

BRAZIL – Fiscal Policy**The Fiscal Maze (III): Insurgent**

Tatiana Pinheiro*

tatiana.pinheiro@santander.com.br

5511-3012-5179

Everton Gomes*

everton.gomes@santander.com.br

5511-3012-7677

- Our forecast for the primary result for 2015 is -1.1% of GDP and for 2016, -1.0% of GDP, based on our projections for two consecutive years of GDP contraction (-3% in 2015 and -2% in 2016, according to our baseline scenario).
- We see the main drivers of the gross debt as: (1) the economic cycle (recession this year and the next), which has the dual effect of constraining the primary surplus and removing the benefits of GDP growth from the debt dynamic; (2) the primary result; (3) the implicit interest on the total (the cost of debt, which depends on the monetary policy and currency variation); (4) the discrepancy between the growth of federal assets and their rate of return; (5) money supply growth; (6) the cost of derivatives (currency variation); and (7) asset adjustments.
- According to the assumptions in our baseline scenario, we forecast the gross government debt-to-GDP ratio growing to 67.7% in 2015, 74.5% in 2016, and 76.8% in 2017, then declining from 2018 onward.
- Assuming that variations in other drivers will be insignificant in upcoming years, the gross debt-to-GDP ratio trend depends on the relationship between the primary result and the gap between debt interest rate and the nominal GDP growth. In this sense, keeping the primary result constant at 2% p.a., we believe there are only two ways to promote a decline in the gross debt: a decline in the implicit interest rate of debt and an acceleration in real GDP growth.
- Each 1% up/down change in real GDP growth decreases/increases by 0.7 p.p. the gross debt-to-GDP ratio. And each 1% change in inflation has a stronger impact on the debt dynamic through the real interest rate, rather than through *seigniorage*. Each 1% down/up change in the real rate also decreases/increases by 0.7 p.p. the gross debt-to-GDP ratio.
- Our estimates suggest that stabilizing the gross debt-to-GDP ratio would require a primary surplus of 3.4% of GDP, significantly higher than the former medium-term target of 2% of GDP. Moreover, given the limited potential for GDP growth in the medium term and an unusual gross debt composition, the minimum condition to curb the government's gross debt-to-GDP ratio would be maintaining a primary surplus of around 3.5% of GDP, in our view.

Introduction

Broadly speaking, the government debt dynamic is driven by the primary balance as a percentage of GDP and the difference between the real interest rate and GDP growth. A primary surplus lowers total debt because it diminishes the government's financial needs, while a primary deficit raises total debt because it increases the government's financial needs. If the real interest rate is higher than GDP growth, the government debt-to-GDP ratio rises, over time, and vice versa.

Nevertheless, other variables besides the primary balance and the difference between the real interest rate and GDP growth also influence the debt dynamic (especially the gross debt dynamic). These variables include subsidized federal government credit with official financial institutions; international reserves; the impact of the exchange rate on the cost of debt via external debt and derivatives operations; the impact of growth on the money supply; and asset adjustments.

The public sector debt to-GDP ratio dynamic has attracted the market's attention since mid-2014. It became a key issue in the debate over the consistency of Brazilian macroeconomic fundamentals after (1) the government reduced the public sector



primary surplus targets in upcoming years¹; (2) the government projected a deficit for the 2016 budget of BRL30.5 billion (0.5% of GDP) to the Congress; and, consequently; and (3) the country lost its investment-grade rating from one of the rating agencies.

In this report, we first discuss the main drivers of the debt dynamic in the Brazilian case (primary balance, interest rate on debt, the cost of the subsidized federal assets, money supply and asset adjustments), and then present an equation for the evolution of the debt-to-GDP ratio dynamic, as well as different scenarios for the ratio. Finally, we present our estimate for a primary result that would stabilize the debt.

The Divergent Dynamic—Primary Balances

First and foremost, the primary result in the 12-month period between the end of 2013 and August 2015 declined from a surplus of 1.8% of GDP to a deficit of 0.8% of GDP, a shift of 2.6 percentage points of GDP, mainly because of dampened spending growth and the impact of the economic cycle.

