GEORGIA

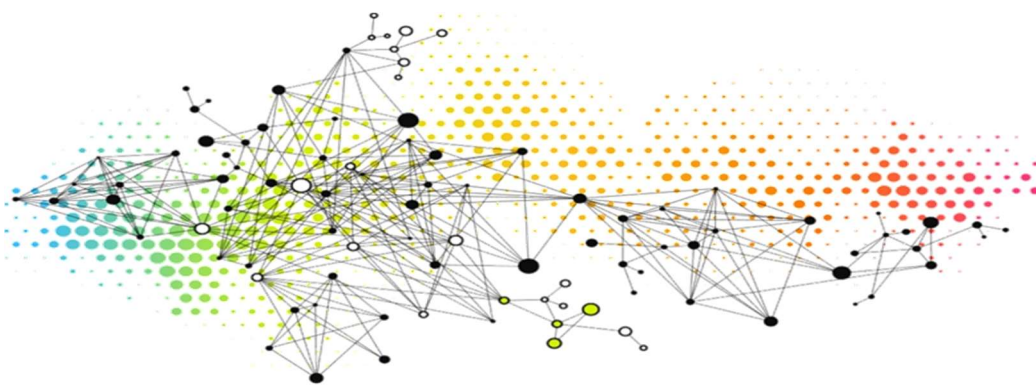**TECHNICAL ASSISTANCE REPORT ON THE FINANCIAL ACCOUNTS AND FINANCIAL SOUNDNESS INDICATORS MISSION**

March 2018

This Technical Assistance report on Georgia was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in September 2017.

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GEORGIA

REPORT ON THE FINANCIAL ACCOUNTS AND FINANCIAL SOUNDNESS INDICATORS MISSION (SEPTEMBER 18–29, 2017)

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CONTENTS

Acronyms

2008 SNA	*System of National Accounts 2008*
BI	Business intelligence
BSA	Balance sheet approach
CBCSDI	Cross-border, cross-sector, domestically incorporated
DCCBS	Domestically controlled, cross-border, cross-sector
DC	Domestic consolidation
DT	Deposit taker
FA	Financial accounts
FSI	Financial soundness indicator
FSI Guide	*Financial Soundness Indicators Compilation Guide*
GEL	Georgian lari
Geostat	National Statistics Office of Georgia
GFS	Government finance statistics
HHs	Households
IC	Insurance corporation
IFRS	International Financial Reporting Standards
IIP	International investment position
MFO	Microfinance organization
MFSMCG	*Monetary and Financial Statistics Manual and Compilation Guide*
MOF	Ministry of Finance
MSD	Monetary Statistics Division, NBG
NBG	National Bank of Georgia
NFC	Nonfinancial corporation
OCVA	Other changes in the volume of assets
ODC	Other depository corporation
OFC	Other financial corporation
ROA	Return on assets
ROE	Return on equity
SebStat	Database of the NBG
SGSPD	Specialized Groups and Supervisory Policy Department, NBG
SRF	Standardized report form
STA	IMF's Statistics Department
TA	Technical assistance

SUMMARY OF MISSION OUTCOMES AND PRIORITY RECOMMENDATIONS

1.   **In response to a request from the National Bank of Georgia (NBG), and with the support of the International Monetary Fund's (IMF's) Middle East and Central Asia Department, a financial accounts (FA) and financial soundness indicators (FSIs) technical assistance (TA) mission visited Tbilisi, Georgia, during September 18–29, 2017**. The mission complemented the work of the October 2016 TA mission on financial and sectoral accounts. Its main objectives were to assist the NBG in: (i) compiling and disseminating quarterly FA by institutional sector; (ii) compiling and disseminating flow-based monetary statistics for the central bank and other depository corporations (ODCs); (iii) producing a quarterly balance sheet approach (BSA) matrix; (iv) reviewing the source data and compilation methodology of FSIs; and (v) improving the reporting frequency of FSIs.

2.   **The NBG made substantial progress in the implementation of the October 2016 mission's recommendations.** Early in 2017, it started reporting to the IMF's Statistics Department (STA) quarterly data for other financial corporations (OFCs) using standardized report form (SRF) 4SR, covering microfinance organizations (MFOs) and insurance corporations (ICs). It also corrected the shortcomings detected by that mission in SRF 2SR for ODCs and sent to STA revised data. Lastly, its Monetary and Statistics Division (MSD) developed a procedure to calculate exchange rate revaluations using an Excel spreadsheet, and based on these calculations it is currently producing for internal use quarterly two-dimensional FA for the financial sector with transactions and revaluations.

3.   **The current mission accomplished all its objectives during its stay in Tbilisi and agreed with the authorities on an action plan to improve FA and FSIs in Georgia**. The mission wants to acknowledge the excellent support and hospitality received from staff of the NBG, particularly of its MSD and its Specialized Groups and Supervisory Policy Department (SGSPD), which contributed decisively to the success of the mission.

4.   **One main objective of the mission was to assist the NBG in the compilation of quarterly flow FA by institutional sector; estimating transactions, revaluations, and other changes in the volume of assets (OCVA)**. FA present stocks and flows of financial assets and liabilities between all sectors of the economy, and with the rest of the world. FA are being produced by the MSD for internal use only, because for public dissemination the NBG wants first to develop automatic procedures for the estimation of revaluations and OCVA in its database (SebStat). It is expected that by May 2018 a business intelligence (BI) software will be fully operational for this purpose.

5.   **The availability of flow monetary data, a prerequisite for the compilation of flow FA, permits a more useful presentation of monetary statistics.** Analysis of transactions in monetary statistics offers an enhanced picture of the monetary developments, in particular, credit to the economy. The NBG should consider disseminating central bank's and ODC's statistics not only for stocks but also for transactions.

6.   **The MSD already produces a quarterly BSA matrix with information contained in the SRFs and data from the International Investment Position (IIP)**. The BSA is a powerful tool to identify risks and vulnerabilities in the financial positions of key sectors of an economy vis-à-vis other sectors and the rest of the world, and it is being increasingly used in IMF surveillance work. This BSA matrix should be expanded to cover general government's positions with the domestic nonfinancial sector, and between nonfinancial corporations (NFCs) and households (HHs).

