bilateral Common Declaration on statistical co-operation between the Hungarian CSO and EUROSTAT (May 1992). This co-operation has been focusing on the data collection system, the business register, the international standards and the computerization. The declaration stated: "In order to achieve these objectives it is essential to ensure a good co-ordination of all the co-operation projects and activities. The purpose of this coordination is to promote an efficient utilization of the resources and effective division of labour between different programmes."

From that moment on, EUROSTAT has played growing role in supporting the transition process. Seminars were concerned (3–4 a year) in the respective countries on various subjects on statistics. Increasing number of statisticians was invited to EUROSTAT training courses (TES). Methodological standards became accessible as basis for the development of the national system towards international uniformity.

This kind of institutionalization of the transition activities lead to the first coordination of the assistance of donor countries and of international organizations. Bilateral connections with Statistical Offices were necessary to demonstrate the practical implementation of theoretical frameworks.

*3.* An intermediate inventory. An inventory of the actions made and the necessary improvements were reviewed at a workshop on the results of technical assistance in transition countries.<sup>5</sup> Below are some relevant conclusions of the workshop.

In deciding priorities and making progress in its transition process, each statistical office of transition countries needs to develop a strategy for ensuring that statistics keep pace with the direction and with the political, economic and social changes in their countries. There is no single pattern of technical assistance applicable to all transition countries. In the course of the transition process, the list of the priorities will have to be reviewed and scrutinized in order to reflect the changing needs of transition countries.

The experience of both recipients and donors has shown that focusing on a few statistical subject areas technical assistance is more effective than wide-scope programmes spread over a great number of subject fields.

All countries in transition must adapt their statistical systems to the realities of changing economic conditions, and they need to develop new sources and methods to deal with, for example, the measurement of prices, unemployment, industrial output, money and banking, balance of payment and so on. The limited resources available for technical assistance should therefore be used to assist them to develop these statistics.

The transfer of know-how, not only related to relevant analytical methods but also to the design of statistical projects, seemed to be essential for a number of statistical offices in transition countries. In this respect, the role of international organizations as well as of some donor countries was specially emphasized.

<sup>&</sup>lt;sup>5</sup> Szilágyi, Gy.: Transition and assistance. Paper submitted to Workshop on results of technical assistance in statistics to transition countries. Sinaia. 1993. October.

More frequent, comprehensive and coherent outputs in publishing programmes and dissemination policies of statistical offices were specifically highlighted. Several participants stressed the increasing importance of updated information and data for macro-economic and social policy management and decision-making; as well as the need for better co-ordination between various producers, statistical offices and data-users in transition countries. It was generally observed that some common barriers still impede efficient co-ordination in most of the transition countries, particularly those related to internal co-ordination of tasks and responsibilities within statistical offices and among producers of statistics within the countries. In addition, the human and other resources of the transition offices need to be mobilized and strengthened through planning, identification and implementation of technical assistance.

In order to implement technical assistance programmes successfully and to benefit from the exchange of experiences with recipient experts, the country experts from donor organizations and countries must be well prepared, informed and acquainted with the economic and social realities of the countries they assist.

- 4. A "typology" of transition actions. Before embarking on the next phase of the seven years development, it seems to be useful to overview the various types of actions.
- A) Operations and results of the transition process are manifold. For a better insight into their structure, they should be classified in terms of the role they play in the development of the national statistical system. Against this background, the following types can be identified.
  - a) Improvement
  - b) Extension
  - c) Adaptation
  - d) Introduction of a new activity.
- a) Fairly developed national statistical system, close to the international standards, with necessity of improvement in some partial respects. In Hungary, the consumer price statistics is a typical example. In this field, assistance has to be based on dialogue between national statisticians and representatives of donors rather than on "training" in educational sense.
- b) Existing system which meets international standards, but the transition to market economy necessitates modifications and extension. For Hungary, this is the case of the national accounting system which has been based on SNA standards since the 1970s, but has to be extended now to a fully-fledged SNA in addition to the incorporation of the consequences of the changes in the institutional set-up. Efficient assistance in such cases includes theoretical backgrounds concerning the new areas and practical guidelines with respect of solutions to be followed in market conditions.
- c) Adaptation of national statistics, as a response to new phenomena. E.g. the introduction of Labour Force Survey has been a direct consequence of the fundamental restructuration of the labour market. Efficient assistance in such field includes theoretical background, social and economic implications and statistical methods.
- d) Introduction of statistical activities that did not exist before; e. g. regional accounts, commodity flow, etc. They are the fields where full assistance are necessary, including practice-oriented training.

