

## Methodology Note

### What does the LGBD record?

The CCI-LGBD is comprised of quantitative and qualitative data that describes the enabling environment and experience of local government entities in respect to debt liabilities. The database is focused on developing countries, specifically, World Bank Group borrowing countries. CCI-LGDB aims to build on existing resources and bring additional granularity to the picture of local government debt, identifying the sources, instruments and terms of the debt liabilities incurred by local governments. The information and data presented is garnered from official sources, including international organizations (OECD, IMF, World Bank) and from local and central government sources. Each researched country includes the following:

- Country profile: Written snapshot of the borrowing enabling environment and experience of local governments
  - Regulatory regime
  - Sources of lending
  - Major stakeholders
  - Debt management
  - Transparency
  - Recent events/initiatives
- Country-level data: Quantitative country level indicators & ratios
  - Total subnational & local government breakdown
  - Debt levels, sources, instruments, metrics
  - Legal & regulatory indicators (enabling environment & market depth)
- City-level data: Quantitative LG level indicators & ratios
  - Debt levels, sources, instruments, metrics
  - Transparency
  - Credit ratings & bond issuances
  - Debt securities data set

### Dates of information included in the database

The initial collection years for borrowing data of the database is 2016-2020. Data will be updated on an annual basis.

### Countries included in the database

The database includes IBRD/IDA borrowing countries. The initial set of researched countries. Ultimately, the dataset aims to include +/- 40 developing countries, subject to the availability of data. The countries are reviewed on an ongoing basis to maintain continuity in the data.

### Cities included in the database

The database includes cities in IBRD/IDA recipient countries already researched in the profiles and country dataset. Selected cities are distinct legal entities (as opposed to agglomerations of multiple entities). Metropolitan entities can be included so long as they are independent, devolved entities with autonomous budgetary management and powers to issue debt/raise taxes. In accordance with the mandate of the City Creditworthiness Initiative, entities in the cities' dataset can include both municipal-level and state-level urban entities (for example Mexico City or Buenos Aires).

Cities are selected in each researched country according to the following criteria:

- (a) The three largest (in terms of recorded population) legally distinct urban entities in the country, and
- (b) Beyond the three largest entities, additional entities can be selected in furtherance of the data set objective of illuminating local-level borrowing. This is particularly applied in countries where entities smaller than the three largest are active borrowers and/or represent interesting cases. (N.B. the launch dataset will only include the three largest cities, to be expanded upon at later updates)

### **Securities included in the database**

The objective of collecting data on individual securities emissions is to monitor the development of debt securities markets, particularly in countries where the market development remains nascent. In countries where there are less than 25 issuances per year the database will attempt complete coverage. For countries with hundreds or even thousands of issuances per year, the database will only cover the 25 largest issuances per annum. Covered issuers can be municipal level or designated state-level urban entities.

### **Government levels included in the database**

A key value of the database is an attempt to systematically cover the borrowing activities of local governments, in particular by disaggregating the borrowing information of state/regional governments. Governmental structures vary greatly amongst countries, so application of a single definition of 'local government' in multiple contexts represents a challenge. The CCI-LGDB operates the following definition of state vs. local government:

- State/regional governments: Aligned with System of National Accounts 2008 4.141 & 4.142, state and regional governments are substantially decentralized (fiscal & political - see definition above) entities directly subordinate to the central government AND that have sub national entities within their geographic administrative boundaries
- Local governments: Aligned with System of National Accounts 2008 4.145, local governments are substantially decentralized entities at the smallest level of geographic administrative boundary, AND
  - Intermediary governments, which are defined as substantially decentralized entities, with geographic administrative boundaries that fall within a state/regional government boundary but that also have smaller sub-national governments (local) that fall within their territory.

The above definitions can be applied with some consistency across different structures. However, with the variety of reporting standards and governmental structures, the application of a single standard definition is not possible. To aid the user of the datasets, CCI-LGDB includes detailed metadata on each country, outlining the levels of government included in each statistic and sources of information. In addition, data is collected at both the total subnational (all general governments) and local level to account for instances where a breakdown of borrowing data to the local level is not possible with available information.

There are also outlier instances, an example of which would be where a flat governmental structure exists and there are only state/regional governments (such as the Kenyan counties). Such cases are relatively rare but if included in the dataset are explained in the metadata.

### Indicators included in the database

The database records, amongst other data points: total reported liabilities, loans, bonds, loans from public and commercial sources, debt service, ratios of debt to GDP, ratio of local government debt to total public debt, etc. Data is reported in current local currency units and as ratios in terms of total reported liabilities and revenues.

In the datasets if researchers could not find information for any reason, 'No Data' is reported.

