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THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

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TECHNICAL ASSISTANCE REPORT ON THE FINANCIAL SOUNDNESS INDICATORS MISSION (JUNE 15–JULY 10, 2020)

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CONTENTS

Glossary

AFR	IMF's African Department
BSD	Bank Supervision Directorate
BSA	Bank Supervision Application
CDM	Concentration and Distribution Measures
CGFC	Capital Goods Finance Companies
CBCSDI	Cross-border, Cross-sector, Domestically Incorporated consolidated basis
DBE	Development Bank of Ethiopia
DC	Domestic Consolidation basis
DCCBCS	Domestic Controlled, Cross-border, Cross-sector consolidation basis
DL	Domestic location
DT	Deposit taker
FAS	Financial Access Survey
FCA	Federal Cooperative Agency
FSI	Financial soundness indicator
FSI Guide	*Financial Soundness Indicators Compilation Guide*
FX	Foreign exchange
IAS	International Accounting Standard
ISIC	International Standard Industrial Classification of All Economic Sector Activities
IFRS	International Financial Reporting Standard
IMF	International Monetary Fund
ISD	Insurance Supervision Directorate
MFAD	Monetary and Financial Analysis Directorate
MFI	Microfinance Institutions
MSD	Microfinance Institutions Supervision Directorate
NBE	National Bank of Ethiopia
NBFI	Nonbank financial institutions
NPL	Nonperforming loan
OCI	Other Comprehensive Income
ROA	Return on assets
ROE	Return on equity
RWA	Risk-weighted asset
SNA	System of National Accounts
SRF	Standardized Report Forms
STA	IMF's Statistics Department
TA	Technical assistance

SUMMARY OF MISSION OUTCOMES AND PRIORITY RECOMMENDATIONS

1. The International Monetary Fund's (IMF's) Statistics Department (STA) provided technical assistance (TA) on financial soundness indicators (FSI) to the National Bank of Ethiopia (NBE) during June 15-July 10, 2020. The TA mission took place in response to a request from the authorities, with the support of the IMF's African Department (AFR). Due to the COVID-19 pandemic and travel restrictions, the mission was conducted remotely via video conferences. The mission worked with the staff of the NBE on the development of FSIs that are in line with the IMF's 2019 *FSI Guide*.[1] The main objectives of the mission were to: (i) review the source data, institutional coverage, and accounting and regulatory frameworks supporting the compilation of FSIs; (ii) provide guidance for mapping source data for the banking sector to the FSI reporting templates FS2 and FSD as well as preparing the metadata; and (iii) agree with the authorities on the timeline to begin regular reporting of the FSIs for deposit-takers to STA. The mission also provided technical assistance to the NBE on the compilation of net open positions in foreign currencies.

2. As a result of the mission, the NBE is now in a position to report quarterly FSIs to STA in line with the *2019 FSI Guide*. Together with staff of the BSD, the mission compiled 22 FSIs for deposit takers (DTs), and two FSIs on the size of OFC's sector from the existing source data. The coverage of DTs for the compilation of FSIs includes 17 commercial banks which cover 90 percent of the entire DTs sector. The FSIs for DTs cover key aspects of capital adequacy, asset quality, earnings and profitability, and liquidity, providing a useful input for financial stability analysis.

3. Prior to the mission, the BSD compiled some FSIs for DTs for internal use in its AFR's financial stability analysis—although they were not always consistent with the FSI Guide methodology. As this was the first FSI mission to work with the BSD in developing an FSI compilation framework, the mission reviewed the FSIs currently compiled by the BSD to assess consistency with the *2019 FSI Guide* and found discrepancies in key indicators, including nonperforming loans (NPLs) to total gross loans, interest margin to gross income, noninterest expenses to gross income, and capital to assets (Appendix III). The mission made a number of recommendations to the NBE to compile their FSIs in line with the *2019 FSI Guide*.

4. The NBE's legal and reporting framework for banking supervision provides the basis for source data needed for FSI compilation. The mission had access to aggregate data for the banking sector for the period June 2017 to December 2019 and to bank-by-bank data for December 2019. The mission was able to assist the NBE in their mapping to the FSI workbook and validated aggregated data from bank- by- bank data for December 2019. In addition, the

[1] The work of the mission was facilitated by the excellent cooperation provided by officials of the Bank Supervision Directorate (BSD) of the NBE.

mission reviewed source data from the balance sheet, income statement, and supervisory data from June 2019 to December 2019 and made various recommendations to improve the collection of source data. Because the data were not available electronically from the BSD, the mission only reviewed supervisory data on large exposures and net open position in foreign currencies for the quarters ended June 2019 and December 2019. The BSD staff would need to compile these supervisory data for the remaining quarters, in line with the framework developed while also addressing the various data shortfalls that were observed during the mission before submission to the FSIs to STA.

5. Improvements in the source data reported to the NBE for FSI compilation could be usefully strengthened, as recommended in this report. While source data reported by the banks are broadly adequate for FSI compilation for deposit-takers in terms of their quality, frequency, and timeliness, some shortfalls need to be addressed, including: i) disaggregating the private sector into nonfinancial corporation, household, and nonprofit institutions serving household sectors and recording transactions with nonresidents as a separate sector; ii) adopting common definitions for the classification and sectorization of financial instruments for the compilation of Monetary and Financial Statistics and FSIs consistent with the Monetary and Financial Statistics Manual and *2019 FSI Guide;* iii) correcting for the inconsistencies that were observed in the detailed breakdowns of revenue and expenses call reports and the main income and expense statements that are used in the compilation of FSIs; iv) strengthening the collection of net open position in foreign currencies; and v) strengthening the NBE's validation and reconciliation of data among the different call reports to ensure that the source data reported by banks are consistent, accurate and complete—particularly for the case of state owned banks, given their relative size in the financial sector.

6. Commercial Banks in Ethiopia follow a modified Basel I framework and have adopted the International Financial Reporting Standards (IFRS) and the International Accounting Standards (IAS), where applicable. IFRS9 has been adopted by commercial banks since July 2018, for the valuation of financial instruments, asset classification, and provisioning requirements in parallel with the NBE's Directive on Asset Classification and Provisioning (No. SBB/69/2018). The adoption of the international regulatory and accounting frameworks facilitates the international comparability of FSIs. Against those frameworks, the mission assessed the adequacy of the definitions of key underlying data series including capital, liquidity, and NPLs.

7. A timeframe for reporting FSI data and metadata to the IMF was discussed and agreed on with BSD officials. BSD officials can compile quarterly FSIs for DTs using the workbook developed by the mission and agreed on for reporting FSI data and metadata to STA for posting on the IMF's FSI website. As of March 2020, data for 143 countries are posted on the FSI website, allowing for cross-country comparisons and analyses that are useful to policy makers and analysts.

8. To support progress in the above work areas, the mission recommended a detailed action plan summarized by the following priority recommendations:

Table 1. Ethiopia: Priority Recommendations

Target Date	Priority Recommendation	Responsible Institutions
November 2020	*Implement quality control checks for data submitted by commercial banks and closely work with them to explain reporting requirements and resolve data discrepancies.*	**NBE**
November 2020	*Finalize and report to STA for review the FSI sectoral financial statements (FS2 template) for DTs, including balance sheet, income statement, and memorandum series, the sectoral FSIs with underlying series (FSD template) for DTs with quarterly data beginning from 2017: Q2, the FSI institutional coverage (FS1 template) with annual data starting from 2017, and the FSI metadata (FSM template).*	**NBE**
December 2020	*Start regular reporting to STA, for posting on the IMF's FSI website, of the FSD and FS2 templates with quarterly data starting from 2017: Q2, and the FS1 template with annual data starting from 2017. Also report the FSM template periodically.*	**NBE**

DETAILED ACTION PLAN

Priority[1]	Action/Milestone	Target Completion Date
H	*Implement quality control checks for data submitted by commercial banks and closely work with them to explain reporting requirements and resolve data discrepancies.* ***Benchmark***	*11/30/2020*
H	*Finalize and report to STA for review the FSI sectoral financial statements (FS2 template) for DTs, including balance sheet, income statement, and memorandum series, the sectoral FSIs with underlying series (FSD template) for DTs with quarterly data beginning from 2017: Q2, the FSI institutional coverage (FS1 template) with annual data starting from 2017, and the FSI metadata (FSM template).* ***Benchmark***	*11/30/2020*
H	*Start regular reporting to STA, for posting on the IMF's FSI website, of the FSD and FS2 templates with quarterly data starting from 2017: Q2, and the FS1 template with annual data starting from 2017. Also report the FSM template periodically.* ***Benchmark***	*12/31/2020*
H	*Report net open position in foreign currencies for historical data using on-balance sheet position only and switch to on- and off-balance sheet position once granular and consistent off-balance sheet data are collected.*	*12/31/2020*
H	*Redesign the call report on net open position in foreign currencies (DF001) to collect more granular data on banks' foreign exchange positions to facilitate the reconciliation of the data with the balance sheet.*	*12/31/2020*
H	*Collect data on the regulatory risk reserve in the balance sheet and on non-performing loans and advances & provisions returns.*	*12/31/2020*
M	*Collect information on the maturity profile of demand, saving, and time deposits separately in the maturity of assets and liabilities call report.*	*12/31/2020*

[1]/ Priority scale: H–High; M–Medium; L–Low.

