



Financial Accounts Statistics in NBRNM, concept, development and analysis

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Legal Framework and Institutional Responsibility

- **The primary responsibility of the NBRNM to compile annual and quarterly financial accounts**
 - Annex 2 to the Memorandum of Understanding in the area of macroeconomic and financial statistics between the NBRNM, SSO and MOF.
 - Technical Agreement on the manner of data exchange for the purposes of Financial Accounts Statistics between the three responsible institutions.
- **Legislation** – Programme of Statistical Surveys 2013-2017 (amended in January 2014).
- **The primary responsibility of the SSO is to compile non-financial accounts.**
- **Inter-institutional cooperation** through three formal working groups (the NBRNM, the MOF and the SSO): Commission for sector classification, Financial Accounts and EDP Working groups, in order to establish consistency of the national accounts system.

Reporting to International Institutions



EUROSTAT

Table 6– annual FA flows

Table 7– annual FA stocks

Table 27– quarterly General
Government FA
-stock and flows

MIP indicators
Key indicators(3)
Auxiliary indicators (1)

GG FA- input for table 3 и 4 of EDP
(responsibility of the SSO)



ECB

Quarterly Financial
Accounts

Tables on stocks and flows



INTERNATIONAL MONETARY FUND

IMF – SDDS plus

Indicator:
Sectorial balance sheets,
quarterly data

Indicator:
Debt securities (quarterly
data, according to the
principal “from whom to
whom”)



Scope of Financial Accounts Statistics - activities

In the previous years, a number of activities on the development of financial accounts were implemented in the Statistics Department:

- **Detailed analysis** of the international requirements, analysis of existing data sources and identifying new data sources.
- **Bridge tables**– linking primary statistics data (monetary, OFI and external statistics) and their automation.
- **Centralized database for sectorization** – which is regularly updated with quarterly and annual data from SSO, in order to provide consistency of statistics in terms of sectors.
- **An internal Working group on Financial Accounts Statistics** has been established and meets regularly on quarterly basis.



Scope of Financial Accounts Statistics - activities

- **Project for development of IT solution for securities**, issued and traded on domestic market, in order to provide comprehensive data on equity and debt securities.
- **Continuous cooperation with SSO and MOF**, in order to identify new data sources and inter-institutional data exchange in the area of government statistics.
- **Participation in projects** on the national accounts area, technical missions and study visits on financial accounts.
- **General government statistics development project** with IMF experts, involving the three institutions.
- **Financial Account Development Project – component 3** within the twinning project by the NBRNM, aiming to develop quarterly financial accounts and annual flows (result: preparation of a pilot version of financial accounts data, for a period of one year, annual, quarterly, stocks and flows, unconsolidated and consolidated).



State-of-play

- **Ongoing - detailed annual data on financial accounts stocks** for all sectors/subsectors and financial instruments on a non-consolidated basis.
- **The set of tables consists of data** on 5 sectors with 9 subsectors and 8 instruments with 11 sub-instruments.
- **Time series of data for the period 2013-2020.** Data are presented in million MKD.
- **Methodological explanations** for data users.
- Two tables are being transmitted to Eurostat on a regular annual basis, experimental data, for restricted use:
 - **table 0720 and table 0725** – stocks of financial assets and liabilities, unconsolidated
- **Since 2018 – a set of tables for the financial accounts of the General Government sector**, for each individual subsector (central government, local government and social security funds) with data on stocks, transactions, price and exchange rate and other changes, on non-consolidated and consolidated basis (time series 2014-2020).



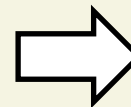
Financial Accounts Compilation Method

- **Interrelated two-dimensional matrices**, with a separate matrix for each sector and sub-sector, where assets/liabilities vis-a-vis other sectors/sub-sectors are broken down by financial instruments.
- Basic compilation principle is “**from whom to whom**” (one financial liability by instrument for a particular sector, represents an asset on the basis of the very instrument in the relevant counterpart sector.)
- **Final matrix table** - Each sector matrix is linked in an aggregated matrix, broken down by asset and liability of each sector/ sub-sector, by financial instrument, on gross basis.



