

## Part III

### Chapter 5

# The investor base of the Federal Public Debt in Brazil<sup>1</sup>

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## 1 Introduction

A diversified investor base, with respect to investment terms, risk preferences and motives for trading assets, is vital for stimulating transactions, increasing the liquidity of public bonds and obtaining government financing under various economic scenarios.<sup>2</sup> It is also needed to balance the market in periods of stress or abrupt shifts in expectations; such periods are common even in liquid markets and can prompt sharp drops in liquidity if, within a short period of time, an investor group with similar preferences enters or exits.

The size and composition of the investor base are linked to the structural characteristics of a country's economy, such as the development and sophistication of the financial market. Addressing its limitations is a complex task.

In recent years, Brazil (whose financial system is based on banking activities) has tried to diversify and expand its investor base (to help manage its debt), as well as improve its relations with each group of bond holders. Since its capital market has matured - against a background of high international liquidity - and its economic foundations have been strengthened, these factors, combined with some microeconomic measures, have helped enlarge and diversify the types of investors in the public debt arena: investors (especially institutional ones) have become more active in managing their resources. However, diversification in the decision-making related to investments in public bonds has not occurred at the same speed as the diversification of the final holders.

This chapter offers an overview of investors in Brazil's public bonds, the actions of public debt managers, and the main trends. Section 2 examines the composition of the investor base, as well as the demand profile of all types of investors with regard to their preference for bonds. Section 3 describes how the subject has been incorporated into the strategic planning of debt and how work on the investor base has been conducted. Also, it examines key measures that have been adopted. Section 4 presents the trends and challenges, focusing on the main debt holders.

## 2 Federal Public Debt holders<sup>3</sup>

Banks in Latin American countries play an important role in financial intermediation. In Brazil, this influences the way the capital market is organized as well as the debate over public debt, especially with

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<sup>2</sup> World Bank, 2001; 2007.

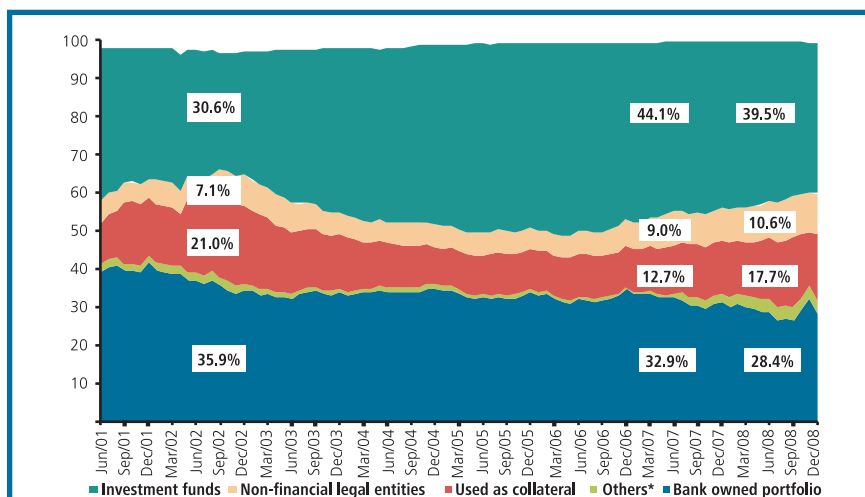
<sup>3</sup> Although the term Federal Public Debt (FPD) is used throughout this chapter, the statistics and analyses are restricted to the Domestic Federal Public Debt (DFPD), its most relevant share (90% of the FPD stock). Thus, the chapter will not analyze the characteristics of

regard to its domestic share. As is well known, the level of economic development<sup>4</sup> and years of high inflation and indexation have led to a highly bank-centered financial system. This chapter will not explore the causes; rather, it will focus on the relevance of the banks' role with respect to the concentration of investment in public debt bonds.

By the end of 2008, bank-owned portfolios still held almost 30% of the Domestic Federal Public Debt (DFPD) bonds, although this share was close to its lowest historic level. Such participation is not that different from other countries. In 2003, domestic banks held 33% of the public debt in Poland, 31.2% in Thailand (including commercial banks and the Government savings banks),<sup>5</sup> and 36.9% in Mexico<sup>6,7</sup>.

However, the banking system's importance to the public debt cannot be measured exclusively by its share, since the issue is far more complex. As financial conglomerates, they also include brokers, asset managers and insurance companies, and social security management firms, among other institutions. Thus, they are involved in investment decisions with regard to a much larger share of the debt. For example, if investment funds' (IF) holdings of public debt - in which the banks' asset managers oversee the main share - are added to bank-owned portfolios, it is clear that financial conglomerates occupy a pivotal position in decisions about the demand for public bonds (see Graph 1).

**Graph 1. Holders of Brazil's DFPD: June 2001 to December 2008<sup>8</sup>**



Source: Central Bank of Brazil

\*Includes clearing houses and clients: individuals, financial corporate entities, and other funds.

external debt holders, which represents about 10% of the FPD. Such debt is made up of bonds issued in the international market (about 76%) and the external contractual debt (divided mainly between the World Bank and the IDB).

<sup>4</sup> Although the financial systems of developed countries such as Japan and Germany are strongly based on banking activities, this characteristic is often associated with less developed countries. Since banks can raise funds from the public, identify good projects, manage risks and monitor the management of companies, they are more important in legal and accounting systems that are not sufficiently elaborated, which is typical of undeveloped economies (Novaes, 2005).

<sup>5</sup> Novaes, 2005.

<sup>6</sup> Lopez, 2006.

<sup>7</sup> This participation includes the debt share held by Central Bank, which differs from data presented by Brazil (as seen in graph 1). If the bonds held by Brazilian Central Bank were included in our statistics, the share of debt in Brazilian bank portfolios would have dropped from 24.1% in 2003 to 20.3% in 2008.

<sup>8</sup> The difference between the participation in the diagram and the total of DFPD bonds in public hands is related to bonds received as collateral by the Central Bank under the Incentive Program for the Restructuring and Strengthening of the National Financial System (Proer) - basically NTN-A3.

The above graph, taken from the Monthly Report on the Federal Public Debt (RMD),<sup>9</sup> provides the commonly-applied breakdown of public debt holdings that focuses more on registration (custody) than on final holders. For example, when bonds of banks or non-bank financial institutions are used as collateral in trades, this is classified as “used as collateral” instead of by the “final holder”. Along with the share of public debt holdings in bank-owned portfolios and “used as collateral,” Graph 1 lists three other categories that deserve further examination: Non-financial legal entities (PJNFs)<sup>10</sup>, investment funds, and others.

Holdings of PJNFs,<sup>11</sup> such as pension funds, insurance companies and commercial or industrial companies have grown recently. A major part of their growth - from 5.3% in February 2006 to 10.6% in December 2008 - was due to a regulation that created a new investment vehicle called “Investment Accounts,” which could be managed directly by these entities and which exempted them from CPMF.<sup>12</sup> Before then, the usual way to avoid the tax was to open a dedicated (exclusive) account with asset managers, since investment funds transactions were already tax-exempt.

Thus, investment funds benefited from such tax regimes that were crucial to their success in Brazil and to their consistently high share of holdings of public debt (shown in Graph 1); besides providing them with tax exemptions, the tax regime weakened competition among funds since migration of investments from one fund to another would have required paying the transaction tax (CPMF). In fact, even during the 2002 mark-to-market crisis<sup>13</sup> that caused sharp redemptions from the funds, these investment vehicles were able to hold over 30% of all domestic government bonds. Their largest participation was in April 2006, with 50.5% of the DFPD.

There is an additional explanation for investment funds’ high participation in the public debt.<sup>14</sup>

[...] the lack of macroeconomic stability, the economic plans and the experience of mismatches of assets and liabilities within the context of the public house financing system (SFH) created much tension among banks as intermediaries and distributors of LFTs and other securities linked to overnight rates. Considering the systemic convenience of removing such risks from the banks’ balance-sheets, a strong mutual fund industry flourished – apart from these institutions, but greatly sponsored by them – with the goal of holding public debt, fragmenting the task into individual funds (similar to remunerated sight deposits, for their quotas have daily liquidity), removing the credit or market risks from the intermediary (bank or manager) and transferring it to the participants (quote holders) of such funds.

Finally, the “others” category in Graph 1 refers to clearing houses and clients (individuals, financial corporate entities and other funds). In this category, “clients/individuals” represent about 0.42% of the debt in the public domain, with bonds purchased on the secondary market and through the Tesouro Direto (TD)

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<sup>9</sup> For details, see Annex 5.1 of the Monthly Report on the Federal Public Debt (Relatório Mensal da Dívida Pública Federal) and Annex 1 of this chapter.

<sup>10</sup> Which can be public and private companies (including the ones from the insurance and capitalization sector), pension funds and open entities of complementary social security.

<sup>11</sup> Non financial legal entities (PJNF).

<sup>12</sup> CPMF is the Portuguese acronym for the Temporary contribution on financial transactions tax. For investment accounts, see section Part III, Chapter 6.

<sup>13</sup> In May 2002, the Central Bank (BC), in a joint decision with the Securities and Exchange Commission (CVM), instructed the country’s investment funds to set the price of financial assets in their portfolios according to market prices (mark-to-market), as of June 1st of that year. Although this was a legitimate measure from a financial point of view, especially to protect investors against potentially greater losses, it was seen as negative and known as the “mark-to-market episode,” bringing about important implications for the public debt dynamics and investment fund industry in the following months.

<sup>14</sup> Franco, 2006.

