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**Global financial and economic crises: Lag in statistics or slow
policy actions¹?**

Per Nymand-Andersen, Adviser

European Central Bank, Directorate General Statistics

Kaiserstrasse 29

60311 Frankfurt am Main, Germany

E-mail: Per.nymand@ecb.europa.eu

Ombak yang kecil jangan diabaikan
Small waves are not to be ignored

Abstract:

The financial crisis has revealed the need to re-assess the conceptual approach to risk and the statistics required from the financial sector, by taking a complete economic and financial system-wide perspective. This paper highlights the new challenges in managing systemic risks, focusing on the required macro- and micro- level statistics and the conceptual framework needed to ensure high quality, timely and representative statistics describing the structures and dynamics of financial systems and their impact on the real economy. Despite the fact that statistics are not the cause of the financial crisis, there are significant statistical challenges in supporting prudent economic and financial analyses in their ability to predict the magnitude and contagion effects of financial risks and to support timely corrective policy actions.

“Does the value of a number increase in times of economic and financial crisis?”

Statistics are the snapshots and radar screens reflecting the structure and dynamics of our democracies. These snapshots need to be continuously adjusted to capture new patterns within our society, which lead to new economic theories, new conceptual frameworks and new policy needs. In a global and highly

¹ The views expressed in this paper are those of the author and do not necessarily reflect the views of the European Central Bank (ECB).

interconnected economy, the world of statistics is continually challenged by its responsibility to reflect and explain complex financial and economic phenomena, as well as their relative importance in, and impact on, the real economy. The persisting financial crisis has had a significant impact on the field of national and international statistics.

Although it is clear that statistics did not cause the financial crisis, it cannot be completely ruled out that certain reported statistics may have contributed to – or even amplified – the financial turmoil and adversely affected the timeliness of corrective policy responses. The financial crisis emerged as a banking (and financial insurance) crisis and swiftly spilled over (as a derivative) into a sovereign debt crisis, as national governments stepped in to rescue the national banking sectors from spillover effects and contagion risks from other domestic banks and from banks abroad. For instance, financial market statistical indicators – such as spreads between sovereign bond yields, associated credit default swap rates, certain volatility measures – started to signal increases in the risk premia for holding certain sovereign securities. These increasing risk premia reflected market sentiments questioning the ability of some sovereign borrowers to manage their national fiscal policies and to live up to their obligations in a prudent and sustainable manner.

As official national statistics are used to measure these debt levels, these core statistics are of paramount importance for assessing national governments' debt levels, obligations, revenues, finance and expenditures, among other types of statistical measures of the health of the economy. However, the possibility cannot be ruled out that sudden questioning of the *quality* of and *trust* in these statistics alongside the systematic reporting of debt levels as being lower than they actually are, may have contributed to – or even exacerbated – the financial turmoil.

Statistics are becoming increasingly important. They are now part of the solution as regards safeguarding financial stability among economic regions and countries; they will be used for supervision of financial agents and governments' fiscal

discipline and for triggering corrective policy actions in compliance with supra-national and international obligations².

What is certain, however, is the long-term reputational damage to statistics, if the *quality* of and *trust* in statistics is questioned. This reputational damage goes far beyond the national agents involved in providing national statistics; it causes collective cross border damage to other statistics agents, including international statistics organisations and to the statistics profession as a field of science attracting young and bright graduates. This is where the collective governance of the statistical function needs take effect in order to develop, present and safeguard the quality and reputation of statistics. *It is not the first time in modern democracies that a tendency towards increased political pressure on statistics is observed during periods of political distress.*

If citizens cannot trust official statistics, who can they rely on to provide the information needed to ensure sustainable policy decisions for an optimal allocation of resources?

There are two elements to this question: what is needed within our modern democracies to continuously shield statistics from short-term electoral and political cycles, and how can the statistics profession be assured that it has the ability to provide and guard good quality statistics? There are clear indications that independently produced statistics are the best pre-condition for the provision of a factual representation of the structure and dynamics of our economy and for the safeguarding of our democracies³.

