Macroeconomic Data in Ethiopia: A Guide on Sources & Release Dates Ethiopiactor

Macro Research

This note reviews the sources, frequency, and timing of macroeconomic data releases in Ethiopia. We also compare Ethiopia's record of macro data releases with that of other countries. As access to timely macro data will become increasingly important in the coming years—given rising private sector participation in the economy, ongoing foreign investment activity, and prospective capital marketswe point to several areas for improvement that could be realized with modest changes to the data release timetables of just a few institutions.

Macroeconomic data in Ethiopia is provided by five key institutions, namely the: (1) Central Statistical Authority (CSA); (2) National Planning Commission (NPC); (3) Ministry of Finance and Economic Cooperation (MOFEC); (4) National Bank of Ethiopia (NBE); and (5) Ministry of Revenues. A listing of the key macroeconomic data series provided by these institutions is presented below under four main categories—real sector, fiscal sector, monetary sector, and external sector (see Table 1).

Real sector data in Ethiopia tend to be focused mainly on GDP and price statistics. GDP data are released by the National Planning Commission only once-a-year and with a roughly five- to six-month lag, thus coming out in November or December for the fiscal year ending in June. Among GDP components, the agriculture sector's performance can be inferred somewhat earlier from the CSA's "Agricultural Sample Survey" publication that provides volume estimates for all major food crops and is generally released in the final quarter of the relevant fiscal year (e.g., estimates for the FY 2018-19 harvest came out in June 2019).1 Other sector-specific data (say for mining, construction, or services) are generally not available at a standard frequency or are released in an ad hoc manner; the manufacturing sector is an exception, given that a "Large and Medium Scale Manufacturing Survey" is compiled annually (covering more than 3,500 firms) but this comes out with a lag of more than two years.² Data on nominal spending levels separate from GDP



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¹ Besides CSA data, agriculture production figures for selected crops are available from supplementary sources such as the WFP, IFPRI, and USDA.

²The latest available Manufacturing Survey is for FY 2016-17 data.



statistics (e.g. retail sales) are not readily available, while household income and consumption expenditure surveys are generally available at one-off intervals and with a 3-4 year lag.³ Employment levels, unemployment rates, and labour participation rates are other indicators that could reveal trends real economic activity but these are generally not available at a regular frequency. For investment data, these are contained in GDP statistics (thus involving a five- to six-month lag), but some partial indications of investment activity are available via press releases from regional investment bureaus or from the Ethiopian Investment Commission (for FDI). Finally, for price and inflation data, these are available within five days of the end of the month (or at times even within 2-3 days of end-of-month) and are generally immediately posted on the CSA's website and released directly to the press.

Fiscal sector data made publicly available in Ethiopia include: (1) the government budget, which is normally released every June for the fiscal year starting in July; (2) quarterly revenue data provided by the Ministry of Revenue via press releases; (3) quarterly overall budget estimates (provided in the Quarterly Bulletin of the NBE and covering revenue, expenditure and overall balance/deficit positions), and; (4) quarterly debt figures made available in MOFEC's Quarterly Debt Bulletin. Revenue data have, in the past, sometimes been released by the Ministry of Revenue on a monthly basis, but this has been on an ad hoc basis. The provision of debt data has become much more transparent in recent years and now includes quarterly figures on: total outstanding public debt by borrower and by lender (both foreign and domestic); new foreign loans contracted; new foreign loans disbursed; foreign loan repayments effected; and domestic debt borrowings plus outstanding debt balances owed to the central bank, the commercial banks, and the non-bank public (such as pension funds).

Monetary sector data are provided by the NBE and include figures on broad money (total deposits plus currency held by the public), reserve money, and foreign asset positions of both the NBE and commercial banks. These data are all made available in the NBE's Quarterly Bulletin, which generally comes out four or five months after the end of a given quarter (the latest available Quarterly Bulletin for end-March 2019 data came out with a nearly four-month lag in mid-July 2019). The Quarterly Bulletin also provides quarterly statistics on other financial sector

³ The last Household Consumption Expenditure Survey was completed in the 2015-16 fiscal year and became available in January 2018.



metrics, including bank deposit/lending rates, T-Bill rates, corporate bond issuances, banks' capital and branch data, micro-finance institutions data, and insurance sector data. Looking beyond the NBE, data on banking trends is available from private banks, who have an established norm of conducting surveys amongst themselves—generally undertaken by their Marketing or Research units—which cover their end-quarter financial positions for variables such as deposits, loans, NBE Bill holdings, assets, capital, profits, branches, and employment.