7.   **The mission advised the NBG in developing three-dimensional FA, which add the counterpart sector.** This should be the next step, once regular compilation and dissemination of two-dimensional FA has been achieved. The NBG already has access to data for currency, deposits, loans, and debt securities from the SRFs. In the medium term, it needs inputs for NFCs and HHs from the National Statistics Office of Georgia (Geostat); and for government finance statistic (GFS) from the Ministry of Finance (MOF).

8.   **Together with staff of the MSD and the SGSPD, the mission reviewed the bridge table used to generate core and encouraged FSIs for deposit takers (DTs).** FSIs are indicators of the current financial health of the financial institutions in a country and their corporate and household counterparts. They provide an input to assess the strength and weakness of a financial system, and as such are being included in all IMF Article IV staff consultations. The NBG regularly reports quarterly core and encouraged FSIs for DTs and other sectors to STA for dissemination on the IMF's website, including the corresponding metadata. The mission found that the FSIs compiled in Georgia are fully in line with the methodology of the IMF's *FSI Compilation Guide* (*FSI Guide*), except for some minor discrepancies that will be corrected. Since the source data for core and encouraged FSIs for DTs are available on a monthly basis, the NBG could improve the frequency of dissemination of these indicators on its webpage and on the IMF's website from quarterly to monthly. Encouraged FSIs for other sectors will continue to be disseminated with a quarterly frequency.

9.   **To support progress in the above work areas, the mission recommended a detailed action plan with the following priority recommendations. Further details can be found in the section *Detailed Technical Assessment and Recommendations*.**

Table 1. Georgia: Priority Recommendations

Target Date	Priority Recommendation	Responsible Institutions
June 2018	*Compile and disseminate two-dimensional flow FA for the financial sector.*	**NBG [MSD]**
September 2018	*Compile and disseminate monthly flow-based monetary statistics for the Central Bank and ODCs.*	**NBG [MSD]**
December 2017	*Compile monthly FSIs for DTs and report them to STA for publication on the IMF website, introducing the revisions recommended by the mission*	**NBG [MSD and SGSPD]**
September 2018	*Produce a quarterly balance sheet approach matrix, complementing the source data from SRFs 1SR, 2SR, and 4SR with external sector, government finance data, and additional data for the nonfinancial corporation sector.*	**NBG [MSD]**
December 2018	*Develop three-dimensional FA tables for the financial and nonfinancial sectors.*	**NBG [MSD]**

THE FINANCIAL SYSTEM IN GEORGIA

10.   The NBG performs the classical functions of a central bank. It regulates the banking and non-banking financial institutions, although since 2013 the Insurance State Supervision Service of Georgia (ISSSG) has taken over the regulation of ICs and pension funds.

11.   Commercial banks dominate the financial system in Georgia, accounting for 90 percent of total assets. At end-August 2017, 16 commercial banks were active in the country, eight of them fully foreign owned and five with a majority participation of foreign investors. Their total assets amount to 32 billion Georgian lari (GEL), equivalent to US$ 12.6 billion. The two largest banks of the country, which are foreign owned, concentrate 70 percent of total assets of the banking system. Domestic controlled banks represent less than nine percent of total assets. Co-circulation is very high in the country, with 57 percent of loans and 66 percent of deposits denominated in foreign currency. Credit unions also operate within the ODC sector, but their magnitude is irrelevant and their businesses are carried out within closed groups.

12.   In the OFC sector, MFOs constitute around 55 percent of total assets (2.0 billion GEL), having experienced a rapid growth in number during the last years. At end-August 2017 there were 83 MFOs, 13 of them foreign controlled with a 40 percent market share within the subsector. A large number of pawnshops occupy the second place in terms of total assets, with 710 million GEL, or two percent of the total financial corporations sector. Fifteen ICs operate in the country, with total assets of about 500 million GEL; only one of them covering exclusively

non-life insurance risks. Three private pension funds, two of them belonging to ICs, have an insignificant participation in the financial sector. Four registered leasing companies, with total assets for 200 million GEL, were active at end-August 2017. The group of financial auxiliaries, insignificant in the market participation, comprises the Georgian Stock Exchange, brokerage companies, money remittance units, and exchange bureaus. Table 1 summarizes the Georgian financial system as of end-August 2017.

Table 2. Georgia: The Financial Corporations Sector
(mill. GEL, end-August 2017)

Financial Corporation (FC) Sub-Sector	Asset size	No. of Institutions	Percent of asset size to total subsector assets	Percent of asset size to total financial sector assets
National Bank of Georgia	9,481.8			
Other Depository Corporations				
Commercial Banks	31,518.2	16	100.0%	89.6%
Domestically controlled	2,792.2	3	8.9%	7.9%
Foreign controlled	28,726.0	13	91.1%	81.7%
Credit Unions	9.5	8	0.0%	0.0%
Total	**31,527.7**	**24**	**100.0%**	**89.6%**
Other Financial Corporations				
Other Financial Intermediaries except ICPF	**2,223.9**	**170**	**61.0%**	**6.3%**
Microfinance organizations	2,019.9	83	55.4%	5.7%
Domestically controlled	*1,236.3*	*70*	*33.9%*	*3.5%*
Foreign controlled	*783.6*	*13*	*21.5%*	*2.2%*
Leasing Companies	204.0	4	5.6%	0.6%
Pawnshops	**712.2**	**n.a.**	**19.5%**	**2.0%**
Financial auxiliaries	**167.2**	**1,269**	**4.6%**	**0.5%**
Stock Exchanges	3.9	1	0.1%	0.0%
Brokerage Companies	42.5	6	1.2%	0.1%
Money Remittance Units	3.3	124	0.1%	0.0%
Exchange Bureaus	117.5	1,138	3.2%	0.3%
Insurance Corporations	**520.1**	**15**	**14.3%**	**1.5%**
Life and Non-life Insurance	516.8	14	14.2%	1.5%
Non-life Insurance	3.3	1	0.1%	0.0%
Pension Funds	**23.9**	**3**	**0.7%**	**0.1%**
Total	3,647.3	1,457	100.0%	10.4%
Total Assets	**35,175.0**	**1,481**		**100.0%**

Source: NBG.