Of course, the real losers of wrong policies are the citizens of individual countries who have to pay for the medium to long-term damage caused by manipulated and unsound policy decisions. The costs are real and high for these citizens, who have to pay higher taxes, work longer, face a reduction in pension payments and deal

² The new framework for European Union (EU) policy coordination includes the implementation of the macroeconomic imbalance procedure as part of the economic governance reform. This reform aims to strengthen economic surveillance within the EU and the euro area in order to ensure that Member States conduct policies that prevent the emergence of harmful macroeconomic imbalances and to correct such imbalances where they become excessive.

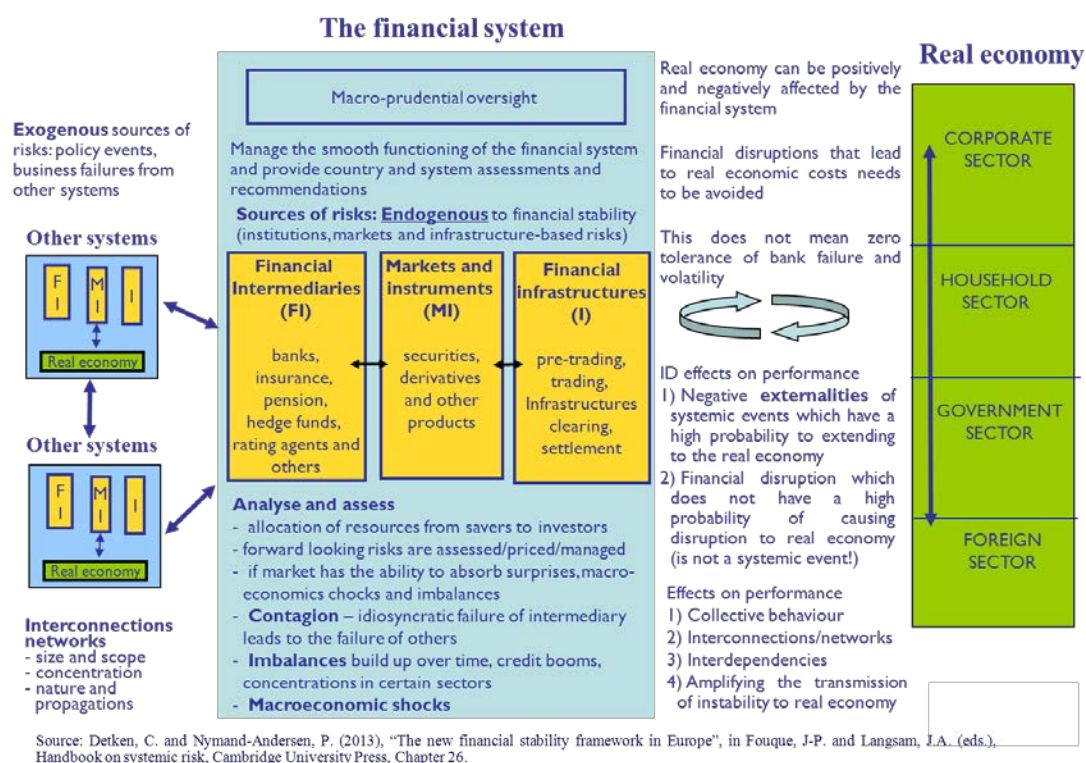
³ Schubert and Nymand-Andersen (2013).

with job losses, without an equivalent increase in public services. On the contrary this is combined with a significant decrease in public expenditure impacting the level of public services, health-care systems and the field of statistics. The cost is indeed significant in the field of statistics also, as the demand for and importance of statistics is ever increasing.

Let us first turn to the new policy solutions for safeguarding financial stability as to ensure that a similar financial crisis will not occur in future.

