



Building Financial Accounts by using “From-whom-to-whom (FWTW)” approach and its analytical value - NBRNM case

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Financial accounts in NBRNM

- FWTW approach

- The Financial Accounts statistics provide/disseminate quarterly balance sheet (stocks), non-consolidated data, by financial instruments/sub-instruments for each institutional sector/sub-sector of the national economy, as well as the rest of the world
- The development of this statistics involves creating a comprehensive stock-flow framework in two phases. The first phase focuses on stock data, while the second aims to enhance the quality of flow data
- Some significant initiatives in this process have led to the introduction of detailed reporting from Other Financial Institutions and the establishment of a security-by-security database (s-b-s).
- Basic compilation principle is “from whom to whom – FWTW”. These data offer a clear view of the direct relationships between sectors for every financial instrument, although they have not yet been publicly released
- Majority of the data sources support the compilation on a from-whom-to-whom basis. Still estimations are necessary for filling some data gaps
- Standardization and technical integration - process in which diverse data sources are converted into standardized tables with a unified three-dimensional structure in stock-flow framework



Financial Accounts in NBRNM

- Data sources

- The financial accounts statistics utilize both primary and secondary data sources
- For the FWTW compilation, essential is to have **information on both the creditor and debtor sectors** of the underlying instrument
- Data sources can be categorized into three types:
 - **Individual data** about the sector/subsector and counterpart sector/subsector (granular databases in external statistics, security-by-security data, loan-by-loan data etc.)
 - **Aggregated information** on the level of the counterpart sector/subsector (monetary statistics, other financial institutions statistics)
 - **Assuming the counterparty sector**, based on a relevant information (tax claims of government, annual financial statements etc.)





Financial Accounts in NBRNM - Compilation

- Primarily, unified sector classification of institutional units according to ESA 2010 is ensured
- Source data in different (not) unified structure are compiled on a **FWTW base**
- Source data is transferred into standardized tables with the unified structure:
 - Creditor sector (CSC),
 - Debtor sector (DSC) and
 - Financial instrument (INS)

Structure of FA compilation tables:

4 dimensions (S, T, R, O)

- ☐ Stocks
- ☐ Transactions
- ☐ Revaluation changes
- ☐ Other changes

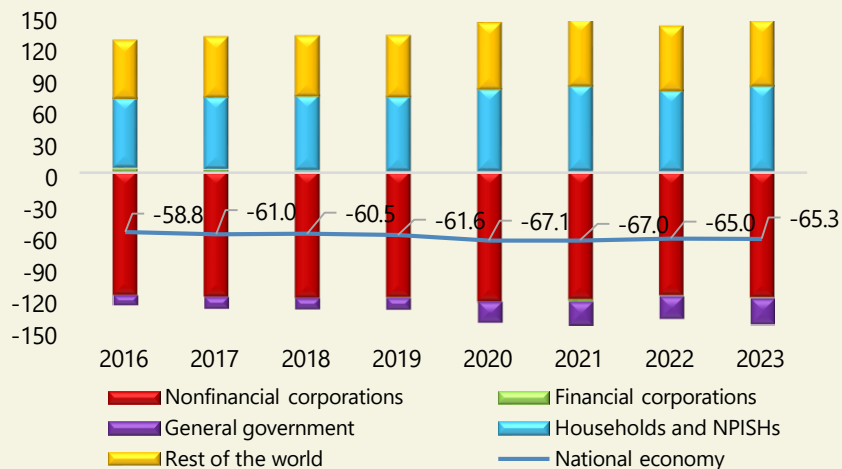
Stock-flow balancing is ensured:
Closing balance \pm Transactions \pm Revaluation changes \pm Other changes – Opening balance = 0



