2019

Special Report

Relationship between the National Treasury and the Central Bank

Aerial View of Downtown Brasília, Brazil

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Special Report

Relationship between the National Treasury and the Central Bank

2019

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Summary

Executive Summary

This report provides information on the financial relationship between the National Treasury and the Brazilian Central Bank (BCB), covering the following aspects:

- The methodology adopted to calculate the BCB accounting result at each balance sheet closing
- The performance of the public bonds portfolio, issued by the National Treasury and held by the BCB
- The deposits in the National Treasury single account in the custody of the BCB
- Changes in the current legal framework

The analyses and information presented here reflect the current legal framework designed to regulate the relationship between the two institutions. As we will see, however, Law No. 13.820/2019, signed into law on May 3, 2019, introduced a new set of rules to streamline, above all, the methodology applied to the BCB financial balance and the maintenance of the public bonds portfolio in the BCB at levels adequate for monetary policy management.

The BCB financial balance has two components: (1) the financial balance relative to operations with international reserves and with foreign exchange derivatives in the domestic market, registered in an "exchange equalization" account; and (2) the results of the remaining balance sheet items, referred to as "other accounts." The balance results registered every year are mainly associated with the volume of international reserves (US$375 billion, as of the end of 2018) and the form according to which their value is recorded in the accounts. To illustrate the relevance of the amounts related to the exchange equalization, in the first half of 2018, in a context of domestic currency devaluation, this component of the account generated a R$149.2 billion profit, while the Central Bank operating profit during the same period was R$20.1 billion, resulting in a total of R$169.3 billion transferred to the Treasury.

This report presents the three ways by which the National Treasury can place bonds in the BCB portfolio: (1) by covering for negative results in the monetary authority's half-yearly financial statements; (2) by rolling over the principal of the bonds maturing in the BCB portfolio; and (3) by restoring the minimum level of the "non-earmarked" bonds in the BCB portfolio (the overall portfolio minus repurchase operations), a mechanism necessary to ensure the BCB has at its disposal the tools it needs to carry out monetary policy. Only the second case implies as a consequence a financial transaction to the National Treasury.

The monetary authority bonds portfolio reached 26.3 percent of gross domestic product (GDP) by the end of 2018, being composed mainly of four types of public bonds: zero-coupon fixed-rate bonds (LTN), fixed-rate bonds with coupons (NTN-F), inflation-linked bonds

(NTN-B), and floating-rate bonds, indexed to the Selic rate (LFT). That is to say, this list coincides with the main bonds traded by the National Treasury on the market within the federal public debt (FPD) management framework. Although the bonds held by the BCB do not affect the public sector net debt (PSND), according to official statistics in Brazil, the dynamic of the BCB portfolio influences the general government gross debt (GGGD), depending on the concept applied.

Another topic covered by this report is the National Treasury single account (TSA), which consists of the federal government cash availability in the custody of the Central Bank. The single account earnings are calculated according to the average yield of the federal public bonds in the BCB portfolio, which, in turn, reflect the rate conditions of the bonds issued in the market. As of the end of 2018, the TSA balance had reached R$1,162.1 billion (16.9 percent of GDP), while the flow from its earnings totaled R$88.5 billion in financial revenues to the federal government throughout that year.

The single account can be broken down into three subaccounts: (1) the National Treasury subaccount, for central government collections and payments in general; (2) the public debt subaccount, destined for payments and revenues from public bond auctions; and (3) the National Social Security Institute (INSS) subaccount, for payments and revenues of the institution responsible for managing the general regime social security system.

In general, the public debt subaccount's cash availabilities are assigned to debt payments. Part of these resources raised through public bond issuances can, however, be assigned to cover other budget expenditures, a practice that is more common in a context of primary fiscal deficits. The liquidity cushion reserved for debt expenses, in turn, is broader, once the National Treasury subaccount also comprises revenues, such as the revenues from BCB result profits, whose use is exclusively authorized for debt payments.

The rules that establish the relationship between the fiscal and the monetary authorities have several implications for topics such as banking system liquidity management, financial system development, and public debt. In particular, the process of building up foreign exchange reserves associated with the significant exchange rate volatility, especially from 2006 on, originated bulky financial flows between the BCB and the National Treasury. This unveiled the need to improve the legal framework in force—especially in the sense of smoothing the flows associated with exchange equalization—to generate beneficial effects for management of both liquidity and inflation, as well as for FPD management.

With this in mind, the two institutions and the National Congress coordinated efforts to establish a new framework that minimizes the volume of the flows between the BCB and the National Treasury. These efforts paid special attention to the exchange equalization result, which usually does not have a counterpart in actual flows, which would be the actual sale or purchase of international reserves. The result was Law No. 13.820/2019, which establishes, among other improvements, mechanisms to institute a reserve in the BCB's own balance sheet using the exchange equalization results. In addition, the proposal improves the rules for placement of bonds in the

BCB portfolio to ensure the needed flexibility for liquidity management. In short, the initiative will bring gains for both monetary policy and public debt management.

1. Introduction

The institutional aspects of the relationship between the fiscal authority and the monetary authority in a country are important, both to strengthen the fiscal position of the government and to assign greater operational autonomy to the central bank, contributing to the efficiency of monetary policy management.

The relationship between the National Treasury and the Central Bank (BCB) is governed by a set of regulations, beginning with the Federal Constitution and including complementary ordinary laws and ministerial ordinances (*portarias*, in Portuguese).

This document aims to organize the knowledge on the topic to help society better understand and follow the relationship between the two institutions. To this end, three aspects of the financial relationship between the fiscal and monetary authorities will be analyzed: (1) the treatment given to the BCB accounting balance result; (2) the use of government bonds for monetary policy purposes; and (3) the treatment given to the federal government's cash position.

The institutional framework that defines the relationship between the National Treasury and the BCB adheres to a set of principles registered in the literature, as well as to best practices adopted internationally. The Brazilian framework in force comprises the following aspects: (1) a symmetrical, practical, and transparent rule defines the methodology applied to the BCB balance (whether it is positive or negative); (2) the BCB conducts monetary policy exclusively using National Treasury bonds; and (3) a single account system exists to centralize the federal government's cash availabilities, in the custody of the BCB, subject to a clear yielding rule. In 2013, the National Treasury explored these aspects, as well as the international literature on the topic, in *The Relationship between Fiscal Authority and Monetary Authority: International Experience and the Brazilian Case*. The full version of this publication is available at http://www.tesouro.fazenda.gov.br/notas-tecnicas.

The analyses and information presented here reflect the legal framework in force until 2018, which was designed to discipline the relationship between the two institutions. As we will see, however, Law No. 13.820/2019, approved in May 2019, introduces a new set of rules intended, above all, to streamline the methodology applied to the BCB financial balance and to guarantee the maintenance of the BCB public bonds portfolio at levels adequate to monetary policy management.

Four sections follow this introduction to the report. Section 2 discusses the methodology adopted to calculate the BCB accounting result at each balance sheet closing. The pursuit of positive balances per se is not among the purposes of the monetary authority. The framework establishing the treatment of BCB positive or negative results, however, grants the monetary authority freedom to execute its classical mandate, guiding its actions toward ensuring the purchasing power of the national currency and the soundness and efficiency of the financial system.

Section 3 covers the dynamic of the portfolio held by the BCB of public bonds issued by the National Treasury. The current framework ensures the monetary authority has the instruments required to manage banking system liquidity, which is important to its operational autonomy and its conduct of monetary policy and to providing an integrated public sector perspective, promoting the development of money markets, and generating positive externalities to the whole economy.