Financial Accounts Compilation Method

- The Financial Accounts Statistics is a secondary/derived statistics, which uses the primary statistics available in NBRNM, as well as number of other additional data sources, such as administrative sources and granular data.
- The compilation of Financial Accounts Statistics is exceptionally complex, since different data sources are often designed for other statistical purposes and may be set on various methodological bases.
- In terms of having multiple sources for the same data (for a given sector/ financial instrument), the financial accounts compilation has to be based on a **hierarchical set up of data sources**.
- **Available sources ranking**- the source that offers methodological compliance with ESA 2010, sectoral consistency, satisfactory scope and timeliness is selected.
- This statistics is also a mechanism for further improvements in primary statistics.
- The complexity of sources is perceived through the matrix.





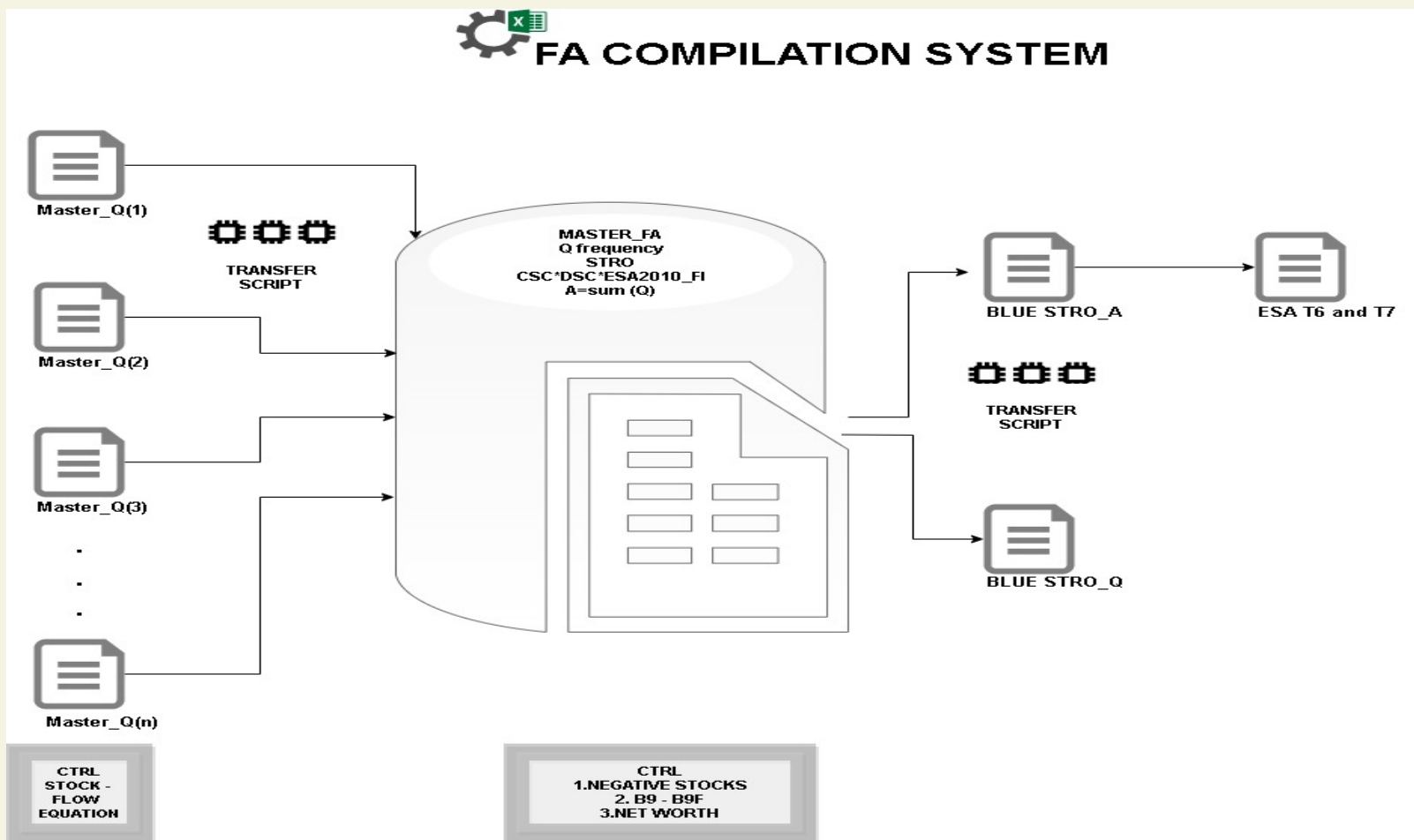
Data sources

- **Monetary and OFI statistics:** NBRNM Balance Sheet; Balance Sheet of Deposit-taking Corporations, except the Central bank; Balance sheet of Other Financial Institutions - pension funds, investment funds, financial corporations, leasing companies, investment and pension funds management companies;
- **External statistics:** KIPO (quarterly reports on claims and liabilities based on international commercial operations of residents); POZ (survey on debt/claims takeovers among residents and nonresidents); NDNP (claims and liabilities on credit operations with non-residents); VS11 and VS22 (equity investments in/from the rest of the world); MI (reports on accounts held abroad and settlement accounts); VHV-1 (investments in equity securities and in investment funds units on foreign markets) and VHV-2 (investments in debt securities on foreign markets);
- **Annual financial statements** of non-financial corporations and government (aggregated data provided by the State Statistical Office and individual data from the Central Registry database);
- **Data on securities from the Central Securities Depository (CSD), security by security** (debt and equity securities issued and traded on the domestic market);
- **Data on the Government sector** from the Ministry of Finance;
- Additional data and information from the websites of corporations and institutions;
- Residual estimations and expert judgment (mostly for households and NPISHs).