Priority[1]	Action/Milestone	Target Completion Date
H	*Provide clear instructions to banks on how to properly fill-in their regulatory capital and risk weighted assets call reports (QC001, QI001 and QO001 forms).*	06/30/2021
M	*Provide additional instructions and breakdowns for reporting supplementary capital items and supervisory deductions.*	*06/30/2021*
M	*Configure the BSA to generate aggregate data for commercial banks from the detailed inputs for the call reports in order to facilitate the compilation and validation of FSIs in the workbook developed by the TA mission for the NBE. Generate FSIs from the BSA once collection of data is fully automated.*	*06/30/2021*
H	*Adopt common definitions for the classification and sectorization of financial instruments (including deposits) in the balance sheets across the BSD and the MFAD consistent with the Monetary and Financial Statistics Manual and 2019 FSI Guide.*	*12/31/2021*
H	*Reconcile the call reports of detailed breakdowns on income and expenses with the main income and expense statements and update the compilation spreadsheets developed during the mission accordingly.*	*12/31/2021*
M	*Revise the balance sheet to incorporate financial derivatives on both the asset and liability sides and exclude L/C commitments from the balance sheet.*	*12/31/2021*
M	*Calculate the spread between the reference lending and deposit rates based on the updated interest income and interest expense report forms.*	*12/31/2021*
M	*Collect residential real estate and commercial real estate loans data in line with the definitions provided in the 2019 FSI Guide.*	*12/31/2021*

[1]/ Priority scale: H–High; M–Medium; L–Low.

INTRODUCTION

A. Background

9. This was the first STA mission on FSIs for the NBE. Ethiopia does not report FSIs to STA but it does produce and share a select subset of FSIs with the AFR department. Prior to this mission, Ethiopia received an MFS mission which assisted the NBE in compiling monetary and financial statistics in standardized report forms (SRFs) for the central bank (SRF 1SR) and ODCs (SRF 2SR) in January 2019.

10. Ethiopia is currently under ECF/EFF arrangements with proposed financial sector reforms. Improved FSIs are expected to facilitate better monitoring of financial stability by the NBE and help guide economic policies in the context of the ECF/EFF arrangements, by shedding light on the underlying accounting and regulatory frameworks for the FSIs. In May 2020, Ethiopia requested emergency financial assistance under the RFI to fight the coronavirus pandemic.

11. In response to the COVID 19 pandemic, the NBE recently issued temporary measures to ease the impact of pandemic on the local economy and its social consequences. These measures, among others, require commercial banks to assess individual borrowers' conditions on a case by case basis whenever loans are renegotiated/restructured in accordance with the NBE's Directive on loan classification and provisioning requirements, and to temporarily suspend the provisioning requirements for these loans by delaying their supervisory classification. These measures are applied to borrowers affected by the pandemic.

B. Ethiopia's Financial System

12. The functions, responsibilities, and mandate of the NBE are contained in the National Bank of Ethiopia Establishment Proclamation (#206 of 1963), last amended in 2008. The mission of the NBE is to maintain price and exchange rate stability, to foster a sound financial system, and undertake such other functions as are conducive to the economic growth of Ethiopia. The NBE acts as a fiscal agent in the country's relations with the IMF. The NBE has regulatory and supervisory authority over the ODC sector (except for SACCOs, which are supervised by the Federal Cooperative Agency) as well as insurance companies and capital goods finance companies.

13. Ethiopia's financial system is largely dominated by one state owned commercial bank. As of end-December 2019, total assets of the financial system (excluding NBE) were Birr 1,630 billion, equivalent to 46 billion U.S. Dollars and representing 60 percent the country's gross domestic product (GDP). The commercial banks constitute close to 90 percent of this market of deposit-takers with the state-owned commercial bank, notably, the Commercial Bank of Ethiopia (CBE), holding an almost 65 percent market share of financial assets and credit to the economy (loans and long-term debt securities) and 62 percent of deposits. An overview of the structure of the entire financial sector including the NBE is presented in Table 2.

14. The ODC sector comprises commercial banks, the DBE, microfinance institutions (MFIs), and SACCOs, with total assets of about Birr 1,630 billion at end-December 2019 (Table 2):

- **Commercial banks are licensed by the NBE to provide services such as accepting deposits, making business and mortgage loans, and offering basic investment products**. The legal framework for the banking business was last updated with Proclamation 1159/2019. There are currently 17 licensed commercial banks in Ethiopia, of which 16 are privately owned and one state owned bank, notably the CBE. The CBE has also subsidiaries in Djibouti and South Sudan. There is no foreign ownership of any bank in Ethiopia.

- **The Development Bank of Ethiopia (DBE) operates as a financial development institution and accepts current accounts, time and savings deposits from social security funds, state-owned enterprises, DBE staff, and DBE's private sector borrowers**. The DBE requires all borrowers to make an equity contribution of 30 percent of the value of the project before approving any credit facilities. Its share of total financial system assets is approximately 4.5 percent.

- **MFIs take deposits and are regulated by Proclamation 1164/2019**. There are currently 39 MFIs operating in Ethiopia with about 5 percent of total financial system assets. Concentration in the MFI sector is high, with the five largest MFIs controlling 90 percent of the market share. Eleven of the MFIs are owned by regional governments. Ten commercial banks have equity participations, but these are not significant. MFIs are mainly funded from customer deposits of about 40 Birr billion at end-2019. The DBE also provides funding to the MFI through government schemes.

- **Savings and Credit Cooperatives (SACCOs) are cooperative financial organizations owned and operated by and for its members**. They are supervised by the Federal Cooperative Agency (FCA) as well as by their respective regional cooperative bureaus. There are two major types of SACCOs operating in Ethiopia. Institution based SACCOs provide deposit, credit, and micro-insurance services to members of a specific organization while community-based SACCOS provide these services to members of a small geographic area. All SACCOs lend only to their members.

15. Currently there are no DTs in receivership or liquidation in Ethiopia. The *FSI Guide* recommends including DTs in distress if they hold significant positions and to compile FSIs both including and excluding these DTs.

Table 2. The Financial Sector in Ethiopia (as of end-December 2019)

Institutions	Number of Institutions	Total Assets (Birr Billions)	Percent of GDP	Percent of total financial system assets
National Bank of Ethiopia		**470.4**	**17.4**	**23.2**
Depository Corporations		**1,523.3**	**56.5**	**75.2**
Commercial Banks	17	1,345.7	49.9	66.4
o/w Government owned	1	829.6	30.8	41.0
o/w Private commercial banks	16	516.2	19.1	25.5
Development Bank of Ethiopia	1	91.8	3.4	4.5
Deposit-taking microfinance companies	39	85.7	3.2	4.2
Savings and Credit Cooperatives*	n.a	n.a	n.a	n.a
Other Financial Corporations		**31.8**	**1.2**	**1.6**
Insurance Companies	18	28.7	1.1	1.4
o/w life insurance companies	10	2.3	0.1	0.1
o/w non-life insurance companies	8	26.4	1.0	1.3
Capital Goods Finance Companies	6	3.2	0.1	0.2

Source: National Bank of Ethiopia.
* Data on saving and credit cooperatives were not available to the mission.

16. Commercial banks also offer a range of Shariah compliant products commonly referred to as 'interest free banking products' in Ethiopia. As of December 2019, the share of interest free banking products was 1.6 percent of total loans and 4.7 percent of total deposits, and both of these shares have been increasing recently. There has also been significant new interest free banking licensing activity, with six new banking licenses applications currently under consideration, and one newly licensed bank that is in the process of starting its activities.

17. The Other Financial Corporation (OFC) sector is relatively undeveloped. It includes 18 insurance companies and 6 capital good finance companies that are supervised by the NBE.