Section 4 provides information about the National Treasury single account in the custody of the BCB, such as its balance and yielding rule. Best international practices on federal government cash management point to centralizing resources in a single account, mainly because of the benefits of optimizing public resources. In turn, the yield of such resources by a market interest rate contributes to better transparency of the relationship between the two institutions.

In its last section, this report describes the initiative for improving the legal framework governing the financial relationship between the National Treasury and the BCB. Law No. 13.820/2019 provides mechanisms for the building up of reserves in the monetary authority's own balance sheet deriving from the exchange equalization result, which contributes to the reduction of financial flows between the National Treasury and the BCB, among other improvements.

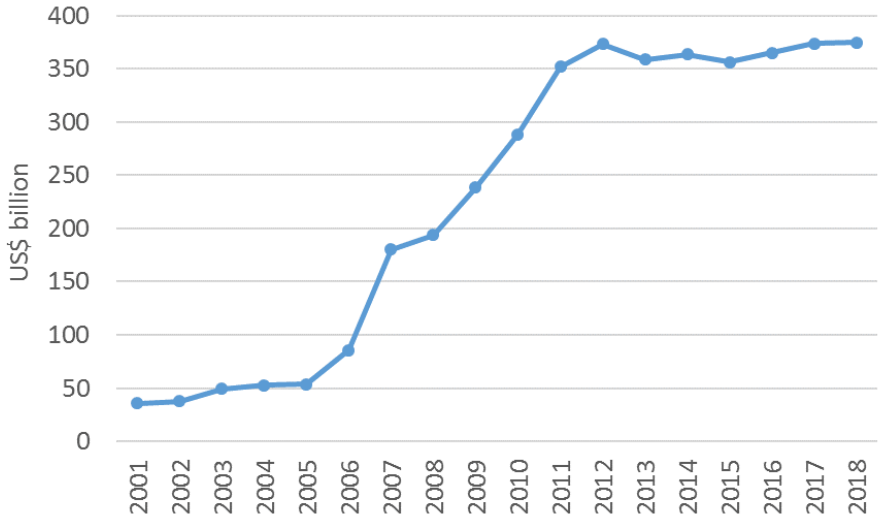
2. The Brazilian Central Bank financial result

2.1. Foreign exchange reserves: The main component of the result

The BCB is an entity with a mandate from the state to act as a money issuer, monetary policy conductor, depository of the National Treasury financial assets, and bank of banks, among other roles. To perform these functions, the BCB carries out transactions with assets and liabilities available on its balance sheet, having as counterparties both the public and private sectors. The BCB publishes half yearly[1] its balance sheets showing the financial results of these transactions.

An important item in the BCB's balance sheet is the volume of foreign exchange reserves, which represents the major part of the results established for each period. Figure 1 shows the dynamic of this BCB asset, which reached US$375 billion by the end of 2018. The most intense growth occurred between 2007 and 2011.

Figure 1. Foreign exchange reserves dynamic (US$ billion -cash basis)



[1] The frequency of the BCB balance sheet statement and result calculation is specified by Article 3 of Provisional Measure No. 2.179-36 of August 24, 2001. The BCB regularly publishes its accounting statements, where its assets and liabilities composition can be verified in detail. See http://www.bcb.gov.br/?BALANCE.

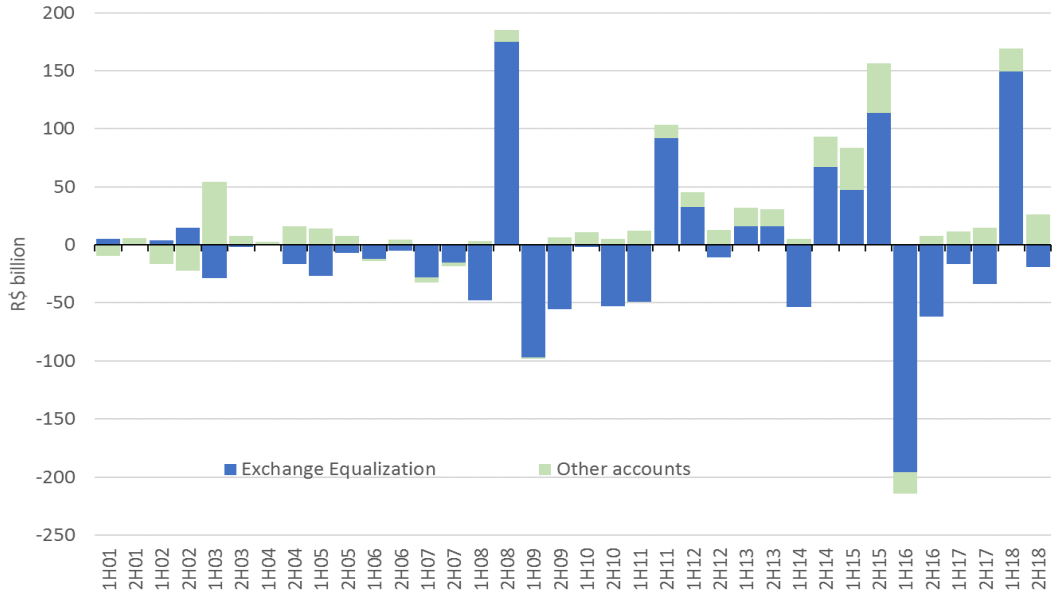
Source: BCB.

The BCB financial balance has two components: (1) the financial balance relative to operations with foreign exchange reserves and with foreign exchange derivatives in the domestic market, registered in an account known as the "exchange equalization" account; and (2) the results of the remaining balance sheet items, called "other accounts." In the framework in force until 2018, not yet influenced by the impact of Law No. 13.820/2019, both components were considered at each half-yearly balance sheet closure, as follows:

- If positive, the component represented a BCB liability to the federal government that should be paid by the tenth working day following its balance sheet approval by the National Monetary Council.
- If negative, the component represented a federal government liability with the BCB that should be paid by the tenth working day of the fiscal year following approval of the BCB's balance sheet by the National Monetary Council.

That is, when the "exchange equalization" account or "other accounts" balance result was positive, the BCB should transfer this result to the National Treasury by crediting the corresponding value in the TSA. Such revenues were exclusively destined for FPD payments, preferably BCB-held debt amortization. And, when either of the balance result components was negative, the National Treasury should cover that result by issuing bonds to place in the BCB portfolio. Figure 2 shows the balance results from 2001 through 2018.

Figure 2. Central Bank balance result flows (R$ billion)



Source: National Treasury. The exchange equalization operation was instituted by Art. 6 of the Provisional Measure (MP) No. 435, of June 28, 2008, converted into Law No. 11.803, of 2008. For the construction of this series from 2001 to 2007, the reference adopted was the item cost of maintaining foreign exchange reserves, available in the BCB financial statements explanatory notes.

Further details and the history of the flow dynamics between the National Treasury and BCB since 2001, including inflation accrual values and the settlement date of positive result transfers or negative result coverages, are provided in box 1 and table 1.

