



# REPUBLIC OF MOLDOVA

## TECHNICAL ASSISTANCE REPORT—REPORT ON SECTORAL ACCOUNTS MISSION

May 2020

This Technical Assistance report on the Republic of Moldova was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed on October 2019.

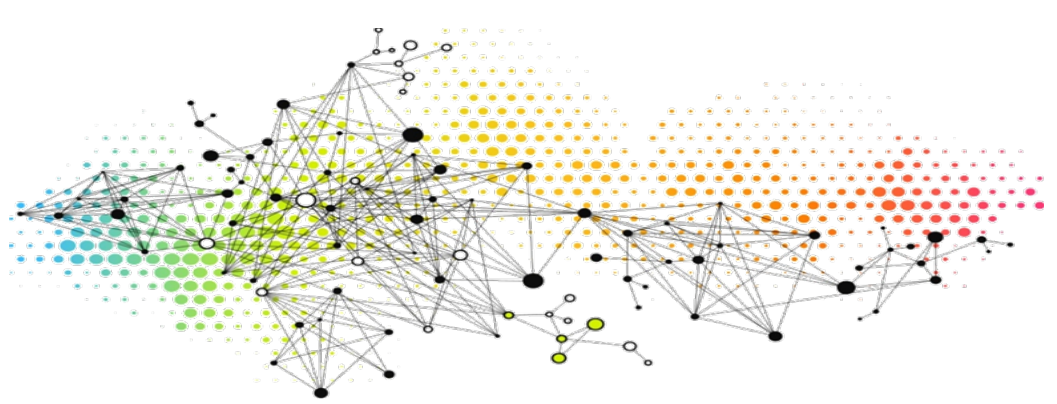
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# REPUBLIC OF MOLDOVA

JANUARY  
2020

## REPORT ON SECTORAL ACCOUNTS MISSION (SEPTEMBER 23–OCTOBER 4, 2019)

**Prepared by Dario Florey**

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## Glossary

<i>2008 SNA</i>	<i>System of National Accounts, 2008</i>
<i>BPM6</i>	<i>Balance of Payments and International Investment Position Manual (sixth edition)</i>
CSD	Central Securities Depository
D4D	Data for decisions
ESS	External Sector Statistics
FABS	Sectoral Financial Accounts and Balance Sheet Statistics
GFS	Government Finance Statistics
GG	General Government
GOM	Government of Moldova
<i>GFSM 2014</i>	<i>Government Finance Statistics Manual, 2014</i>
ISIN	International Securities Identification Number
MFS	Monetary and Financial Statistics
MOE	Ministry of Economy
MOF	Ministry of Finance
MOJ	Ministry of Justice
MSE	Moldova Stock Exchange
NBCO	Nonbank credit organizations
NBM	National Bank of Moldova
NBS	National Bureau of Statistics of the Republic of Moldova
NCFM	National Commission for Financial Markets
NFC	Nonfinancial Corporations
OFC	Other Financial Corporations
ROW	Rest of the World
SBS	Security-by-security statistics
SCA	Saving and credit associations
TA	Technical Assistance

## SUMMARY OF MISSION OUTCOMES AND PRIORITY RECOMMENDATIONS

**1. As part of the IMF's Data for Decisions (D4D) Trust Fund Project, a technical assistance (TA) mission was conducted by John Joice and Dario Florey, IMF Experts, during September 23–October 4, 2019, to help the authorities of the Republic of Moldova in developing sectoral financial accounts and financial balance sheet statistics (FABS).**

The mission was the follow up to the mission held in December 2018, and evaluated the progress made since the last mission against the objectives set out in the action plan. The mission worked principally with the National Bank of Moldova (NBM), but also had meetings with officials from the Ministry of Finance (MOF), the Central Securities Depository (CSD), the National Commission for Financial Markets (NCFM) and the National Bureau of Statistics of the Republic of Moldova (NBS).

**2. FABS consist of transactions in financial instruments, other changes in assets accounts (revaluations and other volume changes), and financial balance sheets of each of the institutional sectors.** They play an important role in the system of national accounts by identifying transactions and positions of financial assets and liabilities of each institutional sector and how each sector interacts with the other sectors and the rest of the world (ROW). They also show how the balances of financial assets and liabilities change over time. As the system of national accounts is closed and consistent, for all transactions and positions in financial assets there is an equal and opposite transaction and position in liabilities. FABS can be used to detect systemic financial risks and serve to show the interrelationships between the real economy and the financial sector. Financial instruments circulate in the economy mainly through financial intermediaries. The compilation and publication of FABS show the essential role played by the financial sector in the economy.

**3. The mission recommended that the NBM play the lead role in the production of FABS.** They will be responsible for aggregating, and reconciling, the different sources and they will publish the results. While the NBM compiles data for the banking system, many of the data are compiled by different agencies: the MOF for general government (GG); the NBS for parts of the households and nonfinancial corporations sectors; the NCFM for financial intermediaries other than the central bank and deposit-taking corporations (DTCs); and the CSD for securities and equities data. The NBM should also organize seminar to inform and explain the importance of FABS to all agencies involved in the compilation of the data and to users of the data.