The following matter provides a summary of this part of typology.

#### Types of development

Action Assistance

IMPROVEMENT of a developed field EXTENSION of an existing area ADAPTATION to new phenomena INTRODUCTION of new activities Dialogue
Guidelines
Theory and methods
Full assistance

- *B*) Another facet of the co-operation is the form of actions and the benefit to be taken. First of all there are
  - actions carried out in the recipient country,
  - actions carried out in the donor country,
  - in both places (pilot projects).

The advantage of actions carried out in the recipient country is that a large number of the staff can be involved against travel and accommodation costs of one or two experts. In addition, workshops, seminars, consultations, etc., are accessible even for persons lacking the language skills required for training abroad. Subjects can be selected by or in consultation with the beneficiaries and topic selection, types of discussion, etc., can also be fitted to the requirements of the hosts.

The advantage of the actions taking place abroad are the professional and human contacts with a considerable number of statisticians of the visited country. Participants have the opportunity to get acquainted with the environment of the statistical activity in addition to the work in narrow sense. These visits help a lot in developing language skills.

Pilot projects constitute relatively new undertaking. They are joint international actions in well defined statistical field (e. g. road transport), beginning with training, development of common methodology, implementation of surveys, data processing, publication, analysis.

Within each of these basic types of assistance operation, further characteristics can be identified.

From among the actions carried out in the recipient country, the various workshops, seminars, training etc. are of primary importance. Theirs success require adequate topic selection, and information for the lecturers regarding local conditions and problems.

Visits of experts of donor countries proved to be especially useful. Great advantage of these visits is that topic selection could be specified more accurately than in case of workshops. The staff involved is generally smaller, but the topics can be considered indepth. Distinction has to be made between short (one week) and medium and long term visits. The topic of short visits is relatively narrow (e.g. price statistics in external trade or in construction) and limited to the national practice (or international experience) of the visiting expert. Medium and long term visits mean active participation in the solution of a given set of problems or in the implementation of a project. It is assumed that the visitors become familiar with the given aspect of national statistical system of the visited country.

Coming now to some operations carried out abroad, participation in training courses are designed for statisticians arriving from a number or all of the transition countries, others belong to the overall training scheme of the donor. US Bureau of Labour Statistics and INSEE, for example, established both types of courses, EUROSTAT admitted participants to its normal "TES". Hungarian participants appreciated the level of these courses, the optimal combination of theory and practice orientation and, above all the opportunity to contact statisticians from a broad range of nations. On the other hand, they criticized workshops involving statisticians from a large number of transition countries, because of substantial differences in the level of the participants, to the extent that training level was either too high for one part of them or too low for the other.

Consultation means the visit of individual statisticians in the Statistical Office of a donor country, to study the work actually carried out in the field of one or two, well specified topics. This form yields the consultant insight into the working style and conditions of the donor office in addition to the in-depth study of the subject selected. The efficiency of consultations is increased if the visit is linked with on-the-job training. This is the best way of getting acquainted with the environment of up to date statistical activity.

Participation at international conferences, meetings and Works Party etc. is one of the most efficient forms for orientation of young statisticians in international professional life, for senior statisticians to put forward and check achievements of the national statistical service. Participants obtain first hand information on the envisaged development of statistical methods, assist the "birth" of new statistics.

Actions and benefits

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Types of actions	Benefits					
	Number	Topic	Depth	Contact	Language	Environment
	In the recipient country					
Seminars, workshops	FF	FF				ĺ
Expert visit, short term		F		F		
Expert visit, long term	F	FF	FF	F		
	Outside					
Training course			F	FF	FF	F
Consultation		F	F	F	F	FF
Meeting, Working party		F		FF	F	FF
	Mixed					
Pilot projects			F	F	F	F

Note. The sign "F" means that the given action is favourable in terms of the given criterion. Particularly favourable actions are indicated by a double F ("FF").

