Debt management guidelines: 10 years

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Brazilian National Treasury
Ministry of Finance

SDMF -Washington D.C.,
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Institutional Framework

Transparency and Accountability

Debt Management Objectives and Coordination

Debt Management Strategy & Risk Management

Development and Maintenance of an Efficient Market
Brazilian Public Debt Management: Institutional Framework

Ministry of Finance
  - CVM (SEC)
    - Central Bank
    - National Treasury
      - Internal Revenue Service
      - Others
  - Corporate
    - Fiscal Policy
  - Public Debt (DMO)
  - States and Municipalities
  - Fiscal Planning and Statistics
  - Accounting
In 1986, the National Treasury was created within the Ministry of Finance.

In 1999, it was implemented a new model for the public debt management based on a DMO framework (back, middle and front offices), that put the National Treasury in line with the best international practices.

In 2003, it was created a Debt Committee, with (i) strategic meetings, every quarter, to approve the Annual Borrowing Plan and its periodic revisions, and (ii) tactic monthly meetings, to decide the bonds issuance schedule for the following month. The committee has the participation of the Undersecretary for Public Debt and of the heads of the back, middle and front offices.
Public Debt Management Institutional Framework: Governance

**Public Debt Under-Secretariat**

**CODIP (Front-Office)**
- Development of short term strategies.
- Issuances of bonds in the domestic and external markets.
- Evaluation of structured operations involving bonds and contractual debt.

**COGEP (Middle-Office)**
- Research and development.
- Risk management.
- Macroeconomic scenarios.
- Domestic and external investor relations.

**CODIV (Back-Office)**
- Register, control, payment and budget monitoring of the domestic and external debts.
- Responsible for the official statistics regarding Federal Public Debt.
“Public debt management requires staff with a combination of financial market, economics, and public policy skills. Regardless of the institutional structure, the ability to attract and retain skilled debt management personnel is crucial, both for developing and executing an effective strategy and for mitigating key-person risk” (World Bank, 2007).

➢ The Ministry of Finance (National Treasury) selection process is designed to attract professionals with solid backgrounds in economics and finance.
   ▪ It also offers development and qualification programs for its technical staff, together with institutions that focus on professional specialization.

➢ Adoption, in 2005, of a Code of Ethics and Standards of Professional Conduct for National Treasury staff:
   ▪ The code was designed to create rules/principles to guide relations with the financial market, the main buyer/holder of public bonds.
The guidelines also state that debt management needs a single, secure information system to record debt data, ensure payments, and improve transparency; if multiple systems exist, they can create obstacles to tasks that require consolidated debt information, such as analyzing data and developing strategies.

The Treasury is developing an integrated system that incorporates the existing ones.

- Current systems:
  - DPI and DIVIDA - Registering and Controlling; ELABORA - Budget Elaboration; GERIR - Risk Management and Strategy Analysis; among other ones.

- Under Construction - SID:
  - Integrate all systems in the DMO; eliminate redundancies; minimize operational risks and increase capacity of generating useful data
  - SID first phase (DPI and DIVIDA integration) is expected to be finished in December 2012, being the second one (ELABORA and GERIR integration) delivered until December 2013.
Best international practices require laws that clearly define responsibilities with respect to issuing new debt instruments, investing, and carrying out transactions for the government.

- In Brazil, these were defined by the Presidential Decree nº 4.643, of 2003, according to which the National Treasury, within the Ministry of Finance, is responsible for “managing the federal public debt, domestic and external, bonded and contractual”.

- Brazil’s indebtedness policy is based on five legal instruments:
  - the Federal Constitution, which establishes the general guidelines for public debt;
  - the LRF - Fiscal Responsibility Law, which defines public finance standards to achieve responsible fiscal management as well as several Federal Public Debt limits;
  - a specific law that defines the general characteristics of federal public debt bonds;
  - the Budgetary Guidelines Law (LDO); and
  - the Annual Budgetary Law (LOA).
Institucional Framework

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According to IMF and World Bank guidelines, it is essential to publicize the goals and responsibilities of debt management to ensure credibility. Such goals, including those related to cost and risk measures, and timely information on financial assets, debt profile and outstanding debt, should be clearly defined and available to the public.