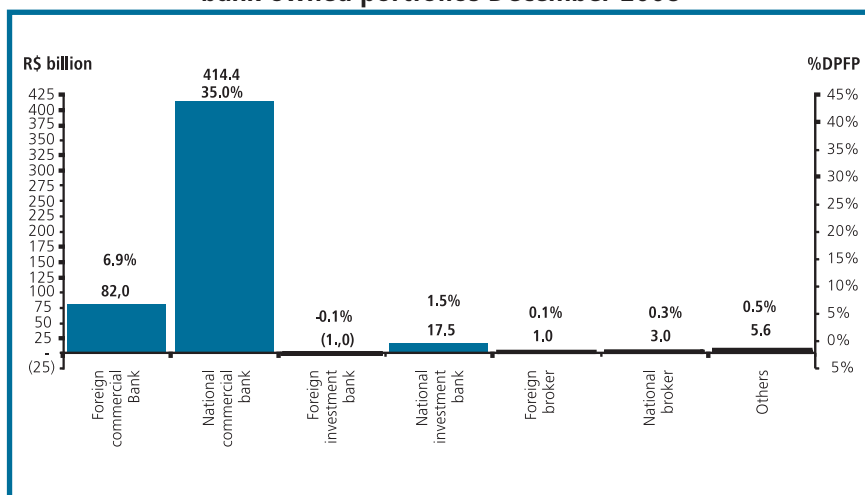
program, which represents a little more than 0.1% of the total debt. The “client/financial corporate entity” category, on the other hand, which covers financial institutions that do not hold an autonomous account in the Special Liquidation and Custody System (SELIC), held 1.14% of the debt in August 2002, and after a continuous reduction since then, resumed an upward trend due to the presence of foreign financial institutions and, as of December 2008, represented 2.63% of the outstanding DFPD held by the public.

## 2.1 Main groups of investors

Due to the investors’ importance with respect to the FPD, this section offers a more detailed breakdown of who they are and their holdings: The data not only disaggregate the categories discussed above, but also consider all bonds “used as collateral” as the property of their respective original holders.

Regarding the banks’ own portfolios, the distribution in Graph 2 shows the strong participation of commercial and national banks. The former represent 95% of the segment while national banks represent more than 80%. The graph also shows that after taking into account the bonds “used as collateral,” the total holdings of the national banks reaches around 84% of the segment and 37.2% of the DFPD held by the public.

**Graph 2. Composition of the major groups of DFPD holders - bank owned portfolios December 2008**



Source: Central Bank of Brazil

As a further indicator of the national banks’ importance, Central Bank data (in Table 1) show that in December 2008, of the 50 largest banks in Brazil, only 20 were under foreign control; of the 10 largest (in terms of total assets), only three were under foreign control.

**Table 1. Largest institutions of the National Financial System (SFN), in total assets (R\$ billion) – December 2008<sup>15</sup>**

Institution	Total assets	% of SFN
Itau	631.33	19.1%
BB	507.35	15.4%
Bradesco	397.34	12.0%

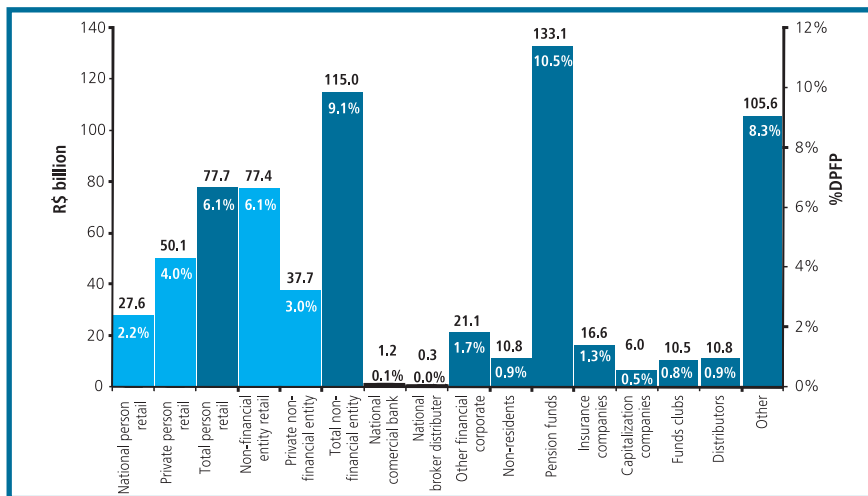
Institution	Total assets	% of SFN
Santander	344.68	10.4%
CEF	295.92	9.0%
HSBC	112.10	3.4%
Votorantim	75.08	2.3%
Safra	66.53	2.0%
Nossa Caixa	54.28	1.6%
Citibank	40.48	1.2%
Subtotal	2,525.09	75.2%
BNDES	272.09	8.2%
<b>Total</b>	<b>2,797.19</b>	<b>83.4%</b>

Source: Central Bank of Brazil.

Investment funds, which are also important players in the debt market, held net assets of almost R\$ 1.1 trillion in December 2008, over two thirds of which were in public bonds. As to their costs, the average administrative fee for fixed interest rate funds was about 1%.<sup>16</sup> Often, fund managers charge performance fees when they obtain profits higher than reference values (usually CDI); losses are the exclusive responsibility of participants.

Public bond holders in investment funds are less concentrated when compared to bank-owned portfolios. Complementary pension funds, individuals and non-financial legal entities account for the largest share with 26.2%, 15.3% and 22.6%, respectively of the total public bonds held by investment funds. Each group's share in the total debt held by the public and the volume of resources in public bonds are presented in Graph 3.

**Graph 3. Composition of DFPD holder groups – investment funds – December 2008**



Source: Central Bank of Brazil

<sup>15</sup> Brazil has proven to be much more resistant than other countries in the recent international crisis and, as was to be expected, its banking system has become more concentrated. During the second half of 2008, one of the largest, Santander (seventh in the ranking of assets, as of June 2008) took over ABN Amro Bank (fifth); Itaú (second) merged with Unibanco (sixth); Banco do Brasil announced the acquisition of Nossa Caixa (eleventh) and part of Banco Votorantim (ninth).

<sup>16</sup> Despite the average rate presented, rates are clearly segmented per invested volume. In 2006, portfolios with an initial investment

The close relationship between investment funds and banks becomes clearer when the ranking of main managers' net assets is analyzed: Eight of the 10 largest investment fund managers are part of the 10 largest bank conglomerates. This indicates that while participants are not so concentrated, management is—due to the similar investment decisions taken by these funds and the bank-owned portfolios, which is reflected in a concentration of demand for certain instruments.

**Table 2. Largest managers in net assets (R\$ billion), December 2008**

Institution	Net Assets	% of Total
BB DTVM S.A.	233.19	21.4%
Bradesco	151.66	19.9%
Itau	138.20	12.7%
Santander	80.49	7.4%
Caixa	76.52	7.0%
HSBC	46.66	4.3%
Unibanco	45.53	4.2%
UBS Pactual	40.89	3.8%
Safra	24.97	2.3%
Nossa Caixa	24.70	2.3%
Subtotal	862.81	79.3%
<b>Total</b>	<b>1,088.50</b>	

Source: Anbid

### 2.1.1 The final debt holders

Before analyzing the composition of the public debt portfolio for each segment, it is important to go a step further, identifying the final bond holders. Since the above categories focus on bond registration (custody), it was necessary to obtain information<sup>17</sup> from the Central Bank and CVM (Securities and Exchange Commission) and rearrange public debt holders in categories with respect to public bond demand and the final holders<sup>18</sup> (see Graph 4).

The category “financial institutions” includes: (a) bank-owned portfolios; (b) amounts retained by financial institutions without individual SELIC accounts; and (c) financial institutions that hold investment funds, such as the national commercial bank (Bco. Com. Nac.), national distributor broker (Corr. Dist. Nac.), other national financial corporate entities (Out. PJF Nac.) and participants of funds that distribute their shares (Cot. Distr).

The “individuals” category includes the shares of individuals in investment funds - retail and private (PF Var. and PF Priv., respectively) - plus the resources they directly retain (Individual Client Accounts, Annex 5.1, RMD). The category “non-financial legal entities” includes these corporate entities' shares of investment

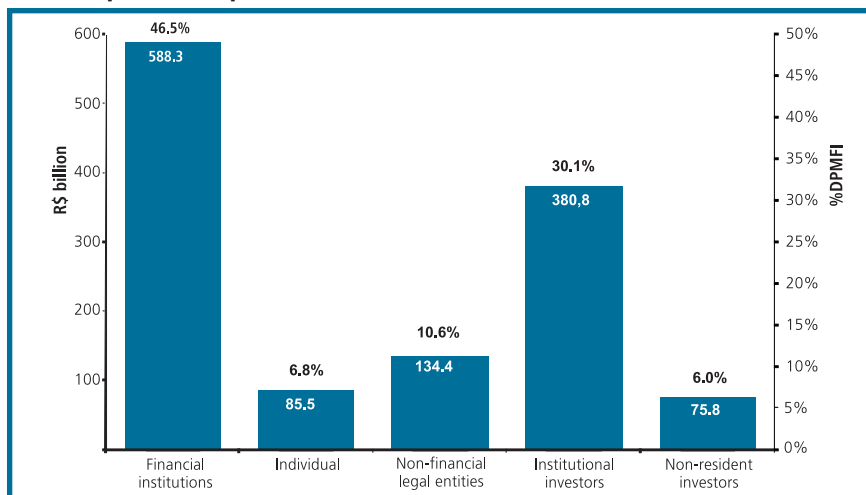
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of up to R\$5,000 had rates from 1.5% to 5.5%; between R\$5,000 and R\$100,000, from 0.85% to 3.5%; and above R\$100,000, from 0.3% to 1.5%.

<sup>17</sup> The author wishes to thank Beatriz da Costa Lourenço Florido, from the Central Bank of Brazil, and Luiz Américo Ramos, of the Securities and Exchange Commission (CVM), for the valuable clarifications and information.

<sup>18</sup> This is just a proxy, since overlaps have been necessary for classifying some segments. Also, there is a difference of about R\$ 4 billion (0.3% of the total DFPD) between the components and the total DFPD regarding linked bonds, the ownership of which was not determined by the categories.

**Graph 4. Composition of final DFPD holders – December 2008**



Source: Central Bank of Brazil

funds - retail and private (PJ Var. and PJ Priv., respectively) - and the resources they directly retain (PJNF Client account, Annex 5.1, RMD), excluding those held by institutional and foreign investors.

“Institutional investors” includes indirect holders of government bonds (via investment funds) such as complementary pension funds (Prev. Comp.),<sup>19</sup> insurance companies, capitalization companies (Soc. Capital), club funds, others in FI (other), and other funds (Client account other FI, Annex 5.1, RMD), as well as all direct holdings of government bonds by complementary pension funds, insurance companies (including health insurance) and capitalization societies (in PJNF Client Account, Annex 5.1, RMD). Finally, the category “non-resident investors” refers to non-residents participation in investment funds (Inv. N. Res.) and all other accounts.

