Santander

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Brazil – Public Sector Debt

The Walking Dead? (Part IV): Debt and Exchange Rate

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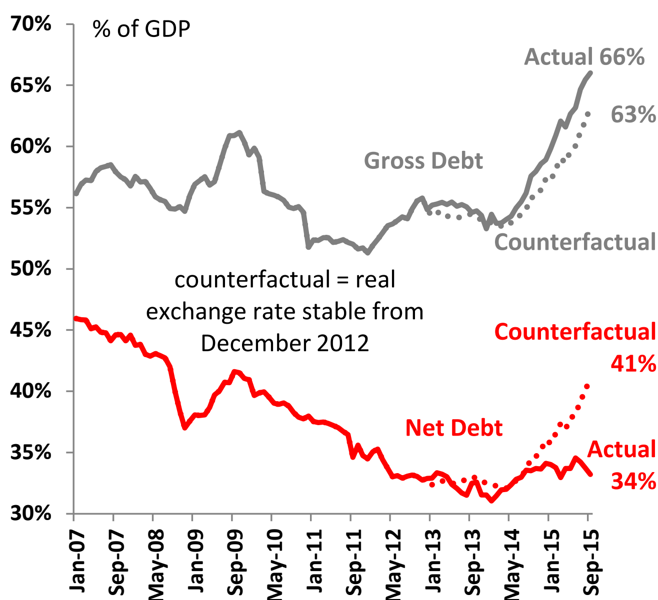
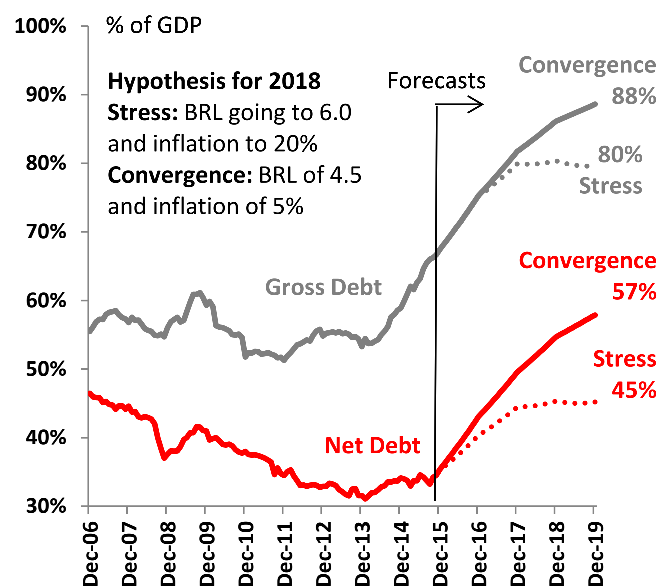
- **Although recent real depreciation of the BRL has been favorable in assuring the stability of net debt at around 34% of GDP for the last three years, it has concealed significant deterioration of the fiscal accounts, which we believe will tend to have a major effect on future dynamics.**
- **According to our simulations, if the BRL had evolved in-line with inflation since 2012, the gross debt to GDP ratio would be currently around 63%, instead of the latest (Oct/15) 66.1%, while net debt would probably have reached 41% of GDP, instead of the latest 34.2% of GDP.**
- **Assuming the current outstanding public sector position in terms of net foreign currency assets (which is substantially lower than three years ago), we estimate that a 10% real depreciation of the exchange rate increases gross debt by 1.1 p.p. and reduces net debt by 1.3 p.p.**
- **In this piece, we claim that the exchange rate and inflation surprises provide a substantial cushion to prevent a much steeper deterioration of debt dynamics in the case of more stressed scenarios in terms of asset prices (compared with the scenario we assumed in *The Walking Dead? (Part II): How Far Will Public Sector Debt Go?*, December 2, 2015).**
- **According to our simulations, a scenario of uncontrolled exchange rate depreciation and inflation could nudge net debt toward stabilization, instead of the increase embedded in our base case scenario.**

Gross and Net Public Sector Debt to GDP Actual and Counterfactual (assuming BRL evolving according to inflation from Dec/12)



Source: Santander estimates based on BCB data.

Simulated Gross and Net Debt Dynamics in a Convergence vs. a Stress Scenario



Source: Santander estimates based on BCB data.

We believe a scenario of continuing depreciation of the exchange rate and increasing inflation is inconsistent with additional increases in the net and gross debt to GDP ratios.