Box 1. Legislation Governing the BCB's Financial Result Treatment

1. Law No. 7.862/1989 provides that the BCB's positive balance result shall be collected to the National Treasury and earmarked for the Treasury's public debt amortization, with priority to bonds held by the BCB.
2. Provisional Measure No. 1.789/1998 provides that the BCB's negative result should be covered by the National Treasury.
3. Complementary Law No. 101/2000 determines that the BCB balance result should be assessed half yearly, and balance results should be transferred until the tenth business day following the balance sheet approval by the National Monetary Council when positive, and up to the tenth business day of the fiscal year subsequent to its approval when negative.
4. Law No. 11.803/2008 sets the exchange equalization mechanism in the calculation of the BCB's financial balance result, breaking the result down into two components and making its origin more transparent. In fact, since Provisional Measure No. 1.789/98 went into effect, the National Treasury has covered negative balance results deriving from exchange rate variation. Exchange equalization, however, integrated the overall BCB balance result, without distinction. Law No. 11.803 also states that the amounts paid to the National Treasury are exclusively destined for federal public bond debt payments, with priority to debt in the BCB portfolio. This command applies both to the positive balance operational result and to exchange equalization.
5. Law No. 13.820/2019 sets, from the second half of 2019, a reserve account in the BCB balance sheet corresponding to the portion of the positive exchange equalization, which will be used to cover for negative results in the future.

Table 1. Brazilian Central Bank financial balance results performance

(R$ million)

Period	Principal [1, 2]		Inflation Accrual [3]		Transfer Settlement Date	
	Exchange Equalization	Other accounts	Exchange Equalization	Other accounts	Exchange Equalization	Other accounts
1H01	4,888	(9,322)	(355)		01/15/02	
2H01	281	5,224			03/07/02	
1H02	3,909	(16,588)			01/15/03	
2H02	14,832	(22,008)	(1,774)		01/28/04	
1H03	(28,898)	54,187	(897)		09/05/03	
2H03	(2,074)	7,575			02/27/04	
1H04	432	2,064			09/10/04	
2H04	(16,214)	15,917	(42)		01/13/06	
1H05	(26,453)	13,796	(1,042)		01/13/06	
2H05	(6,959)	7,983	20		03/09/06	
1H06	(12,009)	(1,703)	(966)		01/15/07	
2H06	(4,892)	4,252			10/31/07	
1H07	(28,245)	(4,019)	(1,269)		10/31/07	
2H07	(14,965)	(3,285)	(904)		06/30/08	
1H08	(44,798)	3,249	(2,776)		12/22/08	09/09/08
2H08	171,416	10,176	3,550	211	03/10/09	03/10/09
1H09	(93,787)	(938)	(3,355)	(42)		12/15/09
2H09	(53,932)	6,554	(1,402)	121	03/30/10	03/11/10
1H10	(1,893)	10,806	(111)	200	01/01/11	09/13/10

2H10	(46,637)	4,930	(6,114)	106	01/27/12	03/11/11
1H11	(46,199)	12,234	(2,956)	214	08/31/11	02/08/12
2H11	90,240	11,244	1,779	222	03/07/12	03/07/12
1H12	32,210	12,321	544	208	09/05/12	09/05/12
2H12	(9,901)	12,300	(1,103)	246	01/14/14	03/11/13
1H13	15,767	15,464	296	290	09/16/13	09/16/13
2H13	15,919	14,271	311	278	03/07/14	03/07/14
1H14	(51,224)	5,275	(2,349)	100	11/12/14 and 12/15/14	09/10/14
2H14	65,173	25,659	1,559	614	03/13/15	03/13/15
1H15	46,407	35,188	1,102	835	09/11/15	09/11/15
2H15	110,938	41,525	2,782	1,041	03/09/16	03/09/16
1H16	(184,645)	(17,305)	(11,072)	(1,089)	12/26/16 and 01/16/17	01/20/17
2H16	(55,674)	7,783	(6,087)	166	-	03/13/17
1H17	(15,745)	11,275	(802)	203	01/31/18	09/12/17
2H17	(30,677)	14,715	(3,016)	241	-	03/13/17
1H18	146,201	19,658	2,994	403	09/13/18	09/13/18
2H18	(19,134)	25,557		416		03/14/19

[1] Negative values (between parenthesis) refer to negative Central Bank balance results that are covered by National Treasury bonds issuances. Positive values refer to positive Central Bank balance results which are transferred in cash to the National Treasury account.

[2] Before 2008 even though exchange equalization was not subject to special treatment, Article 7 of the Complimentary Law No. 101/2000 determined thtat Central Bank statements should contain explanatory notes about the cost of international reserves. These notes made it possible to calculate separately for the years before 2008 the part of the balance results related to exchange equalization from the part related to other accounts

[3] Inflation accrual is relative to principal value inflation accrual from the date of Central Bank statement closing and the actual transfer of the result.

Source: National Treasury.

3. Brazilian Central Bank portfolio of public bonds

3.1. Public debt bonds as monetary policy instruments

In general, monetary authorities use public bonds to manage supply and demand for bank reserves, to serve as guarantees for repurchase (repo) operations, and to support the payment and settlement system. Central banks, therefore, commonly hold a public bonds portfolio in their balance sheets, as it is crucial for conducting monetary policy and managing liquidity.

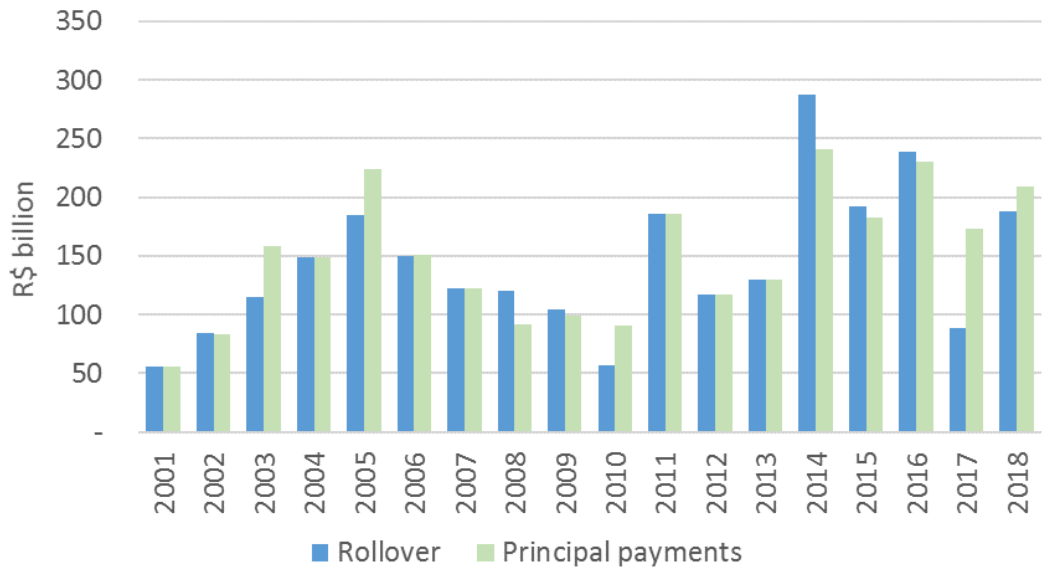
In the Brazilian case, Article 34 of the Fiscal Responsibility Law (FRL) has prohibited the BCB from issuing bonds since May 2002, with the National Treasury the only public sector agent authorized to issue public bonds. On the other hand, the FRL has allowed the BCB to obtain National Treasury bonds at market price, exclusively for rolling over the bonds maturing in its portfolio. And when a certain bond in the monetary authority portfolio matures, only the principal is rolled over, accrued by a price index, while the "real interest" portion of the debt is excluded from this operation. Such accrual of the principal volume is determined by Article 5, paragraph 3, of the FRL. This treatment has only consolidated the constitutional understanding that the BCB cannot finance the National Treasury; Article 164, paragraph 1, of the Federal Constitution prohibits the BCB from providing loans to the National Treasury or any other nonfinancial body or entity.

