General Government Gross Debt in Brazil: Methodological Issues Regarding Government Securities Held by the Central Bank

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Abstract

The general government gross debt, according to the methodology followed by international organizations such as the International Monetary Fund, includes all securities issued by the government. In Brazil, the current institutional framework involving the Central Bank and the National Treasury raises some questions regarding the adequacy of the methodology in measuring the general government's actual liabilities. The Central Bank is forbidden to issue its own securities as well as to finance the National Treasure, but utilizes federal securities solely in liquidity control operations. The National Treasury can issue federal securities directly to the Central Bank's portfolio, without any financial counterpart, either to reallocate the securities portfolio to an adequate level in order to carry out monetary policy, or to compensate the negative result of the Central Bank operations. In this circumstances, the inclusion of the nonearmarked Central Bank portfolio (overall portfolio minus repo operations) in the general government gross debt may not reflect the government's financing needs, because it is not actually a claim on the government. This paper addresses these issues, analyzing whether the international methodology fits well the Brazilian case.

Keywords: Monetary policy; government solvency; financing needs.

1 – Introduction

The General Government Gross Debt (GGGD) is an important fiscal indicator, being compiled and used worldwide. International organizations responsible for publishing fiscal data, such as the International Monetary Fund (IMF), have guidelines for GGGD compilation, aiming to yield comparable indicators. Debt indicators generated by these guidelines are useful and informative, but the multitude of domestic specificities may nevertheless require attention when using the indicators in international comparisons.

In the Brazilian case, the relationship between the National Treasury (Federal government) and the Central Bank of Brazil (CBB) raises some questions regarding the adequacy of the GGGD indicator, as is usually compiled, in measuring the general government's actual liabilities and financing needs. This paper aims to analyses these issues, pointing out whether the international indicator delivers an actual view of government's liabilities, as well as the possible advantages of the new indicator that has been proposed by the Brazilian authorities.

The next section will analyze the GGGD indicator compiled in accord with the international methodology. The relationship between the CBB and the general government in Brazil will follow. Then, an analysis of the GGGD national indicator will be presented. Finally, the last section draws the conclusion.

[1] The views expressed in this work are those of the author and do not necessarily reflect those of the Central Bank of Brazil or its members.

2 – The GGGD indicator according to the international methodology

The GGGD indicator is based upon the concepts of institutional units and liabilities. The former draws the line between the general government and other economic agents, including central banks, while the latter establishes when an institutional unit is indeed obliged to provide economic value to another one.

The *Government Finance Statistics Manual 2001/2014*, published by the IMF, and the *Manual on Government Deficit and Debt*, published by the Eurostat, are examples of international manuals that set guidelines for GGGD compilation. They are aligned and broadly consistent with the System of National Accounts 2008[2], according to which "an institutional unit is an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities"[3]. Following this definition, all resident institutional units[4] are allocated to one and only one of the following five institutional sectors:

1) The non-financial corporations sector;
2) The financial corporations sector;
3) The general government sector, including social security funds;
4) The non-profit institutions serving households sector;
5) The households sector.

Taking into account that a central bank is a separate institutional unit, "it is always allocated to the financial corporations sector, even if it is primarily a non-market producer"[5]. Consequently, all transactions between the central bank and the general government are expected to be recorded by general government debt indicators.

With regard to the liabilities, they are defined by the GFSM 2014 as "established when one unit (the debtor) is obliged, under specific circumstances, to provide funds or other resources to another unit (the creditor)"[6]. Liabilities usually take the form of a legal contract that binds both creditors and debtors, specifying the conditions for disbursements and payments. The *Public Sector Debt Statistics - Guide for Compilers and Users*, also published by the IMF, states that "a debt instrument is defined as a financial claim that requires payment(s) of interest and/or principal by the debtor to the creditor at a date, or dates, in the future"[7]. Whenever a liability is created, the creditor has a corresponding financial claim on the debtor.

Thus, the GGGD may be defined as the total amount of funds or other resources that the general government has to provide to other institutional units. Thus, according to international guidelines, government securities held by the central bank, for instance, should be recorded as a financial claim on the government, as they generate the right to receive funds or other resources.

