

ECB, Eurostat, EFTA, IMF, and UNECE Workshop on Financial Accounts

9-11 October Brussels, Belgium

Report

I. Introduction

1. The Workshop on Financial accounts for EFTA Partner Countries and the countries benefitting from the European Union Instrument for Pre-Accession Assistance (IPA) was held on 9-11 October 2023 at the EFTA House in Brussels. It was jointly organised by the European Central Bank (ECB), European Free Trade Association (EFTA), Eurostat, International Monetary Fund (IMF) and United Nations Economic Commission for Europe (UNECE). Mr Gerard Eding, Chair of the UNECE Steering Group on National Accounts and Director of National Accounts at Statistics Netherlands chaired the workshop. UNECE moderated the online participants.

2. The Workshop was attended in person by 36 and online by 44 participants from the National Statistical Offices (NSOs) and Central Banks of the following countries: Albania, Armenia, Azerbaijan, Belgium, Bosnia and Herzegovina, Georgia, Indonesia, Kazakhstan, Kyrgyzstan, Mongolia, Montenegro, Netherlands, Republic of Moldova, Serbia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan, and representatives from the ECB, EFTA, Eurostat, IMF, UNECE and United Nations Mission in Kosovo (UNMIK).

II. Organisation of the workshop

3. The Workshop was part of the regional initiatives to support the implementation of the System of National Accounts 2008 (2008 SNA) and followed up on the introductory workshop on Financial Accounts, which took place on 14-16 November 2022 in Brussels. The agenda of the workshop covered the specific areas indicated by the participants during and after the 2022 workshop. Based on the feedback, substantial amount of time was allocated to practical exercises and reviewing their results. This was considered very useful as many countries are still in the planning or early implementation stage of the process to compile financial accounts.

4. The following substantive topics were discussed based on presentations and supporting documentation:

- (i) Recapitulation from the previous workshop
- (ii) Financial accounts and monetary data
- (iii) Who-to-whom matrices
- (iv) Issues related to financial corporations
- (v) Issues related to non-financial corporations and households sectors

5. All materials of the workshop are available at:
<https://unece.org/info/Statistics/events/380177>

III. Summary of the sessions and main conclusions

A. Recapitulation from the previous workshop – consistency and balancing

6. The session was based on presentations by IMF, Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan and National Statistical Committee of the Kyrgyz Republic. It also included a practical exercise. Louis Bê Duc from Eurostat acted as a discussant.

7. The presentation of Emmanuel Manolikakis (IMF) first recalled the main identities of balancing the financial accounts at the category/instrument level, transactions of financial assets and liabilities by sector and the links between non-financial and financial accounts. Further, it covered the different data challenges in consistency and balancing the accounts.

8. The objective of the practical exercise was to provide hands-on experience with compiling transactions from stock data, highlighting the structure of the accounts and the relation of the capital account with that of the financial account. The participants found the exercise quite challenging and there was a rich discussion when reviewing the results. It was agreed that similar exercises should be repeated in possible future workshop.

9. Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan presented the process of compiling financial accounts in Kazakhstan. The presentation covered the data sources and their use by economic sectors and financial instruments. Finally, it revealed practical compilation challenges e.g. inconsistency between net lending/borrowing of non-financial and financial transactions due to errors and omissions in the balance of payments, which result from discrepancies in trade statistics, including a time lag between actual delivery and accounting.

10. The presentation of the National Statistical Committee of the Kyrgyz Republic described the current work and next steps on the establishment of a system for the compilation of annual financial accounts and the entire sequence of accounts according to the 2008 SNA.

B. Financial accounts and monetary data

11. The session was based on presentation by Eurostat. Gerard Eding (Statistics Netherlands) acted as a discussant.

12. Monetary aggregates compiled by central banks are widely used to monitor liquidity developments. The main issue is that they are not based on national accounts concepts and their definitions also differ across countries. The presentation of Louis Bê Duc (Eurostat) introduced ideas of how, by collecting more detailed (bank to non-bank) information, a bridge can be established between the two sets of statistics. and monetary aggregates can also be utilized in the compilation of financial accounts. It also provided examples on using both data sets to deepen financial analysis, such as the links between saving, financing and financial investment of sectors. The presentation mainly focused on issues recognized in the euro area. The practical exercise covered the impact on Money/Counterpart to money in the case of different transactions.

C. Who-to-whom matrices

13. The second day of the workshop started with a detailed discussion on who-to-whom matrices. The session was based on presentations by ECB and National Bank of Belgium. Louis Bê Duc (Eurostat) acted as a discussant for this session.