FINANCIAL ACCOUNTS

13.   One main objective of the mission was to assist the NBG in the compilation of quarterly flow FA by institutional sector. Currently, the source data for FA are the SRFs for the central bank, ODCs, and OFCs. They are adequate in terms of coverage and classification of financial instruments; although shortcomings in the sectoring and valuation of some financial instruments were found, which were corrected during the stay of the mission. In the future, the NBG might want to expand the source data to also cover stocks and flows of the nonfinancial sectors (government, NFCs, and HHs).

14.   **The MSD informed the mission that in early 2018 a business intelligence (BI) software will be operational in the SebStat database**. This will allow the MSD to automatically calculate exchange rate revaluations, as well as other kind of revaluations and OCVA. To that end, starting in 2018, commercial banks will be required to report to the NBG supplementary information on gross transactions, OCVA, and revaluations of securities.

15.   **Once the BI software is fully operational (expected by May 2018), the MSD will be able to produce and disseminate two-dimensional FA tables identifying transactions, revaluations, and OCVA for holding sectors and instruments**. The MSD has already developed a program to calculate exchange rate revaluations in an Excel spreadsheet. However, for the regular dissemination of FA tables, it decided to wait until the BI software consistently produces the required adjustments.

16.   **Flow monetary data for the central bank and ODCs can also be disseminated, complementing monthly stock statistics**. The estimation of flow components for monetary statistics is a prerequisite for the compilation of flow FA. This will enhance the current presentation of stock monetary statistics, offering an additional focus on transactions and a more accurate picture of the monetary developments, in particular, credit to the economy.

17.   **Once the regular compilation and dissemination of two-dimensional FA have been established, the NBG might want to move one step further and start compiling three-dimensional FA.** The three-dimensional (from-whom-to-whom) presentation shows inter-sectoral linkages for financial flows and positions and allows answering the question "who is financing whom, in what amount, and with which type of financial instruments." Moving from two- to three-dimensional FA requires additional information for the nonfinancial sectors, not always available in monetary statistics. In the medium term, source data currently available from the SRFs need to be supplemented with data of the nonfinancial sectors.

18.   **The MSD already produces a quarterly balance sheet approach (BSA) matrix sourced from the SRFs and with additional external sector information**. The regular production of a quarterly BSA matrix will be facilitated by the automation provided by the BI.

FINANCIAL SOUNDNESS INDICATORS

19.   **The mission reviewed the source data and compilation process of core and encouraged FSIs and found them adequate and in line with the methodology of the *FSI Guide.*** Together with staff of the MSD and the SGSPD, the mission went through the mapping of commercial banks' financial statements and additional supervisory data to Annexes 2, 3, and 4 of the FSIs. The mission found some minor shortcomings that slightly affect the value of a few indicators. The NBG will correct them and revise the affected FSIs accordingly.

20.   FSIs for Georgia are compiled using a "domestic consolidation" (DC) basis, which is acceptable in view of the structure of the country's financial system. The DC basis covers domestically incorporated (domestically and foreign controlled) DTs, consolidated with their resident DT subsidiaries, and any resident DT branch of foreign banks. Although the *FSI Guide* recommends to use either a "cross-border, cross-sector, domestically incorporated" (CBCSDI) or a "domestic controlled, cross-border, cross-sector" (DCCBS) basis, it also accepts the DC basis as an alternative when resident DTs have few or no nonresident subsidiaries and few or no domestically controlled non-DT subsidiaries, which is the case of Georgia.

21.   Source data allow to improve the frequency of compilation of FSIs for DTs from a quarterly to a monthly basis. Currently, the NBG disseminates—and reports to STA—quarterly FSIs for DTs and other sectors. However, it compiles monthly underlying data, and calculates the resulting FSIs with a monthly frequency. The NBG can start disseminating monthly core and encouraged FSIs for DTs; and report them to STA with the same frequency.

DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS

A. Financial Accounts

22.   Financial accounts present stocks and flows of financial assets and liabilities between all sectors of the economy, and with the rest of the world. In this sense, the FA have a broader sectoral coverage than monetary statistics, and therefore require additional data sources. At the time of the 2016 TA mission, the MSD produced two-dimensional (holding sector and instrument) FA for stocks for the financial sector, with flows calculated simply as the difference in stocks between periods. Following that mission's recommendation, the MSD developed a program— being now applied in an Excel spreadsheet to generate quarterly FA—to calculate revaluations due to exchange rate changes,[1] thereby splitting flows between transactions and revaluations.

23.   As was pointed out by the 2016 TA mission, the production of FA is a task that involves several macroeconomic statistics, and therefore close collaboration and coordination with other statistical agencies is very important to avoid inefficiencies and inconsistencies. For the case of Georgia, the required collaboration is mainly between the NBG and Geostat; but also with the MOF for GFS. Considering that the compilation of sectoral

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[1] The formula used to calculate exchange rate revaluations can be found in the *MFSMCG*, par. 5.249.

accounts is closely related with FA, the 2016 mission recommended a division of labor between those institutions, with the NBG focusing on FA and Geostat on sectoral accounts.

B. Source Data

Financial Sector

24.   Source data for the FA produced by the MSD are exclusively the SRFs for the central bank, ODCs, and OFCs. The SRFs contain detailed data by financial instrument, currency of denomination (domestic and foreign) and counterpart sector. This wealth of information allows a precise distribution of financial instruments for the financial sector, and can be used to allocate such instruments to counterpart sectors.

25.   Coverage of the financial sector is comprehensive and sufficient to produce FA for the financial sector. ODC data do not include credit unions, but their share in total assets is irrelevant, and their businesses are carried out within closed groups. OFC data comprise MFOs and ICs, which constitute three quarters of a subsector whose assets are less than ten percent of the total financial system.

26.   The classification and sectoring of financial instruments are in line with the methodology recommended by the *Monetary and Financial Statistics Manual and Compilation Guide (MFSMCG)*. This positive outcome is due to a proper structure of the chart of accounts and additional granular information reported by commercial banks for supervisory and monetary statistics purposes. Some minor shortcomings were found in the sectoring of financial instruments. They were explained to the MSD and eliminated during the stay of the mission in Tbilisi.

