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THE REGIONAL ACCOUNTS SYSTEM OF THE EU¹

Submitted by Eurostat

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INTRODUCTION

1. ESA95 (the European System of Accounts) is the European version of SNA93. It has the status of a legal act (Council Regulation) and includes a comprehensive data transmission programme that is obligatory for all Member States. ESA95 contains a short chapter on Regional Accounts that establishes the basic definitions and main methodological options. Further details of the methodology were agreed by a working group and published by Eurostat. Member States are in charge of data collection, and data are structured according to industry (NACE) and regional (NUTS) classifications that also have the status of Regulations. Member States transmit GVA to Eurostat and Eurostat calculates regional GDP.

¹ This paper has been prepared by Andreas Krüger at the invitation of the secretariat.

2. Data availability problems are generally limited to gross fixed capital formation (GFCF) and household accounts. Due to a wide range of technical assistance activities, the ESA95 implementation in the new Member States was very effective. As a result, their data has reached a very high level of compliance.
3. Eurostat started a project of comprehensive quality reporting in 1999, which will be followed by a system of regular quality monitoring, starting with regional gross value added.
4. Since the adoption of ESA95, some methodological issues have come up which will be addressed as from 2007. These include the treatment of extra-regio gross value added as well as the allocation of indirect taxes less subsidies.
5. Based on 10 years of experience with the regional accounts system of ESA95, it can be concluded that comprehensive and up-to-date business registers with local KAUs contribute greatly to the quality of regional accounts. Appropriate arrangements for making use of administrative data can further improve the situation. Regional territorial units should be of a suitable minimum size (in terms of population) in order to avoid too many imprecise top-down estimations and problems caused by small samples. Precise population statistics based on a transparent methodology and clear definitions facilitate the estimation of correct per-inhabitant values. For specific methodological problems, like the regional allocation of FISIM to user industries, pragmatic solutions should be found in order to limit the workload of National statistical institutes.

THE REGIONAL ACCOUNTS OF THE EU: AN INTEGRAL PART OF THE ESA95

6. The SNA 1993 mentions regional accounts only briefly (chapter 19, paras 88-96). For the EU, however, it was evident that a more elaborate system of monitoring the regional economic development was necessary, given the substantial amounts of budgetary funds that are spent by the structural funds. Therefore, it was decided to include a separate, albeit short chapter on regional accounts (chapter 13) in the European System of Accounts ESA95. The regional accounts chapter was adopted together with all the other parts of ESA95 as Council Regulation 2223/96 of 25 June 1996.
7. The EU approach is that of a common minimum data transmission programme which leaves Member States the possibility to implement country-specific systems, which can go beyond what is required at EU level. While methods and sources are not identical in all Member States, the ESA95 provides for common rules on issues like the regional territory, units and residence as well as the treatment of ancillary activities. On the other hand, the system does not impose specific methods for regionalisation. The reason for this is again the diversity of sources used in the Member States, which in some cases leave only one methodological option.
8. The EU's regional accounts make use of the same concepts as the accounts of the total economy. The Member States estimate the major part of GVA from the production side, and a minor part from the income side. The shares of data which are based on production and income approach differ from Member State to Member State, because the sources are not identical; therefore the use of specific source statistics is not part of the Regulation. On the basis of the regional GVA and the national GDP figures, Eurostat calculates regional GDP.
9. Regional accounts methods were discussed in detail in parallel with the adoption of the

ESA95 Regulation and published in two manuals; one covers regional GVA and GFCF and the other regional household accounts. The manuals give methodological recommendations which have the status of so-called gentlemen's agreements that were adopted by the competent statistical working group. For some questions, there is more than one methodological approach possible: for instance, the GVA of a given industry may be estimated either by production or by income approach, and regionalised by bottom-up or by top-down methods. Member States choose the option that is most appropriate under their specific conditions.

10. As regards the household accounts methodology, the redistribution of income in kind account was eventually not implemented, because the estimation of social transfers in kind was considered too unreliable. Eurostat and the Member States also developed a methodology for regional tables of general government. After trial estimates in some Member States it was, however, decided not to implement the system in the entire EU, because it would have required a very high input of resources.

11. The presentation of regional accounts in the EU is structured by two of the most important EU classifications, which both have the status of Council Regulations: the NACE Rev. 1 (Council Regulation No. 3037/90) determines the industry structure; the NUTS (European Parliament and Council Regulation No. 1059/2003) divides the EU territory into a hierarchical structure of four levels of territorial units, which are defined according to common criteria. Stability over time is achieved by a minimum period of three years during which the regional units cannot be modified. The NUTS classification in particular has contributed greatly to the high degree of comparability of regional accounts across the EU.

12. The ESA95 Regulation contains a comprehensive data transmission programme that is obligatory for all Member States. The first data transmissions in regional accounts under ESA95 took place in 1999 with reference years as from 1995. The system produces the following variables at regional, national and EU level:

Regional level NUTS2 (254 units in the EU25)

- GVA, compensation of employees, employment (total and employees) and GFCF at 17 industries (so-called A17 breakdown according to ESA95)
- Regional GDP (calculated by Eurostat)
- Primary income of households: Property income, operating surplus/mixed income, compensation of employees, primary income (=balance of the account)
- Secondary distribution of household income: Current taxes on income, wealth etc., social contributions, social benefits, other current transfers (paid and received), disposable income (=balance of the account)

Regional level NUTS3 (1213 units in the EU25)

- GVA and employment (total and employees)
- Regional GDP (calculated by Eurostat)

13. Due to the substantial differences in the methodology, it was decided not to link the ESA95 and ESA79 series in regional accounts. As a result, comparable data series in EU regional accounts begin with the reference year 1995.