The new financial architecture – on the road to a banking union with common rules

The financial crisis has many mutually reinforcing causes. Promoting financial stability requires an in-depth understanding of the functioning of the financial system, consisting of (i) markets, (ii) financial intermediaries and (iii) infrastructures, and of how the financial system interacts with the real economy.



In open market economies where financial intermediaries can operate across various jurisdictions and geographical areas and where financial flows easily cross borders, safeguarding financial stability requires an international approach followed by implementation at the national level. This requires policy-makers to start to think internationally and to act nationally. Well-known challenges derive

from the incentive structure within the financial system; the associated host of asymmetric information and moral hazard problems was not addressed sufficiently at international level, and neither was the issue of ensuring a level playing field. It is now well recognised by policy authorities at all levels that safeguarding financial stability is a necessary precondition for maintaining macroeconomic and monetary stability and thus for economic growth and welfare.

Several international fora under the patronage of the Bank for International Settlements (BIS), the Financial Stability Board (FSB), the International Monetary Fund (IMF) and G20 have now developed common approaches, guidelines and recommendations for coordinating financial stability initiatives across various economic territories and countries.

At the European⁴ level the far-reaching responses to the need for retaining financial stability are without historical precedence, comprising the creation of a new supervisory architecture for financial supervision, based on the recommendations of the “De Larosière report”⁵ and the Presidents of the European Council, European Commission, European Central Bank and Eurogroup.⁶ This is supplemented by a new roadmap for a European banking union, building an integrated financial framework to safeguard financial stability and to minimise the cost of bank failures. The roadmap for the banking union includes the following three building blocks.

- The establishment of a single supervisory mechanism (SSM) for which the European Central Bank (ECB) will be responsible, and the implementation of a single rulebook for financial services⁷.
- The establishment of a single resolution mechanism, and the possibility of direct recapitalisation of banks via European funds and the European Stability Mechanism as a fiscal backstop.

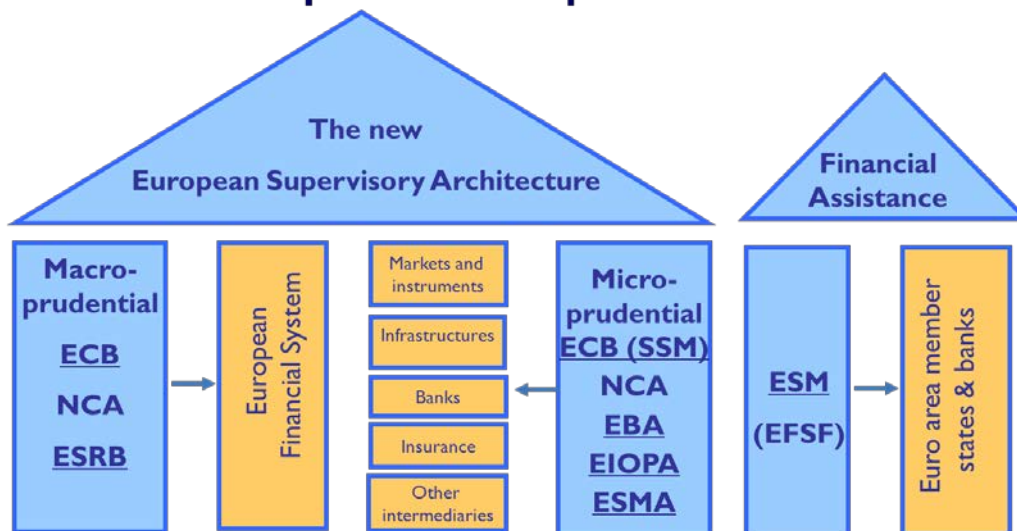
⁴ The term Europe in this paper refers to the 28 Member States of the European Union as of 1st January 2014.

⁵ The report of the High-Level Group on Financial Supervision in the EU, chaired by Jacques de Larosière, published on 25 February 2009.

