LAC DEBT GROUP

METHODOLOGY FOR THE COMPILATION OF STANDARDIZED PUBLIC DEBT STATISTICS

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1. INTRODUCTION

The level of government debt has been a critical indicator of a country's vulnerability to foreign and macro shocks in the Americas. As a result, compiling standardized and comprehensive statistics on public debt is of crucial importance.

However, the most widely used sources of cross-country data on public debt, namely the Public Sector Debt Statistics published jointly by the International Monetary Fund and the World Bank, the International Financial Statistics (IFS) published by the International Monetary Fund and the World Development Indicators (WDI) and Global Development Finance (GDF) published by the World Bank present several problems.

These databases are usually incomplete, lacking coverage for many smaller countries and presenting little or no information on important characteristics of the government debt such as the currency of denomination, the indexation mechanisms, the legislation under which the debt was issued or the type of debt (bonded, bank, official). In addition, the figures present serious problems in terms of cross-country comparability. The cross-country comparability problems arise for the fact that governments differ in the exact definitions that they use to report debt figures. For example, some countries report only central government debt while others report general government debt, or some countries report total debt while others subtract Central Bank holdings of public debt. These figures, reported by each country, are then compiled in the larger datasets without the needed homogenization.

Taking this into account, in 2009 the LAC Debt Group with the support of the InterAmerican Development Bank (IADB) decided to begin the compilation of standardized public debt statistics for the countries in the region. This effort built on previous work that had been undertaken at the IADB Research Department.1

The objective of this effort is to generate a reliable and complete public debt data set for the region. The first period for which we collected data was 1S 2006. Since then the database is updated at the end of each semester. Each updating is complemented with a report that describes the main changes that occurred in the period.

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[1] In 2006, Cowan, Levy-Yeyati, Panizza and Sturzenegger (CLYPS hereafter) assembled the first comprehensive and consistent series of government debt in the Americas. The CLYPS dataset reports figures at the end of each year from 1980 until 2004. In 2008, Cruces and Sandleris updated the database until 2006.

2. DESCRIPTION OF THE DATA

The basic object of interest is the documented debt issued by the central government and the central bank that has to be paid at some point in the future.

This excludes liabilities that may be implicit in the legislation but not documented in official debt contracts: e.g. the liabilities of the pay-as-you-go social security system and transfers that may be promised to other stakeholders in the future. There are two main reasons for including only documented debt. First, non-instrumented debt is generally not counted as government debt neither in developed nor in developing countries. Second, when the debt is not written in contracts, in principle governments can change the real value or the timings of such payments more easily.

The total Gross Public Debt figure results from adding the central government official debt (bilateral debt and debt owed to multilateral organizations), debt owed to commercial banks and bonded debt. Although, the Central Bank non-monetary liabilities are included, its short-term debt obligations issued for monetary regulation are excluded as we assume that they will not be redeemed.

We exclude debts of provincial and local government which are not recorded as central government debt, debts of state-owned enterprises and banks.2 Note that obligations with international financial institutions such as the IMF are often booked at the central bank, so the gross debt includes these liabilities of the central bank. Also note that the debt owed by subnational governments to multilateral organizations does get recorded as central government debt.

Once the total debt figure (i.e. Gross Public Debt) is computed we compute three estimates of net debt attempting to obtain figures that are more meaningful for international and time series comparisons:

Net Public Debt 1 which is Gross Public Debt minus the Central Bank holdings of marketable government debt,

Net Public Debt 2 which is Net Public Debt 1 minus the Central Bank international reserves, and

[2] This assumption creates an upward bias of total debt in the cases where all debt of subnational entities is booked at the central government level,

Net Public Debt 3 which is Net Public Debt 2 minus Pension Fund Assets.

The first two netting steps amount to subtracting from the gross debt figure some central bank assets that could potentially be used to cancel debt on the assumption that monetary liabilities of the central bank will never be redeemed. The third netting step consists of subtracting the government bonds held by the fully funded pension system of those countries that privatized their social security obligations. The transformation of the pay-as-you-go into a fully funded capitalization system, ceteris paribus requires governments to issue debt in order to substitute for retirement taxes levied on the working age population and which are in turn used to pay retirees. When a country moves from a pay-as-you-go to a capitalization system, government retirement taxes fall but payments to retirees to not. Usually, bonds are issued to cover the gap, and these are purchased by private retirement funds. In practice however, the only change that has taken place is that the obligations towards the working age generation get recorded as bonded debt under the privatized system, whereas they used not to get recorded under the pay-as-you-go system. So the rise in government debt would be overestimated if one did not net out from the government debt figure, the amount of debt issued to cover the fall in the retirement tax income.

In addition, the database presents several disaggregations of the Gross Public Debt data. The gross public debt data is classified by:

- By maturity: short term (i.e. less than a year), medium term (i.e. between one and five years) and long term debt (i.e. more than five years),
- By legislation: debt issued under domestic or foreign legislation[3]
- By type of creditor: debt contracted to official institutions, commercial banks or bonded debt
- By currency: domestic or foreign currency
- By rate: fixed or a floating rate and whether it is indexed
- By holder: held by the Central Bank or by other type of holders

The level of disaggregation is such that allows for the analysis of many of these categories simultaneously. For example, it is possible to see the data in the following subcategories:

[3] We do not have a classification criteria based on the country of residence of the holder as, in practice, it is impossible to do it with bonded debt.

- By maturity and legislation
- By legislation and creditor
- By legislation and currency
- By currency and rate

In addition to the information detailed above we have information on principal and interest payments due throughout the following decade.

3. DATA COLLECTION

The data in our database is provided biannually by the Public Debt Offices of the LAC Debt Group countries. The procedure involves the following steps: every April and September, questionnaires in Word and Excel formats are sent to each of the Public Debt offices of the region.[4] The questionnaire requests information on the latest period and four previous ones. The Public Debt offices have approximately a month to provide the public debt information using the standardized public debt definitions. Completed questionnaires are sent by email to the IADB and the consultant in charge of the data collection effort.

A number of consistency checks are implemented on the data provided by the Public Debt offices in order to make sure that it is compatible with across countries and time. A first check is to compare the data provided in previous questionnaires for a given period with the data provided in the present questionnaire for that same period. If previous values differ significantly (by more than five percent), the countries in question are contacted in order to verify which of the past values are to be used and to explain the reasons for the difference. A second control is done by randomly checking the consistency of the information received with that of the countries' published data from official sources. If there are problems with a given figure provided by a country, we contact the Public Debt office to discuss the matter.

It is important to highlight that the quality of the data in our database depends crucially on the veracity of the data provided by the Public Debt offices in the questionnaires. If countries do not truthfully reveal the extent of their public debts in the questionnaires and in other official

[4] In Appendix I we present the Word version of the questionnaire

publications, despite our best efforts, our consistency checks will not be sufficient to solve the problem.

4. PUBLIC DEBT REPORTS

Using the collected data we analyze the main patterns regarding public debt in the LAC region. The data and a descriptive analysis are published in a report. The report presents statistics for the region as a whole, for each country and cross-country comparisons. Countries that did not answer the questionnaire are also included with the information available up to the latest questionnaire that they answered .