The ownership of public bonds by the BCB is different from the ownership of the same bonds by the market, since in the monetary authority's case it is only a mechanism for operating monetary policy and, therefore, does not represent an instrument for funding debt. In fact, the bonds held by the BCB do not represent rollover risk to the issuer. Once such bonds mature, the National Treasury can issue new bonds to place in the BCB portfolio with the same volume of principal. In contrast, bonds held by the market have a distinct character, once they are used to meet the government's borrowing needs. Most of the time, the National Treasury needs to access the market to roll over their maturities.

Figure 3 shows the history of issuances to the BCB for rolling-over purposes. It's worth a note. The FPD maturity structure concentrates large volumes on the first business day of each year, specifically of fixed-rate bonds. Two movements occur when such bonds mature: (1) the volume maturing in the market becomes liquidity, which needs to be mopped up by repo operations, and (2) the bonds available for collateral in repo operations—that is, bonds held by the BCB—are reduced. In situations in which the non-earmarked portfolio has no space to absorb the impact of these two movements without prejudice to liquidity management, the National Treasury can perform the rollover issuances in advance as a means of securing the instruments necessary for monetary policy. In this case, the revenue received by the National Treasury is reserved exclusively to pay for the bonds that are being rolled over, and the early issuance must be performed on a

date close to (not longer than four weeks before) maturity. This explains why, in some years of the time series, principal payment differs from the rollover volume. In the accumulated sum over time, however, issuances do not exceed principal payments.

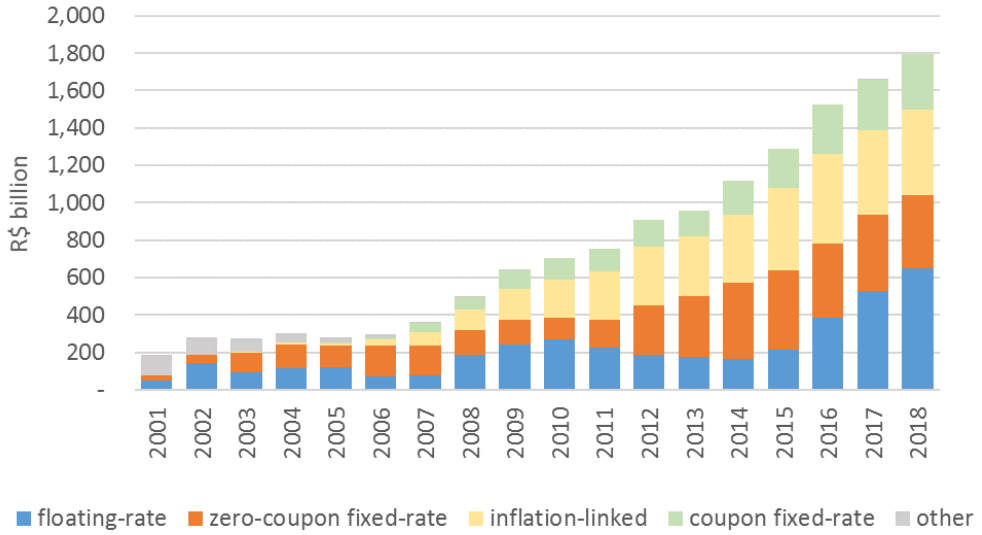
Figure 3. Rollover and principal payments of the BCB public bonds portfolio
R$ billion



Source: National Treasury.

The dynamic of the BCB public bonds portfolio is presented in Figure 4. In addition to the rollover needs, the portfolio volume depends on the performance of Central Bank balance results, as well as on financial system liquidity management needs; this will be explored later in this report. The monetary authority's portfolio consists mainly of four types of public bonds: zero-coupon fixed-rate bonds (LTN), fixed-rate bonds with coupons (NTN-F), inflation-linked bonds (NTN-B), and floating-rate bonds, indexed to the Selic interest rate (LFT). Although BCB ownership of bonds has implications different from market bondholding, the portfolio held by the BCB has features close to those of the government bonds in the market, which gives the BCB flexibility in open market operations. Thus, its cost maintains correspondence with the National Treasury cost of funding in the market.

Figure 4. Dynamic and composition of the BCB public bonds portfolio
R$ billion



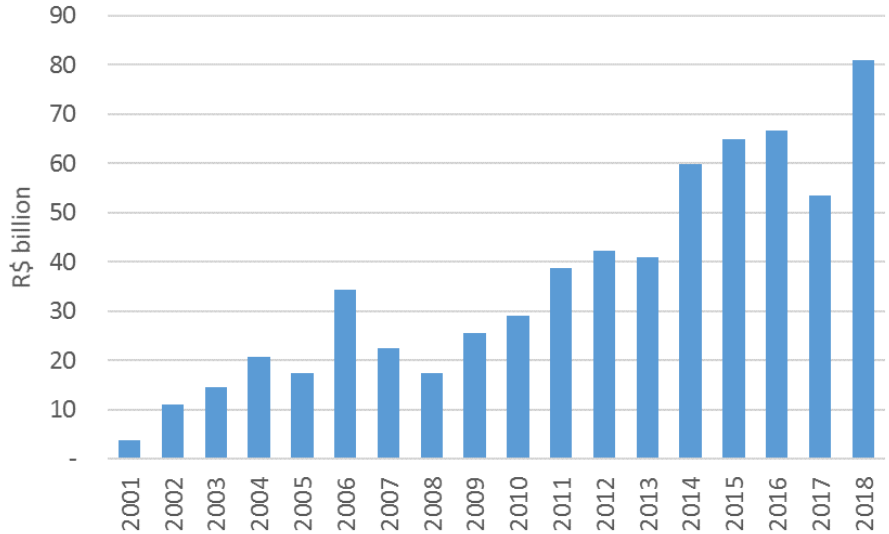
Source: National Treasury.

The Brazilian institutional arrangement has some advantages from an efficiency point of view, of which two should be highlighted. First, the BCB has the autonomy to obtain bonds apart from the competitive auction process, choosing whether to take them from those that are being offered to the market in the auction corresponding to the day they are maturing or in other auctions held on dates close to maturity. This rule applies not only to maturing bonds, but also to all the issuances to the Central Bank (including capitalization for balance results coverage and placements), and it prevents the National Treasury from placing bonds that are not convenient to the monetary policy use. By not participating in the auction, the BCB is prevented from influencing prices that should be formed in a competitive process. Second, the prices of the bonds obtained by the BCB are the same as those set by the public auctions. By applying the price formed in a competitive process, any bias in the formation of the rates is eliminated, so the bonds have a fair price reference and their negotiation with the market, if necessary, does not affect the BCB's balance sheet.

Although the value equivalent to the principal of the BCB's bonds portfolio can be rolled over, current legislation does not allow the same treatment to be given to the volume correspondent to real interests of the bonds. These shall be paid according to the expected interest flow for each type of bond in the BCB's portfolio. In fact, this requirement increases the borrowing needs of the National Treasury, which

has to raise resources by issuing bonds in the market, allocating other budgetary sources, or reducing single-account cash availabilities to pay for such charges. The history of Central Bank portfolio service can be found in figure 5.

Figure 5. Current payments of BCB portfolio bonds' service
R$ billion



Source: National Treasury.