14. The ten Member States that joined the EU in 2004 were integrated into the

implementation process of the ESA95 from the beginning. Specific statistical cooperation programmes financed translation of the methodology as well as a wide range of technical assistance activities in parallel to the implementation of source statistics that had to be introduced at the same time (examples: Labour Force Survey, structural business statistics). As a result, the ESA95 implementation in the new Member States has reached a very high level of compliance.

QUALITY MONITORING OF EU REGIONAL ACCOUNTS

15. Over the last decades, regional accounts data have been increasingly used as a key to determine eligibility of regions for structural funds assistance. Because of the large amounts of budgetary resources involved, quality aspects, in particular accuracy and comparability, became increasingly important at all political levels. Therefore, in 1998 Eurostat and Member States agreed to carry out a systematic screening, which consisted of country reports as well as summary quality reports covering the following areas: regional GVA, GFCF and employment; regional population; regional unemployment.

16. The project was led by CBS Netherlands and designed to last three years. At the beginning, it was limited to EU15 Member States. By the end of 2002, the Commission made additional financing available to include eight new Member States as well as Bulgaria and Romania. Cyprus and Malta were not covered.

17. By mid-2005 Eurostat disposed of a complete set of quality reports from all Member States for whom regional accounts are relevant. The reports provide an overview of all relevant aspects of quality, in particular accuracy, but also relevance, timeliness, accessibility, comparability, coherence and completeness. In addition, the Member States supplied a description of methodology that followed a standard structure.

18. While the comprehensive quality reports had enabled Eurostat to gather a wealth of information, some disadvantages did become apparent. First, the preparation of the quality reports and methodological documents was very time consuming, in some cases (reports on GVA, GFCF and employment) up to 800 man hours. Second, the reports were so voluminous that they became difficult to read. Finally, the volume of work that the preparation of the reports required made it unrealistic to set up a regular monitoring system that would have allowed showing the development of quality indicators over time. One of the main objectives of quality monitoring, i.e. to show the development over time, would not have been achieved.

19. In view of the experiences made so far, Eurostat and Member States agreed that a lighter system of quality monitoring was required, which would not put an excessive burden on the reporting Member States and still make it possible to measure the development of quality indicators over time, with a focus on aspects of accuracy. Discussions on this project started in the framework of a specific Task Force in September 2005.

FUTURE DEVELOPMENTS

20. In the context of a forthcoming modification of the data transmission programme, Eurostat has proposed to reduce deadlines for GVA and employment. The main obstacle to a substantial acceleration is the 18-month deadline for structural business statistics in the EU.

Most Member States need SBS data for compiling their regional accounts.

21. Apart from GVA, users have developed increasing interest for regional employment data. Further, it appeared that it is not sufficient to measure regional employment in persons or jobs, in particular since part-time employment has been growing in many Member States. Therefore, Eurostat has proposed to introduce employment in hours worked into the regional data transmission programme, as is already the case for national accounts. This will enable regional accountants to come up with more appropriate productivity estimations also at the regional level.

22. Because of the strong interest of the public, Eurostat has started a discussion with Member States on the calculation of real growth rates of regional GDP at level NUTS2. This indicator is not part of the ESA95 data transmission programme, because regional accounts are compiled in current prices only. Roughly half of the Member States calculate real regional growth rates already.

23. The treatment of extra-regio GVA has emerged as a question on which not all Member States share the same views. At present, this part of GVA is distributed proportionally onto all regions of the country in question. Eurostat and Member States have agreed to take up this question together with other methodological questions like the regional allocation of FISIM and regional growth rates in a special Task Force as from autumn 2006.

24. As regards quality monitoring, Eurostat has proposed to enter into an open discussion with Member States with the view to agreeing on common quality standards for certain key parameters and thereby further enhancing comparability of regional accounts across the EU. In an initial phase this discussion will concentrate on regional GVA.

CONCLUSIONS

25. On the basis of 10 years of experience with the ESA95 system of regional accounts, Eurostat is able to draw some conclusions as to key requirements for sound regional accounts.

26. It appears that a well-designed and up-to-date statistical business register with local KAUs contributes greatly to the quality of regional accounts.

27. Structural business statistics are an equally important element. They have to provide data in sufficient industry detail, and samples have to be large enough to allow for the regional breakdown that is desired. National statistical institutes should aim at collecting gross output and intermediate consumption from the same source. Top-down methods should be based on regional distribution keys that are as closely related to gross value added as possible.

28. In several countries structural business statistics do not cover the entire GVA of the economy. Therefore, appropriate use of administrative data is an important tool for arriving at full coverage in the primary data collection.

29. The quality of regional estimates decreases with the size of the regional territorial units. This implies that, all other parameters being equal, there is a trade-off between the degree of regional detail and the quality of the estimations. Therefore, statistical regions should be defined of a suitable minimum size (in terms of population) in order to avoid too many imprecise top-

down estimations and inaccuracies provoked by insufficient sample size.

30. Some variables should be estimated at a different regional level than others. For example, GFCF tends to be much more volatile than GVA and therefore would normally be reliable only for larger territorial units.

31. The regional classification should be designed in such a way, that regions are comparable in population and stable over time. An appropriate legal basis should protect the classification against unjustified political pressure for change, in particular when regional policy decisions with budgetary implications are based on the figures.

32. If available resources make it necessary to set priorities, regional GVA/GDP would normally be the first choice, followed by employment, household accounts and GFCF.

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