14. Pierre Sola (ECB) first presented “who-to-whom” concept, its usefulness and the main data sources used in compiling “who-to-whom” matrices. The presentation also covered two cases of compiling “who-to-whom” matrices, one with full information on bilateral links (liabilities and assets by sector) and another without or with limited information on bilateral links. Further, who-to-whom balancing in practice was discussed in detail. The practical exercise focused on questions which may be answered by who-to-whom data and transactions in long term debt securities.

15. The second presentation, by Lies Janssen (National Bank of Belgium), gave an example of compiling the who-to-whom matrix in practice based on the experience and data available for Belgium. It first presented the data sources used (internal by the National Bank of Belgium and external) and the analysis and adjustments made over the different data sets. Further, the presentation covered the compilation process and rules (e.g. hierarchy of sources).

D. Issues related to financial corporations

16. This session focused on compilation issues related to financial corporations. The session was based on presentations by ECB and Eurostat. Emmanuel Manolikakis (IMF) acted as a discussant for this session.

17. Pierre Sola (ECB) presented the process of compiling accounts for financial corporations sub-sectors. First, the presentation explained how the available and most relevant sub-sectors can be selected. Second, it covered the outputs to be produced (main tables and who-to-whom tables). Third, it discussed the typical sources and their integration and, finally, the challenges (inconsistencies across sources, conflicts between sources and some specific issues) and ways of filling the gaps.

18. The presentation by Louis Bê Duc (Eurostat) introduced specific issues related to assessing the interest payments sensitivity to changes in interest rates and financial intermediation services indirectly measured (FISIM). The presentation was followed by a practical example illustrating calculation and allocation of FISIM in practice.

E. Issues related to non-financial corporations and households sectors

19. The final day of the workshop focused on compilation issues related to non-financial corporations and households sectors. The session was based on presentations by IMF, Statistics Netherlands and Bank Indonesia. The exercise provided participants with an illustration of deriving the balance sheet information for these two sectors in practice. Gerard Eding (Statistics Netherlands) acted as a discussant in this session.

20. In his presentation, Emmanuel Manolikakis (IMF) walked the participants through the compilation process of financial accounts for the non-financial corporate and household sectors and highlighted some analytical uses. First, he explained the challenges

with the source data for non-financial corporations and the need to use multiple sources. Second, he covered the analysis of similarities and differences of national accounting and business accounting. Third, he provided an example on investments in financial assets and went through some special cases like valuation of equity and investment fund shares and treatment of leases. Specific issues related to household sector data sources were also addressed. He also presented analytical uses of non-financial corporations data and ways forward with data availability, especially within the G-20 Data Gaps Initiative. Finally, the theory was put into practise using a step-by-step exercise in deriving the balance sheet information on residual corporate net worth for market value of shares, own funds at book value of equity (with assets revalued), market value of shares (with assets revalued) and net asset value.

21. After the practical exercise, Gerard Eding (Statistics Netherlands) presented different data sources for households sector and related challenges, and the Dutch experience in compiling households sector financial accounts. The presentation covered the compilation practice before and after the 2015 benchmark revision, highlighting major achievements and lesson learnt. It concluded with a few results and examples showing the possibilities of new (distributional) statistics in the Netherlands.

22. Another country example was presented by Herina Prasnowaty Dewayany (Bank Indonesia) and covered compilation and utilisation of the financial account of the household sector in Indonesia, highlighting certain challenges, and opportunities. It also introduced the plans to improve the accuracy of households' financial accounts by strengthening institutional cooperation between Bank Indonesia and Ministry of Finance, improving the sample coverage of household accounts survey and coordinating with Statistics Indonesia on quarterly households' financial account data.

F. Conclusions and future work

23. Based on the discussions during the workshop, the participants agreed on some important takeaways that could guide countries when launching or improving the compilation of financial accounts and balance sheets.

24. Financial accounts are an integral part of a broader system of macroeconomic statistics. Coordination and alignment with other subsystems are essential for ensuring consistency and accuracy. This integration extends to statistics such as balance of payments (BOP), international investment position (IIP), government finance statistics (GFS), monetary statistics, non-financial accounts, business statistics, other financial statistics and social statistics.