In these new categories, based on final bond holders, the concentration is not so strong when compared to the classification by the registry (custody) shown earlier. The share of institutional and non-resident investors exceeds 36.5% of the debt (i.e., a significant share with a profile that targets more long-term investments), even after the last international financial crisis. If we consider that, in addition to the demand from these two groups, there is also long-term savings that can be tapped from individuals and non-financial corporate entities, the potential exists to extend the maturity of the public debt.<sup>20</sup>

## 2.2 The main holders’ portfolios

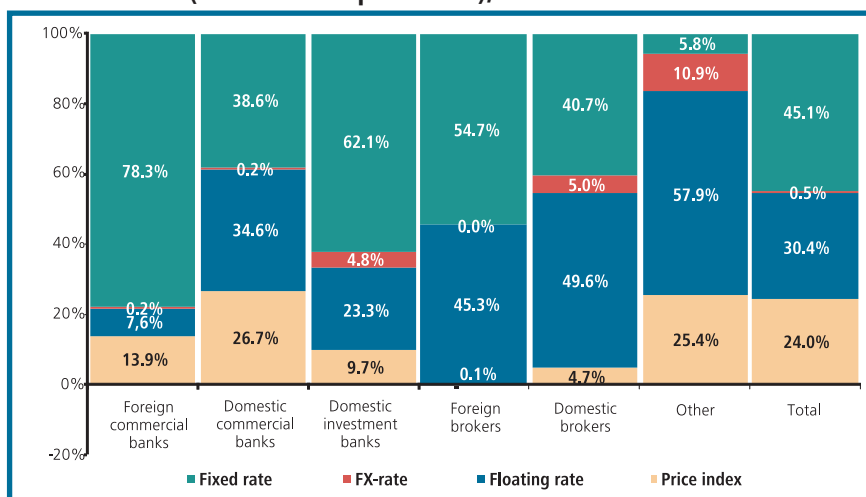
The last section shows that the holdings of government securities are not so concentrated when the statistics are disaggregated to identify the final investors. Thus, an analysis of their demand profile would help evaluate the potential to extend the average debt maturity and improve its composition.

<sup>19</sup> These include both open and closed complementary pension funds, and municipal and state social security systems.

<sup>20</sup> Available data for Brazil and other countries do not allow for a more accurate comparison of terms or final holders. The disaggregation made for this analysis uses data from January 2007 onwards. For 2003, Novaes (2005) notes that Poland had 50% of its debt (including bonds held by the Central Bank) in the hands of non-financial legal entities, while Thailand had 59%. For Brazil, if the debt in the Central Bank is included, the figure is 42.4%.

The composition of public debt portfolios with regard to maturities and characteristics (nominal and indexed debt), provides important information about the market activity of each segment of investors. As expected, an examination of bank portfolios shows that fixed-rate bonds and floating-rate bonds are the most prevalent, as shown in Graph 5. It should be noted that the growth of fixed-rate bonds in their portfolios is recent, due to the stabilization of Brazil's economy. Also, it shows the preference of foreign-controlled banks for fixed-rate bonds (none of the institutions in this group has less than 50% of these in their portfolios) while national institutions hold high percentages of floating-rate bonds. Since the latter are highly represented in the set, floating-rate bonds achieve almost one third of total bank-owned portfolios.<sup>21</sup>

**Graph 5. Composition of public bond portfolios by index (bank-owned portfolios), December 2008**



Source: Central Bank of Brazil

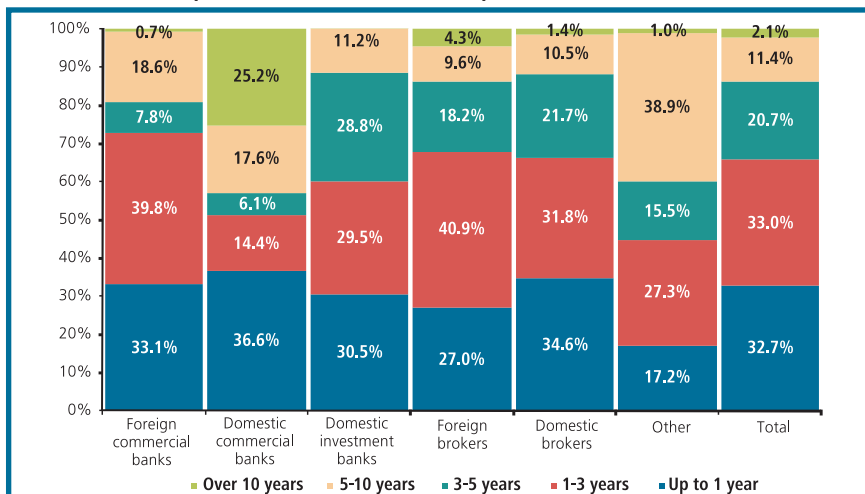
With regard to maturities, bank-owned portfolios mainly hold short-term bonds (up to three years). In December 2008, the commercial banks (both national and international) and the national investment banks, which are more heavily represented in the total DFPD, had more than 50% in bonds with maturities of no more than three years. Although the concentration in shorter maturities persists, its share has been reduced since July 2007, when it was 75%. The reduction in the share of bonds with maturities below three years is consistent with the overall lengthening of the average maturity of the outstanding public debt in December 2008.

International experience has shown that institutional investors are key to the functioning of a country's public debt market. In Brazil, they represent a group with rather homogenous investment goals but one that follows its own strategies, for example, with respect to bond maturities. If that was the case, their demand should encompass a wide range of public bonds, from short-term, fixed-rate bonds to long-term, inflation-linked instruments. However, it is difficult to compare the Brazilian experience with that of other countries, given the wide use of the LFT, a floating-rate instrument linked to overnight rates. In spite of the recent evolution of Brazil's capital market, these instruments are still very prominent in the public bond portfolios of several

<sup>21</sup> Foreign investment banks were omitted from the graphs because, in December 2008, they presented a net position in the public bonds portfolio of just R\$1 billion (0.2% of the segment "own portfolio"), which would distort the comparison. Such a negative position was concentrated in fixed-rate bonds of up to five years.

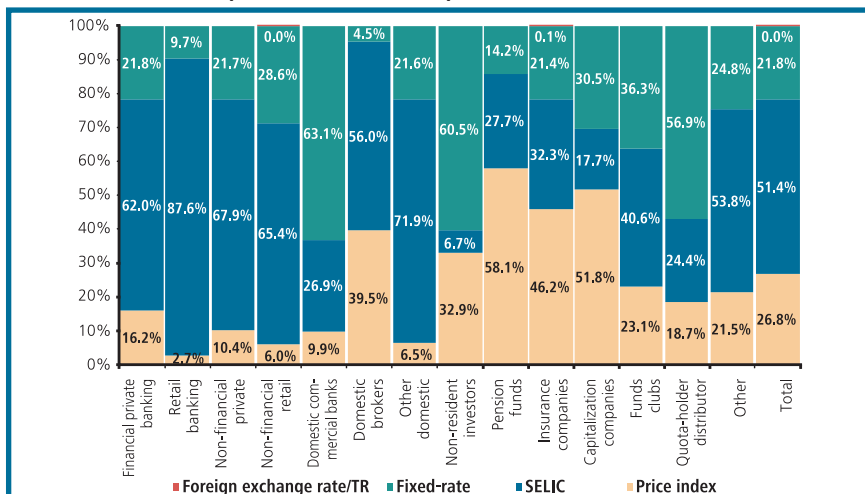
investment funds. It would appear that investors, and not only institutional investors with different types of liabilities (such as investment funds and clubs, complementary pension funds and insurance companies), still maintain a substantial share of their assets in floating-rate bonds. The high level of short-term real interest rates in Brazil contributes to this phenomenon.

**Graph 6. Composition of public bond portfolios by term (Bank-Owned Portfolios) December 2008**



Source: Central Bank of Brazil

**Graph 7. Composition of public bond portfolios by index (investment funds) December 2008**



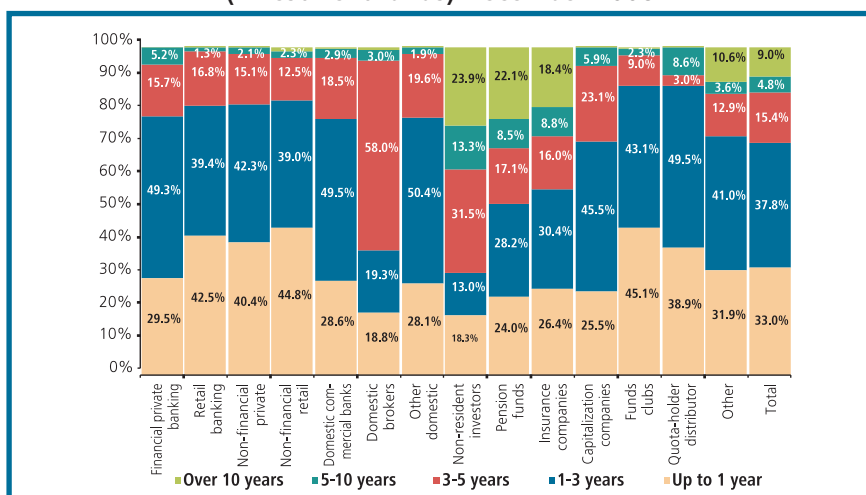
Source: Central Bank of Brazil

Graph 7 indicates that the more diffuse a group's investment goal, the higher the fund's LFT percentage. Hence, "individuals" and "non-financial corporate entity" groups (retail or private) hold a larger share of such bonds, as well as groups with a closer link to the financial sector, except for national commercial banks. It should be noted that these segments all increased their LFT portfolios, especially during the international crisis; thus,

the share of these bonds in the investment funds' portfolios grew by 10% in one year, accounting for over half of their public bond portfolios. The preference of non-resident investors for fixed-rate bonds and inflation-linked bonds, which represent almost 95% of their public bond portfolios in investment funds, is equally noteworthy. Although the SELIC rate increased in the last months of 2008, these investors' appetite for LFTs did not, and their percentage in the portfolios grew by only two points from December 2007 to December 2008.