⁶ Van Rompuy, Herman, *Towards a genuine Economic and Monetary Union*, European Council, Brussels, 5 December 2012. Final report by the President of the European Council in close collaboration with the Presidents of the European Commission, European Central Bank and Eurogroup.

- The harmonising of Member States' deposit guarantee schemes and the establishment of a common European system of deposit protection.

The new European landscape – New ECB tasks



Source: Detken, C. and Nyman-Andersen, P. (2013), "The new financial stability framework in Europe", in Fouque, J-P. and Langsam, J.A. (eds.), Handbook on systemic risk, Cambridge University Press, Chapter 26. New European agencies or new tasks for existing institutions are underlined.

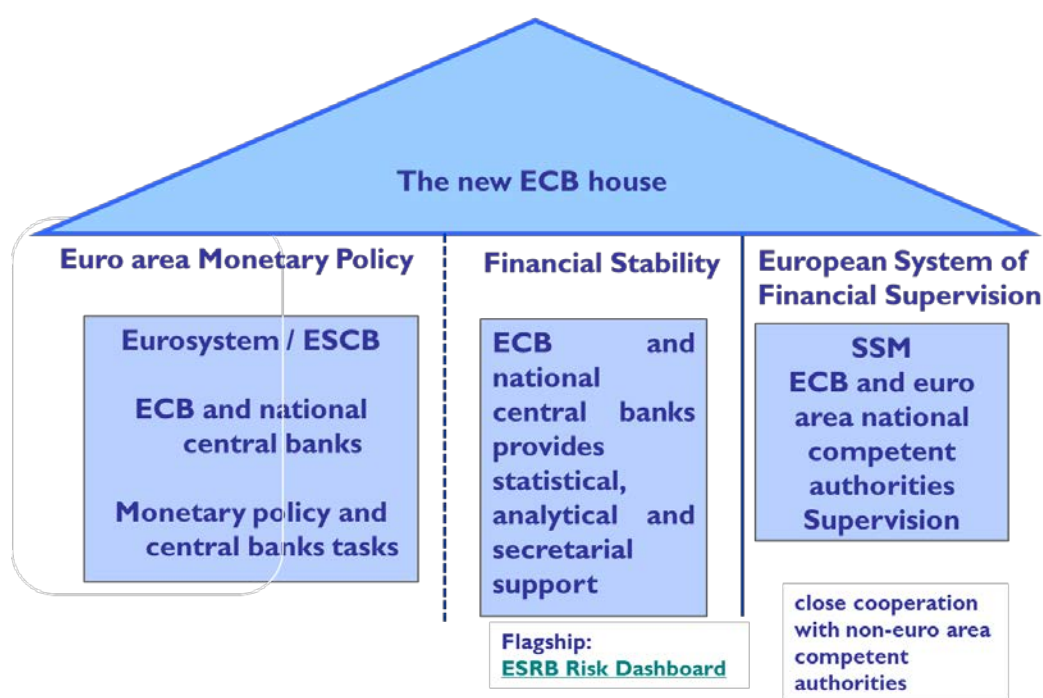
Europe is on the right path towards a banking union, building upon a macro-prudential and a micro-prudential pillar and a financial assistance scheme. The macro-prudential pillar consists of the ECB and the new European Systemic Risk Board (ESRB), the secretariat, statistics and analytical support of which is ensured by the ECB. The new micro-prudential pillar consists of the ECB – with the SSM and the national competent authorities (NCAs), and three new European supervisory authorities: the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA).

The financial assistance scheme consists of the new European Stability Mechanism (ESM), which is the permanent financial assistance fund in the euro area with the purpose of providing financial assistance to euro area Member States in difficulty. The ESM has EUR 80 billion of paid-in capital and EUR 620 billion of callable capital, against which it issues bonds and lends the proceeds to euro area Member States. The transfer of supervisory powers to the supranational level,

⁷ Council Regulation (EU) No 1024/2013 of 15 October 2013 (the "SSM Regulation").

together with the ESM, is necessary as part of the SSM, in support of the Economic and Monetary Union (EMU).