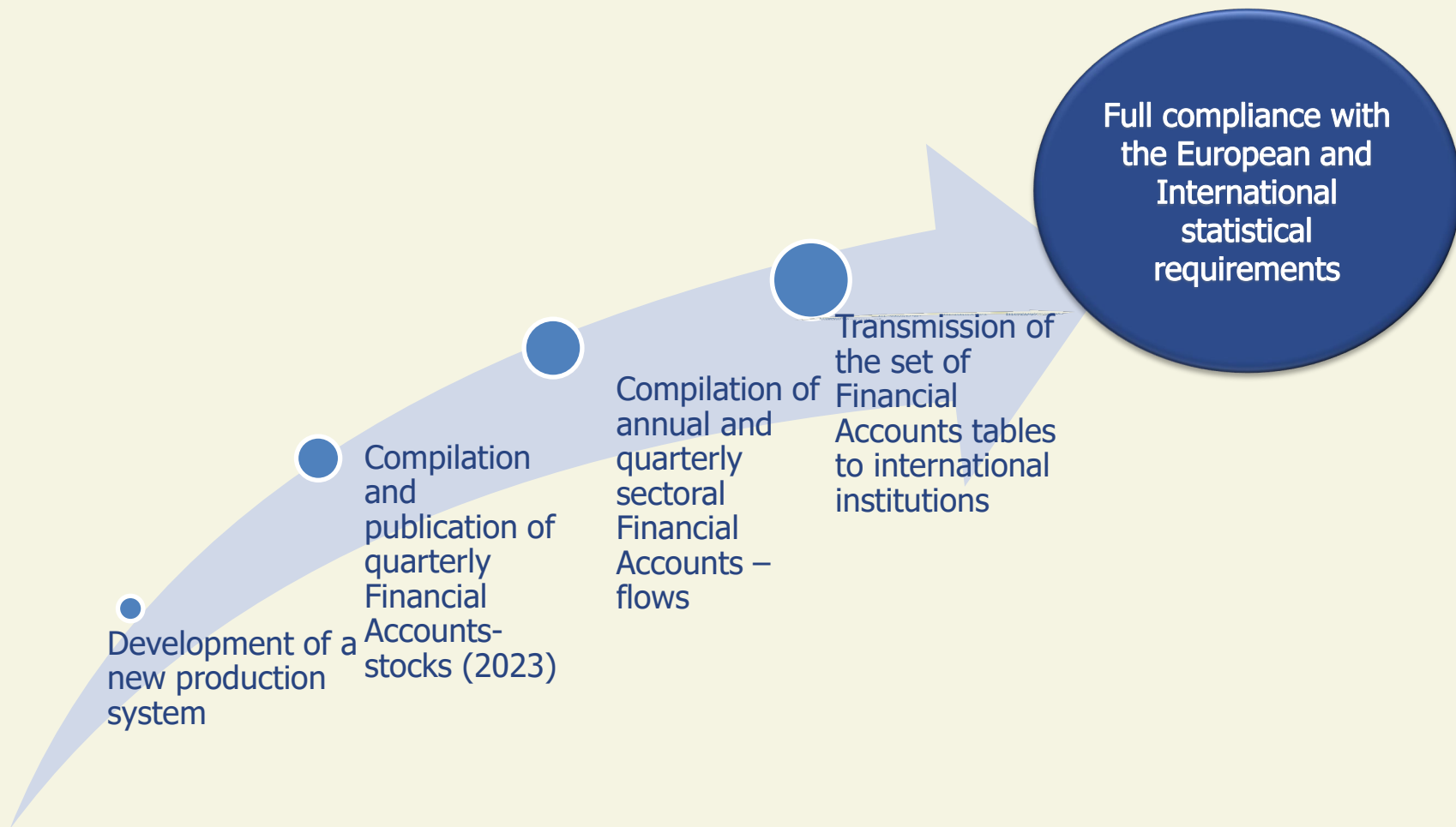
New FA compilation system

- New technical solution is implemented with the aim to ensure efficient and systematic process for compiling and transmitting of full set of financial accounts data (annual and quarterly, stocks and flows) to European institutions.