**4. Coordination of the activities of the agencies involved in the project is key to its success.** Compiling FABS is a complex exercise and ensuring all parties understand its purpose and the need for consistency in the treatment, classification and valuation is essential. The mission, therefore, recommended that the NBM formally set up an interagency group, comprising all the agencies involved. The group should comprise technical experts on each of the subject matter areas. This group should be assigned the following tasks: to coordinate the

work between agencies; to establish a calendar for the exchange of data; to evaluate the hierarchy of the sources to use; to ensure the quality of the data; and if necessary, to organize technical sub-groups on the understanding of methodologies. The group will also be responsible for ensuring consistency among the different publications of various parts of the national accounts (such as gross domestic product; the current and capital accounts; the balance of payments and the international investment position; and government finance statistics). This group should meet regularly, at least four times a year in the early years, until the quarterly data are compiled.

**5. In addition, the mission recommended that the NBM create a higher level group to act as a monitoring committee.** The role of this group should be to ensure that the work of the interagency group is proceeding satisfactorily and on time, and to resolve any conceptual or practical issues that the technical group cannot agree on. It should meet at least twice a year but may need to meet more often in the earlier part of the project.

**6. The NBS has the legal authority to collect data from nonfinancial corporations in Moldova.** According to an agreement with the NBM, financial statements collected by the NBS are provided to the NBM for use in external sector statistics (ESS). However, an advisory body on accounting and financial reporting established by MOF has decided to exclude supplementary annexes these supplementary annexes from the financial statements containing useful information on financial assets and liabilities. Although the new format of the financial statements corresponds to the EU directive (2013/34/EU), the implementation of the new reporting regulations has resulted in the loss of key data for compiling FABS for nonfinancial corporations. It would undermine the quality for this sector, as no other data source is currently available. Accordingly, the mission recommended that both the NBM and the NBS emphasize to the MOF the negative impact the discontinuation of these annexes would have on data quality for both FABS and ESS and to stress the need to maintain these annexes.

**7. The NBM intends to compile and publish both annual and quarterly FABS for Moldova by March 2022.** In some cases, the sources for annual and quarterly data are the same. This is the case for data produced by NBM, but for other series (government and nonfinancial corporations' data), there are no quarterly data. The mission discussed various options that NBM could explore to estimate quarterly data. Given the lead time in developing indicator series, the mission recommended that the NBM start exploring which data could be used as indicators.

**8. The NBM presented a trial matrix of the sector financial balance sheet data for the year 2015.** Sector and subsector balance sheet data have been prepared, using existing data that were provided by the agencies involved in this project. The mission welcomed this initiative and provided extensive comments on how the data could be improved.

**9. The mission discussed the action plan with the NBM.** The NBM agreed with the plan, which aims to compile and FABS publish annual and quarterly by March 2022. By March 2020, the NBM will generate sector annual financial balance sheet data for the 2015–2018 period using

existing data. For the next step, the mission recommended that the NBM produce in December 2020, estimates for 2015–2018 of sector financial transactions, and for the other changes in assets account, (which accounts for valuation and volume changes that are not the result of transactions).

**Table 1. Priority Recommendations**

<b>Target Date</b>	<b>Priority Recommendation</b>	<b>Responsible Institutions</b>
<b>December 2019</b>	<i>The NBM to set up a formal technical working group, with representatives from all the agencies involved in the project, with the responsibility to coordinate the agencies, to ensure the use of the appropriate methodology and to establish and agree a calendar for the exchange of the data.</i>	<b>NBM in coordination with CSD/MOF/NBS/NCFM</b>
<b>December 2019</b>	<i>The NBM to set up a monitoring steering committee to oversee the technical working group.</i>	<b>NBM in coordination with MOF, NBS, Ministry of Economy and NCFM</b>
<b>March 2020</b>	<i>The NBM to organize a seminar for compilers</i>	<b>NBM</b>
<b>March 2020</b>	<i>Compile sector annual financial balance sheets for 2015–2018 using data sources discussed in the mission.</i>	<b>NBM</b>
<b>December 2020</b>	<i>The NBM begin exploring which indicators series could be used in the construction of quarterly data where no such data are currently available</i>	<b>NBM</b>

**Further details on the priority recommendations and the related actions/milestones can be found in the action plan under *Detailed Technical Assessment and Recommendations*.**

## DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS

Priority	Action/Milestone	Target Completion Date	Responsible Institutions
<b><i>Outcome: Data are compiled and disseminated using appropriate statistical techniques, including dealing with data sources, and/or assessment and validation of intermediate data and statistical outputs.</i></b>			
H	Set up a formal technical working group with responsibility to guide the management of FABS and organize the primary roles for compiling FABS and the main responsibilities of each agency.	<b>December 2019</b>	NBM, in coordination with CSD, MOF, NBS, and NCFM
H	Create a high-level group to act as a monitoring committee.	<b>December 2019</b>	NBM, in coordination with MOF, NBS, and NCFM
H	The NBM and the NBS jointly emphasize to the MOF the seriousness of the loss of the financial information from the financial statements for the nonfinancial corporations would have on the success of FABS and ESS	<b>November 2019</b>	NBM and NBS
H	Compile sector annual financial balance sheets for 2015–2018, using data sources discussed in the mission	<b>March 2020</b>	NBM
H	Implement surveys to collect data for NFC sector which will replace the data collected from the financial reports and 'Annex 9'. In case the new reporting regulations is implemented	<b>June 2020</b>	NBM and NBS
M	Organize a seminar for compilers, the objective is to explain the goal of FABS, present the challenge and the methodology	<b>March 2020</b>	NBM, inviting all compilers
H	Disaggregated financial reporting data are provided to the NBM for processing and use in FABS.	<b>July 2020</b>	NBS
M	The NBM produce estimates for 2015 to 2018 of sector financial transactions	<b>December 2020</b>	NBM
M	Complete development of SBS for equity and compiling equity statistics from the CSD. The database will be completed in stages over three years while the data are being migrated to CSD.	<b>May 2019–December 2021</b>	NBM and CSD