3 – The relationship between the Central Bank and the General Government in Brazil

Central banks throughout the world carry out a variety of operations, and have heterogeneous functions. For liquidity control, the mechanisms employed usually include reserve requirements and open market operations (e.g. repo operations). The use of these instruments varies widely, with

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[2] In the case of the MGDD 2014, published by the Eurostat, the alignment is with the European System of Accounts (ESA) 2010, which in turn follows SNA 2008.
[3] SNA 2008, paragraph 4.2.
[4] The residence of each institutional unit is the economic territory with which it has the strongest connection.
[5] SNA 2008, paragraph 4.104.
[6] GFSM 2014, paragraph 3.45.
[7] The Public Sector Debt Statistics – Guide for Compilers and Users, paragraph 2.3.

different impact on the central banks balance sheets. In countries that follow an inflation targeting regime, as is the case of Brazil, open market operations may play an essential role in the task of controlling interest rates and liquidity.

The Brazilian institutional arrangement set adequate segregation of roles and functions between the CBB and the Ministry of Finance. The former is responsible exclusively for the implementation of monetary policy, while the latter is responsible exclusively for the management of fiscal policy, although both seek to act in harmony in the pursuit of their goals.

The CBB holds the classic function of treasury banker, receiving all Federal government available resources (in the Treasury Single Account - TSA). On the other hand, the CBB cannot grant loans to any unit other than a financial institution, and thereby it is not allowed to finance the government (either federal, state or municipal). The CBB can buy National Treasury (NT) securities only in the secondary market, for monetary policy management purposes. Nonetheless, if necessary for monetary policy management, the NT can issue securities directly to the CBB's portfolio, without any financial compensation, given that the Monetary Authority[8] is forbidden, by the Fiscal Responsibility Law - FRL (Supplementary Law 101), to issue securities.

The FRL, promulgated in 2000, brought about important changes in the way the CBB manages monetary policy. With the prohibition of the issuance of securities by the CBB[9], the securities that were on the market were redeemed according to the maturity structure, and by 2006 they were fully extinguished. Since then the CBB has employed exclusively securities issued by the NT in open market operations. Besides the issuance of NT securities whenever necessary for monetary policy management, the NT also issues securities directly to the CBB's portfolio in order to compensate the negative result of the Monetary Authority operations.

The accounting result of the Monetary Authority is calculated and transferred to the NT every six months. If positive, the result is transferred by means of credit in the TSA; if negative, the NT issues securities directly to the CBB's portfolio as compensation, without any financial counterpart. The same arrangement is applied in the case of the exchange equalization operation between the CBB and the NT. This operation was implanted in 2008 aiming to reduce the volatility of the CBB result due to the effects of exchange rate fluctuations over the stock of international reserves (a CBB asset) and over exchange swap operations carried out by the Monetary Authority. As a consequence, the accounting result of the CBB no longer reflects the effects of exchange rate fluctuations in international reserves and exchange swap operations. On the other hand, the result (gain/loss) of the exchange equalization operation is also calculated half-yearly and transferred to the NT under the same criteria and deadlines for the transfer of the accounting result[10]. Still, the transfers from the CBB to the NT, by means of credit in the TSA (related to the CBB positive results) can only be used by the NT for redemption of federal securities, preferably those in the CBB's portfolio.

As a consequence of this arrangement, federal securities in the CBB's portfolio are mainly connected to direct issues either to equalize the cost of international reserves/exchange swap operations, or to reallocate the securities portfolio to an adequate level in order to carry out monetary policy[11].

4 – The GGGD indicator according to the national methodology

[8] Throughout this work the names Central Bank of Brazil and Monetary Authority will be used as synonyms.
[9] The Law set that two years after its enactment (2002), the CBB could no longer issue securities.
[10] This whole arrangement involving accounting result and exchange equalization operation prevents the turning of the CBB's net worth in a debit balance.
[11] The accounting result of the CBB is usually positive, and thereby does not generate issuance of NT securities.