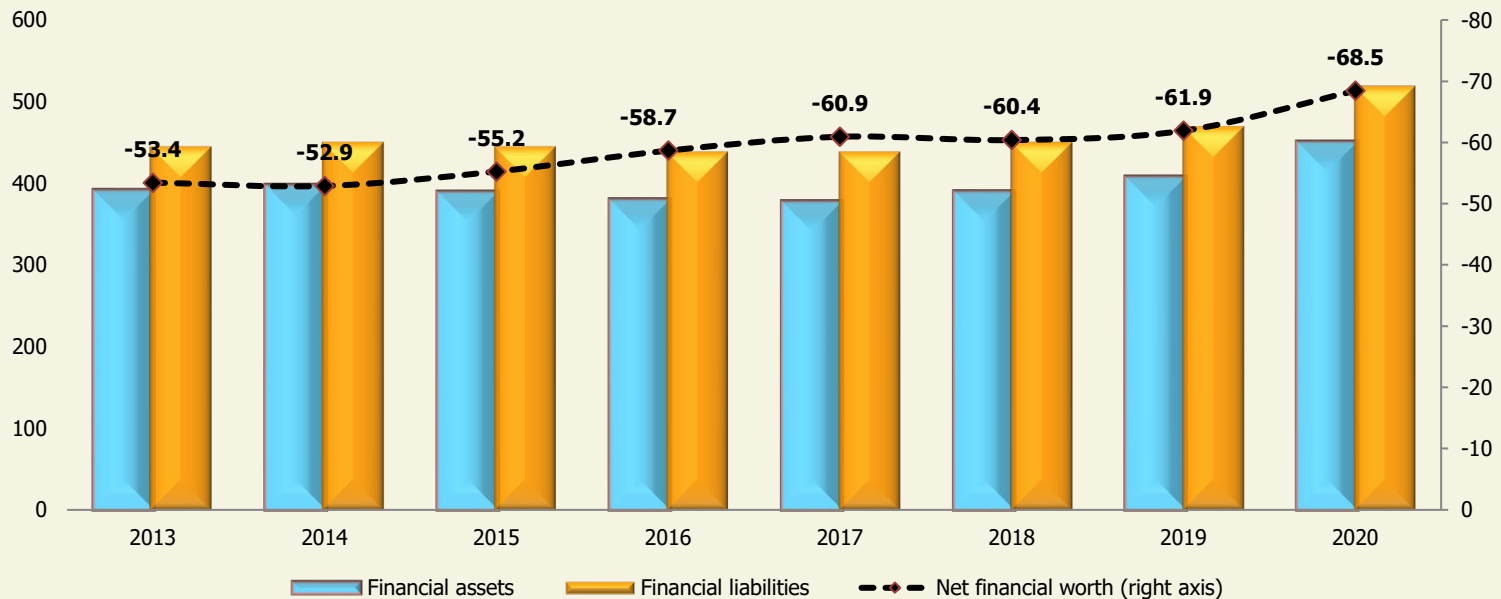
Future activities Mid-term strategy



Financial assets and liabilities of the national economy

- The analysis of financial position of the national economy indicates **deepening of the negative net position in 2020**. The negative Net financial worth (NFW) was Denar 449 billion, which is an increase of Denar 22 billion, i.e. 5.2%.
- In relative terms, the **negative net position in 2020 amounted to 68.5% of GDP**, which is a significant increase (from 6.6 p.p.) compared to the previous year and largely reflects the GDP fall caused by the negative effects of the corona crisis.