<b>COUNTRY AGGREGATED DATA SET</b>	
<b>Indicator</b>	<b>Comment</b>
<b>Year</b>	Data is collected as of the calendar year. In the case that the FY does not align with calendar year balances will be reported as of December 31. If this is not possible it will be noted in the metadata
<b>Total reported liabilities</b>	Total liabilities as reported by official accounts. Includes current and non-current liabilities. Data is collected as presented by official sources. Any deviations from the definition will be clearly identified in the metadata. Data collected for both total subnational general government and local (as per definition). Amounts provided current LCU
<b>Total reported liabilities % of GDP</b>	Data calculated for both total subnational general government and local (as per definition). World Bank GDP. Local Currency Unit Figures as basis for ratio
<b>Total local govt reported liabilities % of total SNG liabilities</b>	Local government liabilities as reported by official sources as % of total reported SNG liabilities
<b>Total reported liabilities % of total public debt</b>	Data calculated for both total subnational general government and local (as per definition). Public debt figures as per IMF reports.
<b>Total reported expenditures</b>	Total expenditures as reported by official accounts. Includes recurrent and non-recurrent items. Data collected for both total subnational general government and local (as per definition). Amounts provided current LCU
<b>Total reported revenues</b>	Total revenue as reported by official accounts. Included recurrent and non-recurrent items. Data collected for both

	total subnational general government and local (as per definition). Amounts provided current LCU
<b>Total debt securities</b>	Total debt securities as reported by official accounts. Include bonds, notes and other marketable/tradable debt instruments. Data collected for both total subnational general government and local (as per definition). Reported as current LCU amount as ratio of total revenues
<b>Loans</b>	Current and non-current loans as reported by official sources. Data collected for both total subnational general government and local (as per definition). Loans are generally considered interest bearing non-marketable instruments with fixed-term tenors. Reported as current LCU amount as ratio of total revenues
<b>Loans, commercial sources</b>	Loans sourced from entities not majority owned by public interests. Data collected for both total subnational general government and local (as per definition). Reported as current LCU amount as ratio of total revenues
<b>Loans, domestic public sources</b>	Loans sourced from entities majority owned by public interests. Data collected for both total subnational general government and local (as per definition). Reported as current LCU amount as ratio of total revenues
<b>Consolidated debt service</b>	Ratio of debt service (principal redemption plus interest) to operating expenditures. Measured at each level of sub national government. Reported as current LCU amount as ratio of total revenues
<b>LEGAL &amp; REGULATORY DATA SET</b>	
<b>Indicator</b>	<b>Comment</b>
<b>Year</b>	Year in which the L&R data set was last updated
<b>Governance structure</b>	Federal, Quasi Federal or Unitary
<b>Local government permitted to contract debt</b>	Legal authority exists for local government to enter into debt contracts with private or public entities
<b>Commercial borrowing is allowed: at least in one form (i.e. domestic bonds or loans)</b>	Local governments are able to enter into debt contracts with commercial entities (i.e. not publicly owned)
<b>Loans permissible</b>	Local governments are able to contract debt obligations in domestic currencies
<b>Bonds permissible</b>	Local governments can market bonds in foreign denominations
<b>Foreign currency borrowing permissible</b>	Local governments are able to contract debt obligations in foreign currencies
<b>Debt stock limit</b>	Total debt stock is limited (for example as a % of revenues)
<b>Debt service limit</b>	Debt service is limited (for example as % of revenues)
<b>Central government approval requirement - loans and bonds</b>	Is central government approval required for all long-term loan and bond credits?

<b>Sub-national government insolvency framework exists</b>	Does a specific insolvency framework exist that deals with the particular issues that public entities such as local governments have?
<b>Revenue pledge/intercept of intergovernmental transfers allowed</b>	Are local governments enabled to pledge intergovernmental transfers to loan repayment as a means of improving the loan terms?
<b>Local government bond issuances recorded</b>	Have any local government bond issuances ever been recorded in the country
<b>Number of reported bond issuances at local government level (2016 base year)</b>	Were any of those issuances in the last 10 years?
<b>Number of local government issuers (2016 base year)</b>	How many issuers were there in the last 10 years?
<b>Local government bond issuances in last 2 years</b>	How many issuers were there in the last 2 years?
<b>Foreign currency borrowing reported</b>	Have there been any verifiable reports of local governments borrowing in foreign currency?
<b>Long term lending from commercial sources</b>	Have there been verifiable reports of lending greater than 1 year in tenor in the country from commercial sources of finance?
<b>Local government ratings recorded</b>	Are there any active credit ratings of local governments in the country?
<b>Local governments required to publish financial data, including debt levels</b>	Do local governments publish financial data on their own website?
<b>Local governments provide debt guarantees to related entities</b>	Related entities include any other entity to which local governments (a) provide an explicit guarantee of the related entity liabilities, and/or (b) have other forms of direct or contingent liability. This question investigates whether such arrangements do exist in a given country
<b>Related entities guarantees included as part of local government debt on the balance sheet</b>	Are there liabilities resulting from relationships examined under the previous questions reported in aggregated government accounts?
<b>Local government use of Public Private Partnerships to finance infrastructure recorded</b>	There are many forms of PPP, from management contracts to concessions to joint ventures, BOT and other forms of risk sharing arrangements. The database focuses on the forms of PPP where the private and public parties undertake substantial risk of capital invested in infrastructure. For this question, there must be evidence that such PPPs are implemented/procured at the local level.
<b>PPP obligations included as part of local government debt on the balance sheet</b>	Of the forms of direct and contingent liabilities that might accrue to the local public party, is there evidence that these liabilities are systematically included in as liabilities on government accounts?