The new institutional framework brought about by the FRL led to a change, in 2008, in the GGGD indicator compiled by the country[12]. By 2007, all NT securities in the CBB's portfolio were included in the GGGD, thereby following usual international standards. When that methodology was defined the CBB was still authorized to issue securities for monetary policy management. According to the CBB, "under that circumstances, there was a certain distinction between securities issued for coverage of budget deficits and securities issued for monetary policy implementation purposes. Consequently, it was reasonable to include all National Treasury securities in CBB's portfolio into GGGD, since the origin of the debt they represented was fiscal in nature, considering that the open market operations were carried out mainly with securities issued by the Monetary Authority. Therefore, it was deemed prudent to adopt a more conservative stance as regards GGGD statistics, considering the entire portfolio as included in the debt."[13]

The national GGGD indicator that the country started to publish in 2008[14] aim to better display actual government liabilities and evolution, given the current institutional arrangement. It excludes all NT securities in the CBB's portfolio, and includes all repo operations carried out by the Monetary Authority[15]. Therefore, the nonearmarked securities portfolio (overall securities portfolio minus repo operations), which is included in the international GGGD methodology[16], is not included in the national one. The national methodology thereby regards the entire securities debt held by the market (NT securities market plus repo operations carried out by the CBB).

As an example of how both methodologies show debt evolution consider the following situation: the NT could hypothetically redeem its securities debt market and, as a consequence, the CBB would have to carry out repo operations to sterilize the monetary expansion resulting from that operation. In that case, the GGGD, according to the international methodology, would be reduced (write-off of securities redeemed by the NT) while the total amount of securities held by the market would actually remain the same (due to the rise of repo operations). In the national methodology, no change would occur in the amount of the GGGD: the reduction of the NT securities market would be offset by the rise of repo operations. The latter methodology seems to better show what is indeed passing with debt evolution, at least regarding market conditions.

The main point for the analysis is whether the nonearmarked securities held by the CBB are really a "claim" on the government. Actually, they do not represent any kind of funding provided by the Monetary Authority or by the market and are only available to the CBB for the management of monetary policy. Moreover, whichever may be the amount of nonearmarked securities in the CBB's portfolio, the conditions in which NT securities are traded in the market remain the same. Also, the rollover of the NT securities in the CBB's portfolio is automatic in practice, and does not induce market pressure. Thus, although the nonearmarked securities remain legally a claim on the government, there is no doubt that its features undermine its "economic claim".

[12] The CBB is responsible for the compilation and publication of the main Brazilian fiscal indicators, including the GGGD and the Public Sector Borrowing Requirements (PSBR). This is because the CBB has access to the public sector financial assets and liabilities by means of financial institutions balance sheets, systems of securities registration and balance of payment statistics (net external debt). The data for all public sector are published monthly, with a maximum lag of 30 days. It is worth to note that besides the Federal government there are 27 states (including the Federal District) and more than 5,600 municipalities in Brazil.
[13] Central Bank of Brazil, *Fiscal Policy Press Release*, *Appendix I - Technical Note*, February 2008.
[14] The publication started in 2008, but the new data series in 2006.
[15] As it was highlighted before, repo operations carried out by the CBB utilize NT securities solely.
[16] The international methodology, as mentioned before, includes all NT securities in the CBB's portfolio, whether or not they are used in repo operations.

Finally, it should be highlighted that the entire relationship between the CBB and the NT is explained in details in the country's fiscal statistics. In each period, there is perfect reconciliation of stocks and flows for each one of the components that form this relationship, with full disclosure of the items.

5 – The evolution of the GGGD in Brazil

The GGGD reached 58.9% of GDP in 2014 in the national concept and 64.5% in the international one (Table 1). NT securities debt market account for most of the debt, followed by repo operations. The total NT securities in the CBB's portfolio amounted to 20.2% of GDP in 2014, while the nonearmarked securities reached 5.6% of GDP in the same date. Between 2006 and 2014 the average amount of nonearmarked securities reached 7.6% of GDP (which is equal the average difference between the GGGD in the national and international concepts).