Priority	Action/Milestone	Target Completion Date	Responsible Institutions
M	Organize a seminar for users, the objective will be to present the usefulness of FABS, the objectives, and the plan action to publish them and what will be available including the detailed data	June 2020	NBM, inviting all users
M	Customize software to host source data and map source data statistics to to-whom-from-whom FABS matrices.	June 2020	NBM
M	Coordinate with MOF on the estimates for GG sector, in particular for valuation and for unconsolidated data	Ongoing	NBM and MOF
M	Coordinate with NBS on the estimates for NFC, Households, NPIHs sector	Ongoing	NBM and NBS
M	Compile and publish annual financial positions for 2015–2020 using the recommended data sources and methodologies.	March 2022	NBM, in coordination with the technical group
M	Compile and publish quarterly financial positions for Q1 2018 to Q4 2021 with the benefit of further TA.	March 2022	NBM, in coordination with the technical group
M	Compile and publish quarterly financial transactions for Q1 2018 to Q4 2021 with the benefit of further TA.	March 2022	NBM, in coordination with the technical group
M	Reconcile data sources used to compile current and capital accounts and the financial account transactions.	Ongoing	NBM, in coordination with the technical group

## A. General Considerations

**10. FABS presents a breakdown, by financial instrument, of financial activity and financial positions for all resident institutional sectors in a complete and consistent framework.** As a rule, FABS are unconsolidated in the *System of National Accounts, 2008 (2008 SNA)*, the consolidation may be relevant for the general government sector.<sup>1</sup>

The unconsolidated FABS provide comprehensive data on the financial activities and financial positions of households, nonfinancial corporations, financial corporations and general

<sup>1</sup> Consolidated data are useful for certain types of analysis, such as for monetary policy purposes or the impact of government activities as a whole on the rest of the economy.

government within and between each institutional sector, as well as between these sectors and the ROW.

**11. The responsibility for compiling and publishing FABS has clearly been assigned to the NBM, but it should work very closely with other agencies responsible for collecting and compiling data for specific sectors.**

The NBM has the legal authority to collect data for the banking system and the ROW. However, most of the data for FABS are primarily compiled by different agencies: the MOF for general government data; the NBS for households and the nonfinancial corporations sector (it also is responsible for the business classification register); the NCFM for financial corporations other than the central bank and commercial banks; and the CSD for securities and equities data. Successful compilation of FABS requires good cooperation and coordination among all the agencies in the collection and compilation of the data. The NBM needs a very clear understanding of the data produced by the other agencies (coverage of the statistics and valuation) and the other agencies must understand the importance of FABS and the methodology used. The mission strongly recommended that NBM establish a formal interagency working group. The role of this working group is to coordinate data supply by establishing a calendar for exchanging the data; to ensure consistency of classification; to guarantee the use of the international methodology; and to monitor progress. The technical working group should meet at least four times a year in the early years (more frequently, if necessary), and then less frequently, as the project develops. It should be composed of all agencies providing data.

**12. In addition to the technical group, the mission recommended setting up a steering committee of high-level managers from the NBM, the MOF, the NBS, Ministry of Economy (MOE) and the NCFM.** The role of this group should be to ensure that the work of the technical group is proceeding satisfactorily and on time and to resolve any conceptual or practical issues that the technical group cannot agree on. It should meet at least twice a year but may need to meet more often in the earlier part of the project.

**13. Balance sheet data should be presented at market value.** While the *2008 SNA* recommends market prices, given the limited information currently available on market prices collected by the different agencies, the mission found that it would be very difficult for the NBM to apply this recommendation, at the earlier stages of the project. However, market price should be used whenever possible.

**14. The national accounts comprise the current accounts and capital accounts, the financial accounts, and the balance sheet.** The national accounts is a closed system where most transactions in the real economy have a counterpart transaction in the financial accounts. As a result, the balancing item of the financial account, net lending or net borrowing, is conceptually identical to the balancing item, net lending or net borrowing, of the capital accounts. This equality helps with data confrontation to identify where there may be errors or omissions in the datasets.

**15. While FABS records the financial assets and liabilities of each institutional sector, a from-whom-to-whom (FWTW) matrix shows the interconnectedness between the assets**

**holders and the liability issuers.** The FWTW present for a given financial instruments the assets of the owning sectors (creditor sectors) broken down by counterparty sectors (debtor sectors). Table 2 shows an example for the stock of credit. In this example, it is possible to observe that financial corporations, as creditor, grant an amount of credit of 4800. The counterpart information gives a global view of the debtor; in this case, it is possible to observe, that financial corporations have a liability of 1500, general government 800, financial corporations 1000, households 500 and rest of the world 1000. The FWTW tables can also be presented for transactions.

**16. Actually, FWTW matrices are important tools to assess the counterparty information.** They are also an important analyze tool to assess the risk of a financial crisis, for example the importance of households investing in bank deposits and bank debt securities for refinancing position of banks.