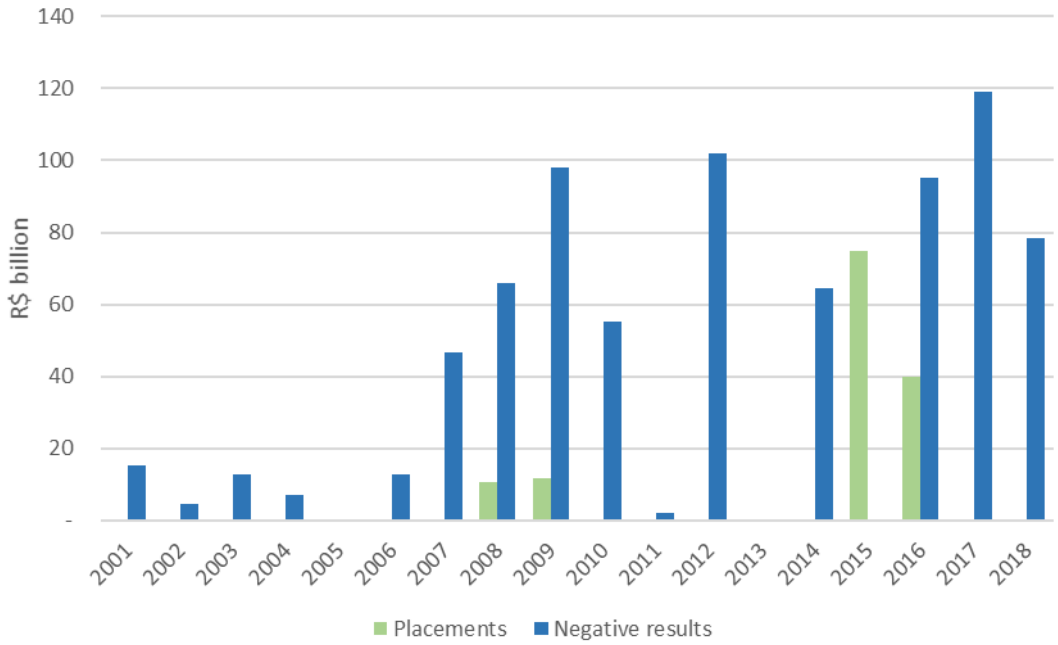
From this dynamic, characterized by the constant rollover of principal and real interest payments, derives the tendency of outstanding bonds in the BCB to rise proportionally to the price index used for inflation accrual of the outstanding volume of principal, which historically has been the General Index of Market Prices (IGP-M), in accordance with the annual provisions of the Budgetary Guidelines Law. The factors that break this trend are the issuance of bonds by the Treasury to cover negative BCB balance sheet financial results, discussed in the previous section, and the placement of bonds to ensure a portfolio with a volume appropriate to monetary policy needs. As we shall see, this possibility of placement represents a mechanism to increase the portfolio when the bonds available are insufficient as collateral in open market operations.

Depending on the liquidity management conducted by the BCB, its portfolio of public bonds may be almost fully compromised as collateral for repo operations. On these occasions, it is advisable that the BCB have a safety margin to avoid constraints on the full implementation of monetary policy. Thus, in 2008, Law No. 11.803/2008 authorized the federal government to issue bonds directly to the BCB to ensure the adequate maintenance of its portfolio of government bonds. The matter was further regulated by the Ministry of Finance in 2009 by

Ordinance No. 241, determining that the National Treasury should issue bonds in favor of the BCB whenever its portfolio of non-earmarked bonds (not compromised as collateral for repurchase operations) reaches a volume of less than R$20 billion. Law No. 13.820/2019 improves this legislation, creating an automatic mechanism for bond placements whenever the BCB's non-earmarked bonds portfolio reaches 4 percent or less of the total portfolio (instead of R$20 billion), in addition to providing for the possibility of cancelling the bonds provided for this purpose, if they are no longer needed, avoiding having to service them.

Throughout this document it is possible, then, to observe the three reasons the National Treasury places bonds in the BCB portfolio: (1) to cover a negative balance sheet financial result half yearly; (2) to roll over the principal of the bonds maturing in the BCB portfolio; and (3) to restore the minimum level of "non-earmarked" bonds in the monetary authority portfolio. With Law No. 13.820/2019, a fourth reason emerges, which involves the possibility of placing bonds to ensure a minimum level for the net worth of the BCB's balance sheet equity—that is, the National Treasury will always place bonds when it is lower than 0.25 percent of the BCB's assets. Only in the case of principal rollover does the bond issuance in favor of the BCB involve a financial transaction between the two institutions, since at the maturity date of a bond in the BCB portfolio the National Treasury pays the bond that has matured, and, at a later date, the Treasury issues a new bond to the BCB and restores its cash availabilities proportionately to the principal's value. In Figure 6 the history of bond issuances to the BCB portfolio is presented according to whether the issuance was needed to restore the volume of non-earmarked bonds in the BCB portfolio or to cover for the BCB's negative balance results.

Figure 6. Issuances to reestablish the volume of non-earmarked bonds in the portfolio (placement) and to cover for negative results
R$ billion

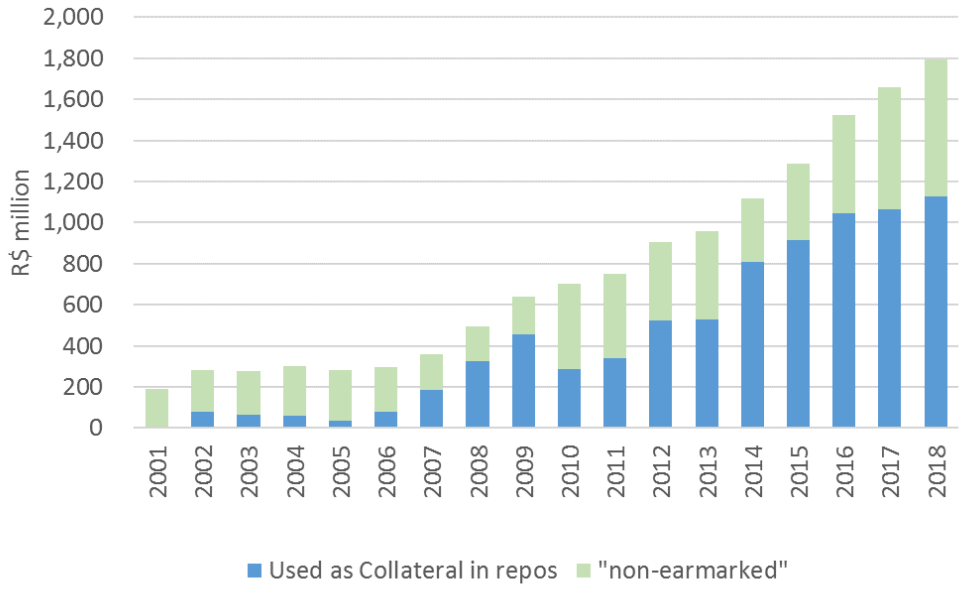


Source: National Treasury.

Figure 7 shows an overview of the performance of the BCB portfolio that highlights the gap between the amount that can be considered non-earmarked and the value compromised as collateral in repo operations. Note that the portfolio started to show faster growth after 2007, coinciding with the period when Brazil started accumulating international reserves more robustly. The relationship between the growth of the BCB's portfolio and international reserves is that, for every dollar purchased by the BCB on the market, the monetary authority needs to sterilize the monetary effect of its purchase. To this end, it carries out repo operations, removing from circulation the Brazilian reais that were given in exchange for the acquired dollars. If these operations are not carried out, the level of liquidity in the economy increases undesirably, making inflationary control more difficult. Since the repo operations are backed by the National Treasury government bonds, the BCB needs more government bonds as international reserves are acquired.