27.   Valuation of securities deviates from the *2008 System of National Accounts* (*2008 SNA*) and *MFSMCG* methodology. Debt securities are reported by banks at nominal, instead of at market, values. However, the bulk of debt securities held by commercial banks are issued by the central government and the NBG, and almost all of them are held to maturity. The securities market in Georgia is very illiquid, and therefore a market value for these instruments is difficult to establish. Banks report valuation changes of debt securities as supplementary information, but the MSD considers them as overestimated and not reliable. In cases of illiquid markets, fair values can be estimated discounting the future cash flows by a market interest rate, which for Georgia could be the available auction rate of government bonds. For debt securities issued by nonresidents, some appropriate price index could be used as a proxy to estimate revaluations. Holdings of equity shares are valued at acquisition cost, which presents a more significant deviation from the market prices recommended by the statistical methodology and the

requirements of International Financial Reporting Standards (IFRS).[2] The introduction of the BI software should facilitate the estimation of fair values and revaluations of debt securities.

28. **_Recommended actions_**: _Until commercial banks report reliable data on market prices and revaluations of debt and equity securities, approximate their market price using fair values. Facilitate the estimation of fair values by developing a routine in the BI software to be implemented in early 2018._

29. **_Recommended actions_**: _For debt securities issued by nonresidents, use a price index for revaluations due to price changes, and use original currency of denomination for revaluations due to exchange rate adjustments._

Nonfinancial Sectors

30. **The source data used to construct FA tables should be expanded with data for nonfinancial sectors**. Currently, the MSD is relying exclusively on monetary data from the SRFs for the construction of FA tables. Thus, these tables contain gaps in the positions (assets and liabilities) and flows of financial instruments of the nonfinancial sectors (government, NFCs, and HHs) and of these sectors with the rest of the world. Those data gaps force the MSD to allocate as residual an important proportion of nonfinancial sectors' assets. Information on nonfinancial sectors is mainly available from national accounts, GFS, or corporate surveys, areas beyond the responsibility of the NBG. To obtain such data, the NBG needs the support and close collaboration with other agencies, in particular, Geostat and the MOF.

31. **_Recommended actions_**: _Coordinate with Geostat and the MOF the sharing of data on stock and flows of financial instruments held by nonfinancial sectors._

C. Compilation Procedures

Business Intelligence Software

32. **Starting in January 2018, the NBG will centralize data reporting from the financial institutions in its SebStat database**. Currently, commercial banks report their data to the SGSPD for supervisory purposes, and parts are used by the MSD to produce SRF 2SR. Commercial banks also report supplementary data to calculate revaluations. Data on the NBG (used to produce SRF 1SR) and from OFCs (used for SRF 4SR) are currently not stored in the SebStat, but is planned to be done at a later date (not yet specified).

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[2] For supervisory and prudential policies, the SGSPD corrects the value of holdings of shares downward to reflect accumulated reserves on investment losses, but not upward when their prices increase.

33.   The NBG is in the process of developing a BI software to run in the SebStat, with full implementation envisaged by May 2018. This will create a comprehensive platform to process, analyze, produce, and disseminate monetary data. The BI software will make use of the expanded reporting requirement that commercial banks need to fulfill in January 2018, with data on stocks, gross transactions, revaluations, loan write-offs, provisions for loan losses, and other OCVA (e.g., reclassifications) in original currency of denomination for all financial instruments.

34.   *Recommended actions*: *Develop in the BI software a program to automatically calculate from the SebStat the series needed for estimating revaluations, OCVA, and transactions.*

Estimation of Flow Components

35.   The MSD has made significant progress in the compilation of flow-based monetary statistics. Following the 2016 mission's recommendations, the MSD developed an ad-hoc program to calculate exchange rate revaluations for cash holdings, deposits, and loans by original currency and counterpart sector. The program can be integrated into the BI software to automatically generate the needed adjustments for the FA tables.

36.   The information available on loans and deposits permits an accurate estimation of valuation changes due to exchange rate movements for the central bank and ODCs. For the NBG, the information is available from its trial balance. Commercial banks report to the NBG supplementary information on their accounts split by original currency and counterpart sector. Using this information on stocks the MSD applies the formula recommended by the *MSMFCG* (par. 5.249) to estimate revaluations at a granular level.

37.   Information from OFCs on foreign-currency denominated assets and liabilities are split into domestic and foreign currency, but without differentiating by original foreign currency. Apart for positions with ODCs, the MSD cannot estimate revaluations with accuracy. However, the two subsectors of OFCs covered by SRF 4SR represent less than 8 percent of total assets of the financial sector, and only one-third of their assets and liabilities are denominated in foreign currency, with the most common foreign currency used being the U.S. dollar. Hence, revaluations for exchange rate changes can be calculated using a U.S. dollar index for all foreign-currency denominated accounts.

38.   *Recommended actions:* *Estimate revaluations due to exchange rate changes of the OFC sector using a U.S. dollar-based index.*

39.   The SebStat collects data on OCVA reported by commercial banks, but the MSD deems this information unreliable. Commercial banks report supplementary information on the valuation changes of their holdings of securities, but the MSD believes that most of the reported valuation changes are solely due to exchange rate changes and overestimated, for

which reason the MSD does not use them. The situation should change once commercial banks start reporting to the SebStat comprehensive data on stocks, gross transactions, revaluations, and OCVA in January 2018.

40. **Other changes in the volume of assets should be eliminated from total flows (difference in stocks) to estimate transactions during the relevant period**. In the case of monetary accounts, OCVA is normally triggered by the write-offs of loans and, in extraordinary cases, by the repudiation of debt securities by the issuer. Other sources of OCVA are the reclassification of instruments (e.g., loans that become negotiable are reclassified as securities), or change in the sector classification of the counterpart (e.g., an OFC that starts operating as ODC). Currently, the MSD does not have access to information on OCVA for the ODC sector. As for the case of revaluation of securities, the problem should be solved with the new reporting requirements to be implemented starting in January 2018.