**Table 2. Excerpt from Sample “From-Whom-To-Whom Matrix” for Stocks**

		AF.4 (liability)				Total held	
		Nonfinancial corporations (S.11)	Financial corporations (S.12)	General Government (S.13)	Households + NPISHs (S.14+S.15)		Rest of the world (S.2)
AF.4 (asset)	Non-financial corporations (S.11)	1000	0	0	0	980	1980
	Financial corporations (S.12)	1500	1000	800	500	1000	4800
	General Government (S.13)	30	0	500	5	0	535
	Households + NPISHs (S.14+S.15)	0	0	0	0	0	0
	Rest of the world (S.2)	1270	2000	50	0		3320
	<b>Total issued</b>	<b>3800</b>	<b>3000</b>	<b>1350</b>	<b>505</b>	<b>1980</b>	<b>10635</b>

**17. The compilation and then the publication of FABS by the NBM is an ambitious project that will require effective user outreach to support success.** Many agencies are involved in compiling data. The NBM must ensure that the methodology used is in line with the 2008 SNA. In addition, for the users it is a new product. Therefore, the mission recommends that the NBM organize two seminars to explain the concept, the methodology, the role and the plan for publication of FABS. The first seminar with the agencies involved in the project and the second one with potential users.

**Recommendations:**

- The NBM set up a formal technical working group with the responsibility to coordinate the agencies, to ensure the use of the appropriate methodology and to establish a calendar for the exchange of the data (December 2019).
- The NBM set up a steering committee to act as the senior body to monitor the progress of the technical group, ensure it meets the deadlines, and resolve any conceptual or practical issues that the technical group cannot agree on (December 2019).
- The NBM organize two seminars: one with agencies involved in producing FABS (March 2020) and one with users (June 2020).
- The NBM develop a detailed action plan up to the end of 2022, when the quarterly and annual financial positions, quarterly and annual financial transactions will be published (June 2020).

**B. Financial Corporations Sector**

**18. The NBM is responsible for the collection data for the central bank and the regulated banking sector, which consists of 11 active banks and 5 banks under liquidation process.** The data from the active banks and from the central bank are collected to meet the requirements for completing the 1SR and 2SR report forms,<sup>2</sup> as well as for balance of payments' purposes. The 1SR and 2SR provide the NBM with the required details and instrument breakdowns to produce FABS of the Central bank (S.121) and deposit-taking corporations (S.122) sector. The NBM also collects data from deposit-taking corporations undergoing liquidation. The counterpart information on deposits and loans of this sector allows the production of data for other sectors such as households, nonfinancial corporations and in some case for general government. Loan-by-loan statistics collected by the NBM's Supervision Department provide important information in the compilation of FABS. The data available for FABS purposes are anonymized. However, complex loans instruments (like foreign currency linked loans) need adjustments in FABS to account for exchange rate changes. The same applies to provisions, which, for prudential reasons, are deducted from loans, but must not be considered in FABS<sup>3</sup> (see explanation in Appendix 2).

**19. The NCFM regulates and supervises nonbank credit sector which is represented by the nonbank credit organizations<sup>4</sup> (NBCOs).** It authorizes activity to NBCOs and issues licenses to savings and credit associations (SCAs); supervises the activity of microfinance and leasing

<sup>2</sup> 1SR and 2SR are standardized report forms. The former is for central bank assets and financial liabilities while the latter is for the deposit-taking corporations.

<sup>3</sup> Provisions for loans are treated as bookkeeping entries in enterprise accounts, but are not recognized in national accounts.

<sup>4</sup> NBCOs are active in providing lending and/or financial leasing, savings and credit services.

companies that also provide credit. In the framework of FABS, “Licenses B” SCAs will be included in the deposit-taking corporations’ sub-sector, while the others above-mentioned will be included in the other financial corporations’ sub-sector. This authority also supervises insurance corporations and private pension funds (no such funds presently exist). The balance sheet data are reported monthly with counterpart information, and provide the required details for the construction of FABS for the other financial corporations, including insurance corporations and pension funds. As of June 30, 2019, coverage is complete (14 insurance companies, 63 insurance brokers, 242 savings associations, and 164 nonbank credit organizations). New legislation gives the NCFM the authority to collect information on loans by country and type of institution. These data would improve revaluation for foreign currency loans and counterpart information. Currently, the NBM does not include license B entities in the 2SR data because SCAs B license report quarterly to NCFM. However, the NBM plans to include SCAs under S122 in FABS.

**20. The CSD maintains data for debt securities issued by the NBM and the Government of Moldova.** For corporate securities, at present, only 11 banks and 14 insurance companies are covered. By the end of 2019 the CSD will include listed entities (public corporations).

The remaining ‘close’ corporations<sup>5</sup> will remain under the responsibility of the NCFM. The CSD will provide data on a quarterly basis to FABS team at the NBM. The sectoral classification is consistent. As mentioned in paragraph 16, the NBM collects data from only 11 depository-taking corporations, because 5 are undergoing liquidation. However, for FABS purposes, the banks in liquidation should be included until they are finally wound up.

**Recommendations:**

- NBM estimate loans without taking into account provisions for loan losses. (March 2020).
- NCFM introduce two more data items on the report to NBCOs: information on exchange rates and information on write-offs (March 2020).

## C. Nonfinancial Corporations, Households and Nonprofit Institutions Serving Households

**21. The NBS has the legal authority to collect data from nonfinancial corporations, and from the households and NPISHs sector.** Under an agreement between the NBM and NBS, Annex 9 of the financial statement collected by NBS for nonfinancial corporations is provided to the NBM for the use in ESS. This annex contains financial data for intra-sectoral loans, payables and receivables accounts and information on own funds. However, the collection of these data may be discontinued as a result of a decision by MOF to exclude these supplementary annexes from the financial statements, starting in 2020. The implementation of the new reporting regulations will result in the loss of key data for compiling FABS for nonfinancial corporations. It would undermine the quality for this sector, as no other data source is currently available.