- In Brazil, transparency reduced the market uncertainties related to debt management goals and made political decisions more consistent. It also helped reduce market volatility and the risk premium required by investors.

- The functions and responsibilities of public debt managers are defined by legal instruments that are publicly available on the National Treasury’s website, along with regulations related to debt management and primary and secondary market activities.
The most important documents the Brazilian National Treasury publicizes are:

- The Annual Public Debt Borrowing Plan (ABP), 12th Edition: Public Debt objectives, guidelines, strategies and targets for the end of the year;
- The Annual Debt Report, 9th Edition: which offers a retrospective analysis for the ABP;
- The Monthly Debt Report, which presents information and overall statistics;
- Monthly issuances schedule, which, at the start of each month, list the dates of auctions, as well as the bonds to be auctioned in the period;
- Debt newsletters, which provides information on issues related to the public debt; and
- Presentations for investors, updated weekly, which include information on the public debt. These offer a macroeconomic overview and describe the advances and challenges in PDM, highlighting the Treasury’s financing strategy

These documents are released in Portuguese and English, sent by our mailing list and available in the National Treasury’s website (www.tesouro.fazenda.gov.br).
The Public Debt Institutional Relations Office has been key to ensuring that policies would be transparent and the Treasury’s actions (as the manager of public debt) would be publicized.

It was also crucial in expanding the investor base, conducting regular meetings with risk-rating agencies and updating the website with relevant information for investors and the public.

Also, the Institutional Relations Office releases statements made by government representatives at national and international events.

Finally, it arranges for regular teleconferences in which the Treasury secretary talks with domestic and foreign investors to describe the latest policies on PDM, fiscal issues, etc., that investors and the public need to know.
Brazil stands out in Investor Relations Best Practices

IIF Report - Investor Relations: An Approach to Effective Communication and Enhanced Transparency
Accountability: External Audits

*Good debt management practices suggest that external auditors should review activities annually. These audits should evaluate the institutional environment (organizational structures and information systems), operational risks, information flows, and monitoring of internal controls.*

- Brazilian debt management is audited internally each year by the Office of the General Comptroller (CGU), an agency of the executive branch.

- Externally, by the Federal Court of Accounts (TCU), within the legislative branch.

- Besides that, the Federal Executive has to account its results to the Legislative every term. Public Debt results is presented in a formal report accounting for the overall government balance sheet (BGU).
Federal Public Debt objectives and guidelines: released every year through the ABP

- The **objective** of the Federal Public Debt Management is that of efficiently meeting the National Treasury Borrowing Requirements, at the lowest possible long-term financing costs, while ensuring the maintenance of prudent risk levels. Additionally, the aim is to contribute to the smooth operation of the Brazilian government securities market.

Based on that long term objectives, the **guidelines** set for 2012 are the following:

- Gradual replacement of floating-rate securities by fixed-rate and inflation-linked instruments;
- Increase the average maturity of the outstanding debt;
- Smooth the maturity profile, with special attention given to short-term maturities;
- Development of the yield curve on both domestic and external markets and growth in the liquidity of federal government securities on the secondary market;
- Broadening of the investor base; and
- Improvement of the External Federal Public Debt (EFPD) profile through issuance of benchmark securities, buyback program and structured operations.
According to the IMF and World Bank guidelines, public debt and fiscal policy managers and central bank authorities must share the same policy goals, given the inter-dependence of their instruments.

- In countries with more developed, efficient financial markets, debt management and monetary policy are clearly separated, which reduces possible conflicts.

- Countries less able to separate the goals and responsibilities face greater challenges.
  - In most cases, these arise mainly because the countries lack a developed bond market and an independent central bank;
  - Also, because they adopt similar market instruments for both monetary and debt policies.

- With respect to the latter, in Brazil, until the Fiscal Responsibility Law (LRF) was passed in 2000, the Central Bank used its own bonds to conduct monetary policy.
In 2000, the Fiscal Responsibility Law was approved, stating that, from 2002 on, the Central Bank was prohibited from issuing bonds to execute monetary policy:

- **Fiscal Policy** (budget deficits financing): conducted by the National Treasury through securities issued in its primary market auctions.