The new European solutions for safeguarding the financial system are far-reaching and significant progress has been made, with further consolidation to come on the road to a banking union. The European Central Bank’s mandate has been extended.



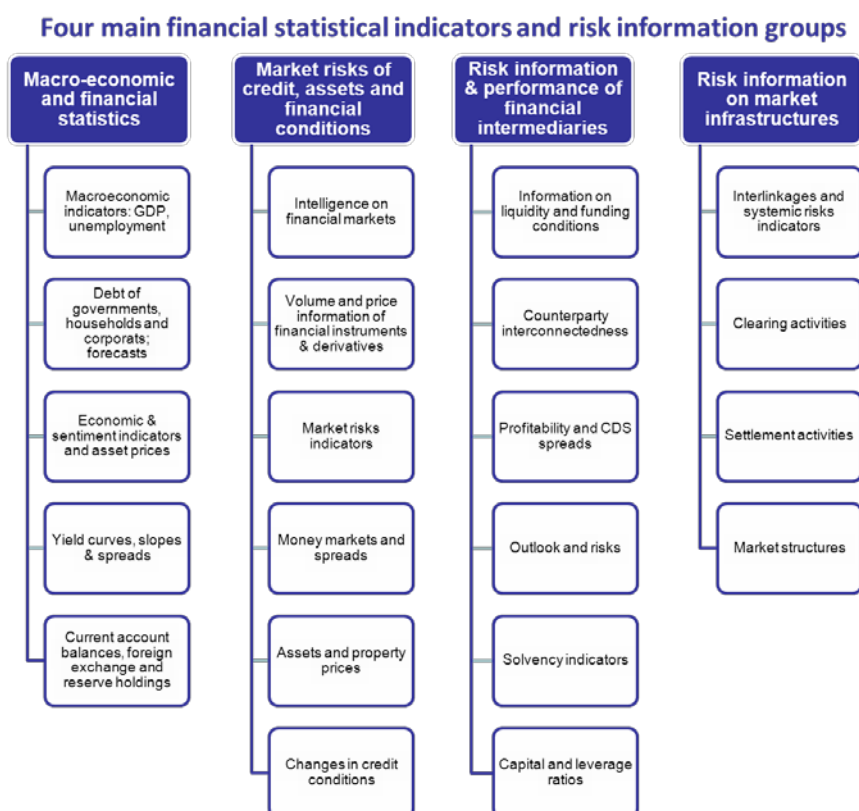
These solutions, however, require an all-inclusive statistics approach as part of supplying meaningful and comparable statistics that serve the new financial architecture as part of the “new ECB house”.

The increasing role of statistics in national and international policy-making

The provision of statistics and financial data is essential for supporting the analytical tools and models employed in the analysis and assessment of the financial system. The ECB’s Directorate General Statistics predominantly collects data and statistics for euro area monetary policy purposes and has been mandated to collect new and enhanced statistics to fully support the EU-wide macro-prudential and micro-prudential analysis frameworks. A particular challenge will

be to expand the coverage from the euro area (18 Member States⁸) to all 28 Member States of the EU.

There are four main statistical indicator groups identified for the purposes of macro-prudential analysis: (i) macroeconomic and financial statistics; (ii) market risks relating to credit, assets and financial conditions; (iii) risk information on and performance of financial intermediaries; and (iv) risk information on market infrastructures.



Source: Nymand-Andersen, P., Antoniou, N., Burkart, O. and Kure, J. (2013), "Financial data and risk information needed for the European System of Financial Supervision", in Brose, M.S., Flood, M.D. and Krishna, D. (eds.), Handbook of Financial Data and Risk Information., Cambridge University Press, Chapter x.