External Sector: The full set of balance of payments statistics—covering all foreign exchange inflows and outflows—is released on a quarterly basis as part of NBE's Quarterly Bulletin, and is thus generally available with a four- to five-month lag. The NBE's BOP tables provide figures on exports, imports, service sector inflows/outflows, interest payments, dividend payments, remittances, grants, loans, FDI, and other capital flows. The BOP data also provide a key indicator of the country's external position, namely the central bank's gross foreign exchange reserves position. Some components of the balance of payments are available earlier from relevant bodies: for example, the Ministry of Trade and Industry generally releases export and import figures one or two months after the end of the relevant month and often within two months of the end of the fiscal year for the full-year outturns; FDI data may be released within two or three months of the end fiscal year by the EIC; and external grants and loans data may also be released separately by MOFEC press releases within a few months of the end of the fiscal year. With respect to data on exchange rates, these are available daily from most commercial bank websites, with the most up-to-date figures (based on our experience) provided by the Commercial Bank of Ethiopia—which provides the daily Birr/USD exchange rate every morning at around 8AM as well as cross-rates for 19 other currencies (besides the USD) plus historical exchange rate data going back many years.

Ethiopia in a Cross-Country Context

A comparison of macroeconomic data releases with other relevant countries shows considerable room for Ethiopia to improve the scope, timeliness, and frequency of its data releases. More specifically:

Scope of data releases:

Ethiopia still lacks indices of economic activity based on highfrequency and more readily available/collectable indicators (see discussion below).



- No surveys of the 'business confidence' or 'business expectations' are systematically collected—covering for example manufacturers, service providers, or other key sectors and potentially useful to provide trends in business sentiment and/or future expectations.
- On prices, the scope of releases seems generally adequate, but the price index does not provide measures of 'core' inflation (excluding certain volatile components).

Frequency of data releases:

- GDP is only available on an annual basis and could usefully be increased to a quarterly frequency (Table 2A), as is already the norm in most emerging markets.
- The frequency of data releases for key monetary variables such as deposits, broad money, reserve money, and foreign exchange reserves—still takes three to four months even though most of the underlying reporting (by commercial banks) takes place within 10 or 15 days after the end of the month.

Timing of data releases:

- GDP data are generally released five or six months after the end of the fiscal year, versus a norm of just three months in most peer countries (Table 2B).
- Based on our review of NBE Quarterly Bulletin releases over the past decade, we find that the average lag time for such data releases was 190 days or around six months, though this has improved steadily in recent years and is now down to 3½ months for 2019 (Table 3). Following the norm of some peer countries would reduce the time lag to just two months or less.
- External sector data and foreign exchange reserves data, both generally available only in NBE's Quarterly Bulletin, is also usually out with a four- to five-month lag, while the norm in most other countries is much shorter, especially for foreign exchange reserves data that—given its nature—can often be released within weeks of the end of the reporting period (Table 2B).



Conclusions

The above review of Ethiopia's macro data releases suggests several areas for potential improvement. We think the most meaningful areas for improvement would include:

- Construction of an index of high-frequency economic activity indicators: An index of various high-frequency indicators could provide a valuable 'economic pulse' of on-going activity without having to rely solely on once-a-year GDP data releases. Such an index could be compiled and regularly released by a public institution (such as the NBE or NPC) or perhaps as a collaboration between public and private institutions. Ranging from simple proxies of just a couple variables to more sophisticated indices involving numerous metrics, high-frequency economic activity indicators can track variables such as: production levels in specific industries, purchasing manager indices, retail sales, building permits/housing starts, cargo volumes, new vehicle registrations, unemployment rates, trade flows, tax collection trends, and credit developments (Table 4). In the Ethiopia context, some 'flash estimates' or 'advance estimates' could be considered in areas such as crop production (in the months immediately after the annual harvests), manufacturing activity (focused, say, on data from all industrial parks), or number of permits for new business formations or new residential/commercial building constructions (compiled from urban municipalities and/or sub-Indices covering monthly data on EAL/shipping cargo volumes, vehicle registrations trade flows, tax collection and credit developments are also potentially possible with the collaboration of the relevant institutions.4 Both macro policymakers and the wider business/investment community would be important beneficiaries of such high frequency indices for the Ethiopian economy.
- o Publicizing quarterly budget data: Quarterly data releases on revenue and expenditure, including overall deficit and financing outturns, could usefully provide another signal of economic activity and of the progress of key policy measures in this area. Current data releases in this area cover quarterly revenue performance data, but do not generally include budget expenditure outturns or the

³ Cepheus Research attempts to track a small set of such indicators and we have included in our Macro Handbook and Quarterly Reviews observed trends for variables such as fuel consumption, electricity consumption, EAL cargo volume, vehicle registrations, Djibouti port traffic, tax collections, and banking data.



associated financing data (covering net borrowing from external sources and from the domestic banking system).

