

# **Use of National Accounts Data in the European Union Context**

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#### **Abstract**

The paper takes the example of the uses of national accounts data in the European Union (EU) – notably administrative, policy and academic - to illustrate the impact of these multiple user requirements on the compilation, dissemination and quality control of the data.

The paper gives an overview of the arrangements for national accounts in the EU, including the European System of Accounts (ESA 2010), and providing a background of the organisation of official statistics in Europe and the role of Eurostat.

The paper identifies the main administrative uses of national accounts data at the EU level – including for budgetary contributions, fiscal control, regional financing, and macroeconomic imbalance monitoring – and describes the implications that these have for the data in such areas revision policy, time series analysis, quality monitoring and allocation of resources. The paper explores what practical approaches have been found to reconcile administrative uses – often in relation to major budgetary sums or policy implications - with broader user needs.

<sup>&</sup>lt;sup>1</sup> The views expressed in this paper are the personal views of the author and do not necessarily reflect the views of the European Commission.

# 1. Background to official statistics in the European Union

The European Statistical System (ESS) is the partnership between the Community statistical authority, which is the Commission (Eurostat), and the National Statistical institutes (NSIs) and other national authorities responsible in each Member State for the development, production and dissemination of European statistics. This Partnership also includes the EFTA countries.

In addition, the European System of Central Banks (ESCB) coordinates statistics produced by National Central Banks.

The ESS functions as a network in which Eurostat's role is to lead the way in the harmonization of statistics in close cooperation with the national statistical authorities. ESS work concentrates mainly on EU policy areas - but, with the extension of EU policies, harmonization has been extended to nearly all statistical fields. Member States collect data and compile statistics for national and EU purposes. Eurostat is itself a Directorate General of the European Commission, but at the same time has a special status which is intended to safeguard its professional independence.

The ESS also coordinates its work with EU candidate countries and at European level with other European Commission services, agencies and the ECB and international organisations such as OECD, the UN, the International Monetary Fund and the World Bank.

The ESS - in common with most European Union policy areas - is founded in European legislation (Regulation 223/2009 of the European Parliament and of the Council, as amended). Below this general level, many statistical collections are separately legislated for, albeit with a recent trend towards the development of framework approaches to major areas of statistics (e.g. business, social and agricultural statistics).

#### 2. National accounts in the European Union

National accounts in the European Union are organised along the general model of European statistics described above. NSIs in European Union Member States<sup>2</sup> compile national accounts for their Member State, and transmit them to Eurostat. Eurostat is responsible for setting national accounts conceptual standards, for compiling European aggregates (EU, euro area) and for taking forward international cooperation on national accounts issues with other international agencies<sup>3</sup>.

As with many areas of European statistics, national accounts are the subject of European legislation, and have been so since 1970. The European System of National and Regional Accounts 2010 (ESA 2010) was developed from the System of National Accounts 2008 (2008 SNA) and is consistent with it, thereby ensuring that European and worldwide standards are aligned. Eurostat has also developed a series of manuals and handbooks which deal with specific national accounts issues in more detail.

<sup>&</sup>lt;sup>2</sup> And also in EEA, EFTA and Candidate Countries, though the main focus of this paper is on EU Member States, since they are directly subject to all of the administrative procedures using national accounts data.

<sup>&</sup>lt;sup>3</sup> For example, Eurostat is a member of the Inter-secretariat Working Group on National Accounts (ISWGNA).

The relevant European Regulation - Regulation 549/2013 of the European Parliament and of the Council - contains two annexes. One annex is a conceptual manual which establishes the recording rules. The other annex is the ESA 2010 transmission programme, which sets out the timetable and detail for data that EU Member States must transmit to Eurostat. Eurostat then publishes these data – subject to confidentiality constraints – so that users have a direct access to country data and European aggregates in one database.

