## The Trajectory of the PSND/GDP Ratio

The Bill amending the Budget Guidelines Law (LDO), 2009, sent to Congress in May, and the Decree no. 6,867, published in the same month, is about monetary and financial programming of the Federal Executive, introducing major changes in the country's fiscal accounts.

In this sense, the companies forming the Petrobras Group[1] are no longer to be considered in the context of fiscal statistics and the target for public sector primary surplus in 2009, evidencing that fact and also the impact of the international crisis on the level of activity and consequently on the level of was reduced from 3.8% of Gross Domestic Product (GDP) to 2.5% of GDP. It should be noted that this reduction considered the purpose of maintaining, over the medium term, the downward trend of the ratio Public Sector Net Debt (PSND)/GDP, an outlook strengthened both by the impact of the current process of monetary easing, and by the establishment of primary surplus target for 2010 at 3.3%.

The aim of this box is to examine the impact of such changes in a scenario of monetary easing and changing market expectations regarding the evolution of exchange rates and of price indices, on the dynamics of PSND/GDP IN 2009 and in the subsequent year. The projections made for the biennium consider as parameters[2] the medians of market expectations disclosed in the Central Bank Focus Bulletin.

1/ The exclusion of Petrobras of fiscal statistics is consistent with its specific characteristics, considering that, in the case of one of the ten largest oil companies in the world, it follows corporate governance rules similar to those experienced by private companies, having the autonomy to raise funds in domestic and foreign markets. By not being part of the fiscal indicators, the company ensures greater autonomy in managing its investment projects, which are fundamental to the development of the country.

2/ See Table1.

**Table 1 – Parameters for the projection of the PSND/GDP ratio[1/]**

| | 2008 | 2009 | 2010 |
|---|---|---|---|
| GDP (% annual growth rate) | 5.10 | -0.57 | 3.50 |
| IGP-DI (% ) | 9.11 | 1.53 | 4.50 |
| IPCA (%) | 5.90 | 4.40 | 4.30 |
| Average Selic rate (%) | 12.48 | 9.84 | 9.13 |
| Exchange rate (R$/US$) – End-of-period | 2.34 | 2.00 | 2.00 |
| Primary surplus (% GDP) | 3.68 | 2.50 | 3.30 |

1/ Parameters released by the Boletim Focus of 5.19.2009, except the primary surplus.

**Figure 1 – Public sector net debt**

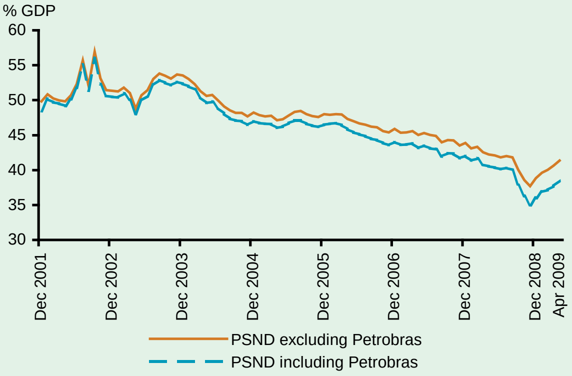
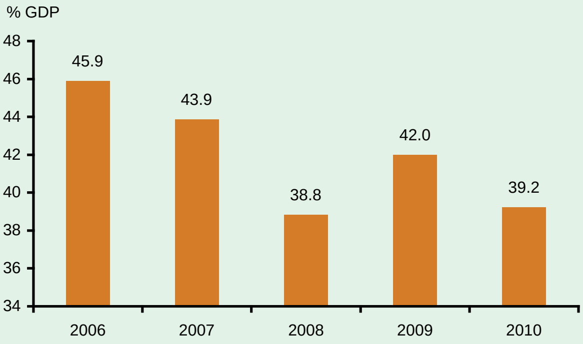
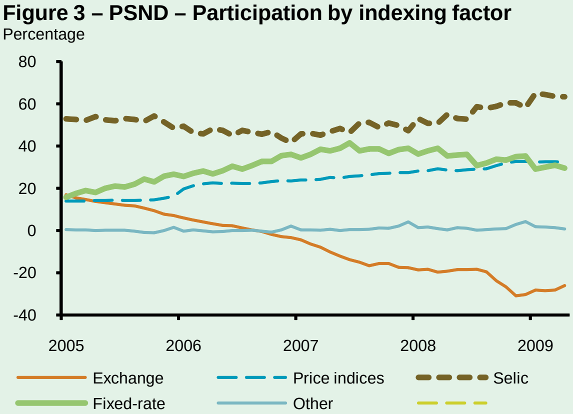



**Figure 2 – PSND – Effective and projected data[1/]**




1/ Effective data up to 2008 and projected data for 2009 and 2010.