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Introduction

In our report *The Walking Dead? (Part I): Useful Alternative Fiscal Indicators and Debt Tutorial* (November 25, 2015), we developed a framework for analyzing public sector debt to GDP dynamics. We also estimated the implied cost of net debt and a measure for the operational deficit adjusted by swaps in order to exclude inflation and the cost of swap operations from the usual nominal measures.

Following that report, in *The Walking Dead? (Part II): How High Will Public Sector Debt Go?* (December 2, 2015), we focused on applying our model to come up with a scenario for both net and gross debt.

Most recently, we released *The Walking Dead (Part III): The Equilibrium Primary Surplus* (December 4, 2015) with our estimates for the primary surplus required to stabilize debt to GDP ratios. We concluded it may be around 3.3% for gross debt and 5.1% for net debt.

In this report, we draw some conclusions related to the role played by the exchange rate in recent and future debt dynamics.

The Weaker the BRL, the Better for the Public Sector Balance Sheet

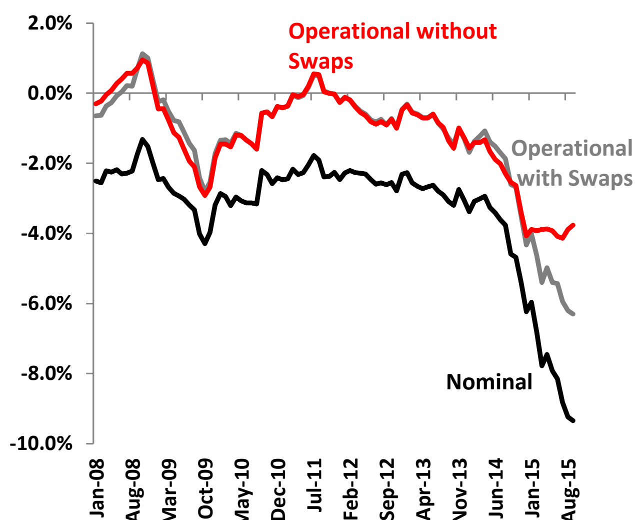
Considering that the Brazilian public sector is a net creditor of foreign-denominated instruments, a depreciation of the currency is favorable for fiscal accounts. Nevertheless, the focus on gross debt and nominal deficit in the context of a sharp BRL correction tends to shroud this circumstance. In *The Walking Dead? (Part I),* we focused on the importance of the operational deficit (ex-swaps) as being, in our view, a more straightforward indicator of public sector budget conditions in terms of its impact on debt (chart on the left-hand side, below).

However, we believe it is important not to overemphasize recent years' stability of net debt as a mitigating factor in the current serious fiscal situation. **The chart on the right-hand side below shows both the actual trajectories and what we believe would have been the level of gross and public sector debt if the BRL had remained stable in real terms (FX depreciation = inflation) since December 2012. Although gross debt would probably be slightly lower than recent readings, net debt would have been substantially higher, according to our estimates.**

The charts show that the favorable impact of the recent exchange rate performance on net debt has been much greater than its negative impact on gross debt. In this sense, we think it is fair to say that the substantial currency correction of recent years has hidden the impact of a significant fiscal deterioration on the government's balance sheet.

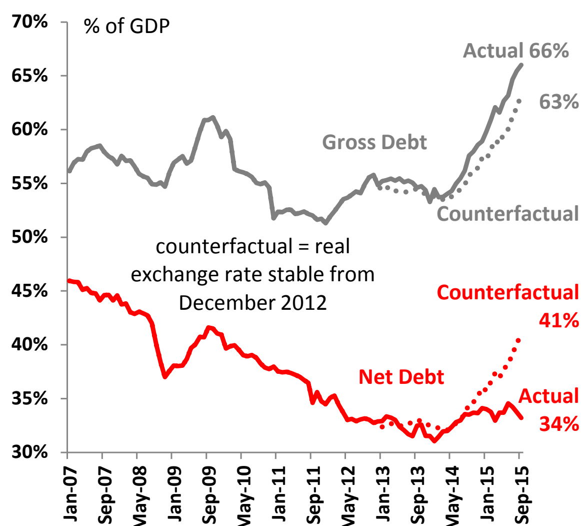
Therefore, as the currency stabilizes in real terms, net debt will probably begin to rise much faster than gross debt, according to our estimates.

Nominal and Operational Deficit (% of GDP)



Source: Santander estimates based on BCB data.