Looking ahead, we see spending growing close to its average rate of the last 20 years and revenue contracting in real terms this year and next. By our estimates, the direct impact of a GDP growth contraction for two consecutive years (-3% in 2015 and -2% in 2016, according to our baseline scenario) would be revenue losses of around 1.4 p.p. and 0.5 p.p., respectively, worse than our previous assumptions. Thus, even with the optimistic hypothesis that the government will continue to reduce spending growth, increase nonrecurring revenues, and pay the fiscal maneuvers of last year (*pedaladas fiscais*) over a period of two years, instead of all at once, to offset the impact of a deeper recession on the primary balance result, we foresee a worse economic environment. Thus, our forecast for the primary result for 2015 is -1.1% of GDP and for 2016, -1.0% of GDP.

Primary result forecast (breakdown)

2014 Primary Surplus	(0.6)
Non Recurring revenues	(0.1)
Impact of the Economic Cycle	(1.4)
Spending Growth	(1.4)
Fiscal Package	2.4
2015 Primary Surplus	(1.1)
Impact of the Economic Cycle	(0.5)
Spending Growth	(0.7)
Fiscal Package	1.3
2016 Primary Surplus	(1.0)

Source: Santander estimate.

An upcoming auction of electricity supply provides an example of the revenue shortfalls we expect. The auction, of 5% of total supply, is scheduled for November 25, and the federal government expects to sell it for BRL11 billion (0.2% of GDP). This nonrecurring revenue will help the primary result for 2015; however, it is half the amount that the government was expecting for this year. (For more details, see our report *The Fiscal Maze II: Divergent*, August 12, 2015.)

Additionally, the government announced a new fiscal package for 2016 amounting to BRL66 billion (40% spending cut measures and 60% revenue increase measures), or 1.1% of GDP, the effectiveness of which depends on a single measure: the reinstatement of the CPMF (tax on financial transactions). This tax would constitute 50% of the total package amount and has to be approved by a Constitutional Amendment (PEC), which requires a qualified quorum of three-fifths in two vote sessions in

¹ The lack of economic growth, and the consequent drop in tax collections, was the reason used by the fiscal authorities to reduce the primary surplus target to 0.15% of GDP from 1.1% of GDP in 2015, to 0.7% of GDP from 2.0% of GDP in 2016, and to set the target at 1.3% for 2017. In October, the 2015 primary target was again lowered to -0.85% of GDP.



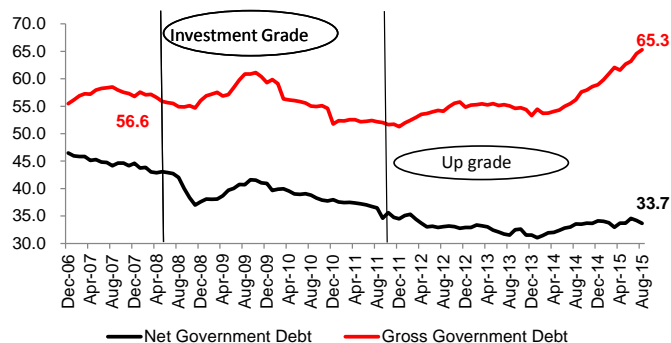
each house (Lower House and Senate). If all of new fiscal measures that can be easily implemented (those depending on a government decision and/or simple majority vote in the Congress) are approved, we estimate a fiscal saving of 0.5% of GDP. **Considering our estimate of the fiscal gap for 2016, 0.5% of GDP in fiscal savings constitutes less than one-third of the total fiscal amount needed to promote a primary balance.**

The Insurgent Dynamic—Debt Service

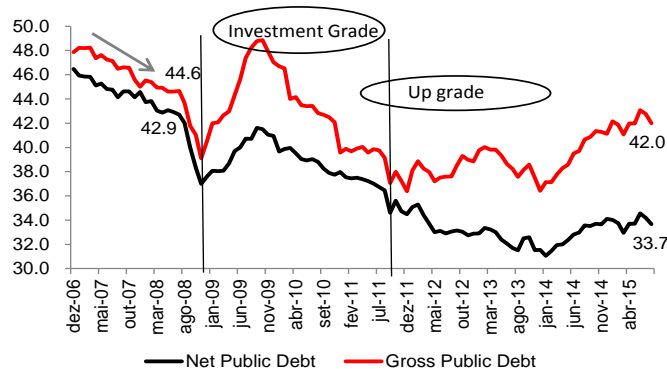
Net debt (gross debt discounted the federal assets) rose more mildly, 2.2 p.p., between the end of 2013 and August 2015 (to 33.7% of GDP registered in August 2015 from 31.5% of GDP posted in December 2013). Net debt is gross debt minus the assets of the federal government, such as its credit with official financial institutions (state-owned banks), and international reserves. Therefore, the net debt-to-GDP ratio was positive, affected by the recent BRL depreciation, which increased the value of international reserves in BRL.