41. *Recommended actions*: *Estimate revaluations for securities and OCVA in the ODC accounts once commercial banks start reporting detailed information on stocks, gross transactions, revaluations, and OCVA.*

D. Flow-based Monetary Statistics

42. **With the available information, the MSD can start compiling and disseminating monthly flow-based monetary statistics for the central bank and the ODCs, a prerequisite for the compilation of flow FA**. Flows derived from differences in stocks could then be split into their three components: transactions, revaluations, and OCVA, offering a more detailed picture of the monetary developments in the country. Transactions can be estimated by taking the difference between balance sheet stocks for two periods and then removing the effects of changes from other sources.

43. *Recommended actions*: *Once the BI software automatically generates the series needed to estimate the different components of flows for monetary statistics, complement the dissemination of stock monetary data with information on transactions during the period.*

E. Two-dimensional Financial Accounts

44. **Building on the recommendations of the 2016 TA mission, the MSD is currently producing two-dimensional FA tables for stocks and flows**. Data are presented on a gross basis, without consolidating positions of different institutional units within the same subsector. Flows consist only of transactions and revaluations, because the MSD does not have access to information on OCVA.

45.   The FA table for the whole financial system aggregates the FA tables for the central bank, ODCs, and OFCs, eliminating inter- and intra-sectoral discrepancies. Source data for each table are the corresponding SRFs for each one of these sectors, including imputation to counterpart sectors. To eliminate discrepancies in the aggregated table, for intersectoral positions and flows the MSD prioritizes the information available from SRF 1SR; while for stocks and flows of ODCs vis-à-vis OFCs it uses data from SRF 4SR because ODCs are misreporting their positions with OFCs.[3] For intra-sectoral discrepancies, priority is given to the information on assets. Vertical discrepancies in stocks and flows are subsumed as *Net financial investment* and *Net acquisition of financial assets less net incurrence of liabilities*.

46.   Equity of ODCs is allocated to resident sectors and to nonresidents based on supervisory information of banks' ownership. The equity component on the liability side of SRF 2SR is presented at book value (total assets less total liabilities) in line with the *MFSMCG* methodology, instead of the market value recommended by the SNA. According to supervisory information, 72 percent of the capital of the commercial banks is property of foreign investors. From the remaining 28 percent domestically owned, 5 percent is owned by resident HHs and 95 percent by holding companies, which in the *2008 SNA* are classified as financial (non-deposit taking) institutions. This allocation key should be periodically updated by the MSD, to properly reflect the actual state of bank ownership.

47.   *Recommended actions*: *Once the BI software is fully operational, regularly compile and disseminate quarterly two-dimensional flow FA. In the medium-term, enhance the FA tables with data on financial flows and positions of nonfinancial sectors.*

F. Three-dimensional Financial Accounts

48.   Three-dimensional FA add the counterpart sector to the two-dimensional financial statistics, allowing for from-whom-to-whom analysis. This provides a framework to present flows and stocks for all categories of instruments for all the sectors or subsectors by counterpart sector. Within this framework, it is possible to trace who finances whom, by which category of financial instrument, and the financing amount. For transactions, the three-dimensional presentation shows both parties to the transaction as well as the financial instrument being used.[4]

49.   The MSD has access to enough information to produce three-dimensional FA. The source data allow to identify inter-sectoral linkages for financial positions. By regrouping a source data matrix and applying it for flow data, the MSD can produce three-dimensional FA

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[3] Once this problem is solved thanks to the new reporting requirements to be implemented in 2018, priority should be given to data contained in SRF 2SR.

[4] *MFSMCG*, par. 8.36.

once the two-dimensional FA for flows has been completed. Until progress is achieved by Geostat in improving data on nonfinancial sectors, the NBG can continue working with the information of the financial sector and the IIP.

50.   The mission presented to the MSD the concept and merits of three-dimensional FA. As there are several possibilities to disseminate three-dimensional FA, which may also vary over time, the mission shared some examples of these options. The final choice will depend on the analytical needs and data availability in the country, with a focus on the relevant institutional sectors and financial instruments.

**51.   *Recommended actions:* *Once the process of compilation and dissemination of two-dimensional FA has been established, work towards the production of three-dimensional FA.*

G. Balance Sheet Approach Matrix

52.   The BSA matrix can be used to analyze vulnerabilities arising from balance sheet positions and mismatches at a point in time, as well as of the buildup of such vulnerabilities over time.[5] A full coverage of the financial sector (SRFs 1SR, 2SR, and 4SR), provides around 70 percent of the information needed to complete this matrix. Most of the remaining gaps can be filled with data from the IIP and GFS.[6]

53.   Using the information contained in the SRFs and data from the IIP, the MSD already produces a quarterly BSA matrix. The MSD uses a file linking the data sources to the matrix in an Excel format. In conjunction with the BI development due in early 2018, the MSD should develop a program to automatically produce the matrix. This matrix should be enhanced with data for the general government, NFCs, and HHs, for which the NBG relies on support from the MOF and Geostat.

**54.   *Recommended actions*: *On the course of the BI development, work towards the regular compilation of a quarterly BSA matrix with information from the SRFs and the IIP. In the medium term, enhance the BSA matrix with data from government finance and other nonfinancial sectors.*

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[5] See *MFSMCG*, par. 8.44-8.49.
[6] Positions between NFCs and HHs can only be obtained from national accounts related sources, and they are not always available on a quarterly basis.

H. Financial Soundness Indicators

55.   Staff of the MSD and the SGSPD explained to the mission the process in place at the NBG to compile FSIs. The NBG compiles core and encouraged FSIs for DTs[7] and other sectors and disseminates them on its website with a quarterly frequency. With the same frequency, it reports FSIs regularly to STA for posting on the IMF's webpage, including the corresponding metadata. The source data and the methodology applied by the NBG broadly complies with the recommendations of the *FSI Guide*, with some minor exceptions that affect a few indicators.

