STATISTICS FOR THE REGION "EURO AREA": THE VARIOUS LEVELS OF AGGREGATION

Gabriel Quirós

European Central Bank[1]

1. The euro area aggregation

The conduct of monetary policy in the euro area has traditionally been underpinned by monetary and financial statistics for the euro area as a whole, aggregated and consolidated by the ECB on the basis of aggregated national data provided by NCBs. These national contributions to euro area statistics are, as much as possible, harmonized, comparable and consistent across euro area member states, in order to allow the compilation of meaningful area-wide aggregates. The setting-up of euro area statistics since before the start of Economic and Monetary Union (EMU) required a continuous process of harmonisation of the methodologies used by the various EU countries for the collection and production of statistics. Besides, harmonisation of statistical concepts, also at international level (by applying the agreed international statistical standards), is also very beneficial for meaningful worldwide comparisons and aggregations. Given that cross-country comparability of official statistics adds enormously to their usefulness, countries around the world are most welcome to apply the internationally agreed statistical standards in their national statistical systems.

It should be noted that harmonised national statistics are very important in the EU even before countries join the euro area. A new enlargement of the euro area usually means long lead times in the preparatory work for both the ECB and the countries joining the euro area. We have experienced various waves of enlargement of the euro area (from initially 11 to 17 member countries today). Once the EU countries join the monetary union, all statistical series for the euro area have to be amended to include the new members. As euro area aggregates are not a simple sum of national data, all back series have to be adjusted. Indeed, aggregation is not enough in the case of the euro area. Cross-border transactions and positions within the euro area have to be distinguished from positions outside it and transactions with non-euro area counterparties. This is necessary to carry out the consolidation at the level of the euro area.

Whenever new users' statistical needs are confirmed and their merits assessed against their cost, a new collection scheme is often formalised in an ECB Regulation. In this way, the statistical information provided by the ECB fulfils high quality standards in terms of harmonisation, coverage and methodological soundness of source data. However, <u>new reporting schemes involving additional collections from reporting agents usually take around 2 years until they deliver the new data sets</u>.

2. The aggregation by institutional sector

The aggregation by institutional sector is essential for the ECB, among other reasons because the ECB uses the annual growth rate of the monetary aggregate M3 as the reference value for monetary growth in the euro area. In this context, one of the first tasks in the development of ESCB monetary statistics was the definition of a homogeneous money-creating sector, and of its counterpart sectors. More generally, all monetary and financial statistics provided by the ESCB are broken down by sectors.

What may be worth noting as regards sectoral statistics is the joint compilation with Eurostat, (the statistical office of the European Union) of the integrated system of quarterly financial and

---

non-financial accounts by institutional sector. These integrated accounts represent a unique framework for analysing economic and financial developments in the euro area and the propagation of shocks, thus helping to better understand the transmission mechanism and the relative importance of the various transmission channels. Moreover, the wide range of key indicators contained in this accounting framework provides a good overview of the economic conditions in the euro area (among many other uses). Besides, the financial part of the accounts covers not only all institutional sectors, but also all financial assets and liabilities, which permits the analysis of portfolio shifts between monetary assets and other financial instruments for each institutional sector.

As mentioned earlier, the ECB provides the statistical support to the newly created ESRB. In order to address future ESRB data needs, these accounts might need to be extended, from the euro area to the whole EU and to each of its Member States (see below). Moreover, the timeliness of these accounts will need to be reduced, from the current t+120 to t+90 after the reference quarter.

3. Country data

In addition to euro area data, national contributions to euro area aggregates are an important element in the analysis of financial stability and of the degree of market integration, but also to inform the policy discussions on shocks and on the transmission mechanism of monetary policy of developments. Moreover, statistical information reported to the ECB by EU Member States not yet participating in the EMU is used for monitoring their economic convergence and for assessing their preparedness to adopt the euro. Both euro area statistics and the national contributors are often jointly disseminated by the ECB and the NCBs, using a single database with tailor-made presentation formats, disseminated in the national languages.

The recent financial and economic crisis brought growing requests for individual EU country data (in addition to the euro area aggregates) by the ECB decision-making bodies and by many other users (ECB staff for country missions, ESRB, European Commission, IMF, the media, etc.). It is expected that the current *ad hoc* requests for more individual country data, including from small Member States, will become more recurrent, and apply to all EU countries. Indeed, the crisis has shown that even shocks in small countries of the euro area can occasionally have significant effects on the euro area as a whole.

As illustrated in the previous heading, country level information has always been part and parcel of the compilation of euro area statistics. However, the main focus thus far has been on the production of consolidated euro area indicators and, hence, on the 5-7 largest contributors to the euro area aggregates (or on the relatively smaller countries with significant financial activities). Therefore, country data monitoring was, until now, a somehow lower priority, in view of the limited statistical resources.

4. Micro level data

The recent financial and economic crisis brought many challenges to euro area statistics. The crisis has shown that shocks may occur in all sectors and in all countries of the euro area (including in the small ones), with significant spill over effects on other sectors and on the euro area as a whole. New data requests resulting from the crisis include, for example, more detailed country level information on the household sector and on the non-financial corporations (e.g. on their financial/investment decisions and external funding), on credit aggregates (by branch of industry) and on credit lines. The need to monitor such detailed activities at a very early stage and in almost real time requires much more timely and detailed information on all sectors and on all individual EU countries, in addition to the euro area aggregates. As mentioned earlier, the conventional provision of information, through an ECB legal act, takes a long time to be developed. Therefore, the increased use of micro databases may substantially improve the flexibility of statistics. By micro-databases we mean databases

with information on individual securities, individual companies, etc., i.e. basic information that can be aggregated in various ways to derive, not only the standard statistical time series, but also new statistical outputs, almost in real time. Requiring reporting agents to transmit the data existing in their systems, on an "item-by-item" basis, for a variety of statistical (and possibly also other) purposes may significantly alleviate their reporting burden because economic agents have to report only once and are no longer required to aggregate the reported information. The use of micro-databases for statistical purposes is obviously much facilitated by the modern IT facilities that permit a swift handling of large amounts of information at reasonable costs. It should be noted that maintaining micro-databases, and particularly the related data quality and data source management, entails however higher resource requirements for the statistical compilers. Standardisation, quality control and matching of such micro information are also preconditions for the optimal use of these micro-databases.

5. Concluding remarks

The ECB statistical framework provides a comprehensive set of statistics, with different levels of aggregation as described above, and serving a multitude of purposes. The financial and economic crisis evidenced the need to monitor and understand economic and financial developments at a very early stage and in almost real time. The ECB is addressing its further statistical needs *inter alia* by setting up micro-databases that will allow the ECB to compile high quality statistics in a more flexible manner and with a minimum burden for the respondents (who can report the data for different statistics and purposes only once).