It is apparent that the financial crises pose its own challenges for statistics and that statistics have increased in importance as part of the new financial architecture.

The focus has shifted towards more timely credit statistics for monetary and economic analysis. In fragmented markets, monitoring the transmission channel within countries has become of the utmost importance. The trend is a policy shift from looking at total aggregates to focusing in addition on more detailed and disaggregated statistics at national and regional level. Users require an in-depth

⁸ As of 1 January 2014.

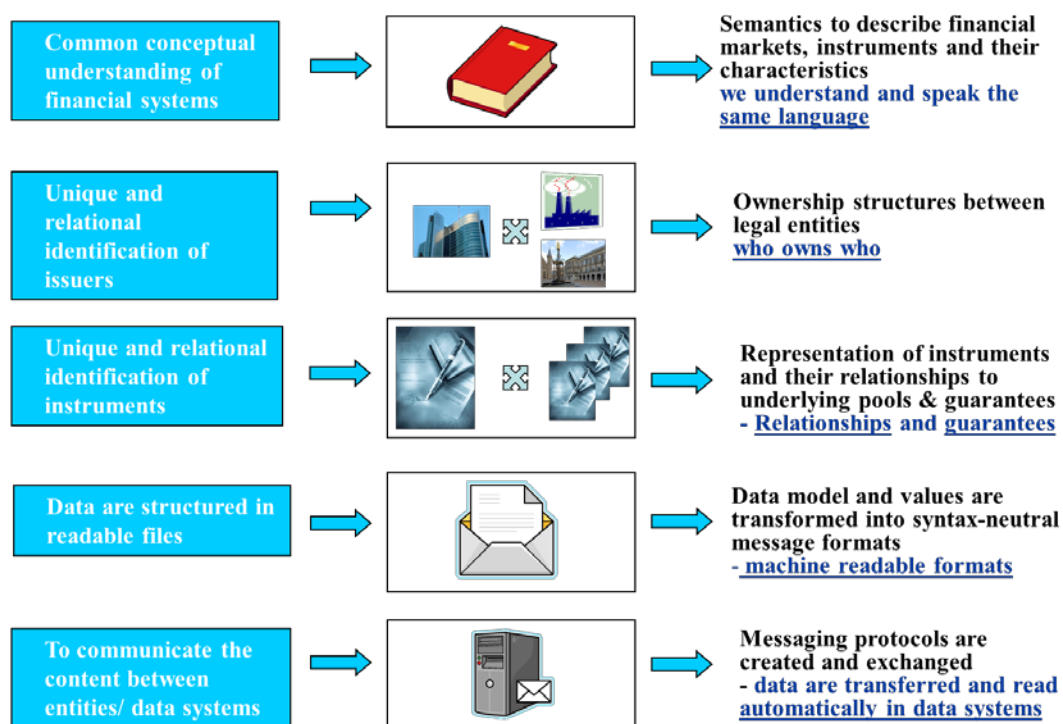
understanding of how the national financial system interacts with the real economy and the ability to compare national financial structures across countries, economic regions and beyond. For example, users require timely statistics on country and regional loan developments, with more detailed information on sectors, size on firms and industry activity of counterparties, and the ability to analyse banks' (monetary financial institutions') interest rate statistics on loans and deposits per size and maturity class and the financing needs/barriers of, in particular, small and medium sized corporates.

A similar trend is foreseen for making use of micro-level data and the need for granular statistics. This means a shift from the traditional collection of aggregated sector-level statistics to institution-specific and individual-level data. *A risk orientation concept replaces the macroeconomic perspective.* The provision of micro-level information is significantly more demanding in terms of ensuring the quality and accuracy of the statistics than the provision of aggregated statistics. The focus will be on cross-institutional comparisons and on linking different information sources for one institution to one overall risk assessment. These are major changes. At the same time, there are many potential synergies between the current statistical and new statistics methods, collection processes and supervisory data. Several central banks are already performing this function today.