- **The insurance corporations in Ethiopia is small and mainly provides general insurance**. Insurance companies are allowed to conduct both life and nonlife insurance business, although the NBE requires the composite insurance companies to report separate financial statements for their life and non-life operations. There are currently 18 insurance companies operating in Ethiopia, the largest of which is owned by the state and has roughly a 35 percent market share. There is also one reinsurance company.

Other financial auxiliaries operating in the insurance sector include insurance brokers and agents.

- **The capital good companies provide mainly leasing and hire purchase facilities to their customers**. Almost a third of their assets are prepayments to acquire fixed assets for leasing. CGFC liabilities are mostly commercial borrowings from commercial banks or the DBE.

DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS

A. Consolidation Basis and Institutional Coverage

18. Ethiopia's FSIs for DTs are compiled using a "domestic consolidation" (DC) basis, which is appropriate based on Ethiopia's banking system structure.[2] Only the CBE has two foreign subsidiaries located in Djibouti and South Sudan, and one domestic non-deposit-taking subsidiary, but their operations are currently not material. Thus, DC basis is appropriate for Ethiopia. The DC basis, defined in *the FSI Guide*, includes data for resident DTs along with those of their resident branches and subsidiaries in the same sector. Although *the FSI Guide* recommends using either a "cross-border, cross-sector, domestically incorporated" (CBCSDI) or a "domestic controlled, cross-border, cross-sector" (DCCBCS) basis, it also provides the DC basis as an alternative when resident DTs have no nonresident branches or subsidiaries, or have ones that are so small that they do not materially affect the results.

19. The FSIs for DTs cover all 17 domestically incorporated commercial banks, representing approximately 90 percent of the assets of the depository corporation sector in Ethiopia. The remainder of the sector that is not covered includes the DBE (Box 1), MFIs, and SACCOs.

20. MFIs have their own regulatory requirements on capital adequacy, asset classification, and liquidity. For instance, MFIs are subject to a 12 percent capital adequacy ratio, slightly adjusted asset classification rules in comparison to banks, a 20 percent liquidity ratio, and additional limits on loan maturity and borrowing. With a few exceptions (i.e., capital adequacy and liquidity), reporting formats for MFIs are different from those of DTs. The NBE is currently redesigning the call reports for MFIs with a view to shifting from the current collection in hard copy to their electronic version in a few months. Also, due to capacity constraints, reports from some MFIs do not fully comply with IFRS/IAS. Taking these issues into account, the mission

[2] DC is renamed as "Domestic Location" (DL) in the *2019 FSI Guide*.

team proposed incorporating MFIs into DT compilation once the data quality and timeliness can be improved and data are collected electronically.

Box 1. The Development Bank of Ethiopia

While the DBE is a development finance institution with its own developmental objectives, it also qualifies as a deposit-taking institution for FSI compilation purposes. Therefore, there is scope for the NBE to include the DBE in the coverage of FSIs in the future. Despite the differences in the regulatory frameworks (paragraph 30), source data on the soundness of the DBE are quite similar to those of commercial banks with the exception of supervisory series on large exposures and liquidity requirements which would have to be collected from a statistical perspective. The *2019 FSI Guide* also provides flexibility to consolidate deposit-takers that are at different stages of implementation of the Basel framework in the same jurisdiction, so the fact that the DBE is subject to different capital adequacy requirements should not rule out its inclusion in the coverage of FSIs. Furthermore, any deviation arising from the DBE's specific regulatory framework including those relating to asset classification and provisioning requirements would need to be properly documented in the metadata. The table below provides a comparison of selected FSIs for the banking sector that were derived for the 17 commercial banks both with and without the DBE.

Financial Soundness Indicators with and without the DBE, end-December 2019

	DBE Included	DBE Excluded
Core FSIs		
Regulatory capital to risk-weighted assets	17.2	17.7
Regulatory Tier 1 capital to risk-weighted assets	17.2	17.7
Nonperforming loans net of provisions to capital	15.3	7.7
Nonperforming loans to total gross loans	5.5	2.7
Liquid assets to total assets	13.8	11.6
Net open position in foreign exchange to capital	28.4	28.9
Return on assets	2.9	2.9
Return on equity	21.7	20.6
Interest margin to gross income	65.0	66.3
Noninterest expense to gross income	54.0	56.9
Additional FSIs		
Capital to assets	8.0	8.0
Personnel expenses to noninterest expenses	47.1	47.7
Customer deposits to total (noninterbank) loans	144.8	157.7
Foreign-currency-denominated liabilities to total liabilities	3.1	2.4

Sources: IMF staff.

21. Since the NBE does not have a formal agreement to share supervisory information with the FCA, source data on SACCOs were not available to the mission. The mission was thus not able to review the source data on SACCOs to assess whether it was adequate for the compilation of FSIs. Also, the regulatory framework for SACCOs is not fully aligned with that of commercial banks and microfinance institutions, complicating the aggregation of data to compile FSIs. This mission therefore reiterates the recommendation of the 2019 MFS mission that

the NBE and Federal Cooperative Agency should enter into a memorandum of understanding to share source data on SACCOs.

22. *Recommendations:*

- The NBE to begin regular reporting of FSIs for commercial banks according to the *2019 FSI Guide* using the workbook developed during the mission.
- The NBE to include MFIs in the compilation of FSIs for DTs once the data quality, timeliness, and reporting formats are enhanced.

B. Accounting and Regulatory Frameworks Underlying the FSI Data

23. Commercial banks in Ethiopia have adopted International Financial Reporting Standards (IFRS) and, where applicable, International Accounting Standards (IAS) for the preparation of financial statements including the quarterly reports that are used for compiling FSIs. The application of international conventions enhances cross-country comparability of FSIs. The Ethiopia Accounting and Auditing Board is responsible for ensuring adherence to IFRS/IAS. Beginning July 1, 2018, banks in Ethiopia have started implementing IFRS9, which replaced IAS39, for the classification and measurement of financial instruments and the calculation of impairment and provisioning requirements in parallel with the NBE's directive (SBB/69/2018) on *Asset Classification and Provisioning*.

24. Loans are classified as nonperforming when they are past due for 90 days or more.[3] Under IFRS9, banks can make a rebuttable presumption that loans are classified as nonperforming when they are past due for more than 90 days. However, because the NBE's regulation is prescriptive, the 90 days backstop under IFRS9—as applied by the commercial banks in Ethiopia—cannot be rebutted.

25. The NBE's directive on *Asset Classification and Provisioning* (No. SBB/69/2018) prescribes the minimum thresholds that banks must adhere to in terms of provisioning requirements for performing and nonperforming loans. The minimum provisioning requirements prescribed by the NBE for performing loans are 1 and 3 percent on outstanding amount of loans that are classified as "Pass" and "Special Mention" (30 days past due) respectively; and 20, 50 and 100 percent on the outstanding amount of loans net of collateral for nonperforming loans that are classified as "substandard" (90 days past due), "doubtful" (180 days past due) and "loss" (360 days past due) respectively (Table 3). In terms of the NBE's directive on Asset Classification and Provisioning, based on days past due, "pass" will correspond to IFRS9's stage 1 (initial recognition), "special mentioned" to IFRS9's stage 2 (significant increase in credit risk); and "substandard", "doubtful" and "loss" to IFRS9's stage 3 (impairment). To ensure

[3] Except for overdraft where additional conditions need to be fulfilled as stipulated in the NBE's directive on Asset Classification and Provisioning (No. SBB/69/2018).

compliance with the minimum provisioning requirements, the NBE has recently issued a circular requiring commercial banks to transfer any excess/shortfalls of provisions derived from the application of IFRS9's expected credit loss models and supervisory approach to/from regulatory risk reserves accounts. The regulatory risk reserves account is not included in regulatory capital.

26. Financial instruments are valued at amortized cost or fair value through profit and loss/other comprehensive income (FVTPL/FVOIC) in accordance with IFRS9. A level 3 measurement approach is commonly used in Ethiopia to measure financial instruments that are valued at fair value due to the absence of secondary financial markets for trading debt securities and equity participations. Equity investments, which were previously measured at nominal value under IAS39, are measured at fair value under IFRS9.

Table 3. Loans Classification and Provisioning Rules for Commercial Banks

IFRS9	NBE's Loans Classification	Number of Days Past Due	Minimum Provisions Prescribed by the NBE (in percent)
Stage 1 (Initial recognition)	Pass	Less than 30 days	1
Stage 2 (Significant increase in credit risk)	Special Mention	30–90 days	3
Stage 3 (Impairment)	Substandard	90–180 days	20
	Doubtful	180–360 days	50
	Loss	More than 360 days	100
Source: NBE SBB/69/2018 Asset Classification and Provisioning (5th Replacement) and audited financial statements of banks.			

