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# The Role of the Official Statistics in the Context of the Global Crisis

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## Abstract

Official statistics can be seen as a communication tool on variety of management levels and in different spheres of life of the society. The recent crisis has generated a number of challenges for official statisticians. Financial, economic, and political actors turned to statistics to describe the situation and to detect, assess, and even forecast these phenomena. Therefore, the main statistical consequence of the crisis is the recognition of the limits of the traditional approaches to statistical production and the importance to go beyond them. The first part of the paper shortly describes position and goals of the official statistics. In its second part the recent challenges are discussed with a particular stress on national accounts, the so-called Principle European Economic Indicators, as well as social statistics. The final chapter presents and analyzes general actions that are being taken at the European level in order to face these challenges and improve the overall quality of the official statistics.

## Keywords

*official statistics,  
crisis,  
challenge,  
quality,  
Europe*

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## 1 OFFICIAL STATISTICS

Official statistics can be seen as a communication tool that is indispensable for good public government, efficient business management, and also very helpful for assuring a democratic debate and facilitating societal life. Communicating about all sorts of phenomena requires a common language, which is universal in its ambition to transgress all sorts of borders, but has necessarily only a limited vocabulary and a limited grammar. It should be translatable into everyday speak as well as different expert speaks. It is a language that provides a societal perception framework which facilitates taking all sorts of decisions and enables to build a new or maintain an already established collective memory. To be understood, the language has to be based on conventions which are stable but

simultaneously enable certain flexibility as the society develops.

Statistical service to society obliges us official statisticians to expose our work to a broad public debate and scrutiny. Our work is shaped by the political, legal, and administrative framework and our means (resources, rights, etc.) are ultimately determined by our political authority. Nevertheless, we should engage in a permanent dialogue with all parties concerned by official statistics (civil society, business community, scientific community, etc.) on the results of our work (the quality debate in the narrow sense), but also about concepts and methods (the quality debate in a wider sense). Only such a dialogue will allow us to stay in tune with the societies we are describing statistically. In this context it should be stressed, however, that a crucial precondition for the

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provision of relevant and objective statistics is professional independence and impartiality of official statistical authorities. At the EU level, these fundamental institutional features have been strengthened by the adoption of the European Statistics Code of Practice (2005)<sup>1</sup>, the establishment of the European Statistical Governance Advisory Board (2008)<sup>2</sup> and the revision of the umbrella regulation for the production of European statistics (2009)<sup>3</sup>.

## 2 CHALLENGES AND THE ROLE OF OFFICIAL STATISTICS

The recent crisis has generated a number of challenges for official statisticians. Financial, economic, and political actors turned to statistics to describe the situation and to detect, assess, and even forecast these phenomena. The role of official statisticians who have been confronted with an increased number of requests for relevant statistical data is, therefore, three-fold:

- to provide sufficient advanced warning;
- to monitor the impacts on economy, society and environment;
- to monitor political responses and their impacts.

### National Accounts

Due to the importance of national accounting for all kinds of macroeconomic analyses, this tool has been considered crucial. Since its inception, national accounting – representing a conceptual frame of reference that enables economists from all over the world to engage in dialogue on common ground – has played an essential role in economic analysis.

Because of their wide range of uses, national accounts need to be solid and properly tailored to their purposes. In the context of the crisis, government debt and deficit are at the central focus point, as the recession forced many States to intervene directly in the economy. It, therefore, gave new legitimacy

to national accounting, which had in fact gained prominence during the crisis of 1929 as a means of helping states to intervene effectively in economic affairs. Renewed interest in all of the macroeconomic analyses made possible by national accounting could, therefore, be expected. Nevertheless, we should thoroughly examine to which extent national accounts make it possible to explain and to monitor both the financial aspects and the real aspects of the crisis.

The crisis first arose in the form of a financial crisis and the question must be asked whether, given its very nature, the information provided in national accounts enables economists to really predict a recession of this type. Obviously, national accounting was primarily devised to measure activity in the real economy and is not well suited to monitor the financial sphere. While national accounting does touch on the financial sphere, this is essentially from the perspective of financing for the real economy. However, we can observe that the financial sphere has become quite autonomous from the real economy. It is, therefore, not surprising that national accounting did not make available specific information to foresee the financial crisis.

