THE DIMENSION OF DATA QUALITY IN THE
COMPILATION OF EURO AREA BALANCE OF PAYMENTS

For information of the IMF BOP Committee

INTRODUCTION

1. The Balance of Payments Statistics and External Reserves (BP&ER) Division of ECB Directorate General Statistics is responsible for the compilation of various statistics related to external transactions/positions of the euro area. These statistics span from the monthly balance of payments (BOP), compiled according to broad category of transactions, to the quarterly BOP, compiled according to a more detailed breakdown in the financial account and related income; in addition, the BP&ER Division is in charge for the compilation of the annual international investment position (IIP), the international reserves (IIP) and foreign currency liquidity template (end-of-month positions) of the euro area, and the euro effective exchange rates (EERs).

2. Statistics referring to the euro area, except the EERs, are compiled by proper aggregation of national contributions, which are to be sent according to a pre-defined calendar. From the input (collection of the data from respondents) at the national level, to the final output at the ECB (aggregation of extra euro area transaction), many actions are taken, in particular at the national level, such as: estimation of missing, incomplete, incorrect data; usage of parallel/external sources; cross checking internally and outside the core statistical business areas; setting up of revisions practice; general consistency checks. The quality of the final outcome (the statistics related to external transactions/positions of the euro area) basically depends on the quality of the Member States’ contribution.

3. The aim of this note is to inform the IMF Committee on the outcome of a reflection that is taking place within the BP&ER Division. Following a discussion at the June 2000 Working Group on Balance of Payments and External Reserves Statistics (WG BP&ER) meeting, a document was circulated for a written procedure. During this summer many countries provided interesting input to further
elaborate on this subject. The final version of the paper will be considered at the next Working Group meeting, in November 2000.

4. The discussion aimed at exchanging views on the definition of quality; on detailing concepts and specifying what the dimensions of quality are. The purpose is to give a shared framework for the assessment and measurement of quality in the euro area BOP/IIP statistics which is an important task for the BP&ER Division to be exerted with the close assistance of the members of the WG BP&ER.

5. The focus is on the production of the euro area aggregates based on Member States' extra euro area transactions. The quality in BOP/IIP statistics has been defined mainly in relation to national needs. International organisations normally compile regional BOP by simply adding national BOP of different countries (after proper harmonisation procedures, when needed). By contrast, the euro area BOP/IIP, though encompassing several Member States (MSs), refers to a monetary union, and the information is deemed a key indicator in assessing the monetary and foreign exchange conditions for the euro area as a whole. Main users of these statistics are the decision-making bodies of the ECB and economists who analyse the statistical data and shed some useful light on the most recent economic and financial developments.

**CHALLENGES TO THE NATIONAL BOP/IIP COLLECTION SYSTEMS**

6. Linked to the formation of the euro area, and all related changes taking place in the markets within the euro zone, the ability to compile euro area BOP on the basis of the existing data collection systems has been challenged in some Member States. Indeed financial markets are in a rapid processing of further integration which makes it even more difficult to collect data on cross-border intra-euro area transactions.

7. Furthermore, whereas the geographical breakdown of non-residents involved in transactions/positions of the reporting economy has never been deemed as a key criterion from a national perspective, since the formation of the euro area the split between residents of (other countries participating in) the euro area and residents outside the euro area has become the most important for compiling reliable statistics. In particular, the number of intermediaries involved in financial transactions makes it difficult to assess the residency of actual creditors in the portfolio investment liabilities.

8. MSs contribute to the euro area BOP/IIP by submitting “modules” of information compiled according to different criteria: direct counterpart for current and capital account besides portfolio investment income, and for other investment. The issuer principle is applied for direct and portfolio investment. This heterogeneity makes it more difficult to check the quality of the BOP on the basis of the total balancing approach, such as the analysis of the errors and omission, the relevant relation between correlated items and sub-items of the current and capital and/or financial account, etc.
QUALITY OF THE EURO AREA BOP STATISTICS

9. Quality in statistics has been therefore defined both in relation to fitness to users’ needs and accuracy in describing an economic phenomenon. The discussion on what are the elements to be included in this concept could have unfolded a long list of topics; finally a list of 8 dimensions was considered: relevance, accuracy, coherence, stability, integrity, timeliness, accessibility, transparency. The definition of these dimensions are not given in this paper as they are already available in the documentation in reference; furthermore, specific aspects and measurement of these dimensions will be further elaborated by end-2000 within the WG BP&ER.