27. The regulatory framework for the computation of capital adequacy ratios for the commercial banks currently follows a modified version of Basel I, although the NBE plans to implement Basel II in the future. The minimum capital adequacy ratio, as defined by the ratio of primary capital to risk weighted assets, is currently set at 8 percent for commercial banks. According to the NBE's Directive (No. SBB/9/95) on *computation of risk weighted assets,* primary capital consists of paid-up capital, share premium, general reserves and legal reserves. Since the NBE's regulation does not prescribe any element of Tier 2 capital, primary capital is equal to total regulatory capital. Retained earnings and gains on revaluation of fixed assets are excluded from primary capital while no supervisory deductions are applied to intangible assets such as goodwill, and investment in unconsolidated subsidiaries. Total risk-weighted assets of banks are the sum of on- and off-balance sheet assets exposures, multiplied by fixed risk weight coefficients ranging from 0 to 100 percent (Table 4), as modified by the NBE. Off-balance sheet exposures are converted in credit equivalent amounts using prescribed credit conversion factors before risk weights are applied in accordance with the risk profile of the counterparts. There is no capital requirement for market risk.

Table 4. Summary of Risk-Weighted Coefficients by Types of Claims

Risk-Weights	Types of Claims
0 percent	Cash in hands Claims on or guaranteed by the NBE Claims on or guaranteed by Federal Government of Ethiopia
20 percent	Claims on or guaranteed by banks with a maturity of less than 1 year Claims on or guaranteed by Regional Government of Ethiopia
50 percent	Residential mortgage loans
100 percent	Claims on or guaranteed by banks with a maturity of more than 1 year Loans other residential mortgage loans Investment in securities and equity other than government Fixed assets Other assets

28. The NBE's Directive (No. SBB/57/2014) on *Liquidity Requirements* requires commercial banks to maintain liquid assets of not less than 15 percent of their net current liabilities. While the NBE's directive on *Liquidity Requirements* prescribed a broad range of instruments that may qualify for inclusion in liquid assets, the NBE has not yet approved any financial instruments other than cash (foreign and local currencies), deposits with the NBE, net deposits with local and foreign banks, or treasury bills for calculation of liquid assets. Also, NBE bills are currently not included in the calculation of liquid assets because they are mainly issued to finance long-term development projects in Ethiopia, tend to have longer maturity profiles than treasury bills, and lack effective secondary market in Ethiopia.

29. Large exposures are defined as loans and advances granted to a single borrower or group of connected borrowers in excess of 10 percent of primary capital. This reporting requirement is introduced in the NBE's Directive (No. SBB/53/12) on *credit exposures to single and related counterparties*, which also prescribes a regulatory limit on aggregate credit exposures, comprising loans and advances, to a single borrower or group of connected borrowers of 25 percent of total capital. The NBE's regulation defines a group of related companies as consisting of a corporation, a share company, a public enterprise or any business entity and their majority-owned subsidiaries as well as the directors, their spouses and close relatives by first degree consanguinity. However, the NBE's definition of large exposures is not fully in line with the BCBS Standard, the recommended approach for measuring large exposures in the *2019 FSI Guide*. The BCBS's "Supervisory Framework for Measuring and Controlling Large Exposures" (BCBS Large Exposures Standard) defines large exposures as the sum of all exposures—including loans, investments in debt securities, and equity of a bank—to a counterparty or to a group of connected counterparties if it is equal to or above 10 percent of the bank's Tier 1 capital. The BCBS Large Exposures Standard defines counterparties as connected when there exists either a control relationship or economic interdependence between counterparties. Therefore, realigning

the definition of large exposures with the Basel's definition would ensure consistency with the approach adopted by the 2019 Guide. This would require, among others, extending the definition of credit exposures to cover corporate bonds.

30. Commercial banks need to maintain a daily net open position in foreign currencies of 15 percent of their total capital. As per the NBE's Directive (No. SBB/27/01) "Amendment of Limitation on Open Foreign Currency Position of Banks" the net open position in foreign exchange is the sum of the net long or short positions of the on- and off-balance sheet assets and liabilities in each foreign currency as per the format provided in the Annex in the Directive.

31. The DBE follows its own regulatory and supervisory framework according to its development objectives as set out by the Government of Ethiopia. The DBE is subject to a 15 percent capital requirement—defined as the ratio of the net worth of the bank to its risk weighted assets—and has its own loans classification and provisioning requirements. According to the NBE's directive (No. SBB/52/2012) on *Asset Classification and Provisioning for Development Finance Institutions,* the DBE is required to maintain the same level of provisions and assets classification criteria as commercial banks for short-term loans while for medium/long-term loans the requirements are less stringent (Table 5). The DBE is in the process of adopting a modified version of IFRS9 for loans classification and provisioning, consistent with the ageing of the debtors prescribed by the NBE's regulation.

Table 5. Loans Classification and Provisioning Rules for Medium and Long-Term Loans Granted by the DBE

IFRS9	NBE's Loans Classification	Number of Days Past Due	Minimum Provisions Prescribed by the NBE (in percent)
Stage 1 (Initial recognition)	Pass	Less than 180 days	1
Stage 2 (Significant increase in credit risk)	Special Mention	6-12 Months	3
Stage 3 (Impairment)	Substandard	12-18 Months	20
	Doubtful	18 Months- 3 years	50
	Loss	More than 3 years	100

Source: NBE SBB/52/12 Asset Classification and Provisioning for Development for Finance Institutions and the DBE.

C. Source Data

32. The mission found that the source data for compiling FSIs for commercial banks are broadly consistent, but some gaps need to be addressed. The source data for compiling FSIs for DTs include income and expense statements, the balance sheets and other call reports that are relevant for compiling supervisory series relating to regulatory capital requirements, the liquidity profile, the net open position in foreign exchange, nonperforming loans, and provisioning. Most source data used in the compilation of FSIs are reported on a quarterly basis with the exception of the net open position in foreign exchange which is reported daily. The NBE also collects high level summary data on the balance sheet position of banks on a monthly basis. Quarterly call reports are due within 20 business days of the end of the reporting period[4]. Only a few series are not available, most notably, information on the geographical distribution of loans and the breakdowns of commercial and residential real estate loans.

33. FSIs in Ethiopia are calculated using the following reporting forms:

- PL001: Profit and loss statement (quarterly);
- BA001: Breakdown of income accounts (quarterly);
- BE001: Breakdown of expenses (quarterly);
- BS001: Balance sheet (quarterly);
- QC001: Capital adequacy report (quarterly);
- QI001: Capital adequacy – on balance sheet (quarterly)
- QO001: Capital adequacy – off-balance sheet (quarterly)
- MA001: Maturity of assets (Weekly);
- LP001: Loan classification (quarterly);
- NL001: Non-Performing Loans and Advances & Provisions (quarterly);
- DF001: Foreign currency positions (daily); and
- LBOO1LB: Large exposures (quarterly).

34. Further sectorization of loans and deposits would improve the presentation of the sectoral financial statements used in the compilation of FSIs. This would require disaggregating loans to the the private sector into nonfinancial corporations, households, and nonprofit institutions serving households, and recording transactions with nonresidents as a separate sector. Further, loans to nonfinancial corporations should be disaggregated by economic activities such as agriculture, construction, tourism, etc., using the United Nation's International Standard Industrial Classification of All Economic Sector Activities (ISIC). Sectorization of the financial statements may be extended to other financial instruments on the asset and liability sides (including deposits) of the balance sheet (consistent with the recommendations of the 2004 and 2009 MFS missions) to ensure that the classification and

[4] Monthly call reports should be submitted within 10 days, weekly call reports within 7 days and daily call reports within one day.

sectorization that are used for compilation of FSIs are consistent with the Monetary and Financial Statistics compiled by MFAD. The 2019 MFS mission also recommended a number of improvements in the sectorization of financial instruments, notably collecting disaggregated data on "sundry debtors" and "accounts payable" to identify positions with nonresidents, insurance companies, other depository corporations, and clearing/settlements that are relevant for the compilation of FSIs.

35. Recommendation:

- The BSD and MFAD to adopt common definitions for the classification and sectorization of financial instruments (including deposits) in the balance sheet (BS001 Form), consistent with the Monetary and Financial Statistics Manual and 2019 FSI Guide.