**Figure 3 – PSND – Participation by indexing factor**




The trajectory of the ratio between PSND and the GDP, with and without the exclusion of Petrobras,[3] is expressed in Figure 1, which shows the downward movement recorded in the two concepts, between late 2003 and 2008, when the indicators began to reflect, in particular, the impact exerted by the international crisis on the evolution of the exchange rate and of the consolidated primary result of the public sector. It is worth mentioning that the level of such ratios is closely matching the period considered, and that their difference reflects the net creditor balance recorded by Petrobras in the period.

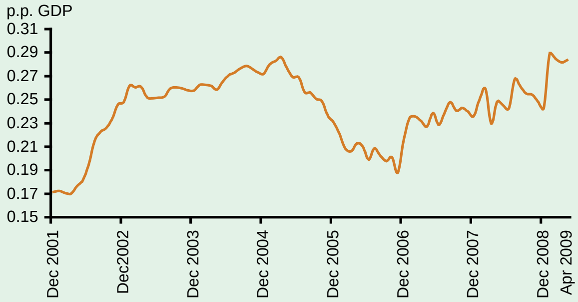
Considering the reprogramming of fiscal targets and the parameters defined in Table 1, the projection of the ratio PSND/GDP in the 2009-2010 period recorded an increase of 3.2 p.p. in the first year, expressed in percentage of 42% reached in December. It should be noted that, although it turns in an increase on an annual basis, the ratio is expected to be in December at a level similar to that observed in April 2009. The representativeness of the net indebtedness to GDP is expected to resume, in 2010, the downward trend recorded in recent years, reaching 39.2% in December, as recorded in Figure 2.

The projection of the ratio PSND/GDP translates, beyond the targets set for the primary result, its sensitivity to interest rates and exchange rates, and to the pace of GDP growth.

The effect of monetary easing on the evolution of the indicator PSND/GDP is primarily associated to the debt composition, recording directly relationship with the participation of securities indexed to the Selic rate in its total. It should be noted that by highlighting the confidence of investors in the country's macroeconomic fundamentals and the policy of the government aiming at separating the national debt from the foreign exchange movements, the share of PSND indexed to the Special System of Clearance and Custody (Selic) has been reporting an increase in recent years, from 41.7% in December 2006 to 63.3% in April 2009, as seen in Figure 3.

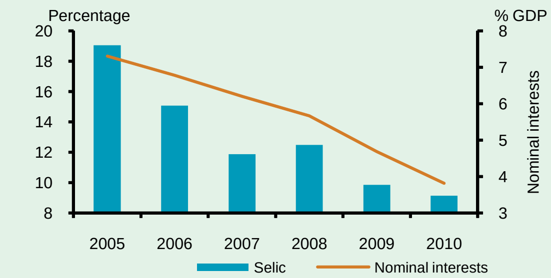
3/ The exclusion of Petrobras from fiscal statistics began to be performed from May 2009. The new primary surplus target for the year considers the new concept.

**Figure 4 – Sensitiveness of the PSND/GDP ratio to the Selic rate[1/]**



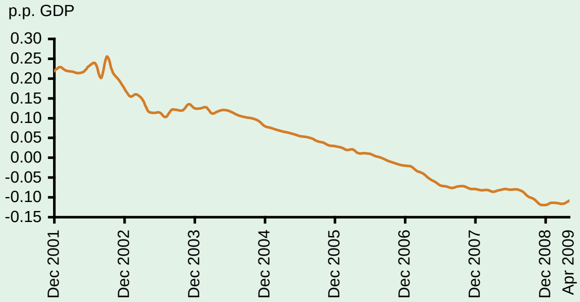

1/ 12-month PSND/GDP ratio change in response to a a positive 1 p.p. change in the Selic rate.

**Figure 5 – Appropriated nominal interests and Selic rate[1/]**
12-month accumulated




1/ Projected values for 2009 and 2010.

**Figure 6 – Sensitiveness of the PSND/GDP ratio to the exchange rate[1/]**




1/ 12-month PSND/GDP ratio change in response to a 1% devaluation of the exchange rate (R$/US$).