In terms of maturities, very short-term bonds prevail in retail clients' portfolios, while there is a greater share of bonds with maturities longer than three years in private client funds. Even if this difference is not very large, it signals a greater portfolio selection effort by asset managers of private client funds to add value to the fund beyond the typical strategy of simply buying instruments with low market risks. Another interesting group, the foreign investors, despite its different preferences, has a portfolio with a longer maturity than national institutional investors, even when compared specifically to complementary pension funds.

**Graph 8. Composition of public bond portfolios by term (investment funds) December 2008**



Source: Central Bank of Brazil

### 2.3 Self management versus outsourced management: an analysis of portfolios

If the size of the investment fund (mutual fund) segment represents an advantage for Brazilian financial markets due to its capacity to capture savings, the preference for instruments such as the LFT to some extent hampers public debt management objectives to improve the debt profile. Also, regulations hinder any attempt to restrict daily liquidity in these funds, which sparks a greater demand for bonds with one-day duration.

In this context, although the base of final debt holders is not so concentrated, the management of public debt portfolios is very much the task of agents whose motivation for negotiating rests mainly on tactical considerations.<sup>22</sup> This causes their positions to remain focused on LFTs, as they offer less exposure to risk within the shorter spectrum of the interest curve for public bonds, thus reducing incentives to extend debt maturities. In turn, this reduces the transparency around price formation in the cash markets of less liquid bonds.

<sup>22</sup> Moura, 2005.

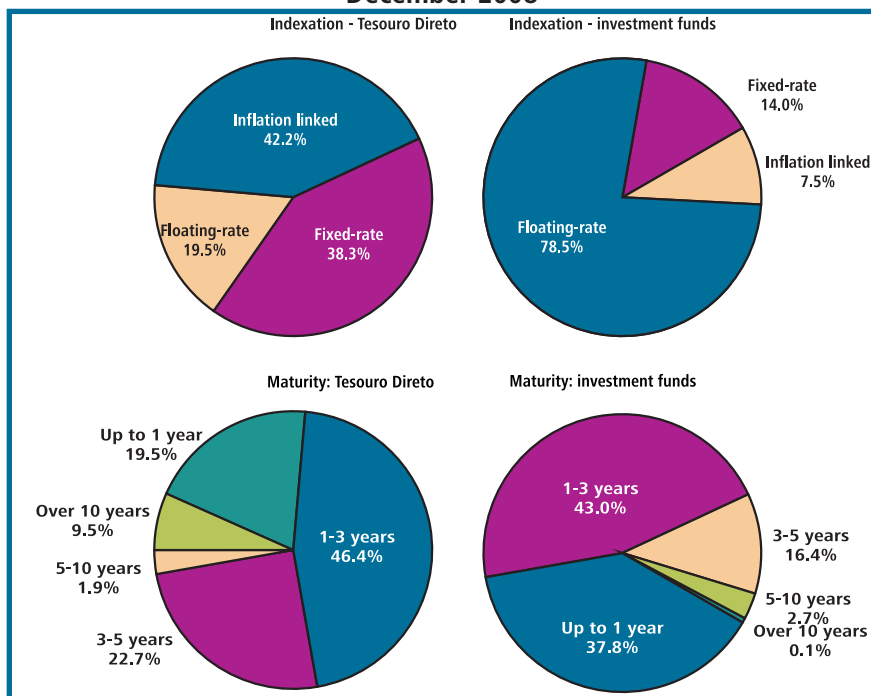
It has been argued<sup>23</sup> that the daily liquidity offered by investment funds and the daily disclosure of quotas are key factors in promoting the LFT in these portfolios. These features lead investors to withdraw funds at the first signs of losses; thus, managers keep a major part of their assets in bonds with a one-day duration and high liquidity.

Another problem with the profile of investment fund portfolios is the so-called “CDI culture.” Typical investment fund managers will not (and would not be able to) buy bonds with a fixed rate (instead of the LFT) if they need to obtain daily returns that are equal to or higher than the CDI. Thus, the liquidity of investment funds linked to a daily benchmark affect the demand of this bond-holder segment and the debt profile itself.<sup>24</sup>

In this scenario, tactical decisions prevail over strategic decisions in the investment funds’ allocation of public bonds; thus, issues related to maturity and investor profiles are less important than other aspects, such as the assets’ daily liquidity. Also, this practice is due to the lack of a stronger financial culture among a large share of individuals and corporate entities, as well as some institutional investors - which delegate banks and asset management companies ample control over their funds.

Hence, a major part of public bonds in investment funds is managed without any consideration given to the final investors’ goals in terms of time frames or risk aversion, since the bonds are traded almost without any type of segmentation: resources are invested in bonds that generate a smaller risk for managers (in terms of deviation from a generic benchmark) and allow for daily liquidity, a requirement common among clients of investment funds. A good way to perceive the distinction in investment allocations by fund managers versus those made directly by end investors is to compare the public bond portfolios of individuals in investment funds and their investments in the Treasury Direct program (TD).<sup>25</sup>

**Graph 9. Composition of individuals’ public bond portfolios  
December 2008**



Source: Central Bank of Brazil and National Treasury /MF

<sup>23</sup> Franco, 2006.

<sup>24</sup> Garcia and Salomão, 2006.

<sup>25</sup> An Internet-based program that sells federal bonds to individuals. For details, see Part III, Chapter 7.

Although differences exist between individuals who invest in public bonds through the TD and investment funds, both investment vehicles have a similar target audience. The December 2008 graphs illustrate that managers concentrate resources in short-term bonds (80.8% in up to three-year bonds) and floating-rate bonds (78.5% in LFTs), while individuals on their own invest mostly in fixed-rate and inflation-linked bonds (80.5%), with a greater diversification in maturities (32.8% have terms longer than three years).

It should be noted that in both static and dynamic terms, individuals and managers control their investment portfolios quite differently. Between June 2007 and December 2008 (when the Central Bank raised interest rates), the share of LFTs in public bond portfolios managed by investment funds for individuals grew about 20 percentage points to reach 78.5% at the end of the period, while the share of these instruments in the portfolios managed directly by individuals in the TD dropped 2 percentage points. This demonstrates that besides a slower response to movements in the yield curve, individuals' demand for public bonds involves other factors than daily liquidity, and that protection against interest rate variations, though critical for managers, may not be to investors.

With regard to the comparison between closed complementary pension funds and investment funds, the share of fixed-rate, inflation-linked and short-term bonds in both portfolios also reflects the difference between self and outsourced management. In December 2006, the share of fixed-rate bonds in self-managed portfolios was no more than 2%, compared to 32.6% in outsourced-managed portfolios. Moreover, inflation-linked bonds accounted for 82.7% in the former and just 48.5% in the latter. Finally, the percentage of maturities of up to three years was 25% against 60%, respectively.

There are two peculiarities in the comparison between self and outsourced management of public bond portfolios that distinguishes individuals from pension funds: with pension funds, (a) the discrepancy between self and outsourced management has been decreasing gradually due to a drop in interest rates; (b) a segregation process of the portfolio management prevents the convergence between self and outsourced management.

About the first particularity, considering lower short term interest rates until 2007, it was natural for pension funds to lengthen the maturities in their portfolios, with bonds offering the protection they needed against inflation to meet their actuarial liabilities. Thus, the LFT share in investment funds that manage pension funds assets dropped from 41.7% in 2005 to 18.7% in December 2006. Such a large shift does not occur with investment funds that manage individual investors' resources, either when interest rates rise or fall, because they have more varied savings goals.

Still, in some cases, investment funds (mainly the exclusive ones<sup>26</sup>) adhere to the requirements of closed complementary pension funds; these involve separating the asset management of retirement benefits which have not yet been granted from those which have. Such strategies have led some pension funds to self-manage their portfolios for retirement benefits to be granted in the future and to outsource (through investment funds) those allocated for retirement benefits currently being paid. With this distinction, the outsourced-managed portfolio is of much shorter maturity and carries less risk of interest rate volatility than the internally managed one.

Such a separation offers only a partial explanation for the different composition of self-managed and outsourced-managed pension fund public bonds portfolios. First, many pension funds are small, and the costs of self-managing their assets are thus high. A 2006 study indicated that, out of a sample of 42 entities, 67% completely outsourced their asset management, while 2% managed all assets themselves.<sup>27</sup> Further, the separation strategy is not yet widespread in Brazil's financial market, since the same study shows that

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<sup>26</sup> "Exclusive" funds are closed-end mutual funds whose assets belong to only one institution (e.g. a pension fund).

<sup>27</sup> For more information about this study, visit the website:

[http://www.towersperrin.com/tp/getwebcachedoc?webc=HRS/USA/2007/200704/Brazil\\_1.pdf](http://www.towersperrin.com/tp/getwebcachedoc?webc=HRS/USA/2007/200704/Brazil_1.pdf).

although 12% of the companies sampled wanted to separate the asset management, 66% did not - nor did they consider doing this until the end of 2006.

Finally, the number of closed complementary pension funds that pay more benefits than receive contributions must be considered, since it is not high enough to justify such a short-term portfolio for resources set aside for retirement benefits being granted. Although the percentage of inflation-linked bonds in the outsourced portfolios grew from the end of 2007 to the end of 2008 (46.5% to 58.1%), a discrepancy still exists between their investment goals and the allocations in the different types of public bonds made by outsourced managers. This is likely to be even greater among smaller entities.<sup>28</sup>

To reduce the discrepancy, the National Treasury is attempting to link managers' incentives to the goals of final investors and expand and diversify the investor base. These initiatives are discussed in the following section.

### **3 Diversifying the investor base**

The idea that a broad investor base is needed to ensure a strong and stable demand for bonds has been a constant among National Treasury debt managers. As in other countries, the demand for domestic bonds reflects the characteristics of the financial system - such as the main types of investors and their investment preferences, as presented in the last section. In Brazil, given the well developed banking and investment fund industry, little had to be done to stimulate their further participation as holders of public debt instruments.