36. The NBE needs to strengthen the validation of data submitted by banks and issue clear guidance to banks on how to report the different line items in the call reports. The NBE is currently revising its call reports, which provides an opportunity to strengthen its data validation procedures and clarify their taxonomy. The mission found several discrepancies across the different call reports that need to be addressed, notably:

a. Income and expense statement and detailed breakdown of income and expenses do not always reconcile;
b. Provisioning figures in the call reports and balance sheet do not match;
c. Components of regulatory capital and risk weighted assets do not align with their value on the balance sheet;
d. Letter of credit on the assets and liabilities of the balance sheet cannot always be offset.

37. Recommendation:

- The NBE to implement quality control checks for data submitted by commercial banks and closely work with them to explain the reporting requirements and resolve data discrepancies.

38. The Bank Supervision Directorate (BSD) has made commendable efforts to collect supervisory data in electronic form from banks during the past three years. Phasing out completely the traditional hard copy submissions would improve the timeliness and accuracy of data collected by the NBE. In 2017, the BSD started to collect supervisory data from commercial banks using the Bank Supervision Application (BSA), which is a web-based platform used by several central banks in Africa to collect and process data from commercial banks. Prior to the implementation of the BSA in 2017, supervisory data were collected mostly in hard copy, and therefore were not readily available to the mission for compilation of FSIs. The microfinance and insurance supervision departments plan to begin gradually shifting the collection of their call reports from hard copies to the BSA in the near future. Once the migration of the call reports to the BSA is complete, the NBE may initiate the incorporation of MFI data with DT data for the compilation of FSIs and start compiling FSIs for insurance corporations.

39. The BSA should be configured to generate the FSIs for the banking sector and for individual banks. Currently, the BSA generates high-level summary reports only, and thus the staff of the BSD has to manually aggregate the more granular data from the call reports when they need to compile FSIs. The NBE would benefit from configurating the BSA to automatically generate these aggregated data for commercial banks in the detailed format of the call reports as they contain useful granular information that are relevant for off-site monitoring including the compilation of FSIs. This would facilitate the transition to the new FSI report forms currently under development, including the new template to collect data on Concentration and Distribution Measures (CDM).

40. Recommendations:

- The NBE to configure the BSA to generate aggregate data for commercial banks from the detailed inputs for the call reports in order to facilitate the compilation and validation of FSIs in the workbook developed by the TA mission for the NBE.
- The NBE to generate FSIs from the BSA once collection of data is fully automated.

D. Compilation Framework

41. The mission developed compilation spreadsheets to electronically derive FSIs from source data (aggregated income statement, balance sheet, and supervisory series) for DTs. This process involved mapping source data to the IMF's FSI sectoral financial statement template and deriving the indicators for the sectoral financial statements in the template, to minimize manual work and errors. The mapping of income and expense statement, balance sheet, and supervisory data was conducted based on the methodology of the 2019 Guide using bridge tables. The bridge tables show where each item in the income statement and balance sheet is classified, serving as a useful reference for current and new FSI compilers. The compilation spreadsheets, including the bridge tables, were provided to the NBE. This compilation framework will ensure a smooth FSI compilation.

42. The mission assisted the NBE in the compilation of 11 core FSIs and 11 additional FSIs for deposit-takers as well as two additional FSIs relating to the size of OFC subsectors. These indicators were compiled for dissemination based on the list of core and additional indicators in *2019 FSIs Guide*. The core FSIs for deposit-takers that were not compiled are common equity tier 1 capital to risk-weighted assets, loan concentration by economic activity, the liquidity coverage ratio, the net stable funding ratio, and residential real estate prices. Additional FSIs that were not available include the geographical distribution of loans to total loans, the spread between the reference lending and deposit rates, and credit growth to the private sector. Although the new core FSI on provisions to nonperforming loans was not compiled, it can be calculated by taking specific provisions divided by nonperforming loans. Most of the FSIs that were not compiled are yet to be implemented in the new report forms currently under development by STA.

43. The main differences between the existing FSIs compiled by the BSD and those developed during the mission stem from compilation methodologies. The FSIs compiled by the mission were based on the recommended compilation methodologies of the *2019 FSI Guide*. This included the reclassification of general provisions and other provisions to other liabilities, the annualization of income and expenditure figures, and the use of average capital and total assets figures where appropriate. Other differences are explained in Appendix III. The mission also calculated selected FSIs including the DBE to illustrate the likely impact of extending the coverage of the FSIs (Box 1).

44. The mission also presented the Concentration and Distribution Measure (CDM) tool to the BSD staff. The *2019 FSI Guide* introduced CDMs for selected FSIs to provide critical information about financial system vulnerabilities not directly captured by simple averages. The CDM tool can be downloaded on the IMF FSI website. The use of the CDM tool is especially important for Ethiopia given the dominance of the CBE which may cause sectoral averages to be unrepresentative of the rest of the banking system.

Income Statement

45. The income and expense statements have been adjusted from the fiscal to the calendar year to ensure cross-country comparability of FSIs on earning and profitability. Figures are now cumulative from January 1st (instead of July 1st) to the end of the reporting quarter for the purpose of compiling FSIs on earnings and profitability. This is consistent with the methodology prescribed in the *2019 FSI Guide*.

46. The income and expense statements and the detailed breakdowns of income and expenses in the call reports are used to map revenue and expenses to the FSI report forms. However, when the mission examined the income and expense statements it found several discrepancies and misalignments with respect to the call reports. For example, it was not clear whether banks need to report their prorated income and gains and losses on financial instruments valued at fair value through profit loss (FVTPL) separately or in other income. There is also no separate line in the detailed breakdown of income for banks to report their dividend income.

47. Recommendation:

- The NBE to reconcile the call reports of detailed breakdowns on income and expenses with the main income and expense statements and update the compilation spreadsheets developed during the mission accordingly.

48. Accrued interest on nonperforming loans is not capitalized in the income and expense statements when loans are past due more 90 days. Instead, it is kept in a suspense account in the memorandum items. Furthermore, recoveries on nonperforming loans that had been previously written-off need to be adjusted in the provision accounts in the income and expense statements and not be recorded in other income. Any interest income derived as part of

the recovery exercise would be credited to the interest income accounts, consistent with the *2019 FSI Guide*.

49. The mission explained the annualization of net income before tax and the averaging of total assets and capital and reserves in the computation of return on assets (ROA) and return on equity (ROE). The *2019 FSI Guide* recommends using net profit before tax for calculation of the ROA and net income after tax for calculating of ROE. Accordingly, ROA is calculated using the annualized net income before tax divided by average total assets, while ROE is calculated using the annualized net income after tax divided by total equity. The preferred methods for annualization and averaging of quarterly data were explained to the staff of the NBE as follows (e.g., for 2019):

• Annualizing net income before/after tax reported on a cumulative basis: 2019Q1 = (2019Q1)*4; 2019Q2 = (2019Q2)*2; 2019Q3 = (2019Q3)/3*4; 2019Q4 = (2019Q4).

• Averaging total assets and capital: 2019Q1 = (2018Q4+2019Q1)/2; 2019Q2 =(2018Q4+2019Q1+2019Q2)/3; 2019Q3 = (2018Q4+2019Q1+2019Q2 +2019Q3)/4; 2019Q4 =(2018Q4+2019Q1+2019Q2+2019Q3+2019Q4)/5.

Balance Sheet

50. Deposits with domestic and foreign banks on the asset side of the balance sheet are mapped to interbank loans. This is consistent with the approach adopted in the *2019 FSI Guide*.

51. Incomplete information on counterparties in some accounts in the balance sheet prevents their proper sectorization. Further breakdowns and clarifications are required on sundry debtors, suspense accounts, and un-cleared effects on the asset side of the balance sheet. On the liability side further details are needed on sundry creditors and resident foreign currency account could be disaggregated into government, bank, and non-bank counterparties. Payment and settlement accounts were mapped to currency and deposits as it was not possible to separate them from the excess reserves held with the NBE.

52. Customers deposits are considered to be a more stable source of funding for banks. They comprise all deposits reported on the liabilities side of the balance sheet except for deposits from central banks, governments, or financial institutions. Consistent with the definition of customer deposits in the *2019 FSI Guide*, deposits from the federal or regional government of Ethiopia, non-bank financial institutions, or pension funds are excluded from customer deposits and mapped to the residual category, that is, other deposits. Deposits from domestic and foreign banks are also excluded and are instead mapped to interbank deposits. Due to the absence of disaggregated data on deposits to financial and non-financial cooperatives and associations, it was decided, after consultation with the NBE, to map them to other deposits until more granular data allow deposits to non-financial cooperatives to be mapped separately to customer deposits.