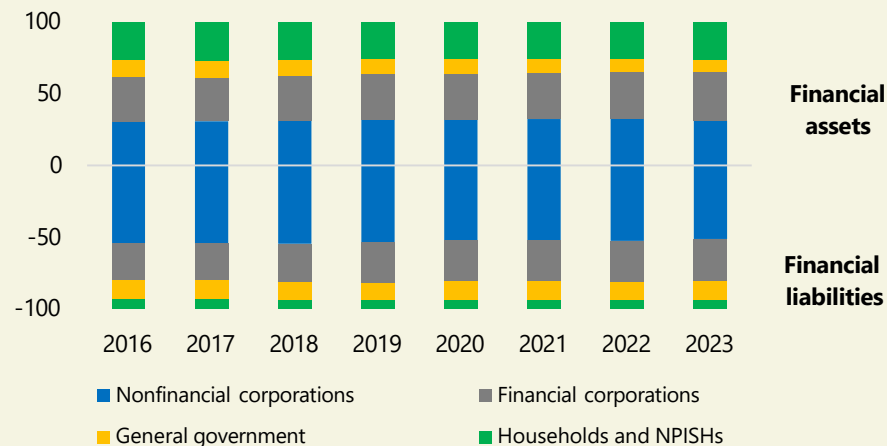
Financial Accounts in NBRNM

- Results

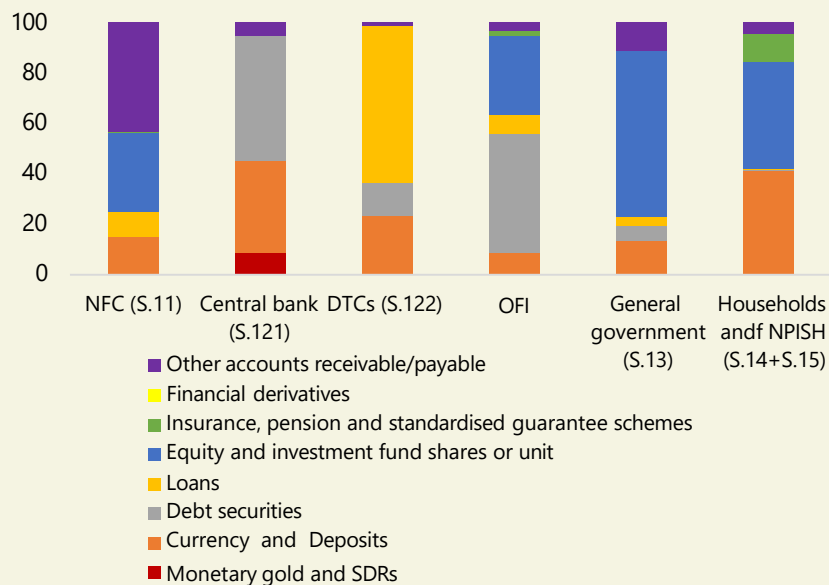
Net financial worth (% of GDP)



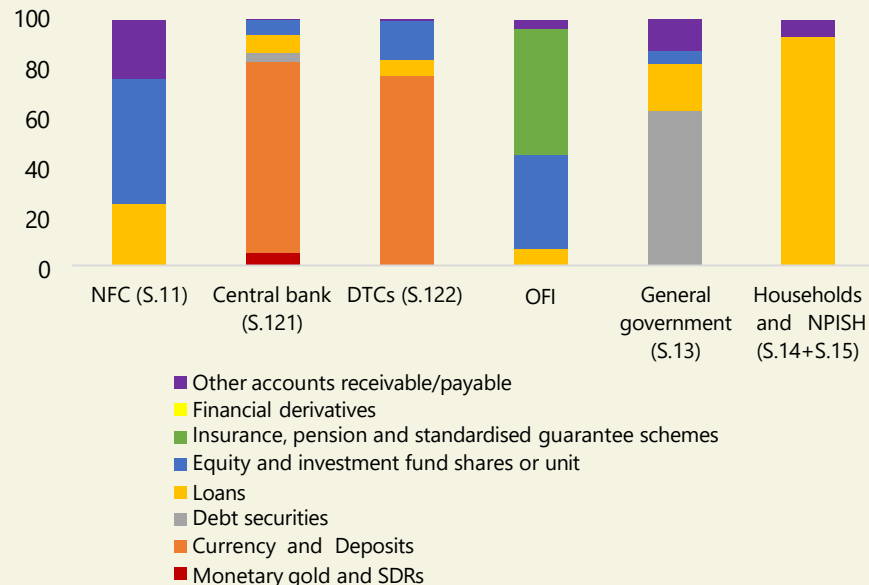
Structure of financial assets and liabilities (in %)



Total financial assets (in%)



Total financial liabilities (in %)

