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More problematic PPP Price Surveys

Paper submitted by Bulgaria *

* Prepared by Radoslav Istatkov, expert, NSI.

Introduction

The 1999 round of the European Comparisons Programme (ECP) was important for our country, though much more tension in time and needs of human and financial resources were faced, **due to three main reasons:**

- the purpose and scope of this international exercise itself - real GDP and price comparisons between countries based on national Purchasing Power Parities (PPPs);
- the time consuming special preparatory work was needed for the forthcoming task undertaken by the National Statistical Institute and external experts contracted;
- the first Bulgarian participation in the PPP consumer goods price survey being a member of the South European Group led by ISTAT after the decision ECP to take place every year since 1999.

In 1999 the country's economic situation was much more stable than in the years of the previous ECP rounds. The annual inflation declined to 1,8 per cent, and the annual GDP growth rate was 2,4 per cent. In such conditions, there were less difficulties in getting adequate and more comparable prices and weights in order to cover all basic headings.

For Bulgaria, the PPP price surveys on **construction projects and equipment goods** were the most difficult part of the ECP. Special attention was paid to that aspect of data collection. As far as this area required specific knowledge and experience external experts needed to be hired for doing the work.

Due to financial problems the 1999 price surveys for bills of quantities and producers' durables were conducted later and performed by the end of September 2000. A number of problems appeared during the work. Some of them have been already mentioned at the Plenary Session in June and at the Equipment goods meeting held in Luxembourg in July this year concerning the 2000 price surveys.

The main issues of work done for 1999 round and the problems met are described below:

I. Price survey on construction works

Bulgaria put efforts to price ten construction projects proposed and additionally approved by Eurostat.

The approach applied by the experts was observation of a representative sample of firms engaged in various construction sites over the country's territory. A specific database has been created in order to organise the information collected from the separate sources.

The *factor cost* method was selected as the best one for obtaining internationally comparable price data. That included evaluation of relevant bills of quantities on the base of inputs additionally adjusted for preliminary, temporary entrepreneurs' and other expenditures. As regards the fees paid to architectures and civil engineers, the evaluation was done according to our national practice, i.e. they covered all or a part of related services such as preparatory work, designing and drawing the construction project, supervising the actual work on it, etc. That set of data was considered carefully when evaluating these specific labour inputs.

The main stages of the work on pricing bills of quantities might be summarised, as follows:

- A. Identifying the items included in the bills of quantities of the standard construction projects in accordance with the Bulgarian State Standard (BSS)**
1. Preparation of a detailed list of construction works and operations which either are in line with the BSS requirements and correspond exactly to those specified in the standard bills of quantities.
 2. Elaboration of analytical prices for those types of construction works which differ from Bulgarian standards.
 3. Elaboration of analytical prices for those types of construction works and deliveries which are not considered by the national regulations.
 4. Reconciliation and approval of the final bills of quantities to be priced for each standard project.
- B. Calculation of annual average national purchaser prices**
1. Calculation of average national producer prices by type of work:
 - development of database of quarterly information collected from the biggest construction firms, Information Centre of Ministry of Regional Development and Public Works, regular publications on average price in construction, etc.
 - processing the data and calculation of national representative producer prices by quarter.
 2. Specifying VAT accrued on different raw materials and services by kind and size.
 3. Estimation of correction coefficients taking into account changes in price, volume and quality between quarters.

4. Calculation of annual average prices by type of work.
5. Control of the results and removing errors.
6. Adding, entrepreneur's preliminary, temporary and overall expenditures.

C. Final calculations and getting results

1. Pricing bills of quantities according to the standards.
2. Getting purchaser prices by:
 - adding fees on project services rendered by architects and engineers as per cent of the total value of the object;
 - adding taxes on sales as specified by law.
3. Putting the results in the required electronic and paper format.

We consider useful for the future surveys to make the following comments on *problems met* and some *recommendations* from practical point of view :

- a) The 1999 list of bills of quantities took into account the different weather conditions of the participating countries. That was included in the list of bills of quantities in terms of different variants of term-isolation, but a wider variety of isolating materials in the list would be of benefit.
- b) The seismic tension of the construction was not taken into account by the proposed list of bills of quantities. In the case of Bulgaria, that would increase the total price of a given construction project by 10 to 30 per cent. This is especially important where reconstruction of old buildings is undertaken. Bulgarian experts are able, if there would be special financing by Eurostat, to develop some of the projects according to the country's seismic conditions in order to estimate those additional costs.
- c) The materials related to some elementary components in the bills of quantities are not used in practice any more, since new modern ones were available on the market. That referred mainly to items of joinery, water piping and floor covering.
- d) According to a Regulation drawn by the Bulgarian Council of Ministries, since September 1999 the so called independent construction supervision should be performed when designing and constructing new buildings. It would be more correct to report those expenditures separately.

In general, we see the urgent need for updating the bills of quantities taking into account the suggestions made by countries and the decision taken at the Paris meeting in June 1999 that Eurostat was going to hire experts from 3 – 4 countries to revise these projects.