This challenges, however, the traditional statistical collection and production concept, and the new mission cannot be achieved without substantial political and statistical support. The challenge is at least two-fold. First, to obtain and maintain the political trust and support for sharing (*giving access to*) detailed information among national, supranational and international authorities, since – to a large extent - the pool of required statistics and data is already available within the overall system, fully respecting and preserving the strict confidentiality of individual data. The latter should however not be used as a barrier to progress, as several methods exist for preserving statistics information and today's IT capacities and IT developments are by no means a barrier to sharing nor to handling large and complex amounts of timely data. Second, substantial political and statistical support is required for the standardisation of concepts and values, which is a cumbersome process of obtaining agreements, and for ensuring timely implementation. For instance, five building blocks of standardisation are necessary

for collecting and sharing relevant statistics and risk data among national and international authorities:

- (i) a common conceptual understanding of financial instruments and their specific data characteristics;
- (ii) a unique identification of issuers such as financial institutions;
- (iii) the identification of instruments and their structures;
- (iv) a standardised data model and data structure;
- (v) a mechanism to transmit and exchange statistics and data.



Source: Nyman-Andersen, P., Antoniou, N., Burkart, O. and Kure, J. (2013), "Financial data and risk information needed for the European System of Financial Supervision", in Brose, M.S., Flood, M.D. and Krishna, D. (eds.), Handbook of Financial Data and Risk Information, Cambridge University Press, Chapter x.

Furthermore, to complete the snap shot picture of the financial systems, there is an increasing need for very timely ad hoc data collection to cover phenomena which are new or potentially gaining in relevance, while the standardisation work and implementation are not yet fixed. These temporary measures can take the form of direct surveys to gauge the importance of the phenomena and detect shifts in patterns. Furthermore, statisticians should not shy away from using private (unofficial) sources to fill in the missing pieces to complete the complex picture of the puzzle, as long as the source and methodologies are transparent. This could be statistics and data from institutional and commercial data vendors, private credit registers and pre-trading, trading and post-trading agents.

Conclusion - lag in statistics or slow policy actions?

The on-going financial crisis has had a significant impact on the field of national and international statistics. Statistics are part of the solution for safeguarding the financial systems and are increasing in importance. The financial crisis has revealed the need to reassess the conceptual framework of identifying and managing risk and this has a significant impact on the field of statistics as supplier of information. This paper highlights the new statistics challenge of providing the macro- and micro-level statistics required to describe the structures and dynamics of our financial systems and their impact on the real economy.

Statistics are not the cause of the financial crisis. However, it cannot be completely ruled out that certain reported statistics may have contributed to – or even amplified – the financial turmoil and adversely affected the timeliness of corrective policy responses. Statistics and their quality can therefore not be taken for granted and continuous efforts are needed to safeguard statistics from the pressure of elections and political cycles, which seems to increase during periods of political distress. There are indications that independently produced statistics are the best pre-condition for the provision of a factual representation of the structure and dynamics of economies and for the safeguarding of democracies.

Yet, there are significant statistical challenges in supporting the newly established institutions with their new conceptual frameworks for identifying and mitigating risks within the financial system. At least in Europe the response has been comprehensive and wide-ranging as part of safeguarding the European financial system and preventing a repetition of the financial crisis.

- A new micro-economic financial stability architecture has been established by the creation of three new European-level supervisory authorities (EBA, EIOPA and ESMA) for (i) banking sector, (ii) the insurance and pension sector, and (iii) financial markets and instruments. Furthermore the ECB has taken on new supervisory tasks in the context of the single supervisory mechanism (SSM).
- The European Systemic Risk Board (ESRB) was established with the responsibility for macro-prudential oversight of the European financial

system together with the ECB, as part of contributing to the prevention and mitigation of systemic risks within the financial system.

- A new European Stability Mechanism (ESM) forms a permanent and significant financial assistance package where temporary financial assistance can be directed to assist euro area Member States.