Gross and Net Public Sector Debt to GDP Actual and Counterfactual (assuming BRL evolving according to inflation from Dec/12)

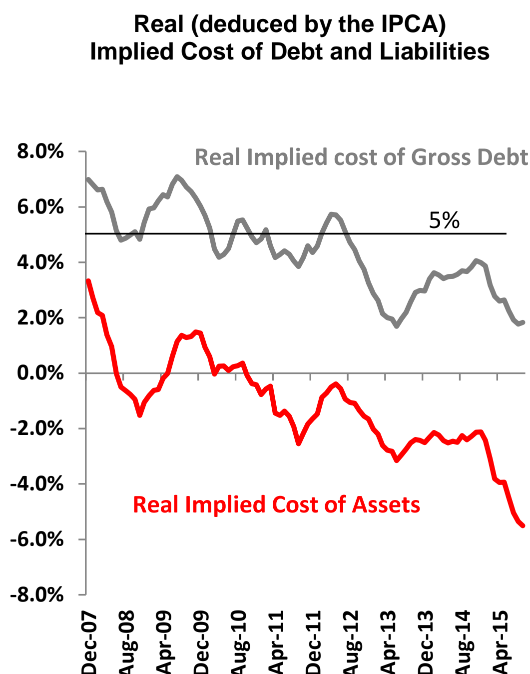


Source: Santander estimates based on BCB data.

What about Dynamics?

Although net debt has remained virtually stable since the end of 2012, the equilibrium primary surplus is probably much higher today even if we assume unchanged borrowing costs for the public sector. This is because since 2012, assets and liabilities have increased roughly by the same amount (approximately 10 p.p. of GDP on each side of the balance sheet). But while implied costs of liabilities are not far from the Selic rate, the income from reserves in the context of a stable currency is substantially lower, not far from Treasury yields. Therefore, the implied cost of net debt is much higher today than it was three years ago.

Real (deduced by the IPCA)
Implied Cost of Debt and Liabilities



Source: Santander estimates based on BCB data.

Simulation

Impact of Debt Composition on Equilibrium Primary Surplus Outstanding

	2012		2015	
	Outstanding	Yield	Outstanding	Yield
Total Gross Debt	**54.8%**	**4.6%**	**66.0%**	**4.4%**
in BRL (1)	52.1%	5.0%	61.4%	5.0%
in USD (2)	2.7%	-3.0%	4.6%	-3.0%
Total Assets	**21.9%**	**-3.6%**	**32.8%**	**-3.8%**
in BRL (3)	6.1%	0.0%	7.6%	0.0%
in USD (4)	15.9%	-5.0%	25.2%	-5.0%
Net Debt	**32.9%**	**10.1%**	**33.2%**	**12.6%**
Potential GDP Growth		**2.0%**		**2.0%**
Equilibrium Primary Surplus				
Gross		**1.4%**	→	**1.6%**
Net		**3.3%**		**4.2%**

"Ad hoc" hypothesis": (1) Recent historical average. (2) 10 years Treasury (2%) + Risk premium (200 bps) (-) Inflation (7%). (3) TJLP (8%) – Inflation (7%). (4) TJLP (7%) – Inflation (7%). (4) 10 years Treasury (2%) (-) Inflation (7%).

Source: Santander estimates based on BCB data.

Our simulation suggests that the primary surplus compatible with stable gross debt would have risen by 0.2 p.p. from 2012 to 2015, simply as a consequence of a different balance sheet composition. In the case of net debt, this measure would have increased by almost 1 p.p.

We think it is important to bear in mind that the exchange rate impact on Reserves should not be held responsible for this weaker balance sheet composition. The fiscal problem, in our view, has been mostly related to the public sector's running a primary surplus that is insufficient to stabilize debt. This has led to a substantial increase in gross debt, which, thus far, has been offset by an increase in the value of assets denominated in BRL. But, if and when the BRL stabilizes, net debt will start to increase by a much faster pace than that observed in the past, according to our estimates.

Financial Market Stress May Lead to Lower (not Higher) Debt

The purpose of this report has been mostly to call attention to the positive impact of the exchange rate on the public sector balance sheet, although we argue that the recent fiscal stance has caused substantial deterioration in the current position and future dynamics. We believe this analysis is important to assess the probability associated particularly with more stressed scenarios.