The issuance of bonds for the coverage of the negative balance results, however—mainly, the exchange equalization associated with the international assets' outstanding volume—already represents a major element in the maintenance of the BCB portfolio volume at levels adequate to the needs of monetary policy.

Figure 7. BCB public bonds portfolio dynamic
R$ billion



Source: National Treasury.

Other factors besides the evolution of international reserves influence the dynamics of liquidity in the market and, therefore, the BCB's portfolio and repo operations. These include net issuances of National Treasury bonds to the market, federal government primary balance results, and the interests referent to the outstanding volume of the BCB's repo operations themselves.

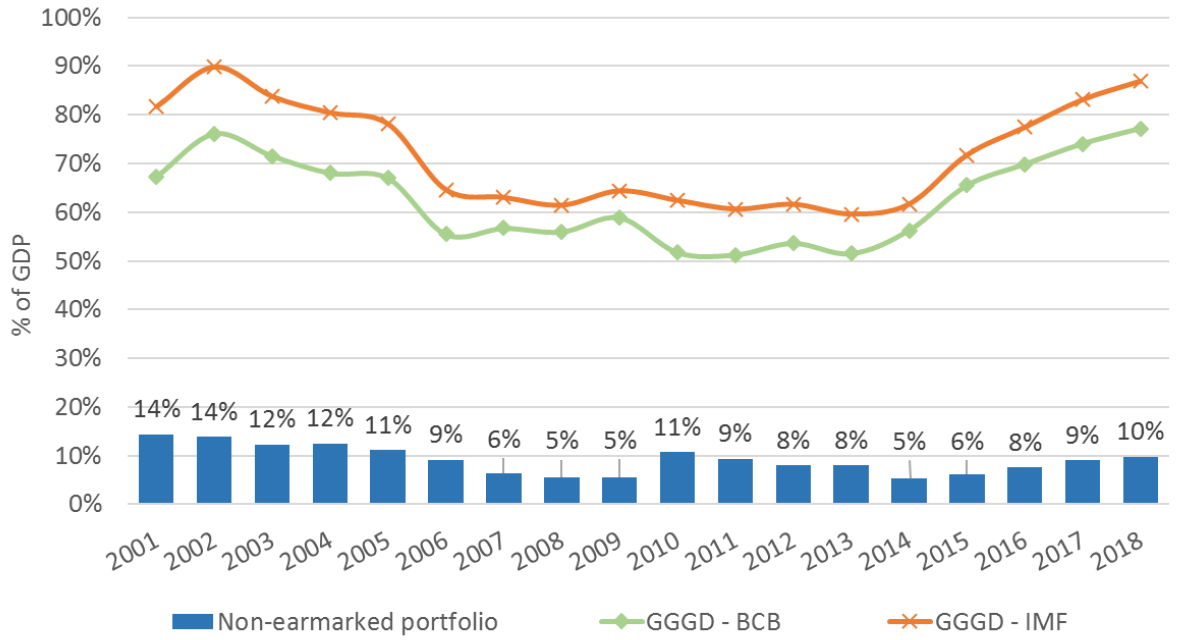
In particular, if we hypothetically consider that all factors except interest are null, the repo operations will tend to grow according to the Selic interest rate, which is their basic yielding factor. Observe the contrast also with the hypothetical natural dynamic of the BCB portfolio which, in a scenario where the principal rollover dynamics are the only variation factor, would tend to grow according to the correspondent inflation index. This exercise illustrates the importance of a bond placement mechanism that provides the BCB with the tools necessary for liquidity management.

3.2. BCB bonds portfolio and debt statistics

The flows originated by the relationship between the National Treasury and BCB, in the form of financial resources or bonds, do not affect the public sector net debt (PSND), given that both institutions are part of the public sector concept, so transactions between them are internally offset. Nevertheless, such flows, as well as the evolution of the National Treasury bonds portfolio in the BCB, influence the general government gross debt (GGGD) indicator, depending on the concept applied.

Analysts, the press, rating agencies, and the general public follow two concepts of GGGD in Brazil's fiscal statistics: those of the BCB and the International Monetary Fund (IMF). The Brazilian concept considers the BCB repo operations as public sector liabilities. The IMF concept, by not considering the BCB as part of the public sector, includes in the government liabilities the whole government bonds portfolio held in the BCB, whether it is used as collateral for the repo operations or not. Thus, the IMF's statistics based on GGGD tend to be higher than those based on the GGGD official concept by the amount of the BCB's "non-earmarked" portfolio, as observed in Figure 8.

Figure 8. General government gross debt and BCB "non-earmarked" bonds portfolio
% of GDP



Source: BCB. The 2001 to 2005 time series for GGGD-BCB was prepared by the National Treasury, based on BCB data.

Note that the current Brazilian institutional framework governing the financial relationship between the National Treasury and the BCB is not adequately reflected by the IMF's GGGD indicator, as the IMF considers the BCB non-earmarked portfolio as debt. In this sense, the GGGD measured by the IMF may not be sensitive to a fiscal effort, once positive primary results kept in the single account mop up financial system liquidity and raise the non-earmarked portfolio, though without signaling an improvement in the IMF indebtedness indicator.

Box 2. Legislation Governing the BCB Bonds Portfolio

1. In its Article 34, Complementary Law No. 101/2000 (Fiscal Responsibility Law, or FRL) prohibited the BCB from issuing government bonds as of May 2002. On the other hand, in Article 39, the FRL allows the BCB to obtain National Treasury bonds at market price for the sole purpose of rolling over the bonds maturing in its portfolio.
2. In its Article 2, Law No. 11.803/2008 authorizes the National Treasury to issue bonds to place in the BCB's portfolio to ensure that the volume of such bonds in the portfolio is adequate for conducting monetary policy. In such a case, the same law provides that the bond issuances to the Central Bank do not involve financial flows back to the National Treasury.
3. The Ministry of Finance Ordinance No. 241/2009 regulates Article 2 of Law No. 11.803/2008, establishing that whenever the BCB portfolio, net of bonds used in repo operations or used as guarantees in derivatives operations, falls below R$20 billion, the National Treasury should carry out a direct issuance of bonds to the BCB, without financial compensation, to prevent compromising the management of monetary policy.
4. Law No. 13.820/2019 creates an automatic mechanism for the placement of bonds whenever the BCB non-earmarked portfolio hits a proportion equal to or less than 4 percent of the total portfolio (instead of R$20 billion), in addition to providing for the possibility of cancellation of the bonds once placed with such a purpose if they are no longer required. The cancellation shall be limited to the BCB's total assets originated from National Treasury bond placements through direct issuances without financial counterpart. In addition, the BCB's equity may not be lower than 1.5 percent of its total assets due to the National Treasury bonds cancellation.

4. The National Treasury single account

4.1. The single account and its subaccounts

The federal government cash availabilities are centralized in an account in the custody of the BCB, known as the National Treasury single account (TSA). Article 164, Paragraph 3, of the 1988 Federal Constitution requires that such cash availabilities be deposited in the BCB. The reasons for custody at the BCB are several: among others, it allows better resource control; it generates lower maintenance costs; it ensures competitive neutrality among private sector agents; and it facilitates liquidity management in the financial system.