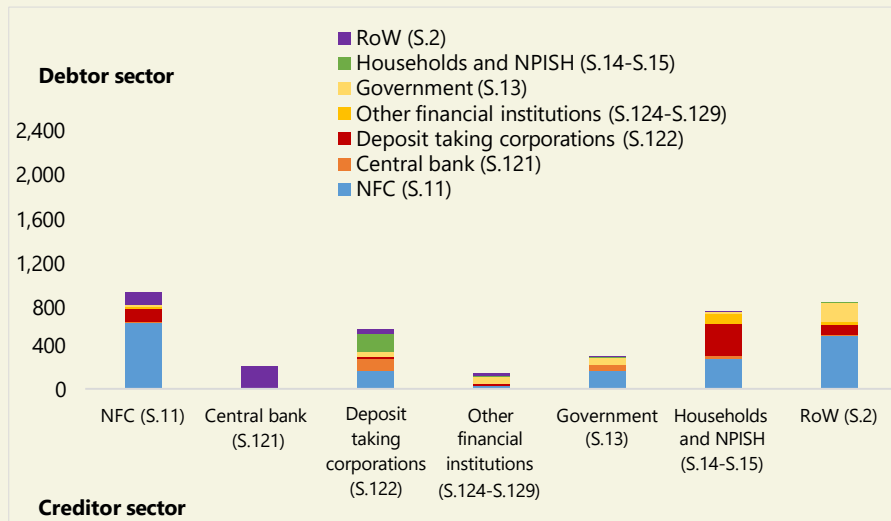




Financial Accounts in NBRNM

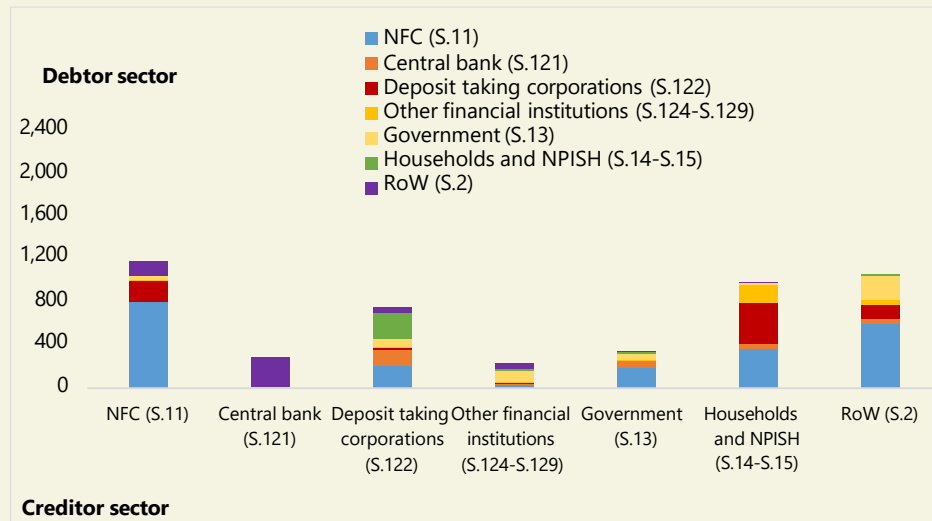
- Results (FWTW)

