Irving Fisher Committee Workshop –Programme
Warsaw, 14–15 December 2015

Combining micro and macro statistical data for financial stability analysis. Experiences, opportunities and challenges.

Financial stability requires continuous monitoring of the processes occurring at the macro and micro level of the financial system. These levels interact with each other, highlighting the need for analysing their bidirectional relationships. This dual nature of financial stability is reflected in the recent financial regulations introduced at an international and national level. It challenges statistical systems that were addressing in a separate way the micro perspective of particular financial institutions and the macro point of view of regulators or central banks.

The conference is aimed at presenting theories and practical applications of statistical data and frameworks, trying to combine both the micro and macro aspect of financial stability analyses. Special attention will be paid to integrated solutions designed to analyse the interdependencies between these two dimensions of financial systems' stability.

Monday, 14 December 2015

Opening remarks

Marek Belka, President, Narodowy Bank Polski

Turalay Kenç, Deputy Governor, Central Bank of the Republic of Turkey, and Chairman of the Irving Fisher Committee on Central Bank Statistics (speech)

Session 1

Micro and macro views on financial stability: different perspectives of the risks affecting financial systems

The recent financial crisis has highlighted the substantial shortcomings of the traditional approach in supervision and financial stability analysis which was mainly based on micro level investigation. It was also a catalyst for developing new analytical and supervision frameworks that take better into account the processes affecting the entire financial system. State-of-the-art solutions are now attempting to integrate these micro and macro perspectives so as to tackle the risks faced by individual institutions and their whole financial networks. This introductory session will review some key features of the Great Financial crisis of 2007-09, especially as regards the banking industry. It will also provide a general outlook on how to mobilise micro and macro data to enhance our understanding of the financial system soundness, in particular by constructing relevant macro-prudential indicators.

Chair: Gülbin Sahinbeyoglu, Central Bank of the Republic of Turkey

Discussant: Martin Arrowsmith, Bank of England

4 Presentations:

- *Marcin Jerzy Michalski*, Michael Bowe, Olga Kolokolova, The University of Manchester / Manchester Business School,
  "Systemic Risk, Interbank Market Contagion, and the Lender of Last Resort Function"
  (paper, presentation)

- *Małgorzata Pawłowska*, Narodowy Bank Polski,
  "The Impact of Market Structure and the Business Cycle on Bank's Profitability: Does the SCP Paradigm Work? A Case Study in Poland prior to and during the financial crisis"
  (paper, presentation)

- *Kaushik Jayaram*, Bank for International Settlements,
  "Macroprudential policy frameworks, instruments and indicators: a review"
  (paper, presentation)

- *Stefano Borgioli*, Gaia Barbic, Jan Klacso, European Central Bank,
  "Aggregate macro-prudential Statistics from micro supervisory data - conceptual and operational issues"
  (paper, presentation)

Session 2

New statistical frameworks for financial stability analysis: experiences and challenges for micro and macro data integration

Reengineering of statistical systems that integrate micro and macro level information has been the new paradigm for the regulation and analysis of financial systems. But risk analysis has become a challenging task, given its various political, institutional, organizational and technical dimensions. The experience gained has been most valuable and it is also crucial for the further development of global financial stability, requiring that this experience is adequately shared. This session will underscore the importance of mobilising micro data and integrating them into a macro framework.

Chair: Robert Kirchner, Deutsche Bundesbank

Discussant: Bruno Tissot, Bank for International Settlements, IFC Secretariat (presentation)

5 Presentations:

- *Ilja Kristian Kavonius*, Juha Honkkila, European Central Bank,
  "Deriving Household Indebtedness Indicators by Linking Micro and Macro Balance Sheet Data"
  (paper, presentation)

- *Jean Cassidy*, Central Bank of Ireland,
  "Understanding Long-Term Mortgage Arrears in Ireland: Insights from Macro and Micro Data"
  (paper, presentation)