- Regular release of export and import data: Formally releasing export and import data after say one month from the end of a given month can also provide another indicator of underlying economic trends and of foreign exchange developments. Such releases already take place in an ad hoc fashion (via occasional press releases or by sector-specific press releases from coffee or horticulture agencies) but a formalized and complete release of export/import data would provide the public with a more complete picture of latest trends.
- Faster release of quarterly monetary and fx reserves data: Perhaps most important, timely release of monetary and foreign exchange reserves data could provide confidence to the private sector and foreign investors of the central bank's policy efforts to control inflation and manage foreign exchange reserves. There is often a high level of misinformation in this area, and making available more data at a greater frequency will work to minimize misperceptions that can negatively and unduly affect public sentiment.
- A calendar of future macro data releases: As is common in most emerging and frontier markets, putting out a planned calendar of data releases can provide a positive signal to investors by providing an assurance on the availability of timely macro data. Such a calendar can also serve as a disciplining device for relevant institutions to release key data points as scheduled, and will also become indispensable if and when Ethiopia moves towards the establishment of capital markets. Based on our observations of recent data release patterns, we put together such an illustrative calendar of upcoming macro data releases for the period up to the end of this fiscal year (Table 5).

In summary, the potential improvements suggested above would—in our view—provide tangible economic benefits in: (1) minimizing often misleading macro data points that are out in the public domain, and (in its place) (2) deepening the macro information base—for planning and decision making purposes—available to Ethiopia's growing private sector, foreign investors, and participants in its prospective capital markets.



Table 1: Ethiopia Macroeconomic Data: Sources, Frequency, and Lag Times

Sector and Data	Institution	Website	Frequency	Timing (lag)	Release Data and Special Remarks
Real Sector					
National Accounts					
GDP	NPC/NBE	www.nbe.gov.et	Annual	~ 6 months	Also in NBE Annual Reports; IMF Article IV
Investment	NPC/NBE	www.nbe.gov.et	Annual	~ 6 months	Also in NBE Annual Reports; IMF Article IV
Consumption	NPC/NBE	www.nbe.gov.et	Annual	~ 6 months	Also in NBE Annual Reports; IMF Article IV
Prices & Inflation	CSA	www.csa.gov.et	Monthly	~ 5 days	First five days of month for previous month
Agriculture	CSA	www.csa.gov.et	Annual	~4 - 6 months	Usually in April-June of the fiscal year
Manufacturing	CSA	www.csa.gov.et	Annual	~24 months	Annual Surveys released with 2 years lag
Fiscal Sector					
Revenue	MOR/ERCA	www.erca.gov.et	Quarterly	~ 1 month	Also in NBE Quarterly Reports
Grants	NBE	www.mofed.gov.et	Quarterly	~4 - 5 months	From NBE Quarterly Reports
Expenditure	NBE	www.mofed.gov.et	Quarterly	~4 - 5 months	From NBE Quarterly Reports
Deficit Financing	NBE	www.mofed.gov.et	Quarterly	~4 - 5 months	From NBE Quarterly Reports
Public Sector Debt	MoFEC	www.mofed.gov.et	Quarterly	~ 3 months	From MOFEC's Quarterly Debt Bulletin on website
Monetary Sector					
Broad money supply	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	From NBE's Quarterly Bulletin posted on website
Reserve money supply	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	From NBE's Quarterly Bulletin posted on website
Foreign exchange reserves	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	From NBE's Quarterly Bulletin posted on website
Banking data	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	Also available from Banks' Survey Data & Reports
External Sector					
Balance of Payments	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	From NBE's Quarterly Bulletin posted on website
Exports, Imports	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	From NBE's Quarterly Bulletin posted on website
Services, Income, Remittances	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	From NBE's Quarterly Bulletin posted on website
Grants	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	From NBE's Quarterly Bulletin posted on website
FDI, Foreign loans, Capital flows	NBE	www.nbe.gov.et	Quarterly	~4 - 5 months	From NBE's Quarterly Bulletin posted on website
Exchange rate	CBE	www.nbe.gov.et	Daily	Same day	Daily rate provided on CBE website by 8AM