Nevertheless, the Treasury has aimed to promote a more diverse investor base, since those with different profiles with regard to maturity terms, risk and motivation to trade, would stimulate even more transactions and market liquidity. Given this goal and in order to maintain its financing strategy under various market conditions, the Treasury adopted regulatory measures and established a communications network with different agents: All investor groups are now analyzed while the debt management strategy is designed and implemented, and specific programs and contacts exist for individual, institutional and foreign investors, investment funds and others.

Besides seeking ways to expand the investor base, the Treasury attempted to change the CDI culture that developed due to Brazil's past high rate of inflation and indexation. This involved creating new programs, such as the TD (see Part III, Chapter 7), and providing information to larger investors that helps them better match their investment choices with their client's goals, rather than with the market's average management.<sup>29</sup>

#### **3.1 The Institutional Relations Unit (Gerin)<sup>30</sup>**

In 1999, while adopting best international practices and conducting an institutional reorganization of Brazil's public debt, the Treasury established a specific unit for investor relations (Gerin).

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<sup>28</sup> By delegating management, and choosing the CDI or SELIC index as a benchmark for their fixed-income portfolio, pension funds pressed managers to shorten their portfolios and concentrate them in LFTs or in Central Bank repo operations. In 2006, according to the Towers Perrin's survey, 72% of the funds surveyed adopted such practices.

<sup>29</sup> Franco (2006) describes the average management of fixed-income bonds as still quite geared towards the overnight interest rate, due to the influence of LFTs, which negatively affected the capital market.

<sup>30</sup> For more information on the Unit, see Part II, Chapter 1.

In addition to its routine communication with the market (in order to reduce misinformation and promote better pricing of assets), Gerin is designed to expand and diversify the investor base. As its efforts are closely linked to the overall mid- and long-term debt strategy, the unit was placed in the middle office, which is the strategic planning area, and not in the front office, which works with operations.

As a result, the Gerin focuses more on structural and strategic issues than daily communications, offering a longer-term perspective that is more connected to FPD management guidelines. Also, the unit created communication channels with several groups of investors, ensuring that the products it offers match the demands of the various market segments. Its broader efforts and strong strategic focus also made it easier for the unit to absorb the new tasks it inherited due to the transfer of the external debt management mandate from the Central Bank to the Treasury, especially those related to providing information and studies tailored to the specific needs of rating agencies.

### 3.2 Building experience with institutional investors

Since its beginning, the Gerin has sought close contact with institutional investors, even those whose portfolios are managed by others. For example, in 2003, it held several meetings with investors (especially pension funds) that prefer long-term instruments. As a result, it identified measures to stimulate the demand for such bonds. For example, it regularly issued NTN-Bs, long-term bonds indexed to the consumer price index (CPI), in line with the goals of the asset and liabilities management of pension funds and of overall debt management. The strategic point of the Treasury's action was to show that the CPI is highly correlated with the INPC, the price index generally used by social security entities as actuarial benchmarks.<sup>31</sup>

The success of the first initiative led to 15 meetings in 2004 with national investor institutions such as commercial banks, investment banks, open and closed complementary pension funds; this series of contacts created a permanent communication channel between public debt managers and main investors, expanding communications and its coverage. Thus, what began with the issue of NTN-Bs was continued with a series of initiatives.<sup>32</sup>

Aware that institutional investors are key to changing the public debt profile, the government revised the tax scheme with regard to social security-related investments in 2004. This created an added incentive for long-term investments and for an increase in the share of complementary pension funds (open and closed) in the debt. In particular, open complementary pension funds gained momentum from the tax incentive and started to compete with traditional investment/mutual funds for long-term investors. Also, the new scheme responded to an earlier request from closed complementary pension funds to end the Special Taxation Regime.<sup>33</sup>

Further, to reduce the so-called *CDI culture*, representatives from the Treasury and market institutions publicized the family of benchmark indexes for investments in public bonds created by Andima (IMA). In 2005,

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<sup>31</sup> The Treasury already offered a similar instrument, the NTN-C, which paid the IGP-M index plus an interest rate. But, as it aimed to offer an instrument linked to the price index used as a reference for the inflation target system and one that was more aligned with the government's primary surplus - besides concentrating its issuances in a single bond with such characteristics - the Treasury offered special incentives to promote the demand for NTN-Bs.

<sup>32</sup> For more details on some of the measures, see Part III, Chapter 1.

<sup>33</sup> The Special Taxation Regime (Regime Especial de Tributação) involved withholding taxes or paying income tax separately on the revenues and gains from the technical reserves and benefit plans of complementary pension funds, insurance societies and Fapi, as well as from life insurance plans with a survival clause. Thus, the whole accumulation stage of social security plans was now exempt from income tax.

they held seminars at five regional offices of the Brazilian Association of Pension Funds (Abrapp), describing the relevance of the new indexes, especially when compared with the CDI, as references for entities that needed assets with longer maturities.<sup>34</sup> They also highlighted the importance of the migration of investments from floating-rate bonds to inflation-linked bonds. In September 2005, interest rates began to drop and as it was clear that the process would be sustained, the Treasury emphasized that the short-term safety provided by LFTs would no longer be compatible with the profitability demanded by the pension funds' actuarial targets.

The share of floating rate (SELIC) bonds in the pension funds' portfolio dropped from 35.9% in March 2005 to 17.7% by December 2006. Gradually, the NTN-Bs replaced the NTN-Cs as the most sought-after instrument for institutional investors. Also, the cycle in which basic interest rates were reduced and the Treasury's strategy of no longer issuing regular NTN-Cs (beginning in 2006), created greater potential for the growth of NTN-Bs, both in the stock of outstanding public debt, as well as in the complementary pension fund portfolios. Thus, while IPCA-indexed bonds represented fewer than 20% of these pension funds' public bond portfolios and the IGP-M-indexed bonds accounted for over 30% in March 2005, they changed to 35% and 23%, respectively, by December 2006.

The drop in the Central Bank interest rate (SELIC) alone could have sparked the change in the composition of assets (held by this segment), but the clarification effort, along with other measures such as the creation of the Investment Account,<sup>35</sup> supported the macro-structural movement underway, thus accelerating the transition.

### 3.3 Non-resident investors in the domestic market

During the same period, the Treasury tried to attract non-resident investors, which have a greater appetite for long-term and fixed-rate bonds. It participated in various meetings to encourage their investment in public bonds, not only for debt management purposes, but also to develop the domestic market, since the entry of new players would help diversify the risk. This represented the most important change in the public debt investor base in recent times.

Besides offering information about domestic bonds on the Treasury website (e.g., which includes the manual for participating in the domestic bond market and rules for pricing bonds), foreign investors were surveyed about the features of Brazil's market that still made it unattractive.

The Treasury effort was not restricted to opening the domestic debt market to promote the various investors' access, a forum on developing the secondary bond market (still considered a bottleneck to diversifying the investor base), was created; such a market helps expand the investor base and its efficiency depends on a diversified investor base.<sup>36</sup> Given this interdependency, the success of this forum will be determined by how well it brings together the various agents. Hence, the Treasury's relationship with them has been crucial.

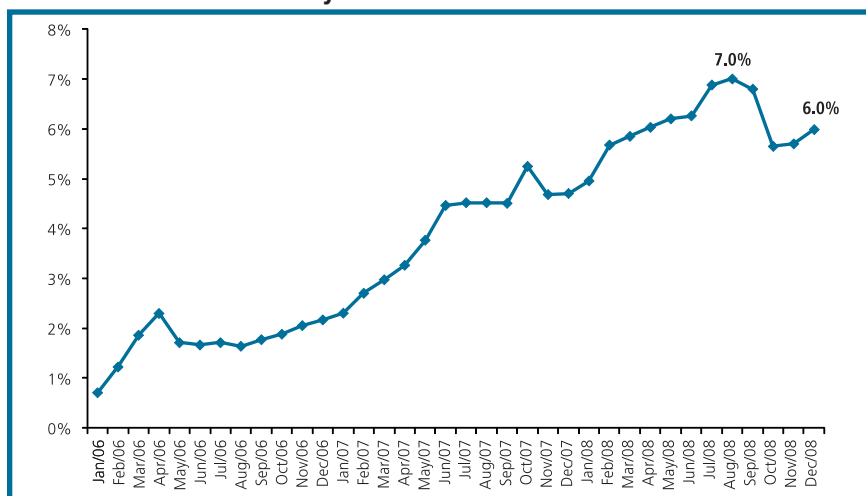
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<sup>34</sup> An updated version of the Towers Perrin study, of 53 institutions, showed that as of April 2007, the number of entities that continued to use the CDI as a benchmark for the fixed-income portfolio dropped to 57%, compared to 72% in the previous survey.

<sup>35</sup> The same study, which sampled 42 pension funds, found that in 2006, after all resources deposited in investment funds were allowed to migrate to other funds without paying the CPMF, 20% intended to change their investment structure due to the Investment Account.

<sup>36</sup> See Part III, Chapter 6.

**Graph 10. Non-resident investor share in DFPD  
January 2006 to December 2008**



Source: CVM (Securities and Exchange Commission) and Central Bank of Brazil, prepared by the National Treasury

### Box 1. Incentives for non-resident investors

As mentioned earlier, the new tax regime for non-resident investors was the most significant measure in recent years that affected the investor base. But the process of making Brazil's market more accessible began long before these investors were exempted from income tax (IR) on bond investments in February 2006.

Since early 2005, the Treasury, aware that it was crucial to expand the investor base within the scope of the BEST initiative (Brazil: Excellence in Securities Transactions),\* had already been improving the structure of the domestic financial market with regulations and measures that would make it more accessible to foreign investors. Thus, in that year, the Treasury streamlined the registration process for non-resident investors at the Securities and Exchange Commission (CVM) and promoted innovations with regard to registering in the national register of corporate entities (CNPJ), which allowed non-resident investors to start their operations with swiftness and simplicity.

The Treasury also participated in debates hosted by the National Association of Financial Market Institutions (An-dima), which had asked a consulting firm to analyze the issue of income tax exemptions for investments by non-residents in the domestic fixed-income market. Further, aware that it needed to attract this segment to assets in Brazilian *reais*, the Treasury successfully launched the first bonds in *reais* abroad (Global BRL 2016)\*\* in September 2005. The high demand from international investors meant that interest in such sovereign assets already existed.