I. FSIs for Deposit Takers

Consolidation Basis

56.   FSIs for Georgia are compiled using a "domestic consolidation" (DC) basis, which is acceptable considering the structure of the country's financial system. DC data consolidate flows and positions of (domestic and foreign controlled) resident DTs with their DT subsidiaries resident in the economy, plus resident branches of foreign banks. Resident non-DT financial institutions are excluded from this consolidation basis. Although five banks have domestically and foreign incorporated non-DT subsidiaries and one bank a DT subsidiary abroad (see Figure 1), the size of these subsidiaries is small and their inclusion will not materially affect the calculation of the FSIs for the whole financial system.

57.   Credit unions are excluded from the coverage of the DT sector, but this does not have any significant impact on the compiled FSIs. Credit unions carry out business within closed groups and the magnitude of their assets is irrelevant. Their exclusion will not impact the final value of the indicators, and would only add a compilation burden.

The Regulatory Framework in Georgia

58.   Since January 2015, Georgia's regulatory framework follows Basel II and Basel III simultaneously. Nevertheless, this fact does not affect the compilation of the current set of FSIs for DTs. The simultaneous application of both regulatory principles by all banks refers to the calculation of the components of regulatory capital according to Basel III, while Basel II elements prevail in the calculation of risk-weighted assets. The new liquidity requirements of Basel III have been enforced only for the Liquidity Coverage Ratio (September 2017), while the Net Stable Funding Ratio will be gradually introduced starting in 2018.

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[7] Three FSIs for DTs are not compiled: *Large exposures to capital* and *Gross asset (and liability) positions in financial derivatives to capital*.

Figure 1: Georgia: Deposit Takers and Their Subsidiaries*
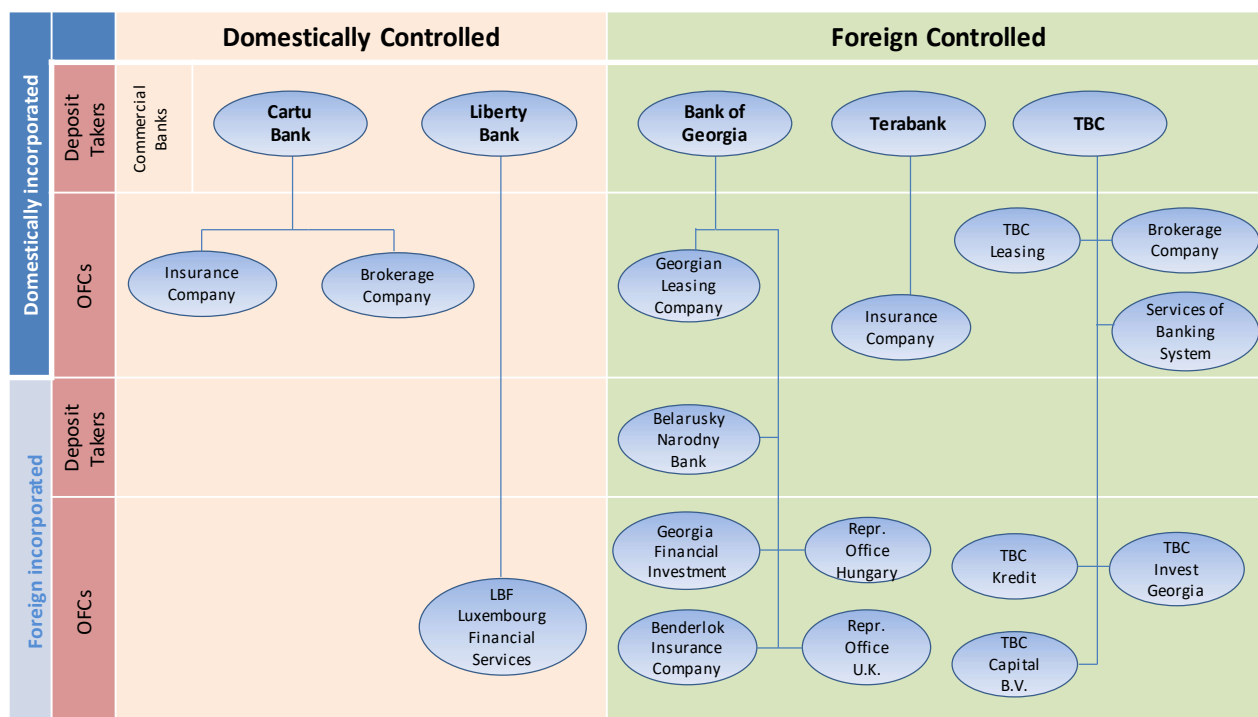
∗ The Figure refers only to banks that have subsidiaries.

Source: NBG and IMF staff.

59.   In addition to the risk-weighted-assets measure of the Basel principles, the SGSPD also computes more stringent weights for foreign-currency denominated loans. In this way, it produces two measures of capital adequacy: one following Basel definitions, and the other with augmented risk-weight for foreign-currency denominated assets.

Accounting Principles

60.   Commercial banks in Georgia follow IFRSs. IFRSs provide a framework for the presentation of financial statements, including implementation guidance. IFRSs focus on the preparation and dissemination of financial statements of individual firms. The amended *FSI Guide* defers to IFRSs for the recording and reporting of source data for FSIs.

61.   Financial instruments are valued on balance sheet along the recommendations of the *FSI Guide*, although some discrepancies might exist for debt securities and equity shares. Debt securities are reported by commercial banks at their nominal value (acquisition cost plus accrued and not paid interest), which is the IFRSs rule for securities held to maturity but not for those designated for trade or available for sale, which should be reported at their market value. In practice, this might not constitute a serious problem in Georgia because the bulk of

securities held by banks are government's and central bank's instruments held to maturity, with little trade on an illiquid market. Banks report **shares** at their acquisition cost, but for supervisory (and FSI compilation) purposes, their value is reduced by the constituted accumulated investment loss reserves. This is a one-way prudential approach, whereby the book value of shares is reduced in case of losses, but not increased to reflect market appreciation of the held shares. **Foreign currency denominated financial instruments** are converted into national currency at the NBG's official exchange rate, which is equivalent to a market rate.