As a summary of these considerations, the table gives an overview on the main types of transition actions, evaluating the profit obtained by these actions in terms of the points discussed so far. The summary evaluation is based on the following six criteria.

Number – The number of participants involved;

Topic — Topic selection according to the requirements of the transition country;

Depth - Opportunity for in-depth study of the selected topic;

Contact — Opportunity to establish professional and human contacts with large number of foreign

Language – Development of language skill;

Environment - Opportunity to "live" in the environment of the statistical activity of other countries.

### FROM 1993 TO 1997

1. Towards accession. The milestone indicating the beginning of a new era was a multilateral Common Declaration of the Statistical Organs of six Central and Eastern European Countries and EUROSTAT in January 1994. In the present context the following stipulations of the Declaration are the most relevant.

- Introduction of statistical standards, classifications and methodologies which are used in the European Communities and internationally;
- Enabling the statistical system at the moment of accession to supply all statistics to the European Commission in the same way as all the other Member States:
  - Transmission of the data needed for the accession negotiations.

This Declaration can be considered as the first step to a broad and well organized cooperation between the respective countries and EUROSTAT. The co-operation included bilateral and multilateral training programmes, expert visits, consultation, participation at workshops, working groups, etc. As the realization of the stipulation of the Declaration, the Hungarian Statistical Office set the following general objectives.

- To give a truthful and objective picture about the state of, and changes in the society, economy and environ-ment to the public administration as well as to the organizations and members of the society;
- To produce statistics in an objective, scientific and unbiased manner, free of any pressure, with particular re-gard to the choice of the best-suited scientific methods, definitions and methodologies;
  - To develop the statistical system in the sense of full implementation of the Act of Statistics;
  - To safeguard the rich and positive traditions of Hungarian Statistics;
  - $Incorporation \ of \ international-in \ particular \ Community-know-how \ into \ the \ statistical \ programs;$
- Promotion of convergence of national statistical practices in Hungary to Community standards and practices by means of common training activities.

The Common Declaration constituted the start of a new phase in the transition process, in particular for the official statistics of countries with the "pre-accession" (PAC) status. The objectives, in connection with the development of the statistical system to meet the requirements of market economy, should be realized through the introduction of statistical standards. In that period statisticians were studying these standards, rather than general statistical aspects of the market economies. On the other hand national statistical institutes were still free in selecting priority areas.

A sample of the achievements of the Hungarian statistics as results of these efforts.

- Introduction of a new Domestic Product Classification harmonized with EU system (PRODCOM);
- Completion of first survey of the enterprise panel;
- Completion of a census on the structure of agriculture with focus on land, ownership and livestock;
- Extension of the sample of monthly industrial statistics;
- Improvement of retail trade sample surveys, in terms of application of the new industrial classification system, extension of survey coverage and higher response rate;
  - Launching a sub-annual survey on road transport;

- Detailed publication of the Hungarian National Accounts according to the SNA 1993;
- Modification of Family Budget Surveys in order to reflect rapid social and economic changes;
- Introduction of an EURO conform Labour Force Survey.

2. Transition to integration. Substantial reorientation occurred in this policy of cooperation in 1996 and 1997, labelled as "transition to integration support". As formulated by EU: there is a change from a demand driven to an accession-driven approach. In this approach all co-operation actions should be designed and implemented so as to facilitate future accession of the candidate countries.

Pre-accession countries are no longer free in selecting the statistical fields to develop; instead, the following four priority areas have been identified by EUROSTAT in which the introduction of EU standards should be accelerated: macro-economic statistics (national accounts, financial statistics, monetary statistics, balance of payments, consumer price indices); agricultural statistics; external trade statistics; statistics of migration. <sup>6</sup>

In addition, national statistical services are expected to accelerate the supply of high quality, EU conform, detailed data.