<b>Central govt has formal Local government debt monitoring system</b>	Is there a formal transparency and monitoring system for sub national debt levels in the country?
<b>CITY DATA SET</b>	
<b>Indicator</b>	<b>Comment</b>
<b>Year</b>	Data is collected as of the calendar year. In the case that the FY does not align with calendar year balances will be reported as of December 31. If this is not possible it will be noted in the metadata
<b>Official entity name</b>	Legal name of the entity
<b>Country</b>	Country of geographic location of the local entity
<b>Level of government</b>	Is the entity at the regional/state or local government level?
<b>Total reported liabilities</b>	Total liabilities as reported by official accounts. Includes current and non-current liabilities. Data is collected as presented by official sources. Any deviations from the definition will be clearly identified in the metadata. Amounts provided in current USD conversion for comparative analysis
<b>Total reported revenues</b>	Total revenues as reported by official accounts. Includes recurrent and non-recurrent items. Amounts provided current LCU
<b>Total reported expenditures</b>	Total expenditures as reported by official accounts. Includes recurrent and non-recurrent items. Amounts provided current LCU
<b>Total reported liabilities % of total revenues</b>	Ratio of total reported liabilities to total reported revenues.
<b>Total debt securities</b>	Total debt securities as reported by official accounts. Include bonds, notes and other marketable/tradable debt instruments.
<b>Total debt securities % of total reported revenues</b>	Ratio of total reported debt securities (current and non-current) to total reported revenues.
<b>Loans</b>	Current and non-current loans as reported by official sources. Loans are generally considered interest bearing non-marketable instruments with fixed-term tenors.
<b>Loans % of total reported revenues</b>	Ratio of total reported loans (current and non-current) to total reported revenues.
<b>Loans, commercial sources</b>	Loans sourced from entities not majority owned by public interests.
<b>Loans, commercial sources % of total reported revenues</b>	Ratio of commercially sourced loans to the total reported revenues.
<b>Loans, domestic public sources</b>	Loans sourced from entities majority owned by public interests
<b>Loans, domestic public sources % of total reported revenues</b>	Ratio of domestic, publicly sourced loans to the total reported revenues.
<b>Debt service % of total reported revenues</b>	Ratio of debt service (redemption plus interest) to total reported revenues.

<b>Active credit long term rating, global scale</b>	International scale ratings provide investors with a comparison to how creditworthy an entity is relative to a global benchmark, including nation states. Cities are characterized as 'investment grade', 'speculative grade', or 'not rated'
<b>Active credit long term rating, local scale</b>	Local ratings are performed relative to a national benchmark. The national treasury is always rated AAA on a local scale and other ratings are relative (and almost always subordinate). Cities are characterized as 'investment grade', 'speculative grade', or 'not rated'
<b>Rating agencies</b>	Often a local government will have multiple ratings. This field captures if an entity has multiple active ratings
<b>Local government history of debt security issuance</b>	Is there recorded evidence of debt securities issuance, i.e. official accounts (central or local), press releases or other reputable accounts. Intended to ensure cities with history of securities issuance but have not issued recently are included
<b>Local government debt guarantees of related entities</b>	Related entities include any other entity to which local governments (a) provide an explicit guarantee of the related entity liabilities, and/or (b) have other forms of direct or contingent liability. This question investigates whether such arrangements do exist in a given country
<b>Local government use public-private partnerships to finance infrastructure</b>	There are many forms of PPP, from management contracts to concessions to joint ventures, BOT and other forms of risk sharing arrangements. The database focuses on the forms of PPP where the private and public parties undertake substantial risk of capital invested in infrastructure. For this question, there must be evidence that such PPPs are implemented/procured at the local level.
<b>Published Financial Statements</b>	Entity has published financial statements via official public channels
<b>SECURITIES DATA SET</b>	
<b>Issuance ISIN or ID</b>	International Securities Identification Number or ID: can be helpful to researchers looking for more information on a particular issuance
<b>Issuer official entity name</b>	Legal name of issuing entity
<b>Country of issuer</b>	Country where issuer is located
<b>Date of issuance</b>	Official reported date of the issuance
<b>Currency of issuance</b>	Denomination of security. Three ISO 4217 standard (i.e. "USD")
<b>Amount</b>	Face value of issuance
<b>Purpose</b>	If reported, the intended use of the funds. Categories to be added as encountered
<b>Date of maturity</b>	Date of last payment of security
<b>Tenor, years</b>	Years from issuance to maturity
<b>Interest rate profile</b>	Floating or fixed interest rate. Categories to be added as encountered