Total financial assets 2019

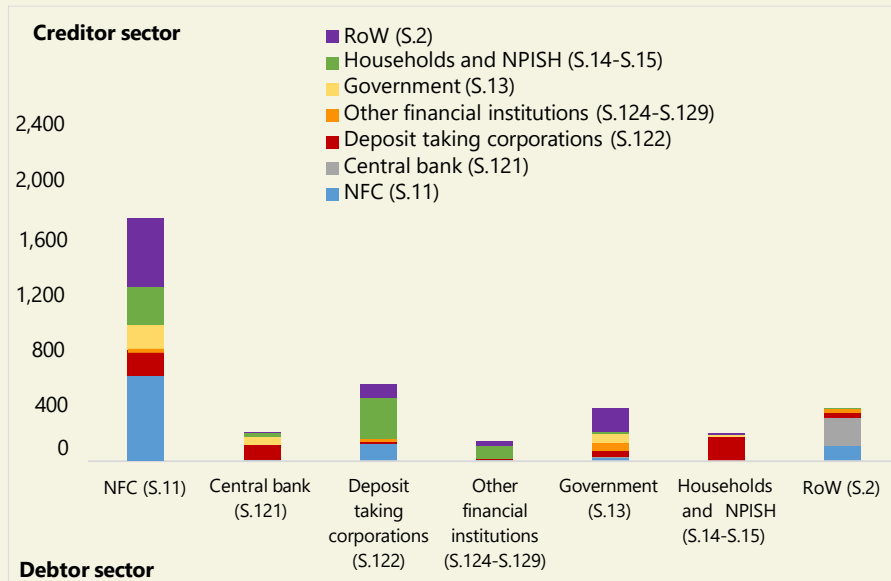


Total financial assets 2023

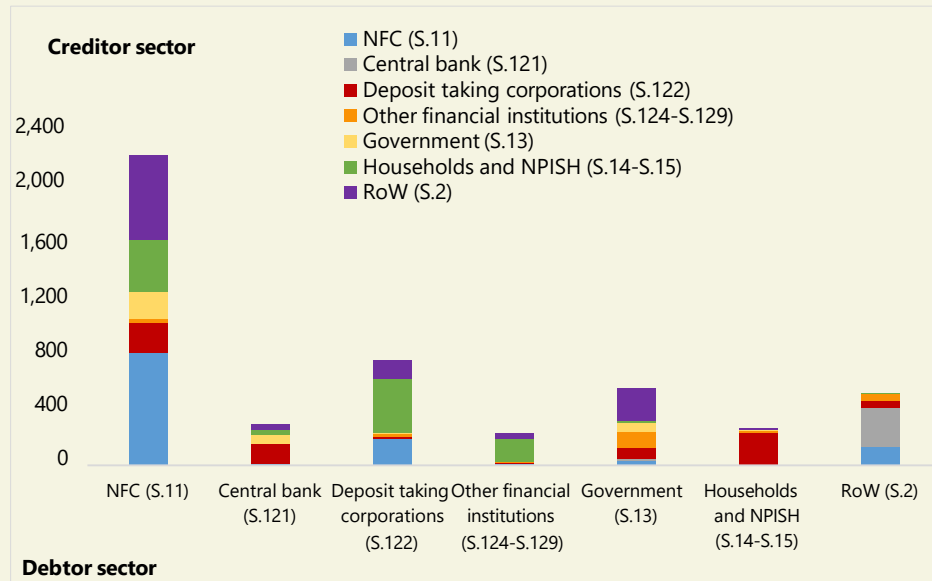
Denar billion



Total financial liabilities 2019



Total financial liabilities 2023





Financial Accounts in NBRNM - Results (FWTW)

DEBT SECURITIES

Denar billion

2019

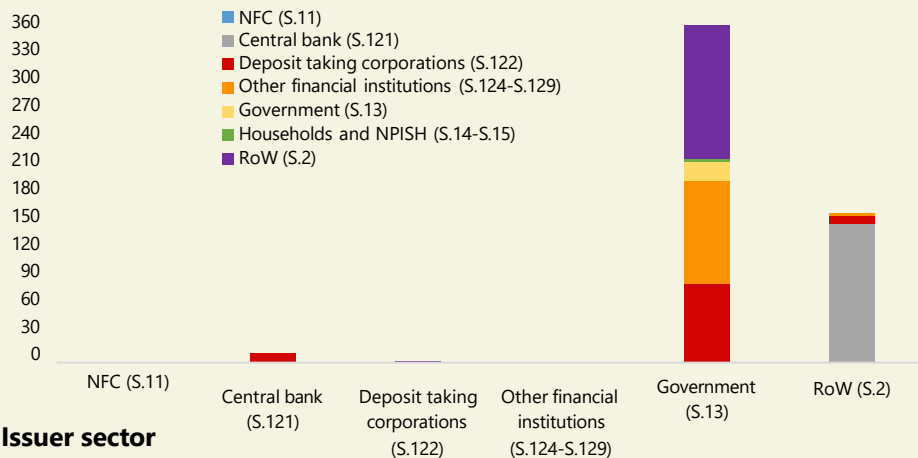
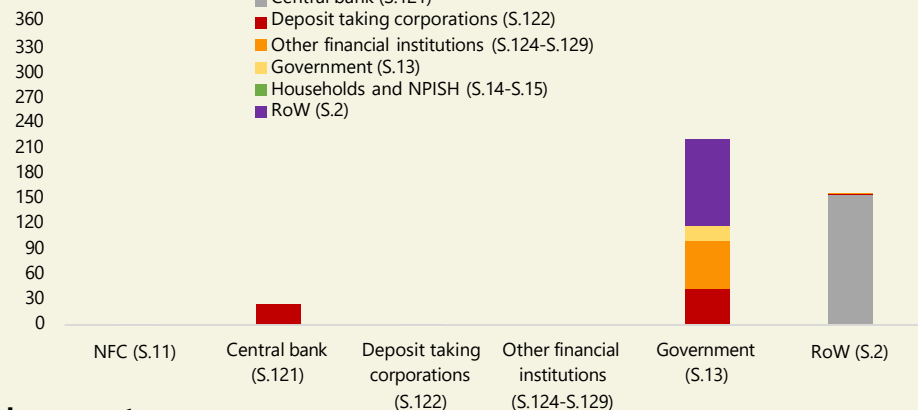
2023