62.   Loans are defined as nonperforming using the 90-days past due criterion or evidence that the loan may become nonperforming before this date. As a rule, any loan for which a debtor has not made the scheduled payments of principal or interest for at least 90 days must be classified as nonperforming. Additionally, banks may designate a loan as nonperforming if they have evidence that payments will not be made, for instance, in case of bankruptcy of the debtor, which is in line with IFRS. The 2007 amendments to the *FSI Guide* restrict the classification of nonperforming loans to only loans overdue 90 days or more. To reconcile this discrepancy, on its website the NBG disseminates both measures of nonperforming loans, while to STA it reports the indicator using the amended *FSI Guide* definition.

Source Data

63.   Source data are the aggregated sectoral balance sheet reported for monetary statistics (SRF 2SR), supplemented by the aggregated income statement of commercial banks and memorandum series. Aggregation of data does not constitute a problem for the DC basis, because there are no ownership relations between resident banks; i.e., no resident bank has a DT subsidiary in the economy. Balance sheet data are comprehensive and presented by instrument, currency of denomination (local and foreign), and counterpart sector. The aggregated income statement contains all profit and loss accounts (more than 300). Memorandum series consist of supervisory series compiled by the SGSPD plus specific series needed for FSIs sourced from the individual accounts of the commercial banks' balance sheet.

64.   Reports have a monthly frequency and are used by the MSD for internal compilation of FSIs. However, the series are disseminated and reported to STA—for posting on the IMF's website—only with a quarterly frequency. Since monthly data are available, core and encouraged FSIs for DTs should be disseminated on a monthly basis, including historical series.

65.   *Recommended actions*: *Disseminate core and encouraged FSIs for DTs on a monthly basis on the NBG's website and report them to STA with monthly frequency for posting on the IMF's webpage. Report to STA historical monthly series from January 2001 onwards*.

Mapping from the Source Data to the FSI Reporting Forms

66. **Together with staff of the MSD and the SGSPD, the mission reviewed the methodology used to compile FSIs from the source data.** Source data and methodology broadly comply with the recommendations of the *FSI Guide*, with a few exceptions that slightly affect the calculation of some indicators. Table 2 presents the shortcomings detected by the mission, which are discussed below. The MSD will correspondingly revise the bridge tables used to generate the FSIs.

67. *Recommended actions*: *Revise the bridge tables used by the MSD to generate FSIs for DTs according to the mission's recommendations.*

68. **The largest departures from the *FSI Guide* methodology are observed in the income- and expense-based indicators**. This is because for *Noninterest income* the SGSPD nets fees and commissions payable from fees and commission receivable, instead of classifying the former as *Other expenses*. This netting artificially reduces *Noninterest income* and *Noninterest expenses*, affecting the indicators that use *Gross income* as denominator, namely FSIs I008 (*Interest margin to gross income*), I009 (*Noninterest expenses to gross income*), and I018 (*Trading income to gross income*). It also affects FSI I019 (*Personnel expenses to noninterest expenses*). The mission calculated the revised indicators with data for August 2017, finding that I008 would change from 66.5 to 60.4 percent, I009 from 47.4 to 52.9 percent, I018 from 8.4 to 6.9 percent, and I019 from 58.4 to 47.5 percent.

69. **The remaining recommended revisions only marginally affect, or not at all, the calculated FSIs**. One small change will occur in indicators I006 (*Return on assets*) and I009 (*Return on equity*) because the MSD's mapping does not pull the balance of account 8617 (*Losses from hedging operations in foreign currency*). Return on assets (ROA) and return on equity (ROE) are calculated before extraordinary items and taxes, as recommended on the *FSI Guide.*

Capital adequacy indicators are calculated in line with Basel supervisory principles and the *FSI Guide* methodology. Supervisory deductions affecting *Tier 1 capital* are netted from this concept before adding to the concept of *Total regulatory capital* (*Tier 1* plus *Tier 2 capital*), from which other regulatory deductions are subtracted to arrive to the concept of *Total net capital resources*. Beyond the capital adequacy ratio required by Basel III, the NBG publishes a more stringent measure, where foreign-currency denominated assets add weight to total risk-weighted assets.

Table 3. Georgia: Recommended Revisions to the FSI Mapping

Accounts	From	To	Observations
Income and Expense Statement			
8401-8419 – Fees and Commission Expense (NC, FC)	Negative *Noninterest Income, Fees and Commissions Receivable*	*Noninterest Expenses*	Fees and commission to be presented on a gross basis
6503, 6513 – Dividends on Investment Totaling more than 50% of Authorized Capital (NC, FC)	*Noninterest Income, Other Income*	*Noninterest Income, Prorated Earnings*	Accounts record dividends on ownership investment (>50%)
6901-6915 – Gains Arising from Investment in Securities (NC, FC)	*Other Income*	*Gains and Losses on Financial Instruments*	Accounts record gains from investments in securities
8617 – Losses from Dealing Operations in Foreign Currency	Not classified	*Gains and Losses on Financial Instruments*	
8902-8915 – Losses Arising from Investments in Securities (NC, FC)	*Other Expenses*	*Gains and Losses on Financial Instruments*	Accounts record losses from investments in securities
8901 – Losses from Operations with Stocks	*Other Financial Assets Provisions*	*Gains and Losses on Financial Instruments*	Account records losses from stock trading
Balance Sheet			
Accumulated Depreciations	Netting from *Other Assets*	Netting from *Fixed Assets*	
Insurance Technical Reserves	*Capital and Reserves*	*Other Liabilities*	
Deposits Excluded from Broad Money	Not currently allocated	*Customer Deposits*	Relates only to deposits of OFCs, NFCs, and HHs

70.   The NBG uses both core and broad measures when calculating the two liquidity indicators: *Liquid assets to total assets* **(I010) and** *Liquid assets to short-term liabilities* **(I011)**. Short- and long-term financial instruments are defined in the chart of accounts based on their original maturity, with the benchmark being one year. However, for the definition of liquid assets for FSIs, the SGSPD includes only instruments with a remaining maturity of one week or less. The core measure comprises cash, reserve deposits, and deposits with resident and nonresident banks in local and foreign currency that comply with the maturity requirement. The broad measure adds central government debt securities in local and foreign currency. Both measures are in line with the *FSI Guide*'s methodology.