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<sup>5</sup> A close corporation is a company whose shares are held by individuals who are closely associated with the business. Their securities are not publicly traded.

The mission emphasized that these data are required for FABS, in particular for other accounts payable/receivable, for the own fund and the ROW data. Own funds data are important to estimate an approximation of the market value for the equities of nonfinancial corporations.

**22. The financial statements do not provide comprehensive information necessary to compile FABS.** For most of financial instruments, counterpart information can be derived from general government sector and deposit-taking corporations. The mission recommended cross-checking the data with these sources.

**23. Public enterprises are classified in the nonfinancial corporations sector.** For instance, public transportation companies receive external loans, which are guaranteed by their owning municipalities, are classified as private nonfinancial corporations. Their debt is also recorded in the nonfinancial corporations sector, unless guaranteed by the government. In this case, the debt will be considered in the government debt. The value of shares of the public enterprise are recorded at book value. There is currently no means to revalue shares to market prices; this can only be done at the time the SOE is being prepared to be privatized.

**24. Data for the households and NPISHs sector are derived from counterpart information of other sectors and as residuals, where no counterpart data are available.** These counterpart data sources are for generally of good quality (mostly from financial corporations' datasets). In the national accounts, when households undertake production activity but where such activity is indistinguishable from the rest of the household's activity so that there are no separate accounts, the production is classified to the households sector. The production generates revenues and may generate household saving which is invested in financial instruments by banks. However, in such cases, it is possible that the banks may classify the activity to nonfinancial corporations. This may lead to inconsistencies between data collected by banks or nonbank credit organizations and data collected by the NBS. Accordingly, the mission recommended that the NBM clarify its instructions to the banks to increase the likelihood that such entities are classified correctly.

**25. NPISHs are required to register with the Ministry of Justice (MOJ).** The mission noted that many NPISHs on the MOJ's register appear to be active in activities like the construction and transport. In addition, some NPISHs had share capital. The mission recommended that the NBS, which is in charge for collecting data for this sector, should verify the list. For FABS purposes, households and NPISHs can be aggregated at a first stage; indeed in Moldova, NPISHs are not significant.

**Recommendations:**

- The NBM and the NBS jointly emphasize to the MOF the seriousness of the loss of the financial information from the financial statements for the nonfinancial corporations would have on the success of FABS and ESS (October 2019).
- NBM to estimate other accounts payable/receivable using the financial statement.

- NBM to clarify its instructions to the deposit-taking corporations to ensure correct classification of the households and nonfinancial corporations' sectors.
- NBM to estimate FABS for the household and NPISHs sector together, using counterpart information and residuals (March 2020).
- The NBS and the NBM to verify the list of NPISHs drawn up by MOJ (June 2020).

## D. Securities Statistics

**26. The Central Securities Depository is responsible for registration and settlement of securities, and maintaining ownership records for the primary and secondary markets.** It began operations in July 2018. Since September 2019, transaction values have been available. Because the market is very illiquid, using the most recent transactions would not necessarily provide an indication of current market value.

**27. For unlisted companies the market value should be estimated as own funds at book value.<sup>6</sup>**

### **Recommendation:**

- NBM to estimate unlisted share liabilities by using own funds at book value (June 2020).

## E. General Government Sector

**28. The MOF is the main agency for the collection of data on central government, local government, the social security fund.** Currently, the MOF compiles data by instrument, with sector counterpart information. However, data are reported to the IMF on a consolidated basis, in line with *Government Finance Statistics Manual, 2014 (GFSM2014)* but not in line with the 2008 SNA, which requires data to be presented on an unconsolidated basis and is the reference methodology for FABS. Accordingly, the data will need to be adjusted to meet the needs for FABS. The transactions between sub-sector entities should not be consolidated. To achieve this requirement the NBM should include the intra-sectoral transactions, which the MOF will need to provide.

**29. To compile data for the sector, the mission recommended using the data from the GFS supplemented by reliable counterparty data.** For liabilities of the general government sector, the mission recommended transforming some of the current data sources for debt securities to the market value using data from the CSD. For general government holdings of equity in public (listed) corporations, security-by-security data will be received from the CSD but only after the full migration is complete around 2021. In the meantime, the mission

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<sup>6</sup> Value of unlisted shares = market price of similar listed shares × (own funds of unlisted corporations)/(own funds of similar listed corporations).

recommended that the NBM use data collected from enterprise financial statements, which is own funds at book value. The central government debt in foreign currency is valued at the exchange rate of the end of the year for the stocks. The transactions data are valued with the exchange rate of the day when the transaction occurs. Estimates for short-term debt for local government can be calculated with the counterpart information from the monetary banking statistics as these data are missing from GFS.

**30. Unlike the requirements for FABS, which is based on accrual accounting principles, data for the budgetary purposes are collected and published on a cash basis.** Since FABS covers all sectors in the economy, ensuring a common, accruals basis for measurement is important. Although the MOF has a long-term plan to estimate the data on an accruals basis, in the meantime the producers of FABS should use a proxy. The time-adjusted cash method (as explained in appendix 2) is considered an acceptable proxy to estimate accruals. The mission explained the time-adjusted cash method to the MOF. The mission recommended working with the technical group (as it concerns MOF, NBM and NBS) to develop a methodology to approximate accrual recording.