Holder sector

Holder sector

- NFC (S.11)
- Central bank (S.121)
- Deposit taking corporations (S.122)
- Other financial institutions (S.124-S.129)
- Government (S.13)
- Households and NPISH (S.14-S.15)
- RoW (S.2)

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Issuer sector

Issuer sector

LOANS

2019

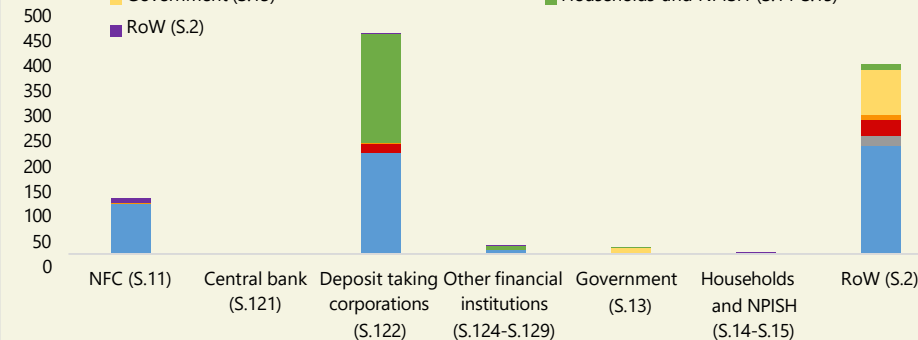
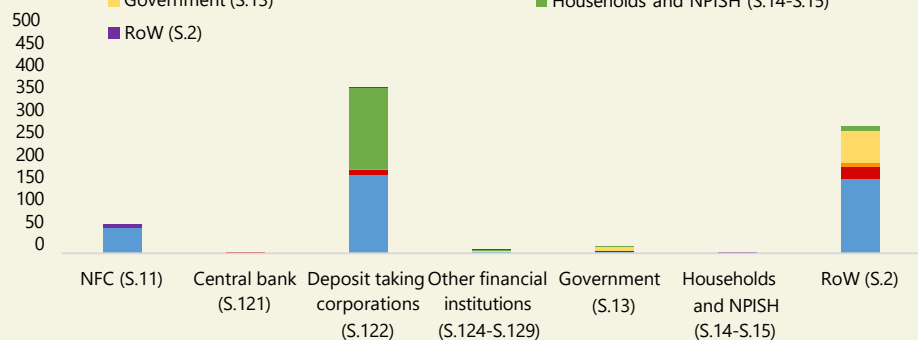
2023

Debtor sector

Debtor sector

- NFC (S.11)
- Central bank (S.121)
- Deposit taking corporations (S.122)
- Other financial institutions (S.124-S.129)
- Government (S.13)
- Households and NPISH (S.14-S.15)
- RoW (S.2)

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- RoW (S.2)



Creditor sector

Creditor sector



Financial accounts in NBRNM - Conclusions and future plans

- Analyse the quality of flow data
- Improve the reconciliation of different types of FWTW information from source data
- Ensure consistency with related macroeconomic datasets
- Development of additional data sources or refinement of estimation models – a key issue is the lack of quarterly data for non-financial corporations and households for specific instruments
- Upon the commencement of regular production of flow data, efforts will be directed towards enriching the dataset for users by supplementing the disseminated data with data on a “From-whom-to-whom” basis.



THANK YOU