25. To compile comprehensive financial accounts, it is crucial to leverage all available data sources. This includes real sector data, corporation and household sectors data, public accounts, balance of payments, stock market data, administrative data, and commercial data. The following steps are recommended:

- Begin with the data that is readily available and accessible;
- Assess the quality of each possible data source and work on gradual improvements;
- Create and maintain a quality hierarchy of data sources for each sector and instrument;
- Provide transparency through publicly available methodological reports;

- Align financial account data with GFS and BOP/IIP data.
26. Balancing financial accounts is a challenging yet essential part of the compilation. The accounting identities have to be maintained. Large corrections are often necessary due to the volatility and magnitude of market values of securities. To address the challenges, compilers should:
- Be pragmatic, optimistic, and even creative in their approach;
 - Maintain transparency and provide metadata to users;
 - Offer feedback to data suppliers for continuous improvement.
27. Statistical discrepancies are inevitable in financial accounts but should not be hidden. They serve as quality indicators. Compilers should:
- Analyze discrepancies to improve data quality;
 - Define acceptable tolerance for discrepancies;
 - Seek inspiration from existing reports, such as the Eurostat/ECB Task Force on vertical consistency¹.
28. Discrepancies can also arise from organizational and institutional factors, including different data sources, data gaps, mismeasurements, and assumptions. Coordination and cooperation among data providers and compilers are crucial. A reliable business register helps minimize misclassifications.
29. Effective communication is key at various levels and should be improved where necessary:
- Engage with respondents when possible;
 - Establish and maintain relationships with holders of administrative data;
 - Collaborate with other data providers and macroeconomic statisticians;
 - Seek input from users for new policy applications.
30. Working groups can facilitate the compilation process. Responsibilities should be distributed based on national circumstances. Compilers should engage in data discussions with key data providers, including the business sector, government, real sector, financial sector, and the external sector (rest of the world).
31. Automation and use of technology is encouraged to streamline the compilation process e.g. for ingesting input data and automatic balancing. However, large discrepancies require careful investigation and manual processing. Adopting the Generic Statistical Business Process Model² (GSBPM) and Generic Statistical Information Model³ (GSIM) for structuring the process and information flow may be useful.
32. Developing who-to-whom matrices provides an overview of sectoral interlinkages in the economy. The process can start with aggregates where counterparty information is readily available (financial corporations' loans and deposits). Progressing to more detailed instruments over time has been proved as a best practice in many countries, giving priority to those that add the most value for users. Addressing data challenges, like incomplete counterpart data from primary sources, necessitate thorough analysis,

¹ https://www.ecb.europa.eu/stats/pdf/Recommendations_on_Vertical_consistency.en.pdf

² statswiki.unece.org/display/GSBPM

³ statswiki.unece.org/display/GSBPM/Information+flow+within+GSBPM+using+GSIM

reconciliation of different sources, estimation for missing data, and other adjustments. Importantly, the development of who-to-whom matrices adds analytical value to the accounts, helping compilers in evaluating initial estimates, and serves as vital information for the analysis of financial vulnerabilities, both internal and external. Furthermore, the creation of visualization tools is encouraged to enhance the service provided to external users.

33. Integrating monetary statistics with financial accounts is challenging due to differing standards. To bridge the gap, collecting additional bank-to-non-bank information is needed. This would allow linking monetary dynamics to sector-specific (households, corporations) saving and financing developments.

34. Information on the sensitivity of sector balance sheets to interest rate changes is valuable for monitoring vulnerabilities and monetary policy effects. Consider gross flows, variable/fixed rates composition, maturity of claims and liabilities, and bank retail rates. The careful calculation of FISIM is important as it has an impact on GDP and may undergo relatively strong change in times of volatility in interest rates.

35. Collecting balance sheets of all significant financial institutions should be the target. Depending on local accounting standards, estimations and additional information may often be required to compile positions at market value.

36. For non-financial institutions, compilers should aim to collect balance sheets and possible additional information from the most relevant institutions. Securities statistics may be an alternative for actively traded securities.

37. Gathering data on households require indirect sources, including counterpart information from financial corporations and securities statistics. While household surveys are useful, they are unlikely to provide reliable annual data without significant costs.

38. The participants evaluated highly the usefulness and practical orientation of the workshop and asked that a follow-up event be organized next year, focusing in-depth on specific topics and providing practical exercises using real datasets. The following topics were suggested for the agenda of future workshops:

- detailed analysis by institutional sector with particular focus on non-financial and household sector (data sources, methods for filling data gaps, reconciliation);
- compilation of financial balance sheets;
- linking financial transactions to financial balance sheets;
- detailed overview of various financial instruments: specific characteristics, data sources, valuation, measurement issues;
- financial market participants;
- combining and reconciliation of data sources: practical examples;
- reconciliation and balancing of non-financial and financial accounts (using country examples)
- IT platforms and tools used for compilation of financial accounts;
- use of financial accounts for analytical purposes; visualization of financial accounts data.

39. With respect to the format of future workshops participants requested extending the duration to allow for more in-depth discussions. More time for practical examples, presenting real country case studies and round table discussions where countries summarize their practices could be used to enhance the practical orientation and the sharing of experiences.

40. In addition, technical assistance missions would be beneficial for the countries at the initial stages of compiling financial accounts.