53. Recommendation:

- The NBE to align the sectoral classification of deposits, including the balance sheet (BS001 form), with the *2019 FSI Guide*.

54. Letters of credit and acceptances are contingent items and should be reported off-balance sheet for the purpose of calculating FSIs. After applying this adjustment, the total assets of the banking sector dropped by 6.2 percent as of December 2019. The mission also found some discrepancies between letters of credit and acceptances in other assets and in other liabilities in the balance sheet; they could not always be offset.

55. The balance sheet does not include financial derivatives. Banks in Ethiopia do not engage in financial derivative activities so the omission has no consequences so far, but banks could start engaging in such activities. It would be advisable to include the relevant lines in the balance sheet to be ready to capture this activity when it occurs and reflect it in the FSIs.

56. Recommendation:

- The NBE to revise the balance sheet to incorporate financial derivatives on both the asset and liability sides and exclude letters of credit and acceptances (BS001 form).

Supervisory series

Regulatory Capital and Risk Weighted Assets

57. The capital adequacy ratios are calculated using the national definition of regulatory capital and risk weighted assets. As mentioned earlier, regulatory capital comprises primary capital only while risk-weighted assets are compiled net of specific and general provisions. But banks do not always report their on-balance sheet exposures under the correct asset classes and risk weight buckets, and thus it may not be possible to reconcile the calculation of risk weighted assets with balance sheet figures. The NBE needs to clarify the reporting rules for asset classification and risk weight buckets. It also needs to ensure that a) the components of primary and supplementary capital are adequately reported by banks in their calculation of regulatory capital and b) supervisory deductions are applied.

58. Recommendations:

- The NBE to provide clear instructions to banks on how to properly fill-in their regulatory capital and risk weighted assets call reports (QC001, QI001 and QO001 forms).

- The NBE to provide additional reporting instructions and breakdowns for reporting supplementary capital items and supervisory deductions (QC001 form).

Nonperforming Loans and Provisions

59. Nonperforming loans and provisions are calculated based on IFRS9 in parallel with a supervisory approach. Currently, provisions are derived from the preparation of financial statements, while regulatory risk reserves—defined as the difference between IFRS9 and supervisory provisions—need to be carved out from retained earnings and allocated to other provisions within the other liabilities section in the balance sheet. Currently the NBE does not collect data regarding the regulatory risk reserve, so provisioning related adjustments could not be made in the presentation of the balance sheet. Specific provisions are defined as provisions on nonperforming loans, consistent with the *2019 FSI Guide*. Provisions on performing loans and other assets are mapped to other liabilities.

60. *Recommendation:*

- The NBE to collect data on the regulatory risk reserve in the balance sheet and on non-performing loans and advances & provisions returns (BS001 and NL001 forms).

Liquidity indicators

61. Liquid assets are calculated according the local definition, which is consistent with the definition of the broad measure of liquid assets adopted in the *2006 FSI Guide*. The *2019 FSI Guide* eliminates the distinction between core and broad measures of liquid assets, therefore the definition of the broad measure is also consistent with the new definition of liquid assets adopted in *2019 FSI Guide*. The components of liquid assets are derived from the balance sheet and consist of cash, deposits with the NBE, deposits with local and foreign banks, and treasury bills. As mentioned earlier, NBE bills are not included from the calculation of liquid assets. Short-term liabilities are calculated from the maturity schedule of assets and liabilities and consist of the sum of all liabilities with residual maturity of not more than 90 days. Time deposits lack a maturity profile, therefore, all time deposits were included in the calculation of short-term liabilities after discussion with staff of BSD. However, going forward, all time deposits with a maturity of more than 90 days need to be excluded to ensure the cross-country comparability of the FSI. Off-balance sheet liabilities are also not reported in short-term liabilities.

62. Recommendation:

- The NBE to collect information on the maturity profile of demand, savings, and time deposits separately in the maturity of assets and liabilities call report (MA001 form).

Large Exposures

63. As mentioned earlier, large exposures are compiled according to the NBE's directive. Large exposures are calculated as the aggregate of all credit exposures to a single or groups of connected borrowers when these exceed 10 percent of primary capital, as per the NBE's Directive (No. SBB/53/12) on credit exposures to single and related counterparties. Credit

exposure is defined as the total outstanding amount of loans and advances only; corporate bonds are not included.

Net open position in foreign currencies

64. The FSI on net open position in foreign currencies to capital can be calculated using either on-balance sheet or on- and off-balance sheet measures, but the latter approach is preferred because it is consistent with the Basel framework. The NBE currently compiles the ratio of net position in foreign currencies to capital using both on- and off-balance sheet positions as the numerator and total capital as denominator as defined in the NBE's Directive. However, the off-balance sheet items are overestimated by the inclusion of commitments to sell foreign currencies to their customers (which should not be included because they are not binding and may be exercised by either the bank or its customers). Due to the absence of granular data, it may not be practical to exclude these commitments from calculation of net open position for the historic data. Thus, it would be preferable for the NBE to start reporting to STA the net open position in foreign currencies using on-balance sheet measures for historic data, and subsequently switch to on- and off-balance sheet measures once granular and consistent off-balance sheet data are collected that allow for accurate calculation of the FSI on net open position in foreign exchange to capital.

65. The current call report for the collection of data on net open position in foreign currencies needs to be modified to better capture the foreign exchange risk profile of banks. The absence of granular information on the subcomponents of on-and off-balance sheet assets and liabilities in foreign currencies makes it difficult from the NBE to verify the accuracy of data that are submitted by individual banks. Redesigning the call report to provide more detailed information on the liquid and illiquid positions of banks in foreign currencies for on- and off-balance sheet assets and liabilities will facilitate the reconciliation of the data in the call report with balance sheet positions denominated in foreign currencies. [5] Off-balance sheet items that give rise to foreign currency risks need to be listed by products (such as commitments, Letters of credits and other trade finance contingencies). Finally, the reports should include an "other items (+ve)" and "other items (-ve)" to record all currencies not listed in the call report to ensure that FX transactions with non-listed currencies are captured. When calculating the net open position, the mid buying and selling rates should be used to covert the foreign exchange position to local currency, consistent with the approach to convert foreign currency positions to the local currency used for reporting balance sheet positions. Currently the NBE regulation requires the use of the closing buying rate.

[5] Foreign currency denominated on-balance sheet assets could include foreign currency notes and coins, balances with banks abroad, interbank loans, loans and advances, financial derivatives, other assets while foreign currency denominated on-balance sheet liabilities could include deposits, short and long-term borrowings, financial derivatives and other liabilities

66. *Recommendations:*

- The NBE to report net open position in foreign currencies for historical data using on-balance sheet position only and switch to on- and off-balance sheet position once granular and consistent off-balance sheet data are collected.
- The NBE to redesign the call report on net open position in foreign currencies (DF001) to collect more granular data on banks' foreign exchange positions to facilitate the reconciliation of the data with the balance sheet.

Spread between reference lending and deposit rates

67. The BSD receives data on the spreads between lending and deposit rates from the MFID. The data submitted by the MFID have been static during the last 18 months, which may not yield an accurate estimate.

68. *Recommendation:*

- The NBE to calculate the spread between the reference lending and deposit rates based on updated the interest income and interest expense report forms (BA001 and BE001) once the data quality of these forms is improved.

Real estate market

69. FSIs on residential estate loans to gross loans and commercial real estate loans were not compiled. This was due to insufficient breakdowns and an unclear definition of other loans to the construction sector.

70. *Recommendation:*

- The NBE to collect residential real estate and commercial real estate loans data in line with the definitions provided in the *2019 FSI Guide*.

E. New FSI Report Forms

71. The *2019 FSI Guide* has phased out extraordinary income/expenses from the presentation of income statements. IAS1 no longer allows the reporting of extraordinary items in presentation of profit or loss and other comprehensive income statements. Accordingly, extraordinary items in the profit and loss statement (PL001) are mapped to other income, if positive, or other expenses, if negative. This treatment will help the NBE to transition to the new FSI template when it is implemented in the coming months.

72. Provisions on performing loans and other assets are mapped to other liabilities in the current report forms, consistent with the approach adopted in *2019 FSI Guide*. However, these should be reported under "General and other provisions" on the liability side of the balance sheet when the new FSI report forms are introduced.