**Recommendations:**

- NBM together with MOF estimate GG data on an unconsolidated basis (March 2020).
- NBM estimate short-term debt from monetary banking data (March 2020).
- NBM and MOF develop a time-adjusted cash methodology to estimate a proxy of accruals (March 2020).

## F. Rest of the World

**31. The NBM compiles quarterly balance of payments (BOP) and international investment position (IIP) according to the *Balance of Payments and International Investment Position Manual, sixth edition (BPM6) Guidelines*.** These data provide the primary data sources for the ROW. The NBS provides the NBM with the annual information of the annex of the Financial Statement for large enterprises. It provides information on the relation with nonresident investors, and is the main source for the stock of direct investment equity. In addition, the quarterly report (census) on foreign investments (direct and portfolio), allocated by enterprises with foreign capital in Moldova, provides information on stocks and flows for the financial accounts. However, at the end of the year the data for quarters are checked and reconciled with the balance sheet data in order to adjust for misreporting during the year. Portfolio investment data are available for banks and for other sectors from the banks' reports to NBM and from the reports of NCFM (primary and secondary market transactions with equity).

**32. Short-term credit and claims are also compiled for direct investment position.** The NBM uses the original maturity in defining the short- and long-term debt, in line with the *BPM6* and *2008 SNA*. Moreover, the former annex 9 to FS in the table, '*Short-term liabilities/claims*',



includes the detailed data on stock composition to adjust the data from books. Although the definition of short-term liabilities/claims in the FS does not correspond to the definition of 2008 SNA, the data processed by NBM are in line with BPM6 and 2008 SNA definition concerning the maturity.

**Recommendation:**

- NBM compile FABS for ROW using the balance of payments (for the financial account) and the IIP (for financial balance sheets) as the primary sources (June 2020).

## G. Comments on 2015 Financial Balance Sheet

**33. The NBM presented a draft financial balance sheet matrix by sector.** The data were compiled from existing sources. The data were compiled for sectors and sub-sectors and for all financial instruments. The data were compiled on a sector consolidated data. In addition, the subcategories of financial instrument were not always consistent across sectors.

**34. The mission noted that the NPISHs report equities within the liabilities.** The mission explained that NPISHs cannot have equities within the liabilities.

**35. The liabilities side for the total of each instrument should be equal to the asset side.** This is not the case. The mission recommended that the NBM investigate the source of these discrepancies. The mission suggests adding an unallocated vector for unexplained discrepancies.

**36. The difference between financial assets and liabilities is positive for the deposit-taking corporations.** The mission recommended that the NBM examine these data closely since, for corporations, their financial balance sheet excludes nonfinancial assets. Thus, corporations will record more liabilities (including shareholders' funds) than financial assets.

**Recommendations:**

- NBM to not publish FABS for the subcategories financial instruments (June 2020).
- NBM publish together the household sector with NPISHs (S14 + S15) (June 2020).
- NBM present FABS to users (June 2020).

Table 3. Proposed Data Sources for Sectors and Instruments

	NFC	Financial corporations			General government			HHs & NPISHs	ROW
		Central bank	Monetary and financial institutions	Other Financial corporations	Total	Central Gov. <sup>1</sup>	Local Gov.		
<b>F1 Monetary gold and SDRs</b>	<i>n. a</i>	<b>1SR/ESS</b>	<i>n.a</i>	<i>n. a</i>	<b>GFS</b>	<b>GFS</b>	<i>n. a</i>	<i>n. a</i>	<b>ESS</b>
<i>F11 Monetary gold</i>	<i>n. a</i>	1SR/ESS	<i>n.a</i>	<i>n. a</i>	<i>n. a</i>	<i>n. a</i>	<i>n. a</i>	<i>n. a</i>	ESS
<i>F12 SDRs</i>	<i>n. a</i>	GFS/ESS	<i>n.a</i>	<i>n. a</i>	<i>GFS</i>	<i>GFS</i>	<i>n. a</i>	<i>n. a</i>	ESS
<b>F2 Currency and deposits</b>	<b>2SR/4SR/ESS</b>	<b>1SR/ESS</b>	<b>2SR</b>	<b>4SR</b>	<b>GFS/1SR</b>	<b>GFS/1SR</b>	<b>GFS/1SR</b>	<b>Counterpart</b>	<b>ESS</b>
<i>F21 Currency</i>	<i>2SR/4SR/ESS</i>	1SR/ESS	2SR	4SR	GFS/1SR	GFS/1SR	GFS/1SR	Counterpart	ESS
<i>F22 Transferable deposits</i>	<i>2SR/4SR/ESS</i>	1SR/ESS	2SR	4SR	GFS/1SR	GFS/1SR	GFS/1SR	Counterpart	ESS
<i>F29 Other deposits</i>	<i>2SR/4SR/ESS</i>	1SR/ESS	2SR	4SR	GFS/1SR	GFS/1SR	GFS/1SR	Counterpart	ESS
<b>F3 Debt securities</b>	<b>CSD/ESS/Survey</b>	<b>1SR/ESS</b>	<b>2SR</b>	<b>4SR</b>	<b>CSD/GFS</b>	<b>CSD/GFS</b>	<b>CSD/GFS</b>	<b>Counterpart</b>	<b>ESS</b>
<b>F4 Loans</b>	<b>2SR/4SR/Survey</b>	<b>1SR/ESS</b>	<b>2SR</b>	<b>4SR</b>	<b>ESS/MOF</b>	<b>ESS/MOF</b>	<b>ESS/MOF</b>	<b>Counterpart</b>	<b>ESS</b>
<b>F5 Equity &amp; investment fund shares</b>	<b>CSD/Survey/ESS</b>	<b>1SR/ESS</b>	<b>2SR</b>	<b>4SR</b>	<b>GFS/Surveys</b>	<b>GFS/Surveys</b>	<b>GFS/Surveys</b>	<b>Counterpart</b>	<b>ESS</b>
<i>F511 Listed shares</i>	<i>CSD</i>	1SR/ESS	2SR	4SR	<i>n.a</i>	<i>n.a</i>	<i>n.a</i>	Counterpart	<i>CSD</i>
<i>F512 Unlisted shares</i>	<i>Surveys/ESS</i>	1SR/ESS	2SR	4SR	<i>GFS/Surveys</i>	<i>GFS/Surveys</i>	<i>GFS/Surveys</i>	Counterpart	<i>ESS</i>
<i>F519 Other equity</i>	<i>Surveys/ESS</i>	1SR/ESS	2SR	4SR	<i>1SR</i>	<i>1SR</i>	<i>1SR</i>	Counterpart	<i>ESS</i>
<i>F52 Investment fund shares/units</i>	<i>n.a</i>	1SR/ESS	2SR	4SR	4SR	4SR	4SR	Counterpart	ESS
<b>F6 Insurance, pension and standardized guarantee schemes</b>	<b>4SR/ESS</b>	<b>1SR/ESS</b>	<b>2SR</b>	<b>4SR</b>	<b>n.a</b>	<b>n.a</b>	<b>n.a</b>	<b>Counterpart</b>	<b>ESS</b>
<b>F8 Other Accounts receivable/payable</b>	<b>4SR/ESS</b>	<b>1SR/ESS</b>	<b>2SR</b>	<b>4SR</b>	<b>n.a</b>	<b>n.a</b>	<b>n.a</b>	<b>Counterpart</b>	<b>ESS</b>