After that, the government issued a provisional measure that triggered a significant entry of these investors into the domestic bond market. As a result, foreign investors' participation in Brazil's domestic debt, which was only 0.69% in January 2006, jumped to over 6% by December 2008. With respect to this measure, the following should be noted: (a) to achieve the Annual Borrowing Plan goals, the share of fixed-rate and inflation-linked bonds in the total debt increased, as seen in the foreign investors portfolio; and (b) this participation grew significantly during the first stage of the international financial crisis (until mid-2008), which showed that Brazil is acknowledged as a safe haven for investments.\*\*\*

\* Partnership between the public sector (National Treasury, Central Bank, Securities Commission - CVM) and the private sector (BM&F, Bovespa, CBLC and Anbid). For additional information, visit the website: <http://www.bestbrazil.org/index.asp>.

\*\* Brazil was elected the best sovereign issuer during 2005 by the *Latin Finance* magazine, especially due to the issuances of the Global BRL 2016 (best issuance in local currency) and the A-Bond (best sovereign issuance in foreign currency), the latter in the exchange operation of the *C-Bond*.

\*\*\* Starting in August 2008, with the deepening of the international financial crisis, the movement towards "fly to quality" or even simple profit realization, caused foreign investors to flee the bond market, reducing their participation in the public debt to less than 6%. But, investments in this segment resumed in October, and by December 2008, its participation had returned to the same levels observed in July.

### 3.4 Interaction between institutional and non-resident investors: market maturity

The increased participation of foreign investors beginning in February 2006 (after they were exempt from income tax on gains from investments in public bonds) illustrates how diversifying the investor base generated important results in the domestic market. A good example is the relationship between closed complementary pension funds and foreign investors. In May 2006, these funds were affected by a congressional investigation set to find out if pension funds had tried to illegally influence members of the House of Representatives. Although no evidence was found of such wrongdoings, since the investigated operations occurred in the less transparent secondary market, pension funds moved away from doing operations in this market.

At the same time, when it appeared that US interest rates might rise, some foreign investors that had participated in the domestic sovereign bond market initiated a “flight to quality” movement. When they tried to sell their bonds - which can be seen in Graph 10 - they did not find counterparts willing to trade in the secondary market easily, precisely because the natural demander for these bonds (complementary pension funds) was outside the market. Thus, the Treasury held auctions to sell and purchase bonds, so as to provide price parameters for all investors, as well as an exit for non-resident investors and an opportunity for pension funds to make purchases through primary auctions.

In May 2006, the market for long-term bonds grew stronger and, as events indicated, it was able to adjust itself without any government intervention. Again, in August 2007, during the US financial crisis, some non-resident investors exited their positions in Brazil’s public bonds, but the Treasury did not have to enter the market as it had done the year before. Due to the opportunity that had been opened, institutional investors - especially pension funds - took advantage of the attractive prices, not only of public bonds, but also of stocks, and entered the market buying both. Hence, the short-term effects of the initial crisis upon the Brazilian market as a whole were significantly softened.

### 3.5 Brazil reaches out to non-resident investors<sup>37</sup>

In 2004, under the agreement established between the Central Bank and the Treasury, efforts started to be made to incentive investors to buy external debt securities. Initially, reports about the results of issuances in the international market were released. Later, these reports were complemented by studies and presentations that analyzed points commented by rating agencies.

In 2005, with the Treasury fully responsible for managing the external federal debt, work with non-resident investors intensified: for example, activities attached to issuances in international capital markets, such as due diligence, were incorporated in the Unit of Research and Scenarios (Gepec), while Gerin was responsible for announcing the issuance results. Closer contact with foreign investments banks was also established to gain access to a broader investor base.

As early as 2005, given the partnership with foreign investment banks, the Treasury held meetings in Europe, Asia and the United States, always focusing on the final investor. These events (a) expanded the public debt investor’s contacts; (b) confirmed Brazil as sovereign issuer abroad; (c) strengthened communication with this market; and (d) contributed to the success of external operations.

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<sup>37</sup> For more information on primary issuances of external debt bonds, see Part III, Chapter 4.

Later, with the aim of saving time and maintaining ongoing communications, the meetings focused on BEST<sup>38</sup> and used teleconferences to gain access to foreign investors. In 2007, a schedule for regular teleconferences was set and publicized - to ensure greater predictability for the market - although special events were held, when needed. It should be noted that the teleconferences are sponsored by investment banks, under a rotation system, with an average of 100 participants on-line.

Another example of Brazil's effort to gain proximity to non-resident investors involves its experience with the Asian market. After Treasury staff visited various countries in 2005 to publicize Brazil's role as an important sovereign issuer, an innovative measure was adopted: The timing between the opening and closing of Brazil's global bond issuances was adjusted so they would open at a time compatible with the start of operations in the Asian markets (Hong Kong), and end at the close of the American market (New York).<sup>39</sup> This first step was needed to familiarize investors with primary issuances of sovereign debt bonds. As the market responded positively, the practice was also adopted by other Latin American countries.

In April 2007, the Treasury adopted a green shoe strategy designed to improve access to the Asian market and protect both Brazil and investors from volatility during the operation: The Treasury issued bonds according to the opening and closing times of the North American market, reserving the right to reopen the operation automatically in the Asian market, with pre-established volumes and with the same conditions as the bonds sold in the American and European markets.

## 4 Trends and challenges

Brazil's capital market has developed considerably in recent years, despite the international financial crisis. For example, the stock market and the private fixed-income market performed extremely well until mid-2008, generating positive externalities for other markets. Public debt managers saw these advances as very beneficial - rather than as competition with government bond markets - since such externalities materialize through (a) the capital market's expansion, (b) retail investors' increasing understanding of financial markets and (c) incentives for more proactive management by institutional investors.

Given a context of great liquidity until the end of 2007, countries, particularly emerging ones, sought through public debt management to strengthen their investor base, improving the regulation and consistency of the institutional investors, non-resident and other segments. In Brazil, the Treasury has focused on these actions in recent years and the course will continue: A more developed capital market tends to attract a larger investor base, either by making the financial system less bank-centered or by reducing the concentration of asset management.

Despite the difficulty in attracting investors, given the unstable global financial markets (mainly after the demise of Lehman Brothers), the government bonds market is still developing. The following analysis focuses on the demand prospects of three main investor groups (banks, complementary pension funds and non-resident investors) so as to identify the strategic role each plays in helping the Treasury implement its long-term debt management guidelines.

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<sup>38</sup> BEST: Brazil Excellence in Securities Transactions.

<sup>39</sup> Previously, external issuances were opened and closed based on the schedules of the European and North American markets.

## 4.1 Banks in Brazil's new financial market

Given the important role of the bank-owned portfolios - commercial and investment banks alone hold almost one third of all DFPD - it is crucial to understand their expected impact on debt management in the next few years.

At the end of 2007, before the main effects of the global financial crisis had been felt, several institutions in the Brazilian market, including five of the 10 largest, were surveyed (for the purposes of this chapter) to determine their expectations for the future size, composition and maturity of the bank-owned portfolios.<sup>40</sup>

With regard to size, it was generally thought that portfolios would gradually shrink, as has been occurring, even after the worst of the crisis in the last quarter of 2008 had passed. This reduction is expected to continue despite the many functions of the bonds in the bank-owned portfolios: (a) to allocate reserves, (b) to control liquidity, (c) to deposit margins/guarantees/pledges in law suits, and (d) to reduce market risks. The first three generally slow the pace of the reduction. However, finding alternative ways to avert risk (in the derivatives market), against a background of low interest rates, higher economic growth and the possibility that banks will offer more credit to the private sector diminishes the attractiveness of government bonds and fosters a shift in the composition of bank-owned portfolios.

Structural factors also tend to reduce the banks' holdings (of public debt), such as bank mergers (in particular), and the entry of foreign investors or accelerated growth of other investors (investment funds) in the market. Moreover, recent monetary policy measures (adopted after September 2008) to reactivate the credit market, such as the series of reductions in reserve requirements, also contributed to keeping the size at historically low levels, even at the height of the crisis.

With regard to composition, the market's view is that after the most acute phase of the crisis and the cycle in which the SELIC rate was reduced, there is room for more fixed-rate bonds. Currently, more than three-fourths of these portfolios are in fixed-rate or floating-rate bonds. As investment instruments, the latter are no longer justified, either due to the long-term reduction in interest rates or the alternative of replacing these bonds with synthetic instruments (such as derivatives). Moreover, the Treasury's strategy of refinancing increasingly smaller proportions of these bonds at favorable periods can promote the purchase of other instruments, not only those with fixed rates, but also those that are linked to inflation. However, as liquidity management instruments, the demand for floating-rate bonds is still sustained, due to the high level of bank liabilities benchmarked to the CDI and with short maturities.

With regard to maturity, it was agreed that stability plays a crucial role in this process, primarily because it affects the agents' perception of risk, mainly for those that trade long-term bonds. Although the movement towards longer-term bonds is not as clear as the change in composition, the increasing liquidity and presence of new players in the market of inflation-linked instruments can make these bonds more attractive for banks, which would entail lengthening their portfolios. It is important to note that between 2007 and 2008, maturity of bank-owned portfolios lengthened, despite the deepening of the financial crisis.<sup>41</sup>

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<sup>40</sup> As agreed with those interviewed, the names of the institutions will not be mentioned in view of the strategic information provided. The author thanks them immensely for their contribution.

<sup>41</sup> At the end of 2007, more than 75% of the government bonds' portfolio of the banks (treasuries) was concentrated in bonds of up to three years; one year later, the percentage fell to about 65%.

## 4.2 Complementary pension funds

The main segment among institutional investors is that of complementary (or private) pension funds, because of their (a) more homogeneous investment objectives, (b) representativeness in the debt and (c) growth perspectives. In 2008, reserves of the complementary pension market (open and closed) reached R\$560 billion, while five years ago, they were just R\$200 billion - an increase of almost 200%. Even in the atypical year of 2008, there was a positive yield, mainly from the stock portfolio, ensuring a 2% growth of the segment's investment assets, as compared to 2007.

