Towards the banking union:
Opportunities and challenges for statistics.

Statistics for multipurpose usage: synergies between the central banking and the supervisory functions

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As we all know, central banking pursues two main objectives: price stability and financial stability. These two objectives are complementary: for instance, financial stability is essential to ensure a smooth transmission of monetary policy that will help ensure price stability. They are also macro objectives. On the other hand, supervision focuses on individual institutions. However, the crisis has shown that macro financial imbalances created by excessive credit activity could have very damaging backward effects on banks. More generally, the crisis unveiled an unsuspected magnitude of interdependency between individual banking strategies and financial stability as well as between financial stability and monetary policy transmission. Monitoring these different interdependencies at the operational level is crucial for efficiency reasons and for avoiding possible conflicts of primary objectives. In a holistic perspective however, these domains can hardly be considered as disconnected. This is probably one of the reasons why in the three main monetary jurisdictions, the euro-zone, Japan and the United States, all these tasks are performed by the same body, namely the Central Bank. It can also be observed that in the United Kingdom banking supervision has been relocated within the Central Bank.

Indeed, the crisis has shown that an in-depth and detailed knowledge of the situation of the financial system is essential to assess on-going economic and financial developments. It should also be an important input to anticipate possible future crises.

What does this intertwined framework imply in terms of data? I would outline three broad consequences.

The first and I would say basic one is that the vast majority of data are multi purpose: the same piece of information can contribute to cross-check a prudential ratio, to detect the build-

up of macro financial imbalances, to assess the impact of monetary measures, or to establish monetary aggregates or national accounts.

From this can be derived a second statement: micro data are crucial. Indeed, micro-data not only allow for a diversity of uses but also are in most cases the only technical way to respond to the never ending new, unforeseen informational needs. Conversely, adopting a piecemeal approach, in which each time a new research or analysis would be conducted, a new reporting scheme would have to be put in place, would be both burdensome and cost-ineffective for the central banks as for respondents.

Finally, the third consequence is on the information collection and dissemination: specialization between business lines lies more than before on data usage than on data collection. This in turn implies data sharing.

Thus the key words for an up-to-date common approach of central banking and supervisory functions are in-depth micro data analysis and data sharing. This obviously puts the statistics departments at the centre of the informational system and implies that they should provide both central bankers and supervisors with timely and reliable micro or macro data.

I am today very pleased to share with you my views on the challenges to comply with these objectives. Let me elaborate somewhat upon some of them.

I will first remind that central bankers and supervisors have common needs that can be satisfied by statisticians. I will then recall that we are living in a more and more data rich environment and I will try to pencil some possible consequences that could be derived from this evolution. I will eventually propose a few thoughts on opportunities but also on challenges for ensuring an efficient data collection and sharing.

1. **Central banking and supervision: a common need for quality and high frequency micro data**

Here, I would like to develop two main ideas: the needs of supervisors and those of other users tend nowadays to converge; more specifically, macro-prudential surveillance has to be supported by recourse to micro data, including those coming from the supervisory area. I will

then give three examples: ANACREDIT (i.e an European credit register), MMSR (money market statistical reporting) and the Data Gaps Initiative (DGI).

1.1. The needs of supervisors converge with those of other users of statistics

Spurred by demanding users within Central Banks, statisticians have since long been under pressure to produce constantly fresher and timelier data to allow a better informed conduct of central bank policies. In the past, some supervisors -certainly not all of them- were less demanding. However, progressively, and especially over the financial crisis, the needs of all supervisors have become more similar to those of other users. This change is related inter alia to the need for supervisors to assess more directly and concretely, on the basis in particular of samples of loans dossiers, the quality of assets, and to develop stress-tests. The creation of the SSM will clearly play a major role in this evolution. At the same time, in order to give well-grounded micro-foundations to their models, economists are more and more in need of individual data. This double movement in users' requirements has given statisticians powerful incentives to develop new tools.

1.2. - Micro data have to support macro-prudential surveillance

There is in my view a lot to gain for macro prudential surveillance in using data at very granular level, collected on a high frequency basis and with a high level of quality requirement. This would in particular facilitate the early detection of common exposures to certain economic sectors -for instance, the construction and real estate industries-, or agents – such as over-indebted households or countries with fragile fundamentals. Data collected initially for supervisory needs can be very helpful in reaching those aims as they often contain precious information on, by example, sectors, currencies of denomination, maturities of the transactions, etc.

1.3 -Three concrete examples: Anacredit, MMSR, DG

Two projects of the STC seem to me cases in point in those regards.

In the first one, ANACREDIT, the idea is to set up a common data base on loans to all categories of borrowers. All the necessary attributes will be known. Obviously, when the

project is going live, the level and quality of information delivered to the Governing Council and to the Supervisory Board will be much enhanced. For research, monetary policy, financial stability, banking supervision, this data hub will be most helpful.