- **Monetary Policy** (control of monetary aggregates): conducted by Central Bank through treasury securities traded in Secondary Markets (Open-Market operations), among other instruments.

Since 2005 the centralization of Federal Public Debt became stronger, with the change of issuance of external debt bonds from Central Bank to the Treasury.

This centralization was fundamental for the Treasury to enhance the debt management: (i) its objectives and guidelines started to be fully reflected on the day-to-day debt strategy; (ii) the institutional relations unit started to continuously assist the rating agencies; (iii) road shows were organized regularly in the main international financial centers; and (iv) the operations desk was created to execute the external debt operations.
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The most important elements of Public Debt Management are a consistent, sustainable strategy for the public debt based on cost and risk analyses that consider macroeconomic and market restrictions and a developed domestic market (World Bank, 2007).

- Guidelines advocated by debt strategy experts stress the importance of monitoring and evaluating risks in the debt structure.

- Managers should be concerned about risks associated with variations in interest and exchange rates, and in securing debt payment and refinancing.

- The strategy should assess distinct medium and long-term debt structures for defining optimum debt profiles which would help managers identify and manage cost-risk tradeoffs.

- It should also consider macroeconomic restrictions and the market’s level of development.
Strategic planning process of the Federal Public Debt

Objective of Federal Public Debt Management

Benchmark
  Definition of Desired Long-Term FPD Structure

Transition Strategy
  Medium-Term FPD Planning

Annual Borrowing Plan
  Short-Term FPD Planning

Debt Management Committee
  Definition of targets, Tactical Planning and Monitoring
Strategic Planning Process of the Federal Public Debt

OBJECTIVE OF PUBLIC DEBT MANAGEMENT

SCENARIOS

YIELD CURVE

CURRENT DEBT

OTHER INPUTS

BENCHMARK MODEL
Steady State

TRANSITION STRATEGY
Medium/ Long Term

ANNUAL BORROWING PLAN
Short Term (1 Year)

GERIR SYSTEM
(Simulations)

OUTPUTS OF THE DEBT PROFILE:
- Composition
- Average Maturity
- Maturity Profile
- Cost
- Risk

MONTHLY COMMITTEE:
- Tactical planning
- Strategy Execution
- Targets definition
- Monitoring
1st Stage: the Desired Long Term Debt Composition - Cost and Risk Evaluation

- Optimal portfolio selection
  - Financing efficient frontier
  - Trade-offs performed by the model
- To determine the optimal portfolio (benchmark) it is necessary to choose the risk appetite of the government (in last instance, the taxpayers aversion to risk)
- Application of the model to measure performance: criterion based on the efficient frontier

Efficient Frontier: Cost-Risk Tradeoff
<table>
<thead>
<tr>
<th>Composition</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Rate</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Inflation Linked</td>
<td>30%</td>
<td>35%</td>
</tr>
<tr>
<td>Floating Rate</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maturity Profile</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Maturity</td>
<td>5 Years</td>
<td>6 Years</td>
</tr>
</tbody>
</table>
2nd Stage: The Transition Strategy

- The transition strategy establishes a bridge between short and long term.

- It seeks to evaluate risks, restrictions, and opportunities for FPD management over a period of time longer than the current fiscal year, usually *five years*.

- It seeks to develop a plan that will lead FPD to the profile indicated by benchmark, with due consideration of the current debt composition and its maturity structure:
  - what should be the path and the speed of convergence of the debt portfolio to the benchmark?
  - what may constitute short and medium-term constraints (particularly, macroeconomic environment and development of local financial markets)?

