



Debt Report

The Brazilian National Treasury informs that from June 2017 onwards the Integrated Public Debt System - SID will provide data and statistics to the Monthly Debt Report.

1. **The information contained in Monthly Debt Report (RMD) has been refined, as it started to consider the complete and detailed set of necessary data to compute the outstanding Federal Public Debt - FPD.** This represents a fine-tuning in the indicators, but its actual impact is marginal when compared to the outstanding FPD¹. Nonetheless, it is an important institutional advance associated with federal debt management.

2. **This is a remarkable achievement for the FPD management and has been part of a process started in September 2005, since the development of Project SID - Phase I.** At that time, the inputs and outputs related to the FPD were scattered in some platforms:

- **DPI** – The Domestic Public Debt System processed all the Domestic Federal Public Debt – transactions, except those related to the Agrarian Reform securities - TDA, and calculated its outstanding, as well as its payments and maturities. This system was neither able to calculate the outstanding based on Internal Rate of Return – IRR nor assess other statistics presented in RMD and in the Annual Debt Report.
- **DÍVIDA** – The External Federal Public Debt – System processed all transactions and calculated the outstanding value, as well as its payments and maturities. This system wasn't able to output other statistics presented in the main publications.
- **ELABORA** – The Budget Elaboration System was able to forecast only the outstanding and maturities from the domestic debt.
- Several spreadsheets calculated the remaining statistics not delivered the systems weren't able to do, such as outstanding average cost, issuances average cost, and ATM, for instance.

3. **SID is a robust system planned and developed by the Brazilian National Treasury - TN. It aims at registering, managing information, and statistics related to the FPD.** Its implementation has been phased out gradually². As of August 2011, the External Federal Contractual Public Debt module was launched. As of August 2012, the External Federal Securities Public Debt module became operational. Last, as of January 2016, the module of the domestic debt has begun to operate. Nowadays, the development of the integration with the Integrated System of Financial Administration - SIAFI and the Guarantees Project (for contingent liabilities management) are being developed³.

4. **The complexity of the project involving a great diversity of securities and integration with other systems explain the long timeline since its beginning back in 2005.** Another challenge was the standardization of rules for all securities and contracts in order to embed homogeneity and provide a user-friendly interface alongside with connection with external systems. For example, the custody and settlement systems at the Central Bank system. These technical challenges were managed and became one of the remarkable components of the SID compared to others debt management systems, which could not fulfill the requests for the Brazilian debt peculiarities.

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5. Until May 2017 RMD issue, the prices of domestic debt securities and overall outstanding debt were calculated by the Central Bank. In turn, the Treasury used this information to produce the main statistics derived from it. Now, the SID enables the DMO⁴ to calculate those prices with its own inputs. This is extremely important in order to refine the numbers and to double check the statistics reinforcing reliability and enhancing transparency to the reports elaborated at Public Debt Under Secretariat. For this purpose, both Treasury and Central Bank worked together to unify the criteria of the methodology to calculate the outstanding based on IRR.

6. Despite the similarity of the methodologies used by both institutions, there were some differences between them:

(i) the Treasury calculates the average price of the securities segregating the different portfolios outstanding in the market, in the retail sales program⁵ and the securities held at the Central Bank. Contrasting to that, the Central Bank bundles the securities altogether. (ii) Treasury calculates the outstanding based on the last day of each month, while the Central Bank does it on the first day of the following month. (iii) Regarding the Updated Nominal Value – VNA calculation, Treasury interpolates it through the month. However, the Central Bank uses constant values. This is particularly important to inflation-linked securities. (iv) Regarding coupon bonds, Treasury doesn't consider those stripped, as opposed to the Central Bank. (v) There were some differences in the way the institutions used to define the average rate of issuance related to non-competitive bonds.

The table below summarizes these differences.

Reference	Central Bank	National Treasury
All securities	<p>Average Price: calculated merging CB, Market and Tesouro Direto portfolios altogether. In particular, the prices of Tesouro Direto portfolio is set according to CB criteria.</p> <p>Reference Date: First day of the next month</p>	<p>Average Price: calculated in each portfolio independently. The average price is calculated by the weighted average of the issuances prices multiplied by its quantities.</p> <p>Reference Date: Last day of the month.</p>
NTN-B*	<p>Stripped Bonds: calculates NTN-B and NTN-F prices.</p>	<p>Stripped Bonds: calculates NTN-B and NTN-F prices.</p>
NTN-C NTN-F	<p>VNA: It is constant ("full") to NTN-B and NTN-C, during the monthly term of IPCA and IGPM, according to the official schedule.</p>	<p>VNA: It is constant ("full") to NTN-B and NTN-C, during the monthly term of IPCA and IGPM, according to the official schedule.</p>
NTN-I	<p>Variable Rate is used to calculate its present value and exponential using 30/360 measure (methodology chosen according to CB Resolution n. 7,818, 08/31/2000).</p>	<p>Fixed rate is used to calculate its present value (12%p.y., compounded capitalization) e exponential using business days/252 measure.</p>
NTN-P	<p>Variable Rate is used to calculate its present value</p>	<p>Fixed rate is used to calculate its present value (6%p.y.)</p>

*As of May/2017, the biggest financial impact caused by the differences in methodology of VNA calculation was on NTN-B outstanding (additional R\$ 8.09 billion on the outstanding calculated by Treasury).

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7. **The accuracy of the information was improved with the alignment of the methodologies by both institutions.** Some information and statistics that were calculated using spreadsheets, e.g. Average Term to Maturity, outstanding average cost and variation factors, will be released based on SID calculation from June 2017 onwards.

8. **The debt analysis, projections, and budget elaboration modules enable the Treasury to simulate various scenarios and contributes to the decision-making process associated with debt strategy and planning.** The timely fashion by which the DMO assess current and future outlooks are crucial to providing key information used by the fiscal unit in the quest for the intertemporal public debt sustainability.

9. **June 2017 RMD's⁶ release was chosen to present a retrospective of the development related to the SID. It can be used as a reference for future actions aimed at improving public debt management.** All the actions taken sought to contribute to the DMO mission to manage public debt in an efficient, transparent and sustainable manner, as well as to confirm the role of the Treasury as the primary source of debt related indicators

[1] The methodological refinement increased the FPD outstanding around 0.2%.

[2] Currently, the Federal Data Processing Service – SERPRO is responsible for the project development.

[3] SID was designed presenting relational database and web access interface through internet browsers. Its functionalities simplify the data extraction, so there is a significant reduction of time between input and output.

[4] Debt Management Office in the Treasury. *ministração da dívida no Tesouro Nacional*.

[5] Tesouro Direto – The internet based retail sales program.

[6] The statistics, the design and the next steps related to SID are in charge of CODIV - General Coordination Staff of Public Debt Control, aka the DMO back office.

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