In this context, a change of 1 p.p. in the Selic rate, considering the possibility of maintaining it in the subsequent twelve months, now provides, in April 2009, a movement, in the same direction, of 0.28 p.p. in PSND/GDP. This means an impact of 0.06 p.p. higher than in the recorded in December 2006 (Figure 4).

One should note, however, that given the existence of significant portion of PSND tied to the price index, 32.3% in April 2009, the total impact of monetary policy on its dynamics is complex. This is because after periods of monetary contraction (expansion), inflation tends to fall (rise), reducing (increasing) the nominal interest incorporated to the debt.

In this scenario, appropriation of 12-month cumulative nominal interests, which also reflects the process of raising interest rates observed in the first three quarters of 2008, considered the market expectation for the Selic rate, will begin to register a declining trend during 2009 and 2010, reaching, in this order, 4.7% of GDP – the lowest percentage since 1997 – and 3.8% of GDP, compared to 5.7% of GDP in 2008, as shown in Figure 5.

The susceptibleness of PSND to the fluctuations in the exchange rate reflects, just as occurred in relation to interest rate, changes experienced by the composition of net indebtedness, which had, by mid-2006, a share linked to the exchange with net debtor balance. Thus, a 1% depreciation in the exchange rate (R$/US$), which, at the end of 2004 determined an increase of 0.08 percentage points in PSND/GDP ratio has come to mean a reduction of 0.11 p.p. in the mentioned indicator (Figure 6). The market scenario projects that the real is expected to record an appreciation of 14.4% in 2009, a movement responsible for variation of 1.4 p.p. in the ratio PSND/GDP and for providing stability in 2010, thus exerting no impact on the indicator. In 2008, depreciation amounted to 32%, accounting for a decrease of 2.6 p.p. of GDP in net indebtedness.

The change in GDP valued by the General Price Index (IGP-DI) Centered should exert a negative contribution to the evolution of PSND/GDP in 2009, 1 p.p., and in 2010, 3.2 p.p., compared to -3.5 p.p. in 2008. The projections reflect, indeed, the impact

**Table 2 – Net debt growth**[1/]
Conditioning factors

| | 2008 | 2009 | 2010 |
|---|---|---|---|
| | | | % GDP |
| PSND – Balance | 38.8 | 42.0 | 39.2 |
| PSND – % change | -5.0 | 3.2 | -2.8 |
| Factors (accumulated flows in the year): | -1.6 | 4.2 | 0.4 |
| PSBR | 1.9 | 2.2 | 0.5 |
| Primary | -3.6 | -2.5 | -3.2 |
| Nominal interests | 5.5 | 4.6 | 3.7 |
| Exchange rate adjustment | -2.6 | 1.4 | 0.0 |
| Domestic exchange securities debt[2/] | 0.1 | -0.1 | 0.0 |
| Foreign debt – Methodological adjustment | -2.7 | 1.5 | 0.0 |
| Other adjustments | -0.9 | 0.6 | 0.0 |
| Foreign debt[3/] | -0.9 | 0.4 | 0.0 |
| Acknowledgment of debts | 0.0 | 0.2 | 0.0 |
| Privatizations | -0.0 | -0.0 | 0.0 |
| Effect GDP growth – Debt | -3.5 | -1.0 | -3.2 |

1/ In 2009 and 2010, projected data.
2/ Domestic dollar-indexed securites debt.
3/ Parity of the basket of currencies that compose of the foreign net debt.

related to estimates for real growth of the product and of the IGP-DI.

In summary, the projection on the growth of the ratio PSND/GDP in 2009 incorporates the most pronounced effect of reducing the primary surplus target and of the impacts of currency appreciation estimated for the year and of the lower contribution associated with the valued GDP growth in comparison to that provided by the reduction in nominal interest appropriation. The falloff forecasted projected for the 2010 ratio, returning to a level lower than the one recorded prior to the crisis, reflects the atmosphere of recovery in the rate of growth of the product and increase of the primary surplus. The individual contributions of determinants of the evolution of PSND/GDP ratio in the two-year period are shown in Table 2.

It is worth mentioning, therefore, that the projection for the PSND/GDP ratio, essentially based on market parameters, by ensuring the continued reduction of public indebtedness over the medium-term, shows the benign nature of the fiscal measures adopted by the government in order to strengthen relevant sectors to the recovery of the level of internal activity, provided that they are temporary, as the authorities in charge have indicated.