- One important distinction between the benchmark and the transition/ABP strategy is that scenarios in the first case presume economy in the steady-state, while the transition/ABP strategy takes as reference a set of possible scenarios for the coming years.
## 2nd Stage: The Transition Strategy

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stock of FPD ($ billion)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.868,1</td>
<td>2.089,9</td>
<td>2.295,9</td>
<td>2.487,3</td>
<td>2.743,1</td>
<td>2.998,9</td>
<td></td>
</tr>
<tr>
<td><strong>Profile (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Rate</td>
<td>37,3</td>
<td>37,5</td>
<td>40,6</td>
<td>41,6</td>
<td>43,9</td>
<td>46,2</td>
</tr>
<tr>
<td>Floating Rate</td>
<td>30,9</td>
<td>29,5</td>
<td>25,3</td>
<td>23,1</td>
<td>19,8</td>
<td>16,7</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>5,1</td>
<td>4,6</td>
<td>4,4</td>
<td>4,2</td>
<td>3,8</td>
<td>3,4</td>
</tr>
<tr>
<td>Inflation-Linked</td>
<td>26,7</td>
<td>28,4</td>
<td>29,7</td>
<td>31,1</td>
<td>32,5</td>
<td>33,9</td>
</tr>
<tr>
<td><strong>Outstanding Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Maturity (in years)</td>
<td>3,6</td>
<td>3,6</td>
<td>3,8</td>
<td>4,0</td>
<td>4,1</td>
<td>4,1</td>
</tr>
<tr>
<td>Issuance Average Maturity (in years)</td>
<td>4,2</td>
<td>4,3</td>
<td>4,1</td>
<td>4,3</td>
<td>4,0</td>
<td>4,0</td>
</tr>
<tr>
<td>% Maturing in 12 months</td>
<td>23,0</td>
<td>26,9</td>
<td>28,4</td>
<td>25,6</td>
<td>19,5</td>
<td>19,5</td>
</tr>
<tr>
<td>% Maturing in 24 months</td>
<td>46,5</td>
<td>51,7</td>
<td>50,2</td>
<td>41,9</td>
<td>40,1</td>
<td>40,1</td>
</tr>
<tr>
<td>% Maturing in 36 months</td>
<td>63,1</td>
<td>65,8</td>
<td>59,1</td>
<td>55,9</td>
<td>54,1</td>
<td>54,1</td>
</tr>
</tbody>
</table>
The objective of the Federal Public Debt Management is that of efficiently meeting the National Treasury Borrowing Requirements, at the lowest possible long-term financing costs, while ensuring the maintenance of prudent risk levels. Additionally, the aim is to contribute to the smooth operation of the Brazilian government securities market.

To achieve this objective, the guidelines underlying FPD management are as follows:

- Increase the average maturity of the outstanding debt
- Smooth the maturity profile, with special attention given to short-term maturities
- Gradual replacement of floating-rate securities by fixed-rate and inflation-linked instruments
- Improvement of the External Federal Public Debt (EFPD) profile through issuance of benchmark securities, buyback program and structured operations
- Development of the yield curve on both domestic and external markets and growth in the liquidity of federal government securities on the secondary market
- Broadening of the investor base
### 3rd Stage: The Annual Borrowing Plan – Federal Public Debt targets to the end of the year

- Targets are published in the Annual Borrowing Plan as limits for the debt profile

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2011</th>
<th>Limits for 2012</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td>Stock of FDP ($R$ billions)</td>
<td>1,866.4</td>
<td>1,950.0</td>
<td>2,050.0</td>
</tr>
<tr>
<td>Profile (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Rate</td>
<td>37.2</td>
<td>37.0</td>
<td>41.0</td>
</tr>
<tr>
<td>Inflation Linked</td>
<td>28.3</td>
<td>30.0</td>
<td>34.0</td>
</tr>
<tr>
<td>Floating Rate</td>
<td>30.1</td>
<td>22.0</td>
<td>26.0</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>4.4</td>
<td>3.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Maturity Structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average maturity (years)</td>
<td>3.6</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>% Maturing in 12 months</td>
<td>21.9</td>
<td>22.0</td>
<td>26.0</td>
</tr>
</tbody>
</table>
Federal Public Debt Annual Borrowing Plan (ABP) main results

- In fact, the National Treasury’s planning and execution of FPD management activities has been strengthened over the years, which has guaranteed the quality of results:

**Percentage of debt maturing in 12 months**

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td>45</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

**Average maturity**

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years</td>
<td>2,7</td>
<td>3,1</td>
<td>3,3</td>
<td>3,5</td>
<td>3,7</td>
<td>3,9</td>
<td>3,7</td>
<td>3,5</td>
<td>3,3</td>
<td>3,1</td>
</tr>
</tbody>
</table>
Federal Public Debt Annual Borrowing Plan (ABP) main results