<b>Reported interest rate</b>	The reported rate at issuance
<b>Public auction or private placement?</b>	Was the security marketed on an exchange or directly to private investors?
<b>General obligation or revenue/structured</b>	Whether the bond was pledged against the full faith and credit of the issuing entity or was a structured/revenue type bond. Categories to be added as encountered
<b>Green Bond</b>	Was the bond certified as green by the Climate Bonds Initiative or other similar organization?
<b>Third party credit enhancements/guarantees used in transaction</b>	There are many forms of credit enhancement that can be used. This field focuses on the intervention by third party guarantors
<b>Credit enhancement details</b>	

## Research methodology

Our methodology consists mainly of internal and external desk research. Internal desk research involves existing World Bank data and expert resources. External desk research involves mainly government reported data and international organization research products.

## Sources of information

The database's research team uses the following sources:

- Academic publications
- Government websites and official reports
- Rating agencies reports
- Multilateral development agencies primarily through information on their websites, reports, and studies.

Socio-economic data: Data used in the country profiles and datasets are the following: governance structure, geographical area, urban population, and GDP (current GDP in local currency). Sources of socio-economic data are the World Bank data bank (world development indicators), International Monetary Fund, and national sources (census). Socio-economic data are updated on an ongoing basis.

Public finance data: Priority has been given to data coming from official government's reports or datasets such as: national statistics institutes, Ministry of Finance/ Treasury and/or the central bank. If national accounts were not available, data has been retrieved from other local governmental sources such as: Ministry of the Interior, banking institutions specialized in local government financing, or national associations of local governments. Statistical sources are reported in the profiles and in the metadata for the dataset. In the datasets currency amounts are in current LCU. The profiles do contain CPI adjustment for analytical purposes.

Public finance data have also been collected from international sources such as: International Monetary Fund (government statistics), OECD (WOFI-SNG) and Eurostat (government statistics).

## Database update:

The database will be updated on an ongoing basis (annual) based on availability from sources. Sources are usually updated by governments on an annual or quarterly basis.

## **Interpretation of data**

The LGBD adds to the global knowledge of local government borrowing in developing countries. The following data characteristics should be considered when interpreting data from the database:

Accuracy of sources: The database relies primarily on information reported in official public sources which may not be accurate or contain all the required information. Given data characteristics, the database may not provide a complete picture of the country's subnational financial situation. Rather, the objective is to provide access to detailed and aggregated data that can serve as the basis for estimates and analyses of local government borrowing in developing countries and add to the global knowledge of local government borrowing in developing countries.

Availability of data and treatment of missing data: The dataset is based on desk research and as such the availability of data depends on already existing information. The desk research relies on official government publications which may or may not report all required information. Given the different reporting standards in the world, some datapoints are missing. As an example, one country may report total local government financial debt as an aggregate number but may not report what percentage loans, bonds, or commercial loans represent. Another country may report only total liabilities without revealing more detail on instruments or other breakdown. Unfortunately, missing data, which occurs in almost all researched countries, may reduce the statistical power of a study and produce biased estimates and ultimately lead to invalid conclusions. It is therefore important that researchers do not draw conclusions based on the assumption of a complete data set.

Reporting standards and requirement: Historically, every country had its own accounting and reporting standards especially when it pertains to subnational governments. Governments define, classify, and report financial data in several ways and therefore a cross-country comparison may not always be possible. For example, while some countries publish very detailed balance sheets and debt reports, others only report the total aggregate numbers, and their definition of "debt" might differ. Furthermore, while one country may classify debt based on instruments (loans, bonds, and other debt instruments), another may report only the lenders (internal, external, commercial, etc.). For these reasons, we advise against using the dataset for cross-country comparison, bench marking, rating, etc.