

## Foreword

This description of the sources and methods underlying the Danish estimates of gross national income at market prices has been drafted with reference to Article 4 of the GNP Directive (89/130/EEC, Euratom) on the harmonization of the compilation of gross national product at market prices. Care has also been taken to keep closely to the common layout of the new GNI documentation for the EU countries approved by the GNP Committee at its meeting on 29 October 1999. Further requirements were set out in the Commission Decision (97/178/EF, Euratom) on the definition of a methodology for the transition between the European System of National and Regional Accounts in the Community (ESA 95) and the European System of Integrated Economic Accounts (ESA second edition). The new common layout will make comparisons between countries much easier than hitherto, since the calculations for a given area will have the same number in the table of contents of the documentation for the different countries.

This framework for the description of sources and methods has led us to concentrate on factors which are important for the estimate of GDP and GNI (GNP)\* at current prices, whilst factors which are not important for the levels of these major aggregates are dealt with only briefly, if at all. It also means that in some cases the description follows a stricter logic and has more detail - focusing on final rather than provisional accounts and on levels rather than growth rates - than would be expected from documentation on national accounts written primarily for researchers and short-term economic analysts. However, exhaustive documentation on the most detailed national accounts calculation systems should be of considerable interest to researchers and analysts, too.

The documentation is set out so that the text itself discusses the primary statistics underlying the estimates and explains in detail the calculation methods used. The actual documentation on the primary statistics has been collected together in Chapter 11 and consists mainly of links to the "declarations of contents" which Danmarks Statistik\*\* makes available to users, to enable them, *inter alia*, to assess the reliability of the individual statistics.

The documentation on the estimate of GNI at market prices consists of eleven chapters. Chapter 1 presents the overall design of the national accounts calculation systems. It looks at them in relation to international manuals and classifications and discusses the timetable for the calculations of provisional and final accounts. There then follows a brief description of the estimate of GDP, GNI and the Danish national accounts in general. Chapter 1 is thus in the nature of a summary, and can be read independently of the rest of the book. As for all the other EU countries, Chapter 1 will be available to the public. In some countries, one or more of the chapters which follow will not be accessible to the public, but will be available only to the Commission, the Court of Auditors and the members of the GNP Committee. This restriction does not apply in Denmark's case, where all the documentation is in the public domain.

Chapter 2 discusses the production cycle and revisions policy for the Danish national accounts.

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\* **N.B:** Footnotes against asterisks are translator's notes, whereas numbered footnotes are in the original Danish text. Text in square brackets has also been added by the translator.

The Danish term has not changed: both GNI and GNP are "bruttonationalindkomst".

\*\* As in many previous texts translated in the Commission, the name has been left in Danish in this paper, even though it has an official name in English, "Statistics Denmark".

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Chapters 3, 4 and 5 are then a detailed review of sources and methods underlying the initial estimates of GDP using the output, income and expenditure\* approaches respectively. For output and income, they deal more particularly with the accounting statistics database which forms the nucleus of the calculation system for resident producer units. Chapter 6 then describes how the national accounts are balanced to give a single adjusted value for gross domestic product derived from a set of balanced supply and use tables. These are subsequently used to compile input-output tables which are an exact match with the published national accounts. The fixed-price calculations in the final Danish national accounts are also at this detailed product balance level.

Chapter 7 gives a general description of the initiatives introduced into the calculation process to ensure that all economic activity which falls within the production boundary and takes place on Denmark's economic territory is included in GDP as calculated by each of the three approaches. This chapter quantifies the explicit allowances for fringe benefits, underreporting and hidden activity ["work in the black economy"].

Chapter 8 documents sources and methods underlying the transition from GDP to GNI whilst Chapter 9 describes the transition from GDP as compiled according to the ESA 95 definitions to GNP as compiled according to the old European national accounts system, the ESA 79.

The figures and tables in the documentation refer to 1995, for two reasons: firstly, the national accounts figures for that year are final, and secondly the Member States have to supply especially detailed documentation for that year on the transition from estimates of GNI according to the ESA 95 definitions to estimates based on the ESA 79 definitions. In addition, 1995 is the basis for the fixed-price calculations. In a few cases, estimates are included for years other than 1995 - usually 1992 - to illustrate sources and methods. The new national accounts system introduced in 1997 was developed on the basis of five benchmark years, namely the period 1988-1992, figures for which could be compared with final figures in the previous national accounts system. It should be stressed, however, that by far the largest share of GNI in the Danish national accounts is calculated from independent estimates of levels for a given year. 1988-1992 were generally chosen as benchmarks simply because there are various alternative calculations available for those years which, when taken together, have provided a basis for deciding on the sources and methods described in the present publication.

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\* The Danish word for the third way of estimating GDP translates literally as "use".