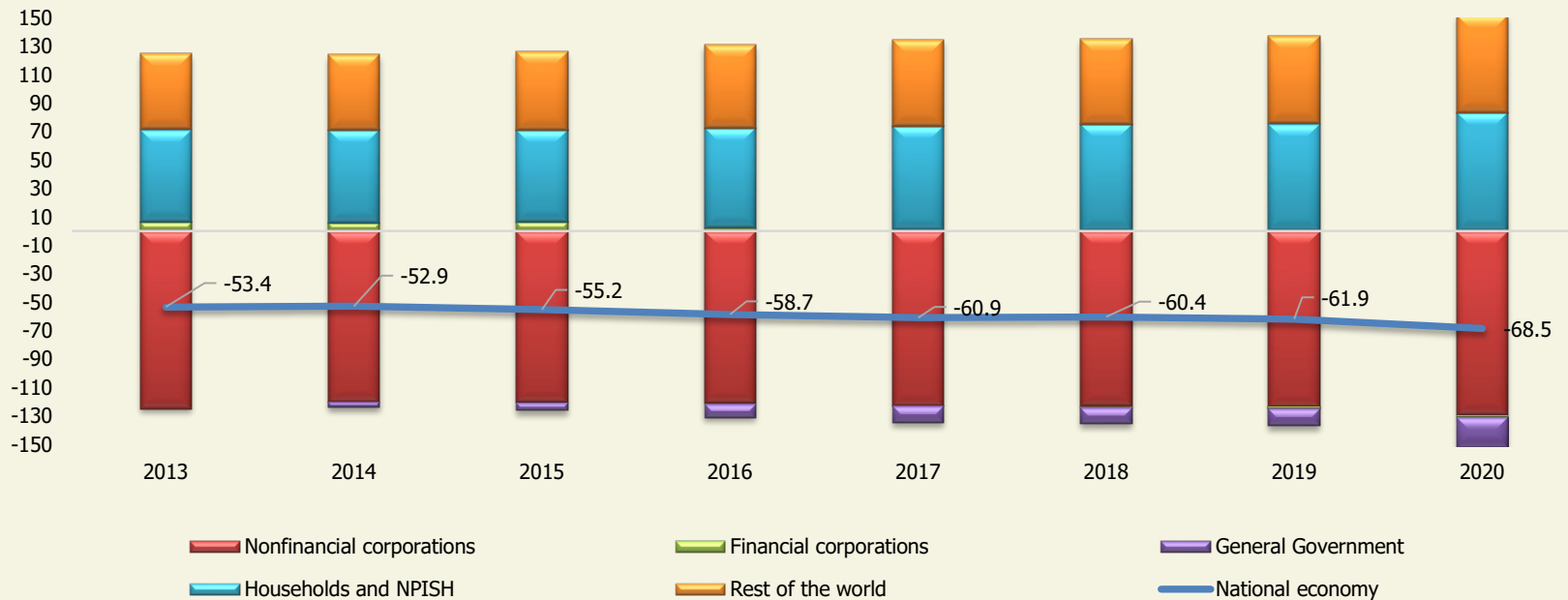
Total financial assets, liabilities and Net financial worth - National economy (% of GDP)



Financial assets and liabilities of the national economy

- Sector-by-sector analysis shows that households and rest of the world sectors in 2020 are net creditors that finance other sectors in the national economy (NFC and the general government), which are net debtors. The financial sector has an almost balanced net financial position.
- Dynamically, the deepened negative NFW as a % of GDP resulted from the deteriorated negative NFW of the government and the NFC, partially offset by the improved NFW of the households sector.