One of the essential questions is whether national accounting can better incorporate the financial aspects of the economy. The fact that financial activity has specific characteristics, such as e.g. the extreme diversity of financial instruments and their constant evolution and the extremely rapid pace of operations, makes it difficult. Thus, it would be unrealistic to attempt to use national accounting as the main analytical tool for the financial sphere. There is certainly room to improve the integration of financial issues in national accounting and this is being done, but it seems necessary that a series of relevant alert indicators be implemented outside national accounts to enable the authorities to anticipate more effectively any major problems looming on the financial horizon.<sup>4</sup>

<sup>1</sup> [http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/documents/code\\_practice.pdf](http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/documents/code_practice.pdf)

<sup>2</sup> <http://epp.eurostat.ec.europa.eu/portal/page/portal/esgab/introduction>

<sup>3</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

<sup>4</sup> In this context a set of indicators developed at the EU level for the European monetary policy, so called principle European economic indicators (PEEIs) can be inspiring (see later).

National accounts provide a very useful framework but we should be also aware of their weaknesses. One of the major weaknesses is certainly the narrowness of their scope. When it comes to understanding a globalised economy, the main drawback of national accounting is the very fact that it is national. Worldwide accounts, with breakdowns by main regional areas, would certainly be extremely useful to economists in that they would highlight any potential imbalances or tensions between the different regions of the world. The conceptual framework to create this already exists: it would not be any different from the current framework used for the System of National Accounts (SNA) as recently revised. Actually creating these accounts would, of course, require the different international organisations to work together under the umbrella of the United Nations. Work to create worldwide accounts will have to be undertaken in cooperation between Eurostat, the IMF, the World Bank, and the OECD.

A key aspect of the statistical reaction has been to ensure the appropriate and proper consideration of the statistical consequences of the financial crisis on key statistics used in the European Union for administrative purposes and for the assessment of public finance.

As the financial crisis escalated from late summer 2008, governments and central banks in European countries have intervened through various operations in an effort to restore confidence in the financial system, at first to rescue single financial institutions in distress, and then through co-ordinated interventions broadly targeting all financial institutions, recognising the systemic aspect of the situation.

All these operations required an appropriate recording and treatment in statistical terms, notably in the framework of public finance statistics. A key requirement for the ESS in this area was to ensure the consistency across time and across

countries of the statistical treatment of public interventions in full respect of the European System of Accounts (ESA95) rules. In this field, Eurostat, in co-operation with ESS partners, has closely monitored the public interventions and their implications for national accounts data, notably for the government deficit and debt statistics used for the excessive deficit procedure (EDP). The outcome of this methodological analysis provided the background information for defining the methodological treatment in national accounts, of these types of operations (see Eurostat Decision on “The statistical recording of public interventions to support financial institutions and financial markets during the financial crisis”<sup>5</sup> published on 15 July 2009). A new element to the existing approach has been introduced in the form of a supplementary table which reflects certain operations exposing governments to risk, but where the measurement is uncertain, as these operations have not crystallised yet. This approach provides transparency and shows a potential size of impact of operations addressing the financial crisis, for example if all guarantees provided by governments are called in the future.

### **Principle European Economic Indicators (PEEIs)**

The crisis has required official statisticians to provide not only a coherent view of the economy but also to deliver promptly key short-term economic indicators for monitoring the impact of the crisis and the impact of the measures taken by governments to remedy it. To meet these requirements, the European Statistical System (ESS)<sup>6</sup> offers through selected Principle European Economic Indicators (PEEIs) a continuously updated overview of these effects of the crisis at the EU level and in Member States, notably from the macroeconomic point of view. The PEEIs are 19 key short-term macroeconomic indicators available in a harmonised way for EU Member States,

<sup>5</sup> [http://epp.eurostat.ec.europa.eu/portal/page/portal/government\\_finance\\_statistics/documents/FT%20-%20Eurostat%20Decision%20-%2009%20July%202009%20\\_3\\_%20\\_final\\_.pdf](http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/documents/FT%20-%20Eurostat%20Decision%20-%2009%20July%202009%20_3_%20_final_.pdf)

<sup>6</sup> The ESS is a partnership between national statistical authorities in Member states and Eurostat.