The new single supervisory mechanism is moving Europe forward on the road to a banking union, ensuring one single prudential supervision policy and rulebook for all financial services operating in Europe. The next steps are to establish a common resolution authority and a common Europe-wide deposit guarantee scheme as part of protecting consumers.

The statistics challenges lay in providing and supporting prudent economic and financial analyses as part of predicting the magnitude and contagion effects of financial risks and supporting timely corrective policy actions. This paper highlights how the financial crisis has had a significant impact on the new function of statistics, in particular by creating the need to

- (i) extend the scope of statistics;
- (ii) provide further granularity of existing statistics;
- (iii) standardise concepts and values;
- (iv) interlink and share statistics and data among authorities and economies;
- (v) use ad hoc surveys;
- (vi) use supplementary private (unofficial) sources; and
- (vii) release statistics within a shorter time frame.

The Directorate General Statistics of the European Central Bank is fully committed to providing the statistical support for the new European structural set-up as part of contributing to safeguarding the financial system, both at the macroeconomic and microeconomic level, and is committed to supplying the statistics and data required for a prudent overall functioning of the single supervisory mechanism. New roads are being constructed to safeguard the European financial system. History will not repeat itself in this field.

Bibliography

Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (the “SSM Regulation”) (OJ L 287, 29.10.2013, p. 63).

Council Regulation (EU) No 1096/2010 of 17 November 2010 conferring specific tasks upon the European Central Bank concerning the functioning of the European Systemic Risk Board (OJ L 331, 15.12.2010, p. 162).

Detken, C. and Nymand-Andersen, P. (2013), “The new financial stability framework in Europe”, in Fouque, J-P. and Langsam, J.A. (eds.), *Handbook on systemic risk*, Cambridge University Press, Chapter 26.

Nymand-Andersen, P., Antoniou, N., Burkart, O. and Kure, J. (2013), “Financial data and risk information needed for the European System of Financial Supervision”, in Brose, M.S., Flood, M.D. and Krishna, D. (eds.), *Handbook of Financial Data and Risk Information*, Cambridge University Press, Chapter x.

Proposal for a directive of the European Parliament and of the Council on Deposit Guarantee Schemes (COM/2010 368 final) and Directive 2009/14/EC of the European Parliament and of the Council of 11 March 2009 amending Directive 94/19/EC on deposit-guarantee schemes as regards the coverage level and the payout delay (OJ L 68, 13.3.2009, p. 3).

Proposal for a Regulation of the European Parliament and of the Council establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Bank Resolution Fund and amending Regulation (EU) No 1093/2010 of the European Parliament and of the Council (COM/2013 520 final - 2013/0253 (COD)).

Regulation (EU) No 1022/2013 of the European Parliament and of the Council of 22 October 2013 amending Regulation (EU) No 1093/2010 establishing a European Supervisory Authority (European Banking Authority) as regards the conferral of specific tasks on the European Central Bank pursuant to Council Regulation (EU) No 1024/2013 (OJ L 287, 29.10.2013, p. 5).

Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board (OJ L 331, 15.12.2010, p. 1).

Regulation (EU) No 1094/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Insurance and Occupational Pensions Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/79/EC (OJ L 331, 15.12.2010, p. 48).

Schubert, A. and Nymand-Andersen, P. (2013), “The role of statistics in generating trust within societies – necessary preconditions”, *Journal of the International Association for Official Statistics*, IOS Press, forthcoming.

Treaty establishing the European Stability Mechanism between the Kingdom of Belgium, the Federal Republic of Germany, the Republic of Estonia, Ireland, the Hellenic Republic, the Kingdom of Spain, the French Republic, the Italian Republic, the Republic of Cyprus, the Grand Duchy of Luxembourg, Malta, the Kingdom of Netherlands, the Republic of Austria, the Portuguese Republic, the Republic of Slovenia, the Slovak Republic and the Republic of Finland.