When comparing the ESA 2010 with the 2008 SNA, one can see that the legal nature of the ESA 2010 conceptual manual means that it is less discursive in style, offering fewer options for recording, and makes references to specific European issues. In practice many European national accountants have both manuals on their desk(tops) and use the 2008 SNA for background when the ESA 2010 does not go into the reasons for a recording approach or does not offer examples.

# 3. Uses of national accounts data at European Union level

The national accounts system is a rich and complete system of information on economic activity for multipurpose uses. The SNA is designed "for economic analysis, decision-taking and peacemaking" (SNA para 1.4). This means that national accounts data have many diverse users at international, country and regional levels, some of which are common across these levels, whereas others can be quite specific.

In general one may focus on three broad types of users:

- Users of national accounts key aggregates most commonly this will be GDP, either as a headline itself for general public or political use (e.g. GDP growth), or the use of GDP as a scaling factor for another statistic ("percentage of GDP").
- Users of national accounts indicators the indicators involved are often below the GDP level, and may include sectoral or industrial breakdowns, for example household saving rate, general government deficit or manufacturing investment.
- Users of detailed national accounts data these more sophisticated users move beyond
  indicators to analyse breakdowns and relations throughout the accounts (for example
  sectoral or input-output data).

At the European Union level – recognising that purely national users will tend to focus on national statistical sources<sup>4</sup> - a focus can be placed on three main groups of users:

a) European policymakers and opinion-formers

<sup>&</sup>lt;sup>4</sup> Which in many cases are more detailed and extensive than data available at European level, given that the national accounts transmission programme is a necessarily a limited common collection across all countries. National users may also prefer the linguistic presentation of explanatory information.

This group composes a broad range from policymakers in the European Commission and the European Central Bank – which are extensive users of detailed national accounts data – through to other European Institutions (European Parliament, Council) and beyond to journalists, industry and civil society.

# b) European Union administrative uses

The term "administrative use" signifies that national accounts data are used for a specific purpose within an administrative procedure which – within the EU – is commonly legislated. Examples of this include:

- <u>Budgetary contributions</u> Member State contributions to the European Union budget are mostly determined by the level of Gross National income (GNI)<sup>5</sup>.
- <u>Stability and Growth Pact</u> Member States' fiscal positions are monitored using national accounts data (government finance statistics) and the Excessive Deficit Procedure is focused on government deficit and debt as a percentage of GDP<sup>6</sup>.
- <u>Macroeconomic Imbalances Procedure</u> introduced within the European Union as a response to the financial crisis, this procedure relies on a statistical scoreboard<sup>7</sup> which includes financial and non-financial data from national accounts (in addition to data from balance of payments, prices etc).
- <u>Eligibility for EU structural funding</u> in order to target European resources on the poorest regions, there is an eligibility process based on regional GDP per inhabitant expressed in PPP terms.

There are many other EU policy areas where national accounts data are either directly used or indirectly used (as scaling factors), often as elements within broader indicator sets<sup>8</sup>.

# c) Researchers with a focus on the European level

Researchers increasingly seek to elaborate their research across countries, rather than solely within countries, which leads to an interest in highly comparable data across countries. Furthermore there is strong interest in analysing data of economic zones (the best example being the euro area)

# 4. Reconciling administrative uses with broader user needs

<sup>&</sup>lt;sup>5</sup> See <a href="http://ec.europa.eu/eurostat/statistics-explained/index.php/Monitoring">http://ec.europa.eu/eurostat/statistics-explained/index.php/Monitoring</a> GNI for own resource purposes

<sup>&</sup>lt;sup>6</sup> See <a href="http://ec.europa.eu/eurostat/statistics-explained/index.php/Government\_finance\_statistics">http://ec.europa.eu/eurostat/statistics-explained/index.php/Government\_finance\_statistics</a>

<sup>&</sup>lt;sup>7</sup> See <a href="http://ec.europa.eu/eurostat/web/macroeconomic-imbalances-procedure/indicators">http://ec.europa.eu/eurostat/web/macroeconomic-imbalances-procedure/indicators</a>

<sup>&</sup>lt;sup>8</sup> For example the Sustainable Development Indicators and Europe 2020 Indicators.