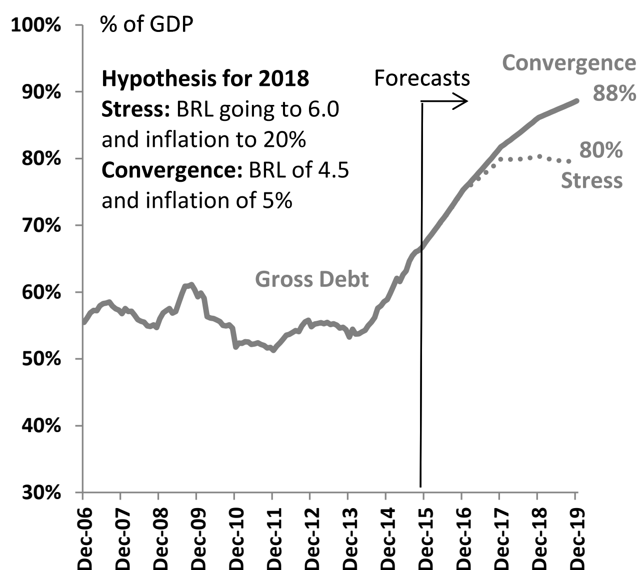
In practice, we claim that a scenario of continued depreciation in the exchange rate and higher inflation is probably inconsistent with substantial additional increases of net and gross debt to GDP. First, we see little room for further correction of the exchange rate in real terms (above inflation). If this proves to be the case, we believe there is a high probability of a convergence scenario in which inflation falls in the near future. Second, if the exchange rate and inflation deteriorate further in a feedback loop in the next couple of years, ex post real interest rates (and the cost of liabilities) will tend to fall further (see previous charts), contributing to contain a more adverse debt to GDP dynamics even without a more substantial adjustment of the primary surplus.

We illustrate the point by running two different scenarios:

Convergence: Inflation falls toward 7% in 2016, 6% in 2017, and 5% in 2018. Real interest rates of 7.5%. GDP growth going from -2% in 2016 to 0% in 2017 and 2% in 2018. BRL/USD at 4.10 next year and correcting at the same pace as inflation thereafter. Primary surplus increasing by 1 p.p. per year from -1% in 2016E.

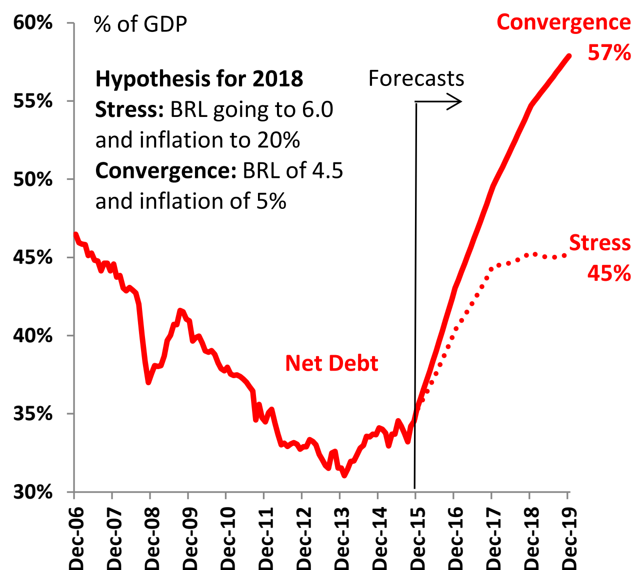
Stress: Inflation increases exponentially toward 20% in 2018. Nominal interest rates increase exponentially toward 22% in 2019 (therefore, ex post real rates approach 1.5%, as inflation tends to advance faster than policy rates). GDP growth going from -4% in 2016 to 0% in 2017 and 2018. BRL/USD increasing at the same pace as inflation (reaching BRL6.0/USD in 2018). Primary surplus going from -1% in 2016 to 0% in 2017, stabilizing at this level thereafter.

Simulated Gross Debt Dynamics in a Convergence vs. a Stress Scenario



Source: Santander estimates based on BCB data.

Simulated Net Debt Dynamics in a Convergence vs. a Stress Scenario



Source: Santander estimates based on BCB data.

Therefore, we consider a convergence scenario – one in which monetary policy remains tight, inflation falls, and risk premiums are higher (due to debt conditions) – as worse from the point of view of debt dynamics than one of more stressed financial market conditions.

In the latter, we project that debt growth slows or even stabilizes, at the price of much higher inflation.

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