It may be unrealistic to expect the pension funds to maintain this course, since important structural changes that contributed to this growth have already been registered and current net cash flows are positive only in the open complementary pension fund segment. However, it is still difficult to measure the growth potential of the latter, both in corporate and individual plans. In recent years, it diverged from forecasts, which expected growth of around 10% a year as of 2003.<sup>42</sup> Instead, the open pension funds' investment portfolio almost tripled from 2003 until December 2008, from R\$48.5 billion to R\$141.9 billion, expanding its size by 11.5%, even in the difficult year of 2008. With such growth - an average of over R\$20 billion a year<sup>43</sup> - private pension funds will lead the segment of institutional investors in Brazil in the not-too-distant future.<sup>44</sup>

Some factors that caused the open pension funds to develop are: (a) the official social security system which cannot guarantee the purchasing power of higher income brackets, (b) the high number of self-employed workers in the labor market, (c) workers that are not served by closed pension funds and (d) the public's increasing financial sophistication.<sup>45</sup> Also, some companies are providing complementary pension funds to employees through open funds, thus avoiding the organization, control and management costs of the closed pension systems.

Another important attraction is the tax differential. If individuals seek long-term objectives for their investments, the regressive income tax table for the pension fund (with respect to the investment's maturity) makes it more advantageous than a regular investment fund. In addition, individuals may deduct the amount they contributed to pensions in their tax returns. Since the earnings of the two products (pensions and investment funds) are not significantly different, it is more advantageous to invest in pension funds, even if the objective is not ultimately related to pensions.

With regard to the open pension funds' investments, according to a survey,<sup>46</sup> those without stock investments<sup>47</sup> accounted for 76.62% of the market in 2007, while 23.4% of were in mixed funds (fixed-income plus stocks). In terms of assets, in 2008, Fenaprevi reported that 90% of investments were in fixed income securities.<sup>48</sup>

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<sup>42</sup> See <http://www2.camara.gov.br/comissoes/temporarias/especial/refprev/pronunciamentos/anapp.pdf>

<sup>43</sup> According to the National Federation of Private Pension Funds and Life Insurance (Fenaprevi).

<sup>44</sup> With respect to Brazil's concentrated financial market, it should be noted that, according to Fenaprevi, in December 2008, the biggest open pension funds in terms of portfolios were: Bradesco Vida e Previdência (37.58%), Itaú Vida e Previdência (17.20%), Brasilprev (13.83%), Unibanco Vida e Previdência (6.52%), Caixa Vida e Previdência (5.12%), Real Tokio Marine (4.24%), Santander Segs (3.66%), HSBC Vida e Previdência (3.09%), Sul America Seg. Prev. (2.03%), Icatu Hartford Seguros (1.81%). Thus, of the 10 largest institutions in the segment, eight are linked to the 10 largest conglomerates in the financial system.

<sup>45</sup> Attention should be drawn to research conducted with young Brazilians by Quorum Brasil - Informação e Estratégia ([www.quorumbrasil.com/sondagens/2007\\_08\\_Os\\_Jovens\\_e\\_os\\_Investimentos.pdf](http://www.quorumbrasil.com/sondagens/2007_08_Os_Jovens_e_os_Investimentos.pdf)) - that shows there is rising concern in the country with long-term investments, also in terms of pensions. Another study by the same institution indicates the concern of rent levels B and C with private pensions.

([http://www.quorumbrasil.com/sondagens/2007\\_02\\_As\\_Classes\\_Sociais\\_e\\_os\\_Investimentos.pdf](http://www.quorumbrasil.com/sondagens/2007_02_As_Classes_Sociais_e_os_Investimentos.pdf)).

<sup>46</sup> See <https://www.netquant.com.br/content/view/120/66/>

<sup>47</sup> Including multimarket funds, with no stock investments, and fixed-income funds.

<sup>48</sup> See <http://www.luterprev.com.br/noticia-detalle.php?NoticialD=62>

In 2007, a very positive year for stock investments, new contributions to these funds represented R\$13.77 billion, of which 88.7% were for mixed funds and 11.3% for those investing only in fixed-income bonds; in 2006, the figures were 14.5% and 85.5%, respectively.

However, it will take time for this significant change to be reflected in the demand for public bonds, which are still the open pension funds' main assets. The legislation limits the amounts - 15%, 30% and 50% - that the various mixed open pension funds may invest in stocks. However, in 2007, the funds invested less than they were permitted. For example, those that could invest up to 50% allocated an average of 25.6%, those with the 30% limit allocated 18.5%, and those with a ceiling of 15% allocated about 9%. However, in a different scenario, where the stock investments are not as attractive as in 2007, the growth of this group of assets in the open pension funds' portfolios should be slow, making room for government bonds.

The challenge for the open pension funds is how to match investors' savings goals with those of the pension fund managers in a more effective way, since they currently are not the same, even in the portfolio for benefits currently granted. Rather, competition is a key factor for this divergence, mainly in plans that do not invest in stocks. In particular, when the CDI is used as the benchmark, asset managers tend to change the focus from the long to the short-term to ensure greater adherence to the benchmark and avoid being less competitive: Long-term investments would cause greater volatility of returns in the short-term and investors lacking a full understanding about the long-term objective of the pension fund might shift their resources to a different fund if their current ones are performing below the benchmark. This fact does not occur with closed complementary pension funds, because (a) shifts to other closed pension funds are not allowed and (b) shifts to open pension funds would result in investors losing the employers' contribution.

Still, on a positive note, there is a long-run trend for investors to choose mixed plans, by choosing them when they begin contributing or switching resources from one fund to another. If this trend continues, despite the reversal during the global financial crisis, investors will no longer use the CDI benchmark, due to the dominance of mixed funds. Thus, as these funds grow, more resources will be allocated to stocks and longer-term bonds that are more in keeping with pension fund objectives and higher long-term returns. This will help (a) the Brazilian financial market to develop further and (b) the Treasury to achieve its goals of lengthening the maturities and improving the public debt profile.

#### 4.2.1 Closed pension funds and the public debt

Closed private pension fund entities (EFPC), also known as closed complementary pension funds, are an important sector for public debt management. Although their total assets doubled between December 2002 and December 2006, reaching R\$417.5 billion in 2008, the balance between contributions and benefits has been negative since 2004. Moreover, in 2008, because of investments in stocks, the sector's assets dropped by 3.3%.

As noted in Graph 11, the stagnation or drop in the number of individuals investing in closed pension funds shifted in 2006, largely when funds organized by professional associations - *fundos instituídos* - were created.<sup>49</sup> However, it is uncertain that the recent growth in the number of participants will be enough to change the negative balance between contributions and benefits, especially due to the new type of closed pension fund; this is caused by the existing plans' maturities and the fact that companies may offer their employees the alternative of open pension fund plans.

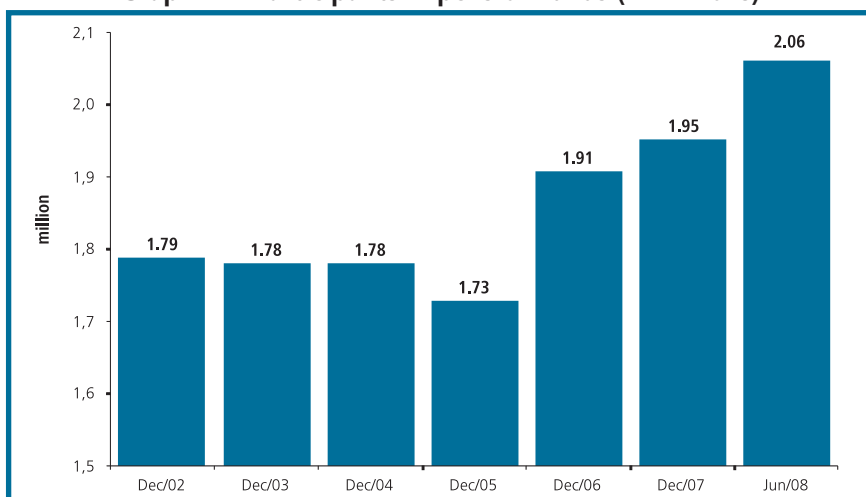
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<sup>49</sup> This is a type of closed pension fund created by professional associations such as unions and councils.

However, if complementary pension funds were created for Federal civil servants, and enlarge the number already developed for state and municipal employees, this could end the stagnation and downward trend. For this to occur, the rules of the constitutional amendment that address the subject must be specified; to this end, the National Congress needs to approve the proposed law to create a pension fund for civil servants. Since a shift from the civil servants' current pension regime to complementary pension funds will not be encouraged, due to the cash problems it would create for the Federal government, the growth of this new fund should occur gradually, when new employees enter the public service.

Since the EFPC's net receipts (contributions less benefits) are not likely to grow significantly in the short term, {the role of these entities in the public debt will be observed by movements in their current portfolio, which already has a high proportion of public bonds. Given the poor performance of the stock market in the second half of 2008, it is estimated that the percentage of public bonds in the EFPCs' total assets (self-managed portfolios plus investment funds), which was already high (43% in 2006), reached 50%. This number would be even higher if the largest pension fund (Pension Fund of Bank of Brazil Employees - Previ) - whose investments in stocks are greater than the average and above the limits set by regulations, was removed from the calculation. Then, fixed-income bonds would increase from about 65% of the closed pension funds' portfolios in November 2008 to 76.8%, while the share of stocks would drop from 27% to 15.7%.<sup>50</sup>

**Graph 11. Participants in pension funds (in millions)**



Source: CVM and Central Bank of Brazil; elaboration: National Treasury Department

Moreover, in mid-2007, a period of historically low interest rates, pension funds had to buy government bonds that no longer guaranteed their actuarial target return, (which was about 6%, indexed for inflation). This caused them to re-think their strategies and look for investments that provided higher yields (and risk exposure) than public debt securities.<sup>51</sup> As a result, it is expected that pension funds will not contribute much to the Treasury's strategy of changing the public debt profile. In fact, EFPCs' asset reallocations before the crisis deepened in September 2008 mainly reflected their intention to search for new investment opportunities in

<sup>50</sup> The Previ's stock investments, which account for over 50% of its total portfolio, are due to the company's strong participation in the Brazilian privatization process in the late 1990s. Previ is already following an adjustment plan so that by 2012 it will comply with laws that set a limit of 50% in stocks.