Source: Cepheus Research compilation



Table 2A: Frequency of Macro Data Releases: Ethiopia in a Cross-Country Context

Country	GDP	Inflation	BM/RM	FX reserves	Export/Import	ВОР	Debt	Revenue
Ethiopia	Yearly	Monthly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Monthly
Kenya	Quarterly	Monthly	Monthly	Monthly	Monthly	Quarterly	Monthly	Monthly
Egypt	Quarterly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Quarterly	Monthly
Ghana	Yearly	Monthly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Monthl
Nigeria	Quarterly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Quarterl
South Africa	Quarterly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthl
Vietnam	Quarterly	Monthly	Quarterly	Quarterly	Monthly	Quarterly	Quarterly	Quarterl
India	Quarterly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthl
China	Quarterly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthl

Table 2B: Timing (Lag Time) of Macro Data Releases: Ethiopia in a Cross-Country Context

Country	GDP	Inflation	BM/RM	FX reserves	Export/Import	ВОР	Debt	Revenue
Ethiopia	+6 month	+ 5days	+120 days	+120 days	+90 days	+120 days	+90 days	+30 days
Kenya	+90 days	+0 days	+30 days	+30 days	+30 days	+90 days	+30 days	+30 days
Egypt	+90 days	+ 7 days	+30 days	+30 days	+30 days	+30 days	+30 days	+7 days
Ghana	+90 days	+15 days	+6 month	+6 month	+30 days	+6 month	+30 days	+45 days
Nigeria	+60 days	+ 7 days	+30 days	+30 days	+30 days	+90 days	+30 days	+30 days
South Africa	+60 days	+20 days	+15 days	+15 days	+30 days	+30 days	+90 days	+30 days
Vietnam	+60 days	+ 7days	+30 days	+30 days	+ 10 days	+30 days	+6 month	+15 days
India	+60 days	+ 6days	+15 days	+15 days	+15 days	+60 days	+90 days	+30 days
China	+15 days	+10 days	+ 5 days	+ 5days	+15 days	+30 days	+60 days	+15 days



Table 3: Timing of Data Releases in NBE Quarterly Bulletin for Monetary, FX Reseves, and Balance of Payments Data

Quarterly Bulletin Publication Title	Last Date for the Quarter Covered	Release Date on the NBE website	Days to release from end-of-quarter		
FY 2018-19, Q3	March 31, 2019	23-Jul-19	114		
FY 2018-19, Q2	December 31, 2018	12-Apr-19	102		
FY 2018-19, Q1	September 30, 2018	19-Feb-19	142		
FY 2017-18, Q4	June 30, 2018	1-Nov-18	124		
FY 2017-18, Q3	March 31, 2018	13-Sep-18	166		
FY 2017-18, Q2	December 31, 2017	11-Jun-18	162		
FY 2017-18, Q1	September 30, 2017	19-Apr-18	201		
FY 2016-17, Q4	June 30, 2017	16-Nov-17	139		
FY 2016-17, Q3	March 31, 2017	1-Aug-17	123		
FY 2016-17, Q2	December 31, 2016	6-Apr-17	96		
FY 2016-17, Q1	September 30, 2016	25-Jan-17	117		
FY 2015-16, Q4	June 30, 2016	31-Oct-16	123		
FY 2015-16, Q3	March 31, 2016	10-Aug-16	132		
FY 2015-16, Q2	December 31, 2015	15-Apr-16	106		
FY 2015-16, Q1	September 30, 2015	26-Feb-16	149		
FY 2013-10, Q1	June 30, 2015	8-Oct-15	100		
FY 2014-15, Q3	March 31, 2015	5-Aug-15	127		
FY 2014-15, Q2	December 31, 2014	3-Apr-15	93		
FY 2014-15, Q1	September 30, 2014	5-Feb-15	128		
FY 2013-14, Q4	June 30, 2014	4-Dec-14	157		
FY 2013-14, Q3	March 31, 2014	24-Sep-14	177		
FY 2013-14, Q2	December 31, 2013	30-Apr-14	120		
FY 2013-14, Q1	September 30, 2013	6-Mar-14	157		
FY 2012-13, Q4	June 30, 2013	21-Feb-14	236		
FY 2012-13, Q3	March 31, 2013	24-Jan-14	299		
FY 2012-13, Q2	December 31, 2012	13-Aug-13	225		
FY 2012-13, Q1	September 30, 2012	10-May-13	222		
FY 2011-12, Q4	June 30, 2012	25-Feb-13	240		
FY 2011-12, Q3	March 31, 2012	31-Dec-12	275		
FY 2011-12, Q2	December 31, 2011	28-Sep-12	272		
FY 2011-12, Q1	September 30, 2011	7-May-12	220		
FY 2010-11, Q4	June 30, 2011	21-Mar-12	265		
FY 2010-11, Q3	March 31, 2011	24-Jan-12	299		
FY 2010-11, Q2	December 31, 2010	24-Jan-12	389		
FY 2010-11, Q1	September 30, 2010	18-Oct-11	383		
FY 2009-10, Q4	June 30, 2010	N/A	N/A		
FY 2009-10, Q3	March 31, 2010	17-Dec-10	261		
FY 2009-10, Q2	December 31, 2009	7-Sep-10	250		
FY 2009-10, Q1	September 30, 2009	16-Aug-10	320		
		***************************************	100		
		days: Last 10 Years	190		
	n days: Last 5 Years	129			
	Average lag in da	ys: Last 2 Quarters	108		