**Fixed rate debt**
- Bounds
- Observed

**Inflation-linked debt**
- Bounds
- Observed

**Floating rate debt**
- Bounds
- Observed

**FX-linked debt**
- Bounds
- Observed
Institucional Framework

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Development and Maintenance of an Efficient Market
Development and Maintenance of an Efficient Market

Frequency of the Auctions for the whole year – as stated in the Annual Borrowing Plan

<table>
<thead>
<tr>
<th>Bond</th>
<th>Type of Auction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional</td>
</tr>
<tr>
<td>LTN</td>
<td>Weekly</td>
</tr>
<tr>
<td>NTN-F</td>
<td>Twice monthly</td>
</tr>
<tr>
<td>LFT</td>
<td>Monthly</td>
</tr>
<tr>
<td>NTN-B</td>
<td>Twice monthly</td>
</tr>
</tbody>
</table>

- **Traditional auctions**: have the principal function of refinancing the Federal Public Debt through issuance of fixed rate, floating rate and inflation linked bonds;
- **Exchange auctions**: consist primarily of exchanges of bonds with shorter maturities for other longer-term bonds, with the overriding objective of lengthening the debt profile; and
- **Buy Back**: to provide investors with higher liquidity.

The official schedule of auctions for the following month is published every month end at the web site: http://www.stn.fazenda.gov.br/divida_pública/leiloes.asp.
### Development and Maintenance of an Efficient Market

#### Benchmarks and Maturities – as stated in the Annual Borrowing Plan

<table>
<thead>
<tr>
<th>Type of Yield</th>
<th>Bond</th>
<th>Benchmark</th>
<th>Maturities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Rate</td>
<td></td>
<td><strong>LTN</strong></td>
<td><strong>Short and medium term</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within 4 years</td>
<td><strong>January, April, July and October</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4 maturity points)</td>
<td>(4 maturity points)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NTN-F</strong></td>
<td><strong>Long Term</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Between 5 and 10 years</td>
<td><strong>January</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2 maturity points)</td>
<td>(2 maturity points)</td>
</tr>
<tr>
<td>Floating Rate</td>
<td></td>
<td><strong>LFT</strong></td>
<td><strong>Maturity greater than average</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FPD maturity</td>
<td><strong>March and September</strong></td>
</tr>
<tr>
<td>Inflation Linked</td>
<td></td>
<td><strong>NTN-B</strong></td>
<td><strong>Group I-Short and medium term</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within 10 years</td>
<td><strong>May and August</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3 maturity points)</td>
<td>(3 maturity points)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Group II-Long term</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20, 30, 40 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3 maturity points)</td>
<td></td>
</tr>
</tbody>
</table>

The official schedule of auctions for the following month is published every month end at the website: [http://www.stn.fazenda.gov.br/divida_pública/leiloes.asp](http://www.stn.fazenda.gov.br/divida_pública/leiloes.asp).
Development and Maintenance of an Efficient Market

Standardized Maturity Structure for Debt Securities: Creation of benchmarks
## Development and Maintenance of an Efficient Market

The National Treasury hereby establishes the schedule of domestic debt issuances for March 2012:

<table>
<thead>
<tr>
<th>AUCTION</th>
<th>TIME</th>
<th>TYPE</th>
<th>SECURITY*</th>
<th>MATURITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>11:00-11:30</td>
<td>Traditional Auction</td>
<td>LTN</td>
<td>10/1/2012; 4/1/2014; 1/1/2016</td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td>11:00-11:30</td>
<td>Traditional Auction</td>
<td>LTN, NTN-F</td>
<td>4/1/2013; 4/1/2014; 1/1/2016; 1/1/2023</td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13th</td>
<td>12:00-13:00</td>
<td>Traditional Auction</td>
<td>NTN-B</td>
<td>8/15/2016; 8/15/2018; 8/15/2022; 8/15/2023; 5/15/2045; 8/15/2050</td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td>Early Redemption</td>
<td>NTN-B</td>
<td></td>
</tr>
<tr>
<td>14th</td>
<td>12:00-13:00</td>
<td>Exchange Auction</td>
<td>NTN-B</td>
<td>8/15/2016; 8/15/2018; 8/15/2022; 8/15/2030; 8/15/2040; 8/15/2050</td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
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<tr>
<td>15th</td>
<td>11:00-11:30</td>
<td>Traditional Auction</td>
<td>LTN, LFT</td>
<td>10/1/2012; 4/1/2014; 1/1/2016; 3/1/2018</td>
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<tr>
<td>Thursday</td>
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<tr>
<td>21st</td>
<td>11:00-11:30</td>
<td>Exchange Auction</td>
<td>LTN, LTN</td>
<td>10/1/2012; 4/1/2013</td>
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<tr>
<td>Wednesday</td>
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<tr>
<td>22nd</td>
<td>11:00-11:30</td>
<td>Traditional Auction</td>
<td>LTN, NTN-F</td>
<td>4/1/2013; 4/1/2014; 1/1/2016</td>
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<tr>
<td>Thursday</td>
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<td>Early Redemption</td>
<td>NTN-F</td>
<td>1/1/2018; 1/1/2023</td>
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<td>27th</td>
<td>12:00-13:00</td>
<td>Traditional Auction</td>
<td>NTN-B</td>
<td>8/15/2016; 8/15/2018; 8/15/2022</td>
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<td>Tuesday</td>
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<tr>
<td>29th</td>
<td>11:00-11:30</td>
<td>Traditional Auction</td>
<td>LTN</td>
<td>10/1/2012; 4/1/2014; 1/1/2016</td>
</tr>
<tr>
<td>Thursday</td>
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</table>
Development and Maintenance of an Efficient Market

Building and extending the local yield curve for Fixed Rate Government bonds

Source: Brazilian National Treasury, Anbima
Development and Maintenance of an Efficient Market

Building and extending the local yield curve for Inflation Linked Government bonds

Source: Brazilian National Treasury, Anbima
Development and Maintenance of an Efficient Market

Important Steps for Secondary Market Development: Dealership System

» Aimed at enhancing public securities sales in the primary market, facilitate Central Bank open market operations and improve overall liquidity of securities in the secondary market.

» Composed by 12 financial institutions, out of which 2 are independent brokerage firms.

» The dealers are evaluated every six months and the institutions with the poorest performance are eventually replaced by other institutions.

<table>
<thead>
<tr>
<th>Evaluation Factor</th>
<th>Candidate</th>
<th>Dealer</th>
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<tbody>
<tr>
<td>Secondary market activity</td>
<td>30%</td>
<td>7.5%</td>
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<tr>
<td>Secondary market activity with negotiation objects</td>
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<td>7.5%</td>
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<tr>
<td>Secondary market activity in electronic platforms</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Repo operations among market participants</td>
<td>25%</td>
<td>15%</td>
</tr>
<tr>
<td>Primary market participation (NT auctions)</td>
<td>35%</td>
<td>20%</td>
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<tr>
<td>CB money market operations</td>
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<td>10%</td>
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<tr>
<td>Relationship with the NT operations desk</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Relationship with the CB operations desk</td>
<td></td>
<td>15%</td>
</tr>
</tbody>
</table>
Development and Maintenance of an Efficient Market

Important Steps for Secondary Market Development: Electronic Trading Systems

- The large majority of Brazilian public securities are traded over-the-counter, but the country has taken some measures to stimulate the use of electronic trading systems:
  - development of three electronic trading platforms: CetipNet (CETIP); Sisbex (BM&Fbovespa) and E-bond (Bloomberg);
  - evaluating factor for dealers
  - some benefits for pension funds (less legal procedures).

- Advantages of using these systems:
  - greater transparency
  - better pricing of the assets traded
  - increased liquidity of the secondary market
  - greater accessibility to a broader base of investors
Important Steps for Secondary Market Development: Broadening the Investors base

This is the result of a long term strategy adopted by the National Treasury aimed at diversifying the investor base.
For additional information access the National Treasury website:

www.tesouro.fazenda.gov.br

Or contact Institutional Relations area:

brazildebt@fazenda.gov.br

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