73. The *2019 FSI Guide* recommends that countries report other comprehensive income (OCI) as an additional line item in their income and expense statements. Other comprehensive income consists mainly of revenues, expenses, gains, and losses that are excluded from net income on the income statement as well as unrealized gains and losses on financial instruments that are measured at fair value through other comprehensive income (FVOIC). Since Ethiopia has been implementing IFRS 9 since 2018, comprehensive reporting of the income statement would necessitate the introduction of other comprehensive income.

F. FSI Metadata

74. The mission highlighted the need to complement the FSI data with the corresponding metadata. Metadata are key for interpreting the FSIs and to allow for cross-country comparisons. Any deviations from the recommendations of the *2019 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 mission has developed FSI metadata for DTs based on information provided by the authorities. The draft metadata should be updated when changes are observed, for instance, when there are changes to the accounting and regulatory frameworks as well as the BSL's instructions underlying the FSI source data.

75. The understanding of how key underlying series are calculated is important for better interpretation of FSIs. Although the *2019 FSI Guide* provides guidance on the calculation of the underlying FSI series, the calculation of some data series used by national FSI compilers may not always fully in line with the *2019 FSI Guide* due to lack of data. Furthermore, there might be some adjustments to the underlying series for the FSI calculation. The *2019 FSI Guide* also defers the calculation of some underlying series to national practices. Appendix IV presents the detailed FSI metadata for deposit takers for reference and for the NBE's own publication. The mission also completed the FSI metadata template in Excel file for reporting together with the FSI data to STA for posting on the IMF's FSI website.

G. FSI Data and Metadata Reporting

76. The NBE aims to regularly report the sectoral FSIs to the IMF with quarterly frequency, to be posted on the IMF's FSI website, upon the NBE management's approval. As discussed earlier, the NBE can compile and report all 11 core and 11 additional FSIs for

deposits-takers as well as two additional FSIs on the size of OFC subsectors on a quarterly basis[6]. The mission also worked with NBE officials to complete the FSI institutional coverage template (FS1 template) with information on the number of the reporting DTs and their branches, split by ownership, and their respective total assets. The FS1 template should also be reported to the IMF for dissemination.

77. Recommendations:

- The NBE to finalize and report to STA for review the FSI sectoral financial statements (FS2 template) for DTs, including balance sheet, income statement, and memorandum series, the sectoral FSIs with underlying series (FSD template) for DTs with quarterly data beginning from 2017: Q2, the FSI institutional coverage (FS1 template) with annual data starting from 2017, and the FSI metadata (FSM template).

- The NBE to start regular reporting to STA, for posting on the IMF's FSI website, of the FSD and FS2 templates with quarterly data starting from 2017: Q2, and the FS1 template with annual data starting from 2017. Also report the FSM template periodically.

H. FSIs for Other Sectors

78. Two FSIs for OFCs, namely, OFC financial assets to total financial assets and OFC financial assets to gross domestic product, were compiled during the mission. The OFC sector currently represents a quite small share of the financial system. The insurance sector,—the largest OFC subsector—has less than one and a half percent of the assets of the financial system. The asset share of capital goods finance companies is around 0.1 percent. The mission advised that developments in the OFC sector be monitored.

I. Resources, Training, and Technical Cooperation

79. The mission recommended that NBE staff seek to attend regional and HQ training courses on financial sector statistics. STA regularly delivers courses on both MFS and FSI at IMF HQ (each course once every two years), and regional trainings are also scheduled. Details can be found on the webpage of the IMF's Institute for Capacity Development.

80. Recommendation:

- Support NBE officials' efforts to participate in IMF FSI training courses to improve their methodological knowledge and skills in compilation and interpretation of FSIs.

[6] According to the classification in the *2019 FSI Guide*.

J. Other Issues

81. The mission followed up on MFS mission recommendations pending since January 2019. The MFID is currently consulting with the NBE management on the MFS mission recommendations and in the process of providing further clarifications on monetary data based on SRFs. The mission also encouraged data sharing and consistency checks with BSD, including for sectoral bank loans data.

82. The mission also inquired about the status of Ethiopia's Financial Access Survey (FAS) reporting. Ethiopia was a FAS reporter until its most recent data submission in 2012. The mission clarified the contact information, and the NBE provided an updated list of contact persons.

Appendix I. Financial Soundness Indicators

	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19
			(in percent)			
Core FSIs						
Regulatory capital to risk-weighted assets	21.8	23.2	22.3	21.0	19.9	17.7
Regulatory Tier 1 capital to risk-weighted assets	21.8	23.2	22.3	21.0	19.9	17.7
Nonperforming loans net of provisions to capital	2.1	7.4	11.6	12.6	4.8	7.7
Nonperforming loans to total gross loans	2.4	3.4	2.8	3.6	2.2	2.7
Return on assets			3.0	3.1	2.9	2.9
Return on equity			22.5	22.5	17.5	20.6
Interest margin to gross income	64.0	74.0	69.3	68.3	69.7	66.3
Noninterest expenses to gross income	48.7	54.8	50.7	50.0	54.6	56.9
Liquid assets to total assets	13.4	11.1	13.0	11.7	13.0	11.6
Liquid assets to short-term liabilities	16.6	14.3	15.6	15.2	16.0	14.4
Net open position in foreign exchange to capital					27.7	28.9
Additional FSIs						
Capital to assets	9.4	8.7	8.7	8.6	8.0	8.0
Large exposures to capital					26.8	33.8
Gross asset position in financial derivatives to capital	0.0	0.0	0.0	0.0	0.0	0.0
Gross liability position in financial derivatives to capital	0.0	0.0	0.0	0.0	0.0	0.0
Trading income to total income	0.0	1.0	0.2	2.8	0.8	2.9
Personnel expenses to noninterest expenses	47.1	50.4	57.0	56.1	48.7	47.7
Spread between reference lending and deposit rates (basis points)	7.4	7.4	5.5	5.5	5.5	5.5
Customer deposits to total (noninterbank) loans	165.3	168.6	176.5	166.9	169.4	157.7
Foreign-currency-denominated liabilities to total liabilities	2.0	2.4	2.3	2.3	2.3	2.4
OFCs						
OFC's financial assets to total financial assets	1.8	1.9	1.9	1.8	1.7	2.1
OFC's financial assets to gross domestic product	0.9		1.0		0.9	

Sources: TA Mission

Appendix II. Officials Met During the Mission

Name	Title/Departments	Institution
Frezer Ayalew	Director, Bank Supervision Directorate (BSD)	NBE
Sintayehu Desalegn	Principal Bank Examiner, Bank Supervision Directorate (BSD)	NBE
Chala Beyene	Bank Examiner, Bank Supervision Directorate (BSD)	NBE
Sibhat Meskelu	Bank Examiner, Bank Supervision Directorate (BSD)	NBE
Asfaw Abera	Director, Microfinance Institutions Supervision Directorate (MSD)	NBE
Bezawit Teferra	Principal Micro-finance Examiner, Micro-finance Institutions Supervision Directorate (MSD)	NBE
Belay Tulu	Director, Insurance Supervision Directorate (ISD)	NBE
Woinshet Zeberga	Chief Research Officer, Monetary and Financial Analysis Directorate (MFAD)	NBE
Mawok Tesfaye	Chief Research Officer, Monetary and Financial Analysis Directorate (MFAD)	NBE
Dawit Keno	V/President, Financial Management	CBE
Yonas Lidetu	V/President, Treasury and Investment	CBE
Samison Amdissa	Director, Financial Reporting and Reconciliation	CBE
Tilahun Geleta	Chief officer, Finance	AIB
Desalegn Tolera	Deputy Chief officer, Credit	AIB
Daniel Lemma	IFRS Project Manager	AIB
Tirfu Adhanom	Director, Finance Department	DBE
Natnael Hailu	A/Director, Strategy, change and Communication	DBE
Yetimgeta Abera	IFRS Project Coordinator	DBE

Note: NBE: National Bank of Ethiopia; CBE: Commercial Bank of Ethiopia; AIB: Awash International Bank; and DBE: Development Bank of Ethiopia

Appendix III. Summary of Recommended Amendments to the FSI Definitions

The mission recommended the following amendments to align FSIs with the *FSI Guide* (Appendix III. Table 1). The recommended amendments include both improvements discussed in this report, as well as the incorporation of amendments brought by the *2019 FSI Guide*. While most changes were implemented during the mission and will not require further work, those changes requiring a longer timeframe for implementation are bolded in the table and spelled out as individual recommendations in this report.