- *Janusz Jabłonowski*, Arkadiusz Florczak, Michał Kupc, Narodowy Bank Polski,
  "In pursuit for patterns of economic behaviours using cluster analysis and correspondence analysis"
  (paper, presentation)

Author in italics: presenter

- *Graziella Morandi*, Piotr Bojaruniec, European Central Bank,
  "Setting-up the transmission of individual MFI statistics on balance sheet items and interest rates across the Eurosystem"
  ([paper](#), [presentation](#))

- *Piotr Bańbuła*, Arkadiusz Kotuła, Joanna Gabriela Przeworska, Paweł Strzelecki, Narodowy Bank Polski,
  Which households are really financially distressed: How MICRo-data could inform the MACRO-prudential policy
  ([paper](#), [presentation](#))

Session 3

Closing data gaps for financial stability assessment: the importance of micro level data sources and harmonization

The development of the new statistical frameworks for financial stability assessment has been limited by the availability of reliable and timely statistical data. On- and off-balance sheet positions were not described and reported with sufficient granularity. Besides that, the limited level of statistical data harmonization hindered the analysis of the connections among financial institutions, one of the most important risk transmission channels across sectors and countries. The introduction of new accounting, regulatory and statistical standards, combined with an extended coverage of financial entities' granular data, have bridged this information gap to a large extent. However, a lot of the work is still ahead, posing significant challenges to national and international institutions. This session will underscore the richness of micro, granular data sources that can be mobilised and used for financial stability analysis.

Chair: Pietro Franchini, Financial Stability Board (FSB)

Discussant: Jacek Kocerka, Narodowy Bank Polski

4 Presentations:
- *Filipa Lima*, Inês Drumond, Bank of Portugal,
  "How to keep statistics' customers happy? Use micro-databases!"
  ([paper](#), [presentation](#))

- *Stefan Bender*, Patricia Staab, Deutsche Bundesbank,
  "The Bundesbank's Research Data and Service Center (RDSC): Gateway to Treasures of Micro Data on the German Financial System"
  ([paper](#), [presentation](#))

- *Asier Cornejo Pérez*, Javier Huerga, European Central Bank,
  "The Centralised Securities Database (CSDB) - Standardised micro data for financial stability purposes"
  ([paper](#), [presentation](#))

- *Martijn Adriaan Boermans*, Netherlands Bank,
  "Investor heterogeneity and international portfolio holdings: Estimating a gravity model with security-by-security data"
  ([paper](#), [presentation](#))

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Session 4

Entity-level credit information transformed into knowledge about macro stability threats

This part of the workshop will take a closer look at micro level credit information. In particular, many countries have set up central credit registers under the auspices of their central banks or financial supervision offices and used them mainly for micro level supervision, especially for credit and counterparty risk analysis. Credit registers can also be used as a source of more "macro" information about the domestic and cross-border connections of financial institutions, supporting the analysis of credit and counterparty risk contagion across sectors and jurisdictions. Other micro information can also be used in this context, including loan surveys and CDS data.

Chair: Aurel Schubert, European Central Bank

Discussant: Maciej Piechocki, BearingPoint (presentation, paper)

5 Presentations:

- *João Cadete de Matos*, Bank of Portugal,
  "The Portuguese Central Credit Register: a powerful multi-purpose tool, relevant for many central bank's functions"
  (paper, presentation)

- *Natalia Nehrebecka*, Narodowy Bank Polski,
  "Approach to the assessment of credit risk for non-financial corporations. Poland Evidence"
  (paper, presentation)

- *Kitty Moloney*, Oisin Kenny, Neill Killeen, Central Bank of Ireland,
  "Network Analysis using EMIR credit default swap data: Micro-level evidence from Irish domiciled special purpose vehicles (SPVs)"
  (paper, presentation)

- *Zuzanna Wośko*, Narodowy Bank Polski,
  "Determinants of credit in Polish banking sector before and after the GFC according to information from NBP Senior Loan Officer Survey. Does supply or demand matter?"
  (paper, presentation)