<sup>1</sup> Deposits or loans of social security funds are offset within central government sector at the end of the years. For quarterly estimates, social security has only two instruments: deposits and loans.

	NFC	Financial corporations			General government			HHs & NPISHs	ROW
		Central bank	Monetary and financial institutions	Other Financial corporations	Total	Central Gov. <sup>1</sup>	Local Gov.		
<i>F81 Trade credit and advances</i>	<b>Surveys/ counterpart</b>	<b>1SR/ESS</b>	<b>2SR</b>	<b>4SR</b>	<b>GFS/budget estimates/ counterparty</b>	<b>GFS/budget estimates/ counterparty</b>	<b>GFS/budget estimates/ counterparty</b>	<b>Counterpart</b>	<b>ESS</b>
<i>F89 Other accounts receivable/payable</i>	Surveys/ counterpart	1SR/ESS	2SR	4SR	GFS/budget estimates/ counterparty	GFS/budget estimates/ counterparty	GFS/budget estimates/ counterparty	Counterpart	ESS
	Surveys/ counterpart	1SR/ESS	2SR	4SR	GFS/budget estimates /counterparty	GFS/budget estimates/ counterparty	GFS/budget estimates/ counterparty	Counterpart	ESS

## H. Officials Met During the Mission

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## Appendix I. Action Plan 2019: Progress to Date

Priority	Action/Milestone	Target Date	Responsible Institutions
<b>M</b>	Complete development of SBS for equity and compiling equity statistics from the CSD. The database will be completed in stages over 3 years while the data are being migrated to CSD.	<b>May 2019–December 2021</b>	NBM and CSD
<b>H</b>	Complete development of SBS database for debt securities and use to-whom-from-whom data for the holdings/liability of debt security.	<b>Completed</b>	NBM and CSD
<b>H</b>	Agree on plan to compile annual and quarterly financial accounts and transactions	<b>Completed</b>	NBM
<b>L</b>	Request aggregated loan-by-loan statistics from NBM Supervision Department and cross-check data provided by the MFS and ESS.	<b>Completed</b>	NBM
<b>M</b>	Customize software to host source data and map source data statistics to to-whom-from-whom FABS matrices.	<b>June 2020</b>	NBM
<b>H</b>	Implement surveys to collect data for NFC sector which will replace the data collected from the financial reports and 'Annex 9'.	<b>June 2020</b>	NBM and NBS
<b>H</b>	Disaggregated financial reporting data are provided to the NBM for processing and use in FABS.	<b>June 2020</b>	NBS
<b>M</b>	NBM to collect stock data from MOF by sector and counterparty.	<b>Completed</b>	NBM and MOF
<b>M</b>	Coordinate with NBS and MOF on the estimates for NFC and GG sector.	<b>Ongoing</b>	NBM, NBS, and MOF
<b>L</b>	Compile and publish annual financial positions for 2015 to 2017 using the recommended data sources and methodologies.	<b>March 2022</b>	NBM in coordination with technical working group
<b>M</b>	Compile and publish quarterly financial positions for Q1 2018 to Q4 2021 with the benefit of further TA.	<b>March 2022</b>	NBM in coordination with technical working group
<b>M</b>	Compile and publish quarterly financial transactions for Q1 2018 to Q4 2021 with the benefit of further TA.	<b>March 2022</b>	NBM in coordination with technical working group