II. Price survey on equipment goods

At the *preparatory stage* the relevance and availability of each equipment good-representative with respective technical parameters on the domestic investment market were analysed. Four groups of respondents (economic units) were selected to provide relevant information:

- importers;
- official distributors;
- wholesalers;
- producers.

The accepted price estimation approach included three main stages:

- collection of price data from the selected respondents;
- adjustments for transportation and installation costs for separate machinery items taking into account Bulgarian standards and country's economic specifications;
- deriving purchaser prices as a sum of the two components mentioned above.

At the *actual data collection stage* the price observation was undertaken strictly following the guidelines submitted by Eurostat as regards: specifications; selection of items; reporting of items; reporting of prices; collection of prices. According to the first part of the survey programme, a special database was created from the information obtained on producer prices for the observed machinery. The data represented the required national average mid-year 1999 prices that were meant to be annual national averages.

At the second stage, additional calculation procedures were undertaken by the experts in order to estimate the trade/transport margins.

All required information concerning the technical characteristics, terms and conditions of sale and representativity of the priced makes and models was also indicated in the item sheets.

114 of all 150 investment goods proposed in the list were priced. 48 are of exactly the same make and model as suggested by Eurostat. For the others, analogues were selected and priced as

follows: 24 were of domestic production, and 42 were imported. The replacements were undertaken due to lack of data or in order to meet the requirements for representativity for each basic heading. Those were done according to the pricing guidelines.

The **problems and difficulties** were related mainly to the following:

- a) Some types of machinery are not offered at the domestic market at all.
- b) For certain makes of motor vehicles (MAN, SCANIA, SHTAER), there are no authorised dealers in the country. They could only be imported incidentally by single traders. Therefore, relevant information could not be collected.
- c) The Bulgarian producers engaged in some activities, for example in agriculture, typically in food industry, etc. use machinery with lower capacity, while the respective items included in the list have higher capacity.
- d) Most producers in Bulgaria still prefer to invest in second-hand machinery due to their lower prices.
- e) Some respondents (especially regarding car prices) refused to provide the information asked.
- f) Bulgaria is a quite big exporter of metal processing machinery, fork-lift trucks and other electrical equipment for its neighbours and to Western Europe as well. For the future rounds, we are going to propose some analogues of domestic makes to be put in the list being more representative for those items.
- g) If there would be not a good matching for some items, quality adjustments would be needed in order to achieve representativity and characteristicity in the respective basic headings from countries point of view as well.

III. Survey on public sector salary costs

The survey on public sector salary costs for 1999 in Bulgaria was undertaken in July 2000 after the relevant methodological notes and guidelines were submitted by Eurostat. No final results have been derived yet but initial data have already been collected. Following the list of definitions and requirements for representativity the survey was carried out as follows:

Preparatory work

4. The survey guidelines and questionnaire were translated. Some efforts were put on getting correspondence between ISCO and Bulgarian classification of occupations. As a result, brief description of the contents of the codes based on the national classification was prepared and added to the guidelines.
5. 14 budgetary institutions were selected to provide information according to the questionnaire. That included 12 Ministries and 2 budgetary institutions on national level.
6. The survey programme was drawn in order to derive national estimate of the compensations by occupation as a weighted average of the wages and salaries provided by the respondents, weights being the relevant numbers of employees engaged in those institutions.

Collection of information

1. A special request was sent to the institutions selected. The translated questionnaire and relevant guidelines were attached. Additional information on the number of employees by occupation was requested from the respondents also. Data were asked not only for the head offices but also for their local offices over the country's territory.
2. Permanent co-ordination and communication was held between NSI and the respondents in order to achieve better understanding of the purpose of the survey.
3. The data were obtained by NSI only in paper format, so now they need to be processed.

The data collected took into account the following national specific features:

- a) The official working week in Bulgaria is of 40 hours.
- b) The current salary standards for the budgetary institutions were used.
- c) At present, imputed contributions are paid incidentally only, but it is not typical for the public sector. So, no figures appeared in that column of the questionnaire.
- d) Judgmental solution was applied by some respondents when allocating single jobs with the same tasks but different skill levels, e.g. executive officials (skill levels III and IV) - codes 202 and 203.

- e) For health services, due to the salary costs differentiation by hospital type separate figures were provided for the existing hospital levels: national, district and local.
- f) The acquired nurse's skill level in Bulgaria is only the 3-rd level as defined by ISCO'88. So, the figures under codes 104, 105 and 106 referred only to ISCO'88 codes 3231 and 3232, but not for code 2230 (Nursing and midwifery professionals).

In order to facilitate the wages and salaries survey in the near future some clarifications in the guidelines from practical point of view should be undertaken, shortening of the occupations list would be efficient also. An exact specification of the units of observation and the jobs describing profession about which the wages are collected would make sense in improving this specific survey.

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The 1999 round of the PPP price survey was a good base for the future work on ECP in Bulgaria. Since most of the problems mentioned above on construction works and equipment goods have already considered at the meeting in July 2000, some of them were finally solved (e.g. possibility for pricing second-hand machinery where appropriate), it is expected the 2000 round to produce better results in that very interesting and important area of knowledge and work. As regards future salary costs survey, more simplified definitions on skills, jobs and levels would overcome most differences and achieve better comparability between countries.