euro area, and EU (and when available for major economic partners) broken in 6 sections: consumer prices, quarterly national accounts, business, labour market, external trade and housing. They are disseminated via the PEEIs website and progress in their EU-wide compilation is regularly reported to the Economic and Financial Committee (EFC Status reports<sup>7</sup>). This project started in 2003 as a dialogue between users and producers to identify the best set of indicators needed for economic and monetary policy purposes at EU level, complemented by quality requirements, especially timeliness, and a methodological background. The PEEIs successfully evolved over time and to a large extent anticipated several requirements that became relevant during the crisis. Among those housing statistics and integrated quarterly financial and non-financial accounts for institutional sectors should be mentioned in particular. It is worth noting that currently this set of key short-term indicators is serving as a model for a global initiative (global principal economic indicators) at the UN level.

The crisis has also stimulated reflections towards a real-time monitoring and the construction of an early warning system. Currently these reflections focus on:

- further improvements of timeliness without a significant decrease of accuracy: more flash estimates and nowcasts;
- construction of new monthly indicators, filling the gaps of those official statistics only available on quarterly basis;
- ensuring the availability of long time series to fit purposes of analysts, as official statistics are often too short;
- compiling indicators to extract signals and to fill the specific gaps in official statistics: cyclical estimates, turning points dating and detection, coincident and leading indicators.

It should be stressed that the above-mentioned ideas require working with statistical and econo-

metric techniques, as well as compiling new and composite indicators using existing statistics. Traditionally, such approaches have not been considered part of official statistics. We may observe, however, that in the recent years more and more statistical agencies have been involved in such kind of activities. Obviously, we – official statisticians – due to our deep knowledge of data and production systems, are in a privileged position. We can provide estimates and indicators based on statistically sound methodologies, transparent, replicable, and well documented procedures, and a high degree of objectivity.

Taking into account the nature of these outputs, we should communicate clearly to our users their specificities compared to traditional official statistics. Nevertheless, the information derived from such estimations (experimental statistics) could be very useful. It could complement official statistics and provide users with indicators enabling to get a real-time picture of the economic situation and with reliable early warning signals.

### **Social Statistics**

It stands to reason that social impacts of the crisis have to be tackled with a high priority and this also needs an appropriate statistical support. For social statistics the monitoring dimension has been at the centre of interest. This reflects the lagging nature of social phenomena during economic downturns. While a lot of relevant information is available, there are some gaps and challenges linked especially to timeliness and flexibility. A comprehensive review of social statistics and their shortcomings at the EU level has been conducted and a new strategy for modernisation of social statistics elaborated together with Member States (see next chapter). The starting point is the expectation that the landscape for social statistics in the next decade will be characterised by increased use of registers and administrative sources alongside sample surveys, multi-mode data collections with a strong component of web-interviewing and enhanced data linking/matching approaches.

<sup>7</sup> [http://epp.eurostat.ec.europa.eu/portal/page/portal/euroindicators/peeis/efc\\_status\\_report](http://epp.eurostat.ec.europa.eu/portal/page/portal/euroindicators/peeis/efc_status_report)

### 3 GENERAL ACTIONS AT EUROPEAN LEVEL

In addition to domain-specific actions sketched above, two general initiatives have to be stressed:

- a critical analysis of methodological and practical aspects related to the statistical production process (re-engineering of the business architecture of the ESS);
- introducing a robust quality management for European Statistics.

The financial and economic crisis has highlighted the need to transform the production system of official statistics into a modern and efficient tool, flexible enough to cope with increasing or unexpected new requirements. The ESS has started to speed-up changes already under way in some Member States, and to rethink the production of official statistics through the modernisation of its business architecture. The approach aiming at vertical (the production chain) and horizontal (across statistical domains) integration is described in COM(2009) 404 final<sup>8</sup>. It was translated into an ESS strategy which was adopted by the ESS Committee in May 2010.

The challenge ahead of us is that official statistics will have to be produced as integrated parts of comprehensive production systems based on common technical infrastructure and a network of databases. For this we have to develop and establish joint structures, tools, and processes through collaborative networks. We have to think about network production at all levels and network communication in all directions, not just among pro-

ducers of official statistics and between producers of official statistics and their political masters, but with all concerned and able to contribute. This should include not only the public administration or the world of business associations or NGOs, but also the scientific community.