I also find excellent the Money Market Statistical Reporting (MMSR) initiative, that has been originated by the Market Operations Committee and that the STC is taking care of at the operational level. My understanding is that this project would consist in collecting data on interbank market transactions as well as on related derivative products, providing a global and detailed picture of the functioning of the money market. Indeed, in addition to a better knowledge of institutions, detailed intelligence of financial markets is essential. Such information is clearly useful for monitoring the effectiveness of monetary policy, in particular the smooth transmission of the monetary rates. It is obviously also helpful when reflecting on new possible monetary measures as for assessing their effectiveness if and when decided. It can even deliver precious intelligence on market players' behaviour to a wider range of users, including banking supervisors and financial stability officers.

At the global level, and this will be my third example, the Data Gaps Initiative requested by the G20 concurs to similar objectives. By collecting information on the two counterparts to each inter banking transaction, the DGI hub that the BIS has set up is offering detailed knowledge to a variety of users.

2. **We are living in a more and more data rich environment. What does it imply for central bankers and supervisors?**

Here, I will address the three following issues:
- data are developing at an exponential rate and offer new possibilities to central bankers and supervisors;
- still, we could be facing two cumulative risks: not reaching the best possible balance between reliability and timelines; being snowed under with data while being more accountable for their use;
- a possible way forward might be to develop and leverage on statistical techniques and analytical tools.

2.1 New opportunity: an incredible expansion of accessible data provided also by the private sector

Data collection is no more the privilege of public administrations and authorities as many private companies are nowadays data providers, and this is not only true for market data. Moreover, smart electronic devices are allowing for vast data collection for commercial purposes that may also be of interest for central bankers. Authorities themselves are collecting more and more data: I have quoted the DGI as a case in point, but market authorities are following on the same track, as recently epitomised by the new initiative from the European Commission to collect detailed information on each repo transaction.

It is beyond doubt that central bankers and to a certain extent supervisors can benefit from this evolution. I have in mind the example of roaming data that could be provided by telecom companies: it could help measuring tourism expenditure, hence establishing the balances of payments that in most cases the Central Banks of the European Union are in charge of.

2.2 New challenge: How to deal with this increasing set of data

Still, two challenges have to be met. First, the data that Central banks use and disseminate must remain reliable. Hence a trade-off between robustness and timeliness has to be dealt with. Second, and this is sometimes less perceived, the marginal benefit of collecting extra data might decrease to a point where, in the absence of proper management, it could be not beneficial but instead detrimental to the quality of central banking and supervision. Let me focus one moment on this aspect.

Collecting more data makes us more accountable to the general public, as we will be no more in the position to assert that 'we did not know'.

At the same time, the larger the volume of information, the more difficult will it be to cross check them, to analyse them and to extract from these data mines the precious early warning signals that will be clear and timely enough for taking the right decisions on time.

These are no theoretical threats. Already, some mounting difficulties in exploiting in a timely and efficient manner some ultra-rich datasets are appearing.

I would see therefore some merits in reflecting on possible ways for alleviating those risks. Here I would like to turn towards the experts in the field, namely the statisticians. In my view, the statistical departments in central banks can play a crucial role in developing for the benefit of all users, including of course the supervisors, a reflection on statistical techniques and tools for facing these new challenges. For instance, not shying away from using samples when comprehensive data collection is not possible nor even necessary. Another way-forward could be to systematically carry out cost-benefit analysis, without hesitating to ask for clear priority lists approved at the appropriate senior level. Asking relevant data can be much more useful than requesting in a never ending way new ones and being afterwards embarrassed on the ways to manage them in an effective and useful way.

3. Data sharing.

This gives me a natural link with the third part of my presentation, which deals about data sharing.

I mentioned at the beginning of this presentation why in my view data sharing between supervisors and central bankers is absolutely necessary. Aurel Schubert, whom all of you know well and who therefore does not need to be presented as the Statistics Director General at the ECB, has written an excellent report on this theme for the Irving Fisher Committee, the also well-known Committee of worldwide economists and statisticians working under the auspices of the BIS. This report will be presented to the BIS All Governors meeting early next year.

I will rather emphasize some points on the 'how':

First, experience is that to achieve this goal, while a bottom-up approach is needed, a top-down approach is crucial. In plain words, the direction has to come from the most senior level inside Central Banks and Supervisory Authorities. By nature, central bankers as supervisors are reluctant to share data, even when the legal framework allows for it. As we are speaking about statistics, I will refer to a global survey that has been made by the Irving Fisher Committee on the reasons of the non data sharing. The outcome is that the percentage of difficulties in communication is not very significantly different between countries where the

legal setup is favourable or unfavourable. Therefore, the first thing to do in my view is for the decision-making persons to give a clear signal in favour of data sharing.

Afterwards, one has to address practical issues and to solve impediments, legal and technical. However, I would like to highlight first the build-up of some concrete opportunities for developing data sharing.