71.   Three FSIs for DTs are not compiled by the NBG. These are *Large exposures to capital* (I014) and *Gross asset* (and *liability*) *positions in financial derivatives to capital* (I016, I017). In the first case, because the NBG has set strict limits to large exposures[8] that cannot be exceeded and therefore large exposures are not reported. Financial derivatives are recorded by banks off-balance sheet—which is against the *FSI Guide* and IFRS guidelines—and therefore have a zero value on the balance sheet. However, the financial derivative market in Georgia is very limited and it is not expected that such accounts could show high balances.

J. FSIs for Other Sectors

72.   The NBG compiles some of the encouraged FSIs for other sectors on a quarterly basis. These FSIs are *OFC assets to GDP*, *Household debt to GDP*, *Household debt service and principal payments to income*, the two indicators for *Market liquidity*, and the *Number of bankruptcy proceedings*. The indicator on *OFC assets to total financial system assets* can be compiled and disseminated using monthly monetary data for commercial banks and OFCs. Real estate prices are produced in Georgia, but because of a small and biased sample, the NBG does not consider the obtained indices reliable enough to be disseminated within the set of FSIs.

73.   To compile the four indicators for NFCs, the NBG needs source data from the national accounts. These indicators require information on total debt, equity, return on equity, and foreign exchange exposure of NFCs. To that end, the NBG should request from Geostat to receive regularly the required data.

74.   *Recommended actions*: *Expand, as possible, the set of FSIs for other sectors with the indicators for NFCs.*

K. Metadata

75.   The mission reviewed the metadata for FSIs and found them overall adequate, although they need to be updated. Metadata are key to interpret FSIs and to allow for cross-country comparisons. Any differences from the recommendations in the *FSI Guide* should be explained in the metadata and updated when necessary. Metadata should also contain information on the content and coverage of the FSIs, as well as the accounting conventions and other national guidelines. The authorities already submit metadata for FSIs to STA. In this regard, the NBG has not updated the metadata since September 2013, although important changes have occurred in the meantime, such as the partial adoption of the Basel III regulatory framework.

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[8] The limit is set at 15 percent of regulatory capital for loans and other obligations to nonrelated customers; and to 25 percent of regulatory capital for parties related to the institution.

Moreover, the financial system structure presented in form FS1 should be submitted to STA and updated annually using the information at the end of the previous year.

76. ***Recommended actions***: *Update, as needed, the metadata for FSIs reported to STA. Update annually Annex 1 of FSIs with the structure of the financial system with information at the end of the previous year.*

Table 4. Mission's Recommendations

Priority	Action/Milestone	Risks/Assumptions/ Verifiable Indicators	Target Completion Date
Financial Accounts (FA)			
Outcome: The NBG compiles and disseminates quarterly FA, based on the SRFs 1SR, 2SR, and 4SR plus additional external sector, government finance, and nonfinancial sector data.			
H	Compile and disseminate quarterly flow FA for the financial sector, based on SRFs 1SR, 2SR, and 4SR.	Quarterly flow FA disseminated by the NBG, identifying transactions, revaluations, and OCVA. **Benchmark.**	June 2018.
H	Compile and disseminate monthly flow data for the central bank and ODCs.	Monthly flow-based monetary statistics disseminated by the NBG, analyzing transactions during the reporting period.	September 2018.
H	Develop a computer program to automatically estimate revaluations for instruments by sector and currency of denomination using the source data provided by ODCs and the NGB's balance sheet.	The program is developed within the BI software of the SebStat database. **Benchmark.**	March 2018.
H	In the NBG's balance sheet and data reported by ODCs identify OCVA, such as loan write-offs or reclassification of financial instruments.	OCVA identified for the NBG and ODCs. Starting in 2018, ODCs report OCVA to the NBG.	March 2018.
M	In the FA tables, allocate ODCs' *Capital and reserves* to shareholders' sectors.	Allocation between nonresident and resident institutional sectors estimated based on shareholders' information available to the SGSPD.	March 2018.
H	Reclassify debt securities held by ODCs from *Other resident sectors* to *Other nonfinancial corporations*.	Debt securities held by ODCs properly sectorized in SRF 2SR.	December 2017.
M	Exclude from broad money time deposits with an original maturity of one year or more.	Broad money excludes time deposits with an original maturity of one year or more.	March 2018.
M	Produce a quarterly BSA matrix based on the SRFs and with additional information from external sector statistics, government financial statistics, and the nonfinancial sector.	A quarterly BSA matrix is already being produced by the NBG with SRF and IIP data. A full-fledged BSA can be produced only when the NBG has access to government and real sector data.	September 2018.
M	Compile and disseminate quarterly from-whom-to-whom FA.	Quarterly from-whom-to-whom FA disseminated by the NBG, with data for all sectors of the economy and the rest of the world. Close collaboration with Geostat is required.	December 2018.

Table 4. Mission's Recommendations (concluded)

Priority	Action/Milestone	Risks/Assumptions/ Verifiable Indicators	Target Completion Date
Financial soundness indicators (FSIs)			
Outcome: Core and encouraged FSIs are compiled for official dissemination and for posting on the IMF's website.			
H	Compile monthly core and encouraged FSIs for DTs according to the methodology of the *FSI Compilation Guide*, and submit them to STA for dissemination on the IMF's website.	Core and encouraged FSIs disseminated on the IMF's website on a monthly basis. The NBG already compiles quarterly core and encouraged FSIs, disseminates them on its website, and reports them to STA. Some minor methodological adjustments are required. **Benchmark**.	December 2017.
H	Submit to STA historical monthly series for FSIs, from January 2001 onwards.	FSIs monthly series, with data from December 2001 onwards, published on the IMF's website.	December 2017.
H	Regularly update metadata for FSIs submitted to STA.	Updated FSI metadata available on the IMF's website.	Continuous.
H	Submit to STA Annex 1 of FSIs with the structure of the financial system at the end of each calendar year.	Updated Annex 1 available on the IMF's website.	Continuous.
M	Compile and disseminate quarterly FSIs for OFCs, NFCs, and HHs, and report them to STA for dissemination on the IMF's website.	Some quarterly FSIs for OFCs, NFCs, and HHs are already being reported to STA.	Partially completed. Full completion by December 2018.

Appendix I. Officials Met by the Mission

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