10. The information is the element, sorted out from the noise received by observers on the markets, which can lead to a new or different approach of the reality, thereby triggering decisions on when investing, and on which instrument, or disinvesting for agents. Information is also a public good for institutions in charge of the regulatory power. The quality of the information depends on the intended use and the fundamental characteristic of quality (objective aspect); users’ expectations will determine what is acceptable as quality characteristics.

QUALITY: FITTING TO USERS’ NEED

Definition

11. Quality in statistics is directly linked to the users’ needs to be fulfilled. One of the main characteristics is the concept of relevance, which infer to determine classes of users to which the statistical information is addressed, and the different types of use of this information.

Users and uses

12. Classes of users and their specific needs should be reassessed periodically, with a particular focus on the most important users.

13. The first class refers to the ECB Governing Council which is in charge to define and conduct the monetary policy for the euro area as a whole. Statistics provided must be relevant for preparing decisions in this field and for assessing the impact of previous decisions. This refers to the reactions of the markets before and after any decisions and to the rapid assessment of e.g. any change in trend, or increase/decrease of volatility.

14. The second class of users consists of ECB and Eurosystem\(^2\) economists which analyse the economic and financial developments on the markets.

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1 A comprehensive overview on this can be found on IMF official web site on the “Data Quality Reference Site” (http://dsbb.imf.org/dqrs_intro.htm).

2 The Eurosystem comprises the ECB and the national central banks of the 11 countries participating in the euro area since its inception. Greece will join from 1 January 2001.
15. In particular, statistics on the external transactions/positions of the euro area participate in the analysis of the external counterpart to M3 growth; they also are one of the key indicators considered in the second pillar for the conduct of the monetary policy in assessing the monetary and foreign exchange conditions affecting the euro area. The following elements describe the key aspect of the focus given on BOP/IIP statistics (users need):

- the demand of BOP information on a monthly basis and in time for assessing most recent developments (short deadline); data at higher frequency (quarterly and annual) are also requested;
- the focus on the euro area as a whole (coverage of extra-euro area transactions/positions only);
- the need for an MFI\(^3\)/non-MFI split (in the BOP financial account, possibly in the related income, and in the IIP), to derive a monetary presentation of the BOP/IIP;
- no details in services, in current transfers and in the capital account.

16. Best practices to meet internal user needs are the following:

- because the focus on the euro area BOP the elements which are part of a national data collection system should aim at providing a good identification of those external transactions which are conducted with non residents in the euro area. Since the setting up of most data collection systems preceded the beginning of the monetary union, a reengineering of the procedures is required. Thus, the identification of pure extra euro area flows may imply the involvement of specific resources and general quality checking procedures and tools. This might lead to a deep review of the system in place (this observation applies also to the rest of the list);
- the timeliness and frequency under which the BOP are compiled should allow a close monitoring of recent developments. Particular procedures are required to ensure the stability over time (meaning that revisions should be of a limited magnitude) of early statistics needed by the ECB. Some items may prove resistant to modelling;
- a key role is played by the financial account, in particular the direct and portfolio investment. Some rebalancing may be needed to carry out sound collection systems.

17. In conclusion, BOP statistics are deemed of good quality when they provide a reliable picture of the transactions between residents of the euro area and residents of countries outside the euro area, at high frequency and timeliness with a special focus on the financial account\(^4\).

18. The larger class of users relates to foreign exchange traders, companies investing and involved in euro area markets, general policy makers outside the ECB, universities, research institutes and

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\(^3\) Monetary Financial Institutions; the list of MFIs is given on the ECB’s web site.

\(^4\) In addition, other ECB users do perform analysis on more long-term developments of the external transactions of the euro area, with also some focus on detailed items. Therefore, additional dimensions of their needs are the availability of back data, and, in particular within the current account (goods and, to some extent, services) data on volumes. To these additional needs in the current account data, Eurostat will investigate data availability.
specialised press. Data are disseminated by the ECB to the general public by different means (monthly bulletin, press release, ECB’s web site).