The national accounts system is designed as a multi-purpose system where different users can find what they need. However it may be considered that the needs of different users, as described above, can lead to different priorities for statisticians, particularly where resources are limited.

The use of national accounts data for administrative purposes – whilst welcome for raising the profile of the data - presents questions and challenges in a number of areas.

### a) Conceptual changes

The national accounts system rightly evolves over time to take account of economic theory, trends and opportunities in the practicality of measurement. Internationally the main evolution occurs during periodic SNA reviews, though there are also mechanisms in place when needed to revise and interpret the SNA between reviews. The update and implementation of European national accounts standards takes place after each review, hence ESA 2010 (based on the 2008 SNA) was implemented by EU Member States in 2014 and led to revisions of time series.

European users understand and support the need the keep the conceptual standards relevant, and even push in some areas for further evolution (for example on the capital boundary). When consulted, they indicate that they prefer that conceptual changes are grouped together periodically, rather than rolled out continuously over time.

Where data are used for administrative purposes, the introduction of conceptual changes (and the subsequent revisions to data) raises a general question about when to implement the new data into the administrative processes, which are usually based on separate (non-statistical) legislation which cross-refer to statistical standards. In some cases (for example the use of GNI for budgetary purposes) there has been a delay, which means that the administrative process continues to use data on the previous conceptual basis (e.g. ESA95), whereas published data for broader users are on the new conceptual basis. This system of "parallel running" has implications for resources both in countries and in Eurostat, and also for verification (see below).

There is also an important communication effort to be foreseen with administrative users, who are often more demanding than other users for early indications of the numerical impacts than can be expected from conceptual changes ("how will it impact my budgetary contribution; how will it impact my government deficit?). This is even further complicated if – as in Europe – the national accounts standards are legislated and therefore have to be approved at government level and in a Parliament, creating the possibility of an undesirable feedback loop ("if this conceptual change goes through, will it disadvantage me in the data?")<sup>9</sup>.

#### b) Revisions

More generally, outside of conceptual changes, revisions to national accounts data (whether through benchmark revisions or more regular revisions) are unwelcome to administrative users when they may call into question previous judgments, even if these users understand that

<sup>&</sup>lt;sup>9</sup> The principal of alignment of the ESA with an already-agreed SNA is very helpful in pushing against this.

revisions are intended to improve the data. Three helpful strategies have evolved to deal with this issue, whilst leaving published national accounts data to be subject to a revision policy designed with general users in mind

- In the use of GNI for EU budget purposes, there is a process of "open" and closed" years, so that the definitive figures to be used for budgetary calculations are only established 4 years after the reference year <sup>10</sup>. More recent data are of course used in the budgetary calculation, but revisions to these data are taken into account until they reach their 4 year "maturity".
- In the use of regional GDP for structural fund calculations, the relevant legislative act is very precise on the data to be used and the point in time (vintage) when they established for setting eligibility for the programme period.
- More generally, policymakers generally take the view that revisions sometime after the event should not re-open previous administrative decisions. There is hence a strong focus on data of the previous year ("n-1"), even if users understand that there is a trade-off between timeliness and quality.

One may note from the above that administrative users may take different points of view about how the data that they focus on are revised. Some users – such as EU budgetary authorities – are willing to wait for data to mature, even if this can lead to sometimes substantial revisions in budgetary demands. Others – such as fiscal experts – want data to be as up to date as possible, reflecting all latest source data and conceptual interpretations (and possibly even faster than established revision practices for national accounts, which are often driven by national finance ministry needs). This can lead to different priorities for establishing revision frameworks and tensions in consistency across the accounts<sup>11</sup>, including whether or not a full time series is revised.