<sup>51</sup> Nunes e Simão, 2007.

other kinds of assets.<sup>52</sup> Given the SELIC's cycle of reduction that began in 2009 to boost the economy after the crisis, yields on public bonds may fall again below the pension funds' actuarial targets. Also, these funds are not expected to lengthen the maturity of their portfolios, because the pension fund segment is paying more benefits than receiving contributions. Thus, pension funds will focus more on developing the secondary market, disseminating new benchmarks for the management of fixed-income bonds (IMA) and promoting a culture of long-term savings, than to refinancing the public debt.

**Table 3. Largest EFPC in total assets (R\$ billion) December 2008**

EFPC	Main sponsor	Total assets	% of total
Previ	Banco do Brasil	116.72	26.4%
Petros	Petrobras	45.20	10.2%
Funcef	Caixa Econômica Federal (CEF)	32.52	7.3%
Fundação CESP	Eletropaulo/CESP/CPFL/CTEEP	20.09	4.5%
Valia	Vale	9.89	2.2%
Sistel	Telebras and other telecom comp.	9.35	2.1%
Itaubanco	Itau Bank	9.27	2.1%
Banesprev	Banespa	9.18	2.1%
Forluz	CEMIG	8.20	1.9%
Centrus	Central Bank of Brazil	7.40	1.7%
Subtotal	Subtotal	267.81	60.5%
<b>Total</b>	<b>Total</b>	<b>442.87</b>	

Source: Complementary Pension Secretariat /Ministry of Social Security

### 4.3 Non-resident investors

Foreign investors have been active in Brazil's financial market since the 1990s. As the economy opened more rapidly in the middle of the decade, the volume of their resources in the country's capital market increased - almost entirely invested in the stock market, whose growth accelerated due to the privatization process. However, the currency crisis, which peaked in January 1999, temporarily halted their entry, and their stock portfolio, which was nearly US\$50 billion in July 1997, dropped to less than US\$10 billion by February 2003, also due to the depreciation of the real.

The second period in which non-resident investors became more prominent was after Brazil's 2002 elections, although the situation differed somewhat from the previous phenomenon: Instead of concentrating their investments in equities, they bought fixed-income securities, since this market was a little more developed. Also, the government had made significant changes in the public bonds market in 2006 which, as mentioned earlier, exempted foreign investors from income tax.

In addition to these measures, institutional advances and a well-structured economic policy in a highly favorable international scenario considerably improved Brazil's risk rating: From 2003 until June 2007, Brazil rose three to four notches in the rating of the three main agencies (Standard & Poor's, Moody's and Fitch),

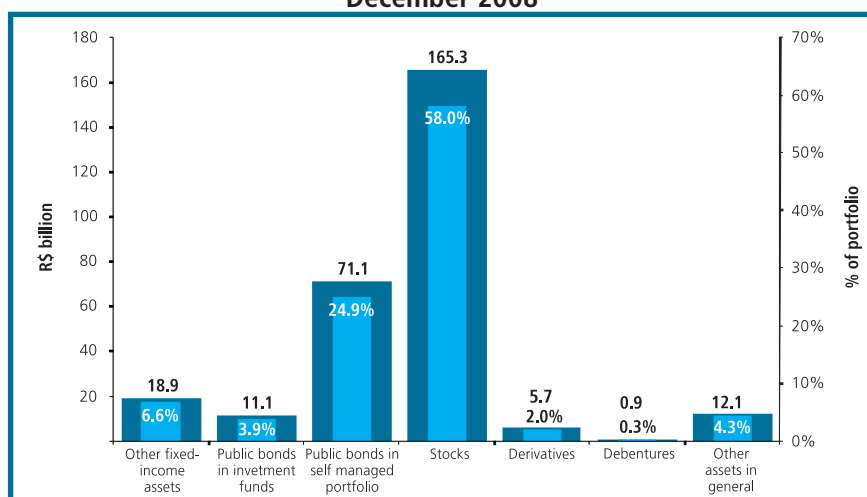
<sup>52</sup> The Towers Perrin study indicates a reduction of three percentage points in the participation of the fixed income portfolios in total pension fund investments between 2005 and 2006 and a rise of eight percentage points of investments in credit instruments (CDB, FDIC, CRI and others), between 2006 and 2007.

and reached investment grade by Standard & Poor's in April 2008 and by Fitch in May. This was an important indication of the economy's soundness, especially at a time when the American financial crisis was evolving (since mid-2007).<sup>53</sup>

Non-residents' public bond portfolios only grew more significantly after 2006, when they received the same tax treatment as that afforded stock investments. However, there is still growth potential for their participation, mainly because the country's gains in the public bonds market (due to the investment grade), were not fully achieved due to the international crisis. Also, the exchange rate depreciation and exit of investments in stocks resulting from the crisis help explain the substantial change in the portfolio composition of non-residents from mid-2007 to the end of 2008.<sup>54</sup>

Regardless of the current global financial crisis, non-residents' investments in Brazil's long-term domestic

**Graph 12. Portfolio composition of non-resident investor's assets in December 2008**



Source: Securities Commission and Central Bank

debt bonds will be influenced by the recent path of the sovereign external debt. From 2005 through 2008, the External Federal Public Debt (EFPD) dropped nominally from R\$157.4 billion to R\$132.5 billion, even with the depreciation of the real. Based on the country's reduced vulnerability and the impact of this fact on its risk rating, the lowering of the EFPD will bring added benefits, linked to a National Treasury objective, which is to increase foreign investors' participation in domestic debt bonds.

Brazil's position on the international scene, with its public sector being a net external creditor at the height of the global crisis, demonstrated the greater resilience that has been built against shocks. This bodes well for the presence of foreign investors in the domestic financial market of public bonds, once the global economy begins to normalize. These investors began to participate more widely just two months after the crisis reached its peak in 2008.

<sup>53</sup> Since May 2007, Standard & Poor's considered the long-term sovereign debt in local currency to be investment grade. For the other two agencies (Moody's and Fitch), the rating for local currency investments was the same as for those in foreign currencies. For more information, see the box in Section 1.2.1, Part I, Chapter 1.

<sup>54</sup> In June 2007, the percentage of non-residents' portfolios invested in stocks was over 76%, while it did not reach even 20% in public bonds; by the end of 2008, these percentages changed to 58% and 28.8%, respectively.

Before September 2008, it was estimated that fewer than 15% of non-resident investors in the DFPD were pension funds, and 70% were asset managers and mutual fund managers. The remaining 15% were hedge funds, banks and other institutions. Given the strengthening of Brazil's external economic and financial position and the removal of some impediments to investments,<sup>55</sup> it would appear that non-resident investors' participation in the DFPD will rise well above the 7.4% that was reached on the eve of the Lehman Brothers collapse.

Also, since Brazil's interest rates reached historically low levels, it is expected that the composition of foreign investors will change, with increased participation of pension funds and reduced activity by hedge funds. Then, non-resident investors will most likely invest in the bonds in which they have already shown the most interest - fixed-rate and inflation-linked, both with longer terms - which are consistent with the long-term strategy of Brazil's Federal Public Debt management.

By removing some of the impediments that remain, the market should gain liquidity with the entry of new investors, generating, in a longer timeframe, a cycle that will attract new foreign resources, which, again, will help the Treasury achieve its goals.

## 5 Conclusions

Brazil has experienced continuous development and its financial system has become sophisticated, which favors a more heterogeneous investor base. Thus, the gains described at the beginning of this chapter should continue to materialize along with the overall advances: Risks will be more dispersed and financing for the government in different scenarios will be more secure. In this environment, there will be more competition among asset managers and less discrepancy between the objectives of investors and asset managers.

Debt management has already benefited from these ongoing improvements. Given (a) Brazil's sound financial market (even during the global crisis), (b) the prospects of continuity of the economic policy and reforms that will ensure the country's economic foundations and sustained growth, along with (c) the improved risk climate, the private sector should also register gains. In this scenario, public sector funding conditions in general and public debt refinancing in particular, will improve considerably.

The trends described in Section 4 offer an optimistic scenario. Improvements in the public debt profile should emerge from (a) reducing the participation of bank-owned portfolios (with their increased volumes of fixed-rate securities), (b) greater participation of investment funds, (c) the TD program, (d) open complementary pension funds and (e) foreign investors, all of which occurred despite profound uncertainties in world markets. At the same time, maturities should lengthen on all sides, since pension funds and foreign investors naturally demand longer-term bonds, and even bank-owned portfolios may take this path, although at a smaller scale. Thus, lengthening and improving the profile, which is already being achieved, must continue, and the search for a long-term debt structure will occur under more favorable conditions.

In this context, public debt is no longer the focus of discussions about the development of the Brazilian capital market, and its structural improvements stimulate a positive cycle: By reducing the crowding-out caused by public debt refinancing, savings can be used to fund private projects that will ensure even more sustainable economic growth.

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<sup>55</sup> One example is the expansion of the investor base that occurred when Brazil's risk evaluation rose. Other impediments could be removed or minimized over the next few years, such as standardization of the counting of days, international clearing, currency exchange contracts and negotiation screens.

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## Annex 1. Statistical information

Most of the statistics on the holders of Brazil's DFPD bonds are from Annex 5.1 of the Monthly Report on the Federal Public Debt (RMD). The data are gathered from the registers in the Central Bank's Special Liquidation and Custody System (SELIC), which is the central depository of public debt bonds - accounting for about 97% of the total domestic debt. The data were presented in the chapter's first graph.

Information on the Treasury Direct (TD) program in Section 2.3, was drawn from the Brazilian Settlement and Custody Company (CBLC), the Treasury's partner in the program that serves as the custodian for the bonds issued through the TD and accounts for 0.1% of domestic debt. The CBLC has a specific account in the SELIC; thus, TD stock is captured by the statistics supplied by the Central Bank.

Other data were taken from Table 5.1 of the RMD, whose source is also the SELIC. With regard to the breakdown of the investment funds presented in that table, the result is an effort by the Securities and Exchange Commission (CVM) and the Central Bank: the CVM provides the composition of investors of each investment fund to the Central Bank, which splits their portfolios of each fund by the relative proportion of each type of investors, according to the SELIC registers.