Net financial worth, by sectors (% of GDP)





Appendix

Data sources by sectors and instruments (assets)

Financial Assets

*Sector/subsector Financial Instruments		Non-financial Corporations S.11	Financial Corporations							General Government - Total				S.14 Households and S.15 NPISH-total	Rest of the world S.2	
			Financial Corporations - Total S.121 - S.129	Central Bank C.121	Deposit taking corporations except the central bank S.122	OFI - total S.123+S.124+S.125+S.126+S.127	Money market funds** S.123	Non-MMF investment funds S.124	Other, other financial institutions (S.125+S.126+S.127**)	Insurance corporations S.128	Pension funds S.129	General Government - Total S.1311+S.1313+S.1314	Central Government S.1311			Local Government S.1313
AF.1	Monetary Gold and SDRs		S.121 - S.129	MS/ES		S.123+S.124+S.125+S.126+S.127						S.1311+S.1313+S.1314				
AF.11	Monetary Gold			MS/ES												
AF.12	SDRs			MS/ES												MS/ES
AF.2	Currency and Deposits															
AF.21	Currency	Residual		MS	MS/ES			OFI	OFI	OFI		AFS	AFS	AFS	Residual	
AF.22	Transferable Deposits	MS/ES		MS	MS			OFI	OFI	OFI		MS	MS	MS	MS	ES
AF.29	Other Deposits	MS/ES		MS	MS			OFI	OFI	OFI		MS	MS	MS	MS	ES
AF.3	Debt Securities	SBS/ES		MS/ES	SBS/ES			SBS	SBS	SBS/ES	SBS/ES	SBS/ES	SBS	SBS	SBS/ES	ES/SBS
AF.31	Short-term	SBS/ES		MS/ES	SBS/ES			SBS	SBS	SBS/ES	SBS/ES	SBS/ES	SBS	SBS	SBS/ES	ES/SBS
AF.32	Long-term	SBS/ES		MS/ES	SBS/ES			SBS	SBS	SBS/ES	SBS/ES	SBS/ES	SBS	SBS	SBS/ES	ES/SBS
AF.4	Loans	MS/ES/AFS		MS/ES	MS			OFI/ES	OFI/ES	OFI/ES		ES/MS/DI	ES/MS/DI	ES/MS/DI	ES	ES
AF.41	Short-term	MS/ES/AFS		MS/ES	MS			OFI/ES	OFI/ES	OFI/ES		ES/MS/MF	ES/MS/MF	ES/MS/MF	ES	ES
AF.42	Long-term	MS/ES/AFS		MS/ES	MS			OFI/ES	OFI/ES	OFI/ES		ES/MS/MF	ES/MS/MF	ES/MS/MF	ES	ES
AF.5	Equity and shares/units	AFS/SBS		MS	MS/ES			SBS/ES/OFI	SBS/ES/OFI	SBS/ES/OFI	SBS/ES/OFI	SBS/AFS	SBS/AFS	SBS/AFS	SBS/MS/ES	SBS/MS/ES
AF.51	Equity	AFS/SBS		MS	MS/ES			SBS/ES/OFI	SBS/ES/OFI	SBS/ES/OFI	SBS/ES/OFI	SBS/AFS	SBS/AFS	SBS/AFS	SBS/MS/ES	SBS/MS/ES
AF.59	IF shares/units	OFI/ES			OFI			OFI/ES	OFI/ES	OFI/ES	OFI/ES				OFI/ES	ES
AF.6	Insurance, pension and standardised guarantee schemes	OFI		OFI	OFI			OFI	OFI	OFI	OFI	OFI	OFI	OFI	OFI	
AF.7	Financial Derivatives			MS	MS			OFI	OFI	OFI	OFI				MS	ES
AF.8	Other accounts receivable	CS/AFS		MS	MS			OFI	OFI	OFI	OFI	CS/AFS	CS/AFS	CS/AFS	CS	ES