Table 1 - General government gross debt

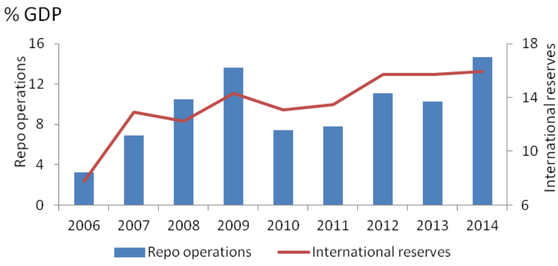
% GDP

	2006	2007	2008	2009	2010	2011	2012	2013	2014
GGGD - National concept (A)	**55,5**	**56,8**	**56,0**	**59,3**	**51,8**	**51,3**	**54,8**	**53,3**	**58,9**
Internal gross debt	49,2	52,5	51,4	55,9	48,9	48,8	52,1	50,4	55,5
NT securities debt market	44,6	44,3	39,8	41,1	40,4	39,9	39,7	38,6	38,8
CBB repo operations (B)	3,2	6,9	10,5	13,7	7,4	7,8	11,1	10,3	14,7
Other	1,5	1,3	1,1	1,1	1,1	1,1	1,3	1,5	2,0
Foreign debt	6,2	4,3	4,7	3,3	2,8	2,5	2,7	2,9	3,4
Memo									
Nonearmarked securities in CBB's portfolio (C)	9,1	6,3	5,4	5,5	10,7	9,4	8,1	8,3	5,6
Total securities in the CBB porfolio (D=B+C)	12,3	13,2	15,9	19,2	18,1	17,2	19,2	18,6	20,2
GDDD - International concept (E=A+C)	**64,6**	**63,1**	**61,5**	**64,8**	**62,4**	**60,7**	**62,9**	**61,6**	**64,5**

Source: Central Bank of Brazil

The repo operations carried out by the CBB reached 14.7% of GDP in 2014, increasing 11.4 percentage points of GDP since 2006. This evolution was influenced, among other factors, by the growth of international reserves held by the CBB, which went from USD86 billion (8% of GDP) to USD374 billion (16% of GDP) in the period, forcing the Monetary Authority, given its inflation targeting, to absorb liquidity created by acquiring them. The Brazilian government has nevertheless highlighted that the accumulation of international reserves has been beneficial to the country, introducing important degrees of freedom for the conduction of economic policy[17].

Figure 1 - CBB's repo operations and international reserves



[17] With the growth of international reserves, the Public Sector Net Debt (PSND) has registered a net creditor position in foreign currency since 2006. In situations of economic stress, when the exchange rate usually depreciates, the net creditor position in foreign currency leads the PSND to decrease in domestic currency.

The share of repo operations (financial assets sold under repurchase agreements) in the CBB liabilities and equity (balance sheet) reached 39% in 2014 (Table 2), while the share of NT securities reached 52% in the CBB assets in the same date.

Table 2 - Central Bank of Brazil Balance Sheet

Dec 31, 2014

BRL (Domestic currency) Billion

Assets		Liabilities and Equity	
In foreign currencies	1,009	In foreign currencies	26
Securities	876	Deposits Received from International Financial Organizations	14
Cash and Cash Equivalents	25	Accounts Payable	11
Time Deposits Placed with Financial Institutions	34		
Financial Assets Purchased Under Resale Agreements	29		
Other	45	Other	1
In local currency	1,148	In local currency	2,112
Federal Government Securities	1,113	Financial Assets Sold Under Repurchase Agreements	837
Receivables	25	Payables to the Federal Government (TSA)	698
		Deposits Received from Financial Institutions	326
		Currency in circulation	221
		Other	30
Other	10	Equity	19
Total assets	2,157	Total liabilities and equity	2,157

Source: CBB - Accounting and Financial Department

6 – Final remarks

Although international manuals stipulate that all transactions and stocks between central banks and governments be recorded in debt indicators, the requirement may lead to biased comparisons when government securities in central bank's portfolio are not an actual "claim" on the government. In these situations, part of government's debt may not reflect its actual financing needs.

In the Brazilian case, given the country's prevailing institutional arrangement and considering the above mentioned aspects, the national debt methodology may better reflect the government's financing needs, and should be considered along with traditional debt indicators compiled under international standards. Although international comparability should be one of the aims of fiscal statistics, it is also important to acknowledge that international standards may disregard important specificities which may in turn undermine comparability when not properly addressed.

References

Central Bank of Brazil (2011) *Analysis of the Evolution of Nominal Interests Appropriation on the PSND*, Inflation Report, March 2011.

-------------- (2008) *Fiscal Policy Press Release – Appendix I – Technical Note*, February 2008 Edition.

Eurostat (2014) *Manual on Government Deficit and Debt*.

International Monetary Fund (2001) *Government Finance Statistics Manual 2001*.

-------------- (2013) *Public Sector Debt Statistics - Guide for Compilers and Users.*

-------------- (2014) *Government Finance Statistics Manual 2014, Pre-publication Draft*.

United Nations Statistical Commission (2008) System of National Accounts 2008.