Appendix III. Table 1. Ethiopia: Recommended Amendments to FSIs [1]

Indicator	Recommendation
Total Capital to RWA / Tier 1 Capital to RWA	Provide clear instructions to banks on how to properly fill-in the call reports on regulatory capital and risk weighted assets and introduce supplementary capital and deduction items from regulatory capital **(to be implemented)**.
NPLs net of provisions to capital	Subtract only specific provisions from the numerator. Provisions include only specific provisions on nonperforming loans. Use regulatory capital as the denominator.
NPLs to total loans	The definition of total loans should be aligned with the FSI Guide definition.
Return on Assets (ROA)	Use net income before tax in the numerator. Aggregate the numerator as indicated in the report. Average the denominator as indicated in the report. Transform data from fiscal year to calendar year.
Return on Equity (ROE)	Aggregate the numerator as indicated in the report. Average the denominator as indicated in the report. Transform data from fiscal year to calendar year.
Interest margin to gross income	Deduct interest expenses from gross income. Recovered NPLs need to be adjusted for in provision charges in the income statements and excluded from other income.

[1] Recommendations requiring further work by BSD are those with bolded action items. All others have been implemented during the TA mission and are reported for reference.

Indicator	Recommendation
Noninterest expense to gross income	Deduct interest expenses from gross income. Recovered NPLs need to be adjusted for in provision charges in the income.
Liquid assets to total assets	Exclude letters of credit and acceptances from total assets.
Liquid assets to short-term liabilities	Collect disaggregate information on the maturity profile of demand, saving, and time deposits in the maturity of assets and liabilities call report and adjust the calculation of short-term liabilities to include only time deposits with a residual time to maturity of not more than 90 days **(to be implemented)**.
Net open position in FX to capital	Use regulatory capital as the denominator.
Capital to Assets	Exclude letters of credit and acceptances from total assets.
Large Exposures to Capital	Implement the BCBS's definition of large exposures **(to be implemented)**.
Gross asset/liability position in derivatives to capital	Use regulatory capital as the denominator.
Trading income to total income	Adjust gross income to incorporate interest expense.
Personnel expenses to noninterest expenses	No change.
Spread between reference lending and deposit rates (basis points)	Use updated interest income and interest expense report forms to calculate the ratio **(to be implemented)**.
Customer deposits to total non-interbank loans	Align the sectoral classification of deposits with that of the *2019 FSI Guide* **(to be implemented)**.
FX loans to total loans	No change.
FX liabilities to total liabilities	No change.
Residential real estate loans to total loans	Collect data as recommended by the FSI Guide **(to be implemented)**.
Commercial real estate loans to total loans	Collect data as recommended by the FSI Guide **(to be implemented)**.

These data and methodological revisions have resulted in significant changes to some FSIs. The mission recommended to the NBE changes in the calculation of FSIs in line with the *2019 FSI Guide*. Appendix III. Table 2 covers the size of change observed in the FSIs before and after the mission. According to this table, there have been significant changes in the *nonperforming loans net of provisions to capital*, *interest margin to gross income* and *noninterest expenses to gross income* indicators.

Appendix III. Table 2. Ethiopia: Comparison of FSIs Before and After the Technical Assistance

	FSI Mission		NBE Calculation		Difference	
	Jun-18	**Jun-19**	**Jun-18**	**Jun-19**	**Jun-18**	**Jun-19**
	(in percent)		**(in percent)**			
Core FSIs						
Regulatory capital to risk-weighted assets	22.3	19.9	22.3	19.2	0.0	0.7
Regulatory Tier 1 capital to risk-weighted assets	22.3	19.9	22.3	19.2	0.0	0.7
Nonperforming loans net of provisions to capital	11.6	4.8	0.8	n.a.	10.8	n.a.
Nonperforming loans to total gross loans	2.8	2.2	3.0	2.3	-0.2	-0.1
Return on assets	3.0	2.9	1.7	1.9	1.3	1.0
Return on equity	22.5	17.5	20.2	23.8	2.3	-6.3
Interest margin to gross income	69.3	69.7	34.4	n.a.	34.9	n.a.
Noninterest expenses to gross income	50.7	54.6	36.2	n.a.	14.5	n.a.
Liquid assets to total assets	13.0	13.0	12.4	14.5	0.6	-1.5
Liquid assets to short-term liabilities	15.6	16.0	16.5	16.9	-0.9	-0.9
Additional FSIs						
Capital to assets	8.7	8.0	8.3	7.8	0.4	0.2
Personnel expenses to noninterest expenses	57.0	48.7	55.4	n.a.	1.6	n.a.

Sources: TA Mission

Appendix IV. FSI Metadata for Deposit Takers

Financial Soundness Indicators Metadata for Ethiopia

Metadata should be disseminated together with FSI data to facilitate data interpretation. Metadata include information about FSIs and their compilation, such as data definitions, how data are consolidated, supervisory and accounting rules adopted by the reporting banks, institutional coverage, and data sources, which are useful to data users.

Residence of institutional units

Foreign-owned companies incorporated in Ethiopia are classified as residents in line with System of National Accounts (2008 SNA), which classifies foreign-owned companies as residents in an economic territory where they engage in and intend to continue engaging in economic activities and transactions on a significant scale for at least one year.

Consolidation basis

FSIs for deposit takers (DTs) in Ethiopia are compiled on a domestic location (DL) basis. According to the *2019 FSI Guide*, DL includes resident DTs along with their branches and subsidiaries in the same sector that are also resident in the domestic economy. There are no foreign banks currently in operation in Ethiopia.

Consolidation adjustments

Since no banks in Ethiopia have a deposit-taking subsidiary, intra-group consolidation adjustment is not applicable. Intragroup adjustments refer to the elimination of financial flows (income and expense) and financial positions between DTs within the same banking group (parent, its branches, and subsidiaries).

Institutional coverage

The institutional coverage of the FSIs for DTs exceeds 90 percent (as of December 2019) as all 17 commercial banks operating in Ethiopia are covered in the FSI compilation. The 39 deposit-taking microfinance institutions (MFIs), and one development bank are also classified as deposit-takers, but they are not yet included in the FSI compilation. Data on Savings and Credit Cooperatives (SACCOs) that are classified as deposit-takers were not available.

Regulatory framework

All banks operating in Ethiopia have adopted a modified version of Basel I to compile and report data for all supervisory purposes.

Accounting framework

Commercial banks in Ethiopia have adopted International Financial Reporting Standards (IFRS) and, where applicable, International Accounting Standards (IAS) for the preparation of financial statements that are used for compiling FSIs. In particular, note the following:

- Banks are required to adopt IAS21 for the conversion of accounts denominated in foreign currency into local currency for reporting purposes;
- Financial instruments are valued at amortized cost or fair value through profit and loss/other comprehensive income in accordance with IFRS9;
- Equity investments that were previously measured at nominal value under IAS39 are measured at fair value under IFRS9; and
- Accrual accounting is adopted, and accrued interest is calculated.
- Interest is not accrued on nonperforming loans.

Data Definition

Tier 1 capital consists of paid-up capital, share premium, general reserves, and legal reserves. Retained earnings and gains on revaluation of fixed assets are not included in Tier 1 capital. No deductions are applied to Tier 1.

Total regulatory capital is equal to Tier 1 capital. The NBE's regulation does not prescribe any element of Tier 2 capital.

Risk Weighted Assets is the sum of on- and off-balance sheet assets risk weighted assets. There is no additional capital requirement for market risk.

The broad measure of liquid assets include cash, deposits with the NBE, deposits with local and foreign banks, treasury bills. NBE bills are not included because of their longer maturity profile and absence of a secondary market on which to trade these instruments.

Short-term liabilities comprise demand, savings, and time deposits without maturity breakdowns and other liabilities with remaining time to maturity of three months or less, based on the maturity breakdowns reported by all banks to the NBE.

Nonperforming loans (NPLs) is defined as loans that are past due for more than 90 days.

Return on assets (ROA) is calculated as the ratio of annualized net income before tax divided by average total assets.

Return on equity (ROE) is calculated as the ratio of annualized net income after tax divided by average capital and reserves.
Net open position in foreign exchange Prior to September 2020, off-balance exposures are excluded from the calculation of net open position in foreign exchange.

Source data

Source data for compiling FSIs for DTs include income and expense statements, the balance sheets and other call reports that are relevant for compiling supervisory series relating to regulatory capital requirements, the liquidity profile, the net open position in foreign exchange, nonperforming loans, and provisioning. The financial year in Ethiopia starts from 1 July and ends on 30 June, therefore the income and expense statement has been restated from the beginning of 1 January to the end of the reporting period, in line with the methodology of the *2019 FSI Guide*. Banks are required to submit quarterly returns by the 20th business day after the end of each quarter.