This stage of the transition was the focal point of the CESTAT seminar "Results and prospects of the transition period" (referred to in the introduction). The discussion revealed a number of inconsistencies between national and international objectives. On one hand there was general agreement on the need of international co-ordination of a strategic plan into which individual projects should be nested. But there was a concern on the part of the recipient countries that their strategic plan was not in necessary harmony with that of donors and in particular with that of the EU. Specifically, concerns were voiced about possible contradictions between national priorities and international priorities geared to the adoption of new standards and to the complicance with standards required for admission to the EU. In particular

- the same resources may be assigned to satisfy both national and international (supranational) objectives,
- national users may not recognize any of the outputs required by supranational organizations,
- the introduction of international standards may be incompatible with the abandon of national standards,
- a sharp break with old standards for the sake of instituting new and international standards may result in a double loss of useful information e.g. break of time series in terms of old standards, lack of backward compilations in terms of new ones.

Participants agreed that one of the most desirable feature of any action was the objective of creating a sustainable legacy. To ensure sustainability, several participants mentioned the need of stronger infrastructure and management capabilities (e.g. through intensive training). Participants also considered that far-seeing assistance should concentrate on the creation of future managers of National Statistical Institutes and that this could only happen through their immediate involvement in the process of determining their institution's strategic approach.

Accelerated adaptation and introduction of EU standards constitute high priority of the development of Hungarian statistical service. Contrary to previous phases, the

<sup>&</sup>lt;sup>6</sup> Countries can select two other priority areas. In the case of Hungary they are business registers and environmental statistics.

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"transition to integration" period is considered as period of implementation rather than learning process. The traditions and international experiences, coupled with the various kinds of training in the previous phases provide the necessary basis for this policy. Development of knowledge is now being shifted into "learning in doing" actions, like participation at the discussion of the working parties devoted to the relevant issues, cooperation in pilot projects with statisticians of the partner countries etc.

Nevertheless, adaptation of European standards is not an overnight process; it has not been even for the member countries. Statisticians should not believe in the existence of a monolithic block of 15 countries, with totally uniform and comparable statistical system. A leading official of EUROSTAT recently revealed a set of substantive inconsistencies as regard European Business Statistics. E.g. in connection of short term indicators the following statements were made: "Coverage does present a number of problems. Firstly, although for the key indicator of production we have data from all Member States, for the other indicators between four and eight countries are missing. Secondly the coverage by industrial sectors differs from those countries that do supply data. The data collected is supposed to be representative of the size of the national sectors, but this means that the Member States adopt different policies in terms of the number and sizes of enterprises covered. There are also considerable problems of completeness. The majority of the indicators are available only for industry. For construction, and particularly for services, far fewer indicators are available. In addition there exist considerable difficulties with the concepts involved in the construction of the indices. A recent EUROSTAT paper reviewing the production index found that there are at least six different methods of calculating this index based on six different sets of basic data, each with its own advantages and disadvantages."

Even more explicit is the authors' final conclusion: "The absence of accuracy evaluation at European level indicates the theoretical difficulty inherent in the system at both National and European level. The complexity of the process of production, the differences of information sources and the variety of collection methods make the task almost impossible, and this may be the explanation of the absence of such evaluations in most of the National Institutes and of course also at the European level. Conscious of this weakness we have introduced in the production regulations the obligation for quality assessment in future European Business Statistics. This is a major challenge for European statisticians, but I am absolutely convinced that statisticians with their capacity for working together at a World scale will come out with excellent solutions."

Statisticians of the transition countries are facing a big challenge. Adaptation of European standards is not merely "copying" instructions worked out by other people. Adaptation means reconciliation with the national environment, traditions, institutional set-up etc. In solving all these problem, those statisticians are making valuable contribution to the development of European statistics. Transition therefore requires initiatives and high level creativity of our statisticians.

<sup>&</sup>lt;sup>7</sup> Nanopoulos, Ph.: Quality of European business statistics. Paper presented at the ISI Special Conference on "Accuracy, timeliness and relevance of economic statistics". Washington D.C. September, 1996.