Source: Cepheus Research Compilation based on NBE website.



Table 4: An Illustrative Sampling of Non-GDP Indicators of Economic Activity Used in Other Countries

1 Production/turnover indicators

'Flash GDP' estimates

Production index by industry (agriculture, mining, manufacturing, etc)

Retail sales

Manufacturing sales

Export sales (by specific sectors as relevant)

New factory orders ('Purchasing Managers Index')

New construction starts (for residential, commercial buildings)

Home sales

Cement sales

Vehicle registrations

Tourist arrivals

Electricity consumption

Fuel consumption

Cargo volumes (air, freight, roads, or ports)

Credit to private sector

Job advertisements/openings

2 Confidence and Sentiment

Business confidence indicators

Consumer confidence indicators

Consensus projections for key macro indicators

Source: Cepheus Research based on resources from IMF and selected country central bank websites.

Table 5: Ethiopia	i Macro Data	Kelease Calan	dar: October	2019-June 20	J2U					
	Frequency	OCT 2019	NOV 2019	DEC 2019	JAN 2019	FEB 2019	MAR 2019	APR 2019	MAY 2019	JUN 20
Real Sector				_						
GDP	Annually			Dec 15, 2019						
Prices	Monthly	Nov 5, 2019	Dec 5, 2019	Jan 5, 2019	Feb 5, 2019	Mar 5, 2019	Apr 5, 2019	May 5, 2019	Jun 5, 2019	Jul 5, 20
Investment	Annually			Dec 15, 2019						
Agriculture	Annually							Apr 30, 2019		
Fiscal Sector										
Budget	Annually									June 15, 20
Revenue	Quarterly	Oct 15,2019			15-Jan-20			15-Apr-19		Julie 13, 20
Expenditure	Quarterly	1	Nov 1, 2019		13-3411-20		Mar 1, 2020	13-Apr-13		
Overall Balance	Quarterly	1	Nov 1, 2019 Nov 1, 2019				Mar 1, 2020			
Debt	Quarterly		Nov 1, 2019			Feb 1, 2019	Widi 1, 2020		May 1, 2020	
Monetary Sector										
Broad Money	Quarterly		Nov 1, 2019			Feb 1, 2019			May 1, 2020	
Reserve Money	Quarterly		Nov 1, 2019			Feb 1, 2019			May 1, 2020	
Foreign Assets	Quarterly		Nov 1, 2019			Feb 1, 2019			May 1, 2020	
Financial Sector	Quarterly		Nov 1, 2019			Feb 1, 2019			May 1, 2020	
External Sector										
ВОР	Quarterly		Nov 1, 2019			Feb 1, 2019			May 1, 2020	
Trade	Quarterly		Nov 1, 2019			Feb 1, 2019			May 1, 2020	
FDI	Quarterly		Nov 1, 2019			Feb 1, 2019			May 1, 2020	

 $Source: Cepheus\ Research\ compilation\ and\ estimations.$