# c) Quality assessment and "Verification"

Producers of national accounts data are naturally subject to the quality frameworks established by their statistical offices and there is a strong emphasis in Europe on high quality standards for official statistics and for quality reporting to users.

Nevertheless the use of national accounts data for administrative purposes 'raises the bar' in terms of quality assessment. Users rightly complain if it comes to light that statistical data are not "fit for purpose", and particularly if it is found that the statistics are being interfered with or manipulated for policy ends<sup>12</sup>.

<sup>&</sup>lt;sup>10</sup> Eurostat may nevertheless introduce 'reservations' on the data, where there are quality concerns, which means that older data remain open for budgetary calculation purposes.

<sup>&</sup>lt;sup>11</sup> These issues are currently discussed in the context of a European harmonised revision policy.

<sup>&</sup>lt;sup>12</sup> In the area of European fiscal statistics, this has led to the legislation of major investigative powers for Eurostat which may result in a fine for a Member State where statistics have been manipulated, intentionally or due to serious negligence.

This creates an expectation from users that an external body (e.g. Eurostat) is intensively checking national accounts data beyond the established quality frameworks, and even that this should amount to an "audit", as for financial statements.

This leads to the need to establish a formal verification<sup>13</sup> function, with legislative backing. In Europe, for example, there have been steps in recent years to significantly strengthen the legislative basis for Eurostat to investigate fiscal data. In the area of budgetary calculations based on GNI, a strong principle of professional statistical peer review has been developed, thereby clearly separating the steps of appropriately finalising the data from the process of calculating the budgetary impacts.

Use of national accounts indicators alongside other indicators (for example in the Macroeconomic Imbalances Procedure Scoreboard) gives greater attention to consistency between data. This is important issue in Europe where users are increasingly sensitive to divergences between data from national accounts and from balance of payments, and where there is an ongoing exercise to investigate and address them.

### d) Selection of indicators

Most statisticians can probably recall a case where their data has been used inappropriately, and which may have then led to a dialogue with the user concerned. This issue is magnified if an indicator is chosen for administrative use without a consultation with the relevant statistical experts, who would have been able to point out conceptual and/or quality issues.

This is not to say that the choice of indicators should necessarily rest with statisticians. Policymakers are ultimately responsible for the implications of the statistics used, however they need to be encouraged to do so with the fullest knowledge of those statistics. In Europe, Eurostat actively seeks to provide input to policy discussions in this field, and in some cases a consultation of statisticians is already built into the timetable for developing policy indicators, so that the focus is on statistics of suitably high quality. But it is an area which needs constant monitoring and a willingness of statisticians to be pro-active.

#### e) Resources

Increased administrative user focus on particular data, with its accompanying revision and verification issues, undoubtedly has an upward impact over time on the resources which are allocated to their production and dissemination. Administrative users often have greater access to the management of national statistical offices, and that management will be sensitive to statistics which they see carry a higher reputational risk.

This has been observed both in European national statistical offices and in Eurostat, where the human resources devoted to fiscal data and (more recently) GNI have been growing. Where this

<sup>&</sup>lt;sup>13</sup> This is term is used to distinguish the function from that of an audit function, which goes beyond the role of statisticians.

happens in the context of more resources for national accounts overall, this is seen as a positive development, drawing in resources to more visible data. However where this happens in a context of stable, or even falling, resources in national accounts, it leads to the need for hard choices about production activities in other areas of the accounts.

#### 5. Conclusions

Statistics are produced to be used, and the more that they are (appropriately) used, the better informed society and policymakers will be. Nevertheless there are different groups of users which may have different specific needs with regard to statistics. The use of statistics for administrative purposes – where there are automatic or semi-automatic consequences arising from their use – raises particular issues for statisticians, notably when concepts change, revisions are made, data are quality checked, and resources are allocated. The involvement of statisticians from an early stage in the selection of statistics for administrative use, and good communication by statisticians to users on the statistics that are being used, are essential to mitigate the potential difficulties introduced through administrative use.