The impact of the economic and financial crisis has also led to a more general reflection on the economic governance structure for the Euro area and the European Union as a whole. As a result of this reflection, the Commission adopted on 29 September 2010 a package of legislative proposals<sup>9</sup>. Broader and enhanced surveillance of fiscal policies, but also macroeconomic policies and structural reforms is sought in the light of the shortcomings of the existing legislation. New enforcement mechanisms are foreseen in case of non-compliance by Member States. Therefore, it is crucial to ensure that the decisions are based on statistical information which is produced under robust quality management.

Statistical information is a product resulting from statistical production processes operating across the entire ESS. Users of European statistics should be able to confidently use this information as an input to their own decision-making. These products should be fit for purpose, with users central in determining what constitutes quality.

The overall quality of statistical information on the European level is highly dependent on the appropriateness of the entire production process for statistics. In case data provided by Member States were of insufficient quality, this would have a negative impact on the quality of European statistics<sup>10</sup>.

<sup>8</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0404:FIN:EN:PDF>

<sup>9</sup> COM (2010) 522 to 527:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0522:FIN:EN:PDF>

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0523:FIN:EN:PDF>

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<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0526:FIN:EN:PDF>

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0527:FIN:EN:PDF>

<sup>10</sup> Following the weaknesses identified in the Greek case, extended audit-like powers in the EDP area were granted to Eurostat (EC Regulation 679/2010).

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:198:0001:0004:EN:PDF>

To help preventing such situations from happening, comprehensive and robust ESS quality management is needed. This systemic approach to quality will go hand in hand with the implementation of the above-mentioned vision for reforming the production method of European statistics, as it is expected to streamline the entire production chain.

We have to admit that, in the context of the crisis, the weaknesses in the quality of public accounting data and their statistical integration within the EDP reporting process were compounded by some weaknesses in the statistical governance arrangements in place. For the future it is, thus, crucial to move from a mainly corrective to a preventive approach regarding quality management for European statistics.

We can build on the existing framework comprised of the European Statistics Code of Practice, the European Statistical Governance Advisory Board (ESGAB) and the Regulation (EC) 223/2009 on European statistics, which provides solid foundations for an effective governance for the production of EU statistics, and address just those weaknesses which have become apparent on the basis of the recently gained experience. The new element in view of strengthening the quality of European statistics should be a risk-based approach taking into account also statistical implications of the legislative proposals, adopted by the Commission on 29 September 2010, on:

- strengthening the Stability and Growth Pact with prudent fiscal policy making;
- preventing and correcting macroeconomic imbalances;
- establishing national fiscal frameworks of quality, and in particular the need to have in place

public accounting systems, subject to appropriate internal control and audit mechanisms, comprehensively and consistently covering all sub-sectors of general government;

- stronger enforcement<sup>11</sup>.

This enhanced quality management will also take on board the conclusions of the Economic and Financial Affairs Council of 17 November 2010<sup>12</sup>.

## CONCLUSION

The worldwide nature of the crisis has underlined the global dimension of economic and financial phenomena, the integration of financial markets, and the rapidity of circulation of the information. All these aspects call for a global statistical view of the economic and financial reality, adequately supported by a statistical vision for the coming years. Therefore, the main statistical consequence of the crisis is the recognition of the limits of the traditional approaches to statistical production and the importance to go beyond them.

Even if the statistics concentrate on the recent past, this information is essential to enable economists and analysts to anticipate future scenarios. The crisis, thus, represents a challenge of strengthening official statistics by adapting relevant analytical tools at international level and always aiming at objectivity and credibility stemming from professional independence and impartiality of statistical services.

The ESS has acknowledged these challenges and is stepping up efforts to expedite the changes already under way, including the modernisation of the business architecture for the production of official statistics and further strengthening its governance including enhancing quality management.

<sup>11</sup> [http://ec.europa.eu/economy\\_finance/articles/eu\\_economic\\_situation/2010-09-eu\\_economic\\_governance\\_proposals\\_en.htm](http://ec.europa.eu/economy_finance/articles/eu_economic_situation/2010-09-eu_economic_governance_proposals_en.htm)

<sup>12</sup> [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/117762.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/117762.pdf)

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