Priority	Action/Milestone	Target Date	Responsible Institutions
<b><i>Outcome: Internal consistency within a macroeconomic or financial dataset has improved (reduced discrepancies).</i></b>			
<b>L</b>	Assess the feasibility of developing a business classification registry to be used in the compilation of macroeconomic statistics.	<b>completed</b>	NBM in coordination with CSD, MOF, NBS, and NCFM
<b>H</b>	Organize a technical working group with responsibility to guide the management of FABS and organize the primary roles for compiling FABS and the main responsibilities of each agency.	<b>June 2019</b>	NBM in coordination with CSD, MOF, NBS, and NCFM
<b>M</b>	Reconcile data sources used to compile current and capital accounts and the financial account transactions.	<b>ongoing</b>	Technical working group on FABS

## Appendix II. Methodological Issues

**1. For many financial instruments, changes in balance sheet positions can be used to estimate transactions.** However, where there are foreign currency instruments, or instruments where there are price and/or volume changes (notably for securities or equities), these effects must be removed to ensure that transactions are as accurate as possible. Reconciling the balancing item of sectoral capital accounts compiled by NBS (when these data will be available) will also improve the quality of the data.

For example, assume a deposit of 200 euros hold by household at a bank, an exchange rate of 0.05 euro for 1MDL at the beginning of the year and 0.04 euro for 1 MDL at the end of the year and no transaction during the period. In MDL at the time of opening balance sheet would be reported 4000 MDL; and at the time of closing balance sheet it would be reported 5000 MDL; the difference of 1000 MDL should be recorded in the revaluation account as the change was not due to a transaction or other change in volume. If, however, there were a transaction of 50 euros during the period, the closing balance sheet in MDL would be 6250. The difference between the opening and closing balance sheet is 2250 MDL. Two components explain the variation: the first one is the transaction and the second one is the revaluation. To determine how much is due to the transaction and how much is due to the depreciation of the MDL, the transaction should be converted to MDL using the exchange rate when the transaction occurs, if known, or alternatively the average exchange rate for the period. In this case, using the latter approach results in a transaction of 1111 MDL (50 euros / average (0.05;0.04)) and a revaluation of  $2250 - 1111 = 1139$  MDL.

**2. The time-adjusted Method can be used to estimate accrual values when the data are recorded on a cash basis.** This method is labelled 'time-adjusted cash'. It consists of applying to the series of the receipts or the payment a simple time lag based on compilers' knowledge. Payments due are recorded as payables; the part of payment not yet paid is also recorded as a liability (i.e., accounts payable) in the financial accounts and balance sheets. Receipts due are recorded as receivables; the part not yet received is also recorded as an asset in the financial accounts and balance sheets. Interest, taxes, excises and social contributions are affected by this issue. In the example below, the VAT is paid with a time lag of one month. Using the 'time-adjusted cash' approach, the receipts are recorded one month earlier for the whole series. The difference (100) between the 'time-adjusted cash' (18300) and the cash (18200), is recorded in the 'other accounts receivable'.



**Appendix Table 1. Time Adjusted Cash Method**

Value Added Tax	2018								
	January	February	March	April	May	June	July	August	
Cash	1'300	1'200	1'400	1'450	1'500	1'400	1'700	1'600	
Time-adjusted cash	1'200	1'400	1'450	1'500	1'400	1'700	1'600	1'700	
Value Added Tax	2018					Total 2018	2019		
	September	October	November	December	January		February	March	
Cash	1'700	1'750	1'600	1'600	<b>18'200</b>	1'400	1'350	1'600	
Time-adjusted cash	1'750	1'600	1'600	1'400	<b>18'300</b>	1'350	1'600		

**3. Provisions for loan losses for a given period should be re-added to the closing financial position before computing the value of FABS.** The transaction will be the difference between the opening balance sheet and the closing balance sheet after adding back the provisions to the closing position and taking account of any foreign exchange valuation changes.

**4. For example, in the financial statement of a corporation, it is reported the stock of loans less provisions at the beginning of the period of 5220 MDL (where the provision is 20) and at the end of the period 5405 (where the provision is 25).** The provisions at the beginning and at the end of the period should be added respectively to the loans at the beginning and at the end of the period to derive the flows from the transaction. In the example, the transaction to be recorded is  $(5405 + 25) - (5220 + 20) = 190$  MDL.

**5. The writing-off (as opposed to its forgiveness or debt cancellation) of a loan is not considered a transaction as it is not implemented by mutual agreement.** It is not recorded in either the capital account or the financial account; for example, in the case of bankruptcy. It will be recorded in the other changes in the volume of assets accounts, usually only when the creditor removes the asset from its books. In the case of debt cancellation, there is a bilateral agreement between a creditor and a debtor to cancel (or to 'forgive') part or all of a liability owed by the debtor to the creditor. The debt cancellation implies a transaction in the capital account as a transfer of capital (D.99) and it will have a negative impact for the unit lending and a positive impact on the unit borrowing.

**6. For example, assume a corporation with a credit of 200 to a bank goes bankrupt.** In the financial balance sheet of the bank, the position of the loans is deleted and there are no flows recorded in financial accounts. It has no impact on net lending of the banking sector. However, if, the bank and the corporation decide by a mutual agreement to write off the loan, it results in a financial transaction for both entities (a decrease in financial assets of the bank and a decrease in financial liabilities of the corporation) with a counterpart as a transfer of capital (D.99). In this case it does affect the net borrowing and net lending positions of the two entities. The net worth of the bank will be negatively impacted, and the net worth of the corporation will be positively impacted.