- *Naoto Osawa*, Bank of Japan,
  "Fluctuations of Cross-Border Portfolio Investment Flows Caused by Japan's Mutual Funds: Fund-level Micro Data Analysis"
  (paper, presentation)

Tuesday, 15 December 2015

Session 5

The experience of emerging markets' statistical institutions in combining micro and macro level data: different approaches, a common goal

Although the initial wave of the last financial crisis mainly hit advanced economies, tensions also affected emerging economies. This showed that even the safest financial institutions operating in emerging markets could not be insulated from the fragilities of their counterparts in developed economies. The emerging market economies' regulators, central banks and statistical offices needed to rapidly adjust their statistical systems to this situation. A case in point was the building up of micro and macro data integrated statistical frameworks to address these challenges.

Author in italics: presenter

Chair: Masahiro Higo, Bank of Japan (presentation)

Discussant: Laura Vajanne, Bank of Finland (presentation)

5 Presentations:

- *Diego Avanzini*, Juan Francisco Martínez, Víctor Pérez, Central Bank of Chile,
  "A micro-powered model of mortgage default risk for full recourse economies, with an application to the case of Chile"
  (paper, presentation)

- *Krzysztof Olszewski*, Joanna Waszczuk, Jacek Łaszek, Hanna Augustyniak, Robert Leszczyński, Narodowy Bank Polski,
  "On the dynamics of the primary housing market and the forecasting of house prices"
  (paper, presentation)

- *Cihan Yalcin*, Timur Hulagu, Central Bank of the Republic of Turkey,
  "Micro Evidence on Foreign Exchange Liabilities and the Exchange Rate Risk in Non-Financial Firms in Turkey: A Descriptive Analysis"
  (paper, presentation)

- *Andy Johan Prasetyo,* Astri Octiana Lana, Irfan Sampe, Bank of Indonesia,
  "Indonesia Financial System Statistics: A Combination of Micro and Macro Data"
  (paper, presentation)

- *Nur Fazila Mat Salleh*, Central Bank of Malaysia,
  "Malaysia's Experience in Managing Credit Registers: Integrating Micro Databases for Macro Analysis"
  (presentation)

Session 6

Intensifying cooperation between national and international institutions: from a national perspective to the global financial system

A *sine qua non* condition of global financial stability is the close cooperation between national and international institutions. In the last few years a lot of initiatives aimed at the harmonization of statistical data frameworks were started under the umbrella of the G-20 and several international institutions including the BIS. These initiatives are trying to build on the best practices developed at national levels to answer the questions faced by the larger international policy community. This session is devoted to the need for mobilising micro-type information at the global level, the recent achievements and the future challenges that remain ahead.

Chair: Eugeniusz Gatnar, Narodowy Bank Polski

Discussant: Pietro Franchini, FSB (presentation)

4 Presentations:

- *Alberto Fuertes*, Jose Maria Serena, Bank of Spain,
  "Insights from matched firm-bond level data - Market of issuance and credit quality"
  (paper, presentation)

- *Anna Maria Agresti*, European Central Bank,
  „Shadow banking: Some considerations for measurements purposes"
  (paper, presentation)

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- *Malgorzata Osiewicz*, Linda Fache-Rousova, Kirsi-Maria Kulmala, European Central Bank,
  "Reporting of derivatives transactions in Europe - Exploring the potential of EMIR micro data against the challenges of aggregation across six trade repositories"
  ([paper](#), [presentation](#))
- *Bruno Tissot*, Bank for International Settlements, IFC Secretariat
  "Closing information gaps at the global level – what micro data can bring"
  ([paper](#), [presentation](#))

Closing remarks – *The G20 statistical agenda*

Turalay Kenç, Deputy Governor, Central Bank of the Republic of Turkey, and Chairman of the Irving Fisher Committee on Central Bank Statistics ([speech](#))

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