3.1 Technical avenues for implementing data sharing

Of course, what may come immediately to mind is to fully align the reporting framework for supervisors and central bankers. It has been done in some countries, for instance Canada and Italy if I am not mistaken, and it is undoubtedly a very legitimate goal. But it is also a very ambitious challenge for all those who use different datasets and it would probably require years to be changed.

Harmonizing formats between for instance international standards for national accounts and balances of payments on the one hand, individual supervisory data on the other hand, is also an interesting idea but it has to be proven that it can be performed without taking much time and implying significant costs for credit institutions as for Central banks.

Other options can be explored. IT tools developed for Big Data can in particular allow for data transmission without requiring any common formats or even definitions. This represents in our view a major opportunity. At the Banque de France, in cooperation with the Prudential Supervision and Resolution Authority we are currently using the Big Data IT technology for setting up a common data base fed by, and usable by, all data providers including supervisors, while of course strictly respecting the confidentiality rules set by the European Union law. This system, called 'Pooling and Sharing the Statistical Series' has I believe been presented to the members of the STC in its SSM composition.

A unique data entry point can also be very helpful. An example among probably many others is the One Gate portal that the National Bank of Belgium and the Banque de France have developed in common, and which is much appreciated by all reporting institutions, i.e corporates, insurance companies and financial institutions.

3.2 Another promising tool for data sharing: the Legal Entity Identifier (LEI)

Harmonisation between the different codes that support accounting and statistical information can also contribute to simplifying data collection and implementing data sharing in an efficient manner. Indeed, the first pillar for a comprehensive data hub, in particular for solo basis data, is to have a common identifier for economic entities. The idea is to have only one code for one unit springs to mind in a world where finance is globalized. Nevertheless, the implementation of such a system requires a solid willpower. The G20 met the challenge and launched the LEI initiative, with the view to building a Global LEI System for corporates and financial institutions engaged in financial transactions. At the European level, the Committee on monetary, financial and balance of payment statistics (CMFB), that convenes representatives of Eurostat, the ECB, National Statistical Institutes and National Central Banks, is promoting the LEI and sharing good practices in this area.

In the first stage, LEIs will provide unambiguous identification of counterparties according to a globally agreed standard, based on best practices in terms of identification.

The first layer of the system is already operational and is allowing the use of internationally recognized codes in mandatory reporting on derivatives transactions implemented in the US (Dodd-Franck Act) or in Europe (EMIR Regulation), while the second layer remains to be developed. The latter should build on the existing LEIs to create a network of relationships between entities. It will be an important contribution to financial stability at the global level.

3.3 Challenges to be addressed

Opportunities are numerous and very promising. There are however challenges to be addressed, as is usually the case when a new paradigm is being developed. The first challenge is to fully exploit the possibilities offered by the legal framework while of course strictly respecting it. Here I am referring more specifically to Article 58 of the Directive (2013/36) of 26 June 2013 usually called 'CRD 4' regarding confidentiality. This article reads in particular: '*Nothing [in this directive] (...) shall prevent a competent authority [i.e a supervisory authority] from transmitting information to [ESCB Central Banks] ...when the information is relevant for the purposes of their statutory tasks, including the conduct of monetary policy and related liquidity provision, oversight of payments, clearing and settlement systems and*

the safeguarding of stability of the financial system'. Conversely, central Banks have to transmit to the supervisory bodies all the data that are necessary to them.

The need-to-know principle between different functions and responsibilities is therefore crucial for organizing data sharing both ways, from central bankers to supervisors but also from supervisors to central bankers. This implies precisely and finely defined rules, including a dedicated governance scheme to monitor their implementation. Those rules should in my view aim at taking into account both the necessity to share intelligence and to work in synergy rather than in silos on the one hand, the obligation to fully respect legal constraints linked to the allocation of responsibilities and strong security standards when managing access rights on a daily basis on the other hand.

Conclusion

My presentation has examined how the crisis has spurred statisticians to enhance their provision of information. This should progressively lead to the building up of an integrated information system in which all the data, micro or macro, rough or processed, comprehensive or sample-based, are put together and made available to central bankers and supervisors, on the basis of strictly defined access rights. I also emphasized the necessity in my view to develop synergies, to avoid silo approaches, between central bankers as between central bankers and supervisors. In a more and more data rich environment, the statistical departments have a pivotal role to play in organizing in the most efficient way possible and suited to the needs and responsibilities of the different users, the collection, checking and disclosing of micro as aggregated data to all those who 'need to know'.

Challenges are numerous and demanding but meeting them is absolutely crucial for the smooth implementation of monetary policy, the effective conduct of banking supervision and the stability of the financial system. We have hopefully a few years ahead of us for implementing data sharing within Central Banks as between Central Banks and Supervisory Authorities, before the cyclicality in systemic problems recalls itself to our awareness. While the progress made since the start of the crisis and the G20 initiative are impressive, much more has still to be done in this area.

Many thanks for your attention.