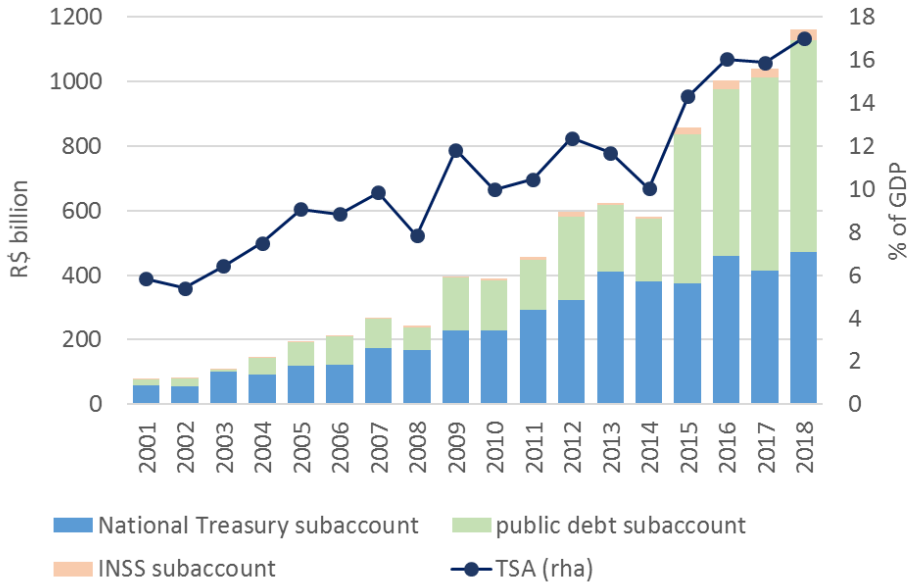
The single account can be broken down into three components: (1) the National Treasury subaccount, for central government collections and payments in general, (2) the public debt subaccount, destined for payments and revenues from public bonds auctions, and (3) the National Social Security Institute (INSS) subaccount, for payments and revenues of the institution responsible for managing the general regime social security system. Figure 9 shows the balance dynamic of the single account and its subaccounts. The total single account balance increased considerably in nominal terms in the past two decades, from R$76.93 billion in 2001 to R$1,162.11 billion in 2018.

Once again, it is possible to see higher growth in the balance from 2008, precisely the period when Brazil began to accumulate international reserves with more intensity. The dynamic between the single account growth and the level of international reserves is as follows: an increasing volume of international reserves generates larger positive results in the BCB balance sheet at times of currency devaluation, as shown above. In turn, the BCB positive balance result is transferred to the single account. The single account also tends to vary for two other reasons:

(1) Primary result: Surpluses raise the single account balance, when this result is not used, for example, for debt amortization.
(2) Net issuance of National Treasury bonds: The single account balance increases when the National Treasury issues public bonds in a volume larger than the debt maturity and this revenue is not used for other budgetary expenditures.

There is an interaction between net issuances and the need to transfer bonds to the BCB for monetary policy purposes. The larger volume of bond issuances on the market contributes to reducing liquidity by acting to increase the BCB's non-earmarked portfolio. In this case, the net issuance revenue must be kept in the single account to prevent liquidity from returning to the economy. On the other hand, if the Treasury chose to reduce bond issuances and pay FPD on the market with single account cash, the result would be an increase in liquidity. In such a case, the National Treasury would probably have to place bonds to the BCB to ensure there would be enough to serve as collateral for open market operations. As both FPD and repo operations are part of GGGD, the result would be a change only in the composition of government debt to the public, without reducing outstanding debt volume or increasing the BCB portfolio.

Figure 9. Treasury single account and subaccounts balance dynamic R$ billion and % of GDP



Source: National Treasury.

In general, the public debt subaccount's cash availabilities are assigned to debt payments. Part of these resources raised through public bond issuances can, however, be assigned to cover other budget expenditures, which is more common in a context of primary fiscal deficits. Such assignment depends on budget forecasts and must comply with the legal limits in force, as the Golden Rule (Article 167, item III, of the Federal Constitution) states that credit operations cannot exceed capital expenditures.

The National Treasury subaccount also includes resources earmarked exclusively for debt payments. This is the case, for example, of revenues derived from the BCB's balance result flows, which by law should be used for federal public bonds debt amortization, primarily the part in the BCB portfolio. Thus, the liquidity cushion—that is, the exclusive cash reserve to honor debt—must be understood to be the public debt subaccount, plus the part of the budgetary resources earmarked by law for debt payment that integrates the Treasury subaccount.

Existing resource earmarks restrict the use of federal government cash availabilities, but they are not always used for debt payments. The Treasury subaccount has other resources linked to funds, bodies, and programs or subject to other earmarks for a specific purpose defined by law. The 2018 closing balance statement for this subaccount, for example, showed on December 31, 2018, a balance of R$583.8 billion. This balance consisted mostly of earmarked resources, as shown in table 2.

Table 2. National Treasury subaccount, by category of earmarked revenue
R$ million

(R$ million)

Revenues	2017 [1]	2018 [1]
Ordinary revenues	**105,575**	**111,886**
Earmarked revenues	**308,805**	**470,624**
Education	21,262	15,933
Social Security (except pension system) [2]	(2,158)	20,869
Pension Regimes for Government Workers (RPPS) [2]	(5,217)	1,328
General Social Security Regime (RGPS) [2]	(8,712)	4,115
Financial revenues	24,030	156,814
Credit operations	(828)	362
Privatizations and concessions	343	1,005
Constitutional and legal transfers	12,814	15,066
Grants	184	175
Other revenues earmarked to bodies and programs	194,029	184,258
Other revenues earmarked to funds	54,188	59,184
Other revenues	18,870	11,515
Revenues in reclassification 3	**3,237**	**1,330**
Total	**417,617**	**583,840**

[1] As of December 31. The information in this table were extracted from the 2018 federal government balance (see explanatory notes, table 11 of the balance available at: https://www.tesouro.fazenda.gov.br/pt/-/balanco-geral-da-uniao)

[2] Some of the earmarked revenues present negative balance, which mean that expenditures in these revenues sources exceeded the resources available. When this happens, the interpretation is that this is covered by ordinary revenues

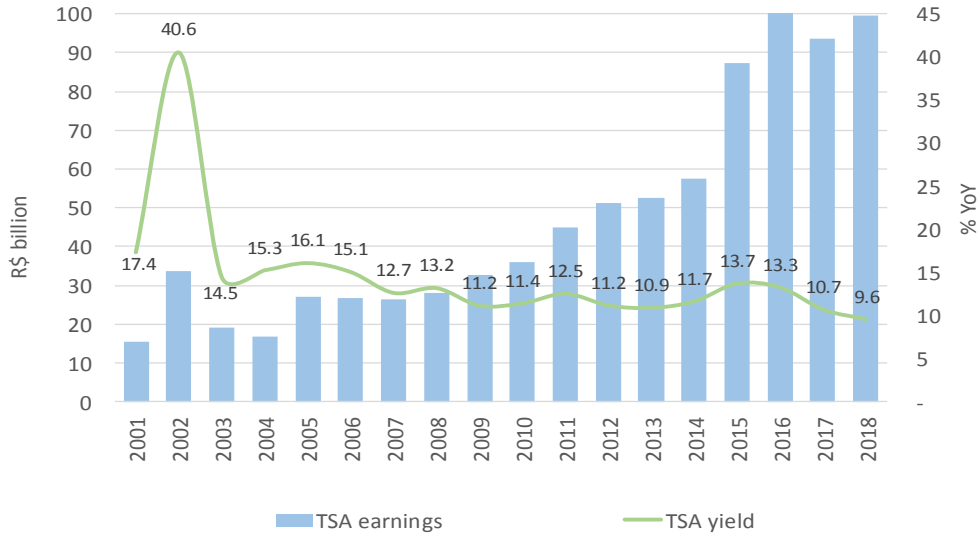
[3] The balances presented are in accordance with the methodology adjustment relative to the accounts "Values to be transferred to the TSA" and "Single account earnings"

Source: SIAFI

4.2. Single account earnings

The resources deposited in the single account are remunerated at market interest rates. More precisely, the account's rate of return corresponds to the average return on federal government bonds held in the BCB portfolio, in accordance with Article 1 of Provisional Measure No. 1.789 of 1998. As pointed out in the previous section, the composition of this portfolio comprises essentially the same instruments and conditions as the bonds offered to the market by the National Treasury. The annual flow of single account earnings is shown in Figure 10. The destination of this treasury revenue is free, not specifically earmarked for debt payments.