*The fields in the matrix tables marked in gray mean that the sector/subsector theoretically, shouldn't have assets/liabilities for the appropriate instrument

** Within the financial sector in the Republic of North Macedonia there are no Money Market Funds (subsector S.123), while Captive financial institutions and money holders (subsector S.127), which mainly include holding companies, is a small number, so there is not sufficient data so far. In certain specific cases, the identified data from this subsector in the Financial Accounts are currently included within Sector S.125 - Other Financial Intermediaries.

Data sources by sectors and instruments (liabilities)



Financial Liabilities

*Sector/subsector Financial Instruments		Non-financial Corporations S.11	Financial Corporations								General Government - Total				S.14 Households and S.15 NPISH-total	Rest of the World S.2	
			Financial Corporations - Total S.121 - S.129	Central Bank C.121	Deposit taking corporations except the central bank S.122	OFI - total S.123+S124+S.125+S.126+S.127	Money market funds** S.123	Non-MMF investment funds S.124	Other, other financial Institutions (S.125+S.126+S.127**)	Insurance corporations S.128	Pension funds S.129	General Government - Total S.1311+S.1313+S.1314	Central Government S.1311	Local Government S.1313			Social security funds S.1314
AF.1	Monetary Gold and SDRs		S.121 - S.129	MS/ES		S.123+S124+S.125+S.126+S.127							S.1311+S.1313+S.1314				MS/ES
AF.11	Monetary Gold			MS/ES													
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AF.2	Currency and Deposits																
AF.21	Currency			MS													MS
AF.22	Transferable Deposits			MS	MS												ES
AF.29	Other Deposits			MS	MS												ES
AF.3	Debt Securities	SBS/ES		MS/ES	SBS/ES			SBS/ES	SBS	SBS/ES	SBS/ES		SBS/ES	SBS/ES	SBS		ES/SBS
AF.31	Short-term	SBS/ES		MS/ES	SBS/ES			SBS/ES	SBS	SBS/ES	SBS/ES		SBS/ES	SBS	SBS		ES/SBS
AF.32	Long-term	SBS/ES		MS/ES	SBS/ES			SBS/ES	SBS	SBS/ES	SBS/ES		SBS/ES	SBS	SBS		ES/SBS
AF.4	Loans	MS/ES/AFS		MS/ES	MS			OFI/ES	OFI/ES	OFI/ES			ES/MS/DI	ES/MS/DI	ES/MS/DI	MS/ES	ES
AF.41	Short-term	MS/ES/AFS		MS/ES	MS			OFI/ES	OFI/ES	OFI/ES			ES/MS/MF	ES/MS/MF	ES/MS/MF	MS/ES	ES
AF.42	Long-term	MS/ES/AFS		MS/ES	MS			OFI/ES	OFI/ES	OFI/ES			ES/MS/MF	ES/MS/MF	ES/MS/MF	MS/ES	ES
AF.5	Equity and shares/units	SBS/AFS		MS	SBS/MS/ES			SBS/ES/OFI	SBS/ES/OFI	SBS/ES/OFI	SBS/ES/OFI		SBS/AFS	SBS/AFS	SBS/AFS		ES/SBS
AF.51	Equity	AFS/SBS		MS	MS/ES			ES/OFI	ES/OFI	ES/OFI	ES/OFI		AFS/MS	AFS	AFS		ES
AF.59	IF shares/units	OFI/ES			OFI			OFI/ES	OFI/ES	OFI/ES	OFI/ES						ES
AF.6	Insurance, pension and standardised guarantee schemes	OFI/ES		OFI	OFI			OFI	OFI	OFI	OFI					MS	ES
AF.7	Financial Derivatives			MS	MS			OFI	OFI	OFI	OFI					MS	ES
AF.8	Other accounts payable	CS/AFS		MS	MS			OFI	OFI	OFI	OFI		CS/AFS	CS/AFS	CS/AFS	CS	ES

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