Figure 10. Treasury single account earnings
R$ billion and yield rate % year-over-year



Source: National Treasury.

In the set of international best practices, yield at a market interest rate discourages the public manager from seeking alternatives with higher returns in the banking sector. In addition, with the resources coming into the single account, the BCB reduces its liabilities in repo operations by the same amount. It is, therefore, only fair that the BCB should give back these earnings to the National Treasury for its resources. Imbalances in this relationship, if any, could lead to distortions in the BCB balance sheet. Another good practice is to keep the yield equivalent to that of public bonds, which reduces the government's incentive to offer a lower than market yield for bonds. In the Brazilian case, this issue was resolved with a framework in which issuances to the BCB follow the conditions obtained in the National Treasury auctions, thus ensuring the earnings are fair and in accordance with market parameters.

Box 3: Legislation Governing the Earnings of the National Treasury Single Account

1. Article 164, paragraph 3, of the Federal Constitution states that "the federal government cash availabilities shall be deposited in the Central Bank."

2. Article 1 of Provisional Measure No. 2.179-36, 2001 (original edition MP-1789, 1998), specifies that the federal government cash availabilities deposited at the Brazilian Central Bank will be paid, from January 18, 1999, by the weighted mean of the intrinsic yield of the domestic federal public debt bonds issued by the National Treasury and held by the BCB.

5. Changes in the current framework

5.1. New financial relationship between the National Treasury and the BCB

The financial relationship between the National Treasury and BCB is relevant to sound macroeconomic management. It is directly related to liquidity management in the banking system, financial market development, and public indebtedness. The process of accumulating international reserves since 2006, associated with exchange rate volatility, has led to a significant increase in financial flows between the BCB and the federal government, as has been shown throughout this report.

With this in mind, the two institutions and the National Congress directed efforts toward developing a new set of rules that would minimize the amount of resources transferred. Since this flow does not, for the most part, come from actual operations or the actual sale or purchase of international reserves, these efforts resulted in Law No. 13.820/2019, which brings important improvements to and reduces asymmetries in the regulatory framework governing the financial relationship between the National Treasury and BCB. A main premise is the improvement of the institutional arrangement regarding the distribution and coverage of the BCB's balance results, with special attention to the reduction of exchange equalization flows, which will make both the liquidity/inflation management and the FPD management more efficient. The following presents the main features of the new framework.

BCB financial balance. Exchange rate variations correspond to the most relevant source of volatility in the BCB's profit and loss and, therefore, to financial flows between the BCB and the National Treasury. The BCB balance sheet presents a currency mismatch, whereby a relevant portion of its assets is denominated in foreign currencies, while the entity's liabilities consist predominantly of local currency bonds. Thus, the new legislation establishes mechanisms for accumulating reserves on the monetary authority's own balance sheet, mainly on the basis of gains resulting from market-to-market accounting of international assets. Instead of transferring these gains to the National Treasury, these accounting reserves would be used to cover any future losses also arising from the effect of exchange rate fluctuations on the value of foreign currency assets.

In the event of insufficient reserves to meet future negative results, the losses shall be covered by using the BCB equity until it reaches the minimum limit of 1.5 percent of the total assets existing in the balance sheet at that date. If the balance reserves and the equity use, in the manner indicated, are not sufficient to cover for the negative result, the remaining balance will be considered a federal government liability toward the BCB and should be paid until the tenth business day of the fiscal year subsequent to the balance sheet approval—a mechanism similar to that which has historically prevailed in the legislation.

In turn, the share of the positive results corresponding to the other BCB transactions would continue to be transferred to the National Treasury, as it is associated more with the actual outcome of the monetary authority and less with exchange rate volatility.

Such reduction of flows between these two institutions deriving from the new approach toward the monetary authority's balance result aligns Brazil with international best practices. To illustrate this point, note that BCB transfers to the federal government in the period from 2008 (when the exchange equalization mechanism came into force) to 2018 totaled R$1,015.5 billion, of which R$709.2 billion corresponded to exchange equalization and R$306.3 billion to positive results transfers. These resources were paid to the National Treasury by cash transfers to the single account. In the same period, the federal government transferred to the BCB a total of R$714.8 billion, of which R$695.4 billion corresponded to exchange equalization and R$19.4 billion to the coverage of negative results. These resources, in turn, were paid through the placement of National Treasury bonds in the BCB's portfolio.

Improvement in inflation control management. The new legislation also brings rules for the reestablishment of the federal public bonds portfolio held by the BCB. The intention is to go beyond the current framework, in which decisions to place bonds for monetary policy purposes in the BCB portfolio are made by Ministry of Finance ordinances, as described in section 3, above. The new design creates an automatic mechanism for the placement of bonds in the BCB's portfolio, based on a minimum level of non-earmarked bonds in the portfolio. In this sense, to ensure the Central Bank always safeguards the proper portfolio volume, the reestablishment will occur whenever the share of bonds available for repo operations (non-earmarked portfolio) reaches a proportion equal to or less than 4 percent of the total portfolio, up to the value of 5 percent of the total portfolio.

Improvement in public debt management. A major positive impact on debt management will be a reduction in the occasions when the National Treasury will need to place bonds in the monetary authority portfolio to cover for negative results. Another relevant change aligned with improving debt management is the provision that the BCB may, with prior National Monetary Council authorization, give back to the National Treasury part of the non-earmarked bonds, up to the amount originated from the placements for the adequacy the portfolio for liquidity management purposes (that is, this provision does not apply to values related to negative results coverages or rollover). The scope of such authorization will therefore be limited to the BCB's balance of assets resulting from the placement of National Treasury bonds in its portfolio. In addition, the BCB's equity may not be lower than 1.5 percent of its total assets, due to the National Treasury bonds cancellation.

Consequently, with such improvements, the federal government will tend to spend less on interest payments of the bonds in the BCB portfolio in the future. This represents an advantage for public debt management, reducing government borrowing needs, which otherwise would have to be financed with the market or with other TSA resources. In particular, the charges in the BCB portfolio are recorded as current expenditures and, therefore, create pressure on the Golden Rule. In this sense, factors that contribute to a lower growth in the outstanding bonds held by the BCB favor the government fiscal balance. Finally, the effects are still positive for the GGGD/GDP dynamic

calculated according to the International Monetary Fund methodology. As we have previously reported, this indicator, most accepted for cross-country comparisons, accounts for the entire portfolio of public bonds held by the monetary authority.

In short, this report has highlighted important features of the Brazilian institutional arrangement governing the financial relationship between the National Treasury and the BCB. It is a framework that adheres to international best practices, consolidated in theoretical and empirical literature. The newly passed legislation in this area (Law No. 13.820/2019) is designed to strengthen and improve this reality by promoting an adjustment in the main financial flows between the two institutions. The corollary is that Brazil is even closer to the state of the art with respect to appropriate incentives in the relationship between monetary and fiscal authority.