However, the gross government debt-to-GDP ratio broke through the 55.5% of GDP mark (the average from YE2006 through 1H14), reaching 65.3% in August, as a result of economic deceleration, the increase in the primary imbalance throughout 2H14, the increase in debt service costs owing to monetary tightening, and the BRL's sharp depreciation. That marks the reemergence of concerns in the markets about the cost of the debt as a substantial ingredient in the debt-to-GDP ratio dynamic.

Gross and Net General Government Debt-to-GDP Ratio



Gross General Government Debt-to-GDP Ratio (Net International Reserves)



Source: BCB.

Sources: BCB and Santander estimate.

Between YE2013 and August 2015, the gross debt skyrocketed 12.0 p.p., of which 3.6 p.p. was due to an increase in federal securities bond issuance; 2.6 p.p. was due to the primary balance shift we mentioned above; 1.8 p.p. was due to debt service payments reflecting monetary tightening and the impact of BRL depreciation on derivatives (swap operations); 1.3 p.p. was external debt due to the BRL's depreciation; and 2.8 p.p. was due to the economic deceleration (see at left on the following page). We highlight that according to the BCB, the cost of derivatives is counted as nominal interest, which amounts to 1.8% of GDP in the same period, which means that the entire increase in nominal interest was due to the impact of the BRL's depreciation on the cost of derivatives.

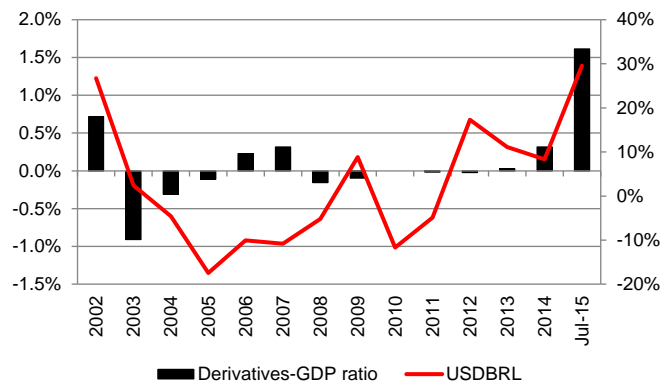


Impact of Conditioning Factors on Gross Government Debt - % GDP

Gross government debt (Dec-13)	53.3%
Impact of net federal securities issue	3.6%
Impact of primary balance	2.6%
Impact of nominal interest	1.8%
Impact of currency variation (External debt)	1.3%
Impact of GDP growth deceleration	2.8%
Gross government debt (Aug-15)	65.3%

Source: BCB.

Cost of Derivatives and BRL Fluctuations



Source: BCB.

The chart above (at right) shows the 12-month gains (negative) and losses (positive) from the derivatives (currency swaps) versus USD/BRL fluctuation.

Gross Government Debt Dynamic

According to our exercise, changes in the government's gross debt are driven by (1) the primary result; (2) the implicit interest on the total (the cost of debt, which depends on the monetary policy and currency fluctuations); (3) the discrepancy between the growth of federal assets and their rate of return; (4) money supply growth; (5) the cost of derivatives (currency variation); and (6) asset adjustments.

That said, we are using the following equation² to simulate the gross debt-to-GDP ratio:

$$d_{gt} = -p_t + \frac{1 + i_{gt}}{1 + g_t} d_{gt-1} + \frac{g_{Ait} - i_{Ait}}{1 + g_t} a_{it-1} + \frac{g_{Aet} - i_{Aet}}{1 + g_t} a_{et-1} - \frac{g_{Ht}}{1 + g_t} h_{t-1} + z_{ad} + z_{cd} + z_{de}$$

where:

d_{gt} = gross government debt (% GDP)

p_t = primary balance (% GDP)

i_{gt} = nominal implicit interest rate on debt : $(i_{git}D_{git-1} + i_{get}E_{t-1}D_{get-1}) / (D_{git-1} + E_{t-1}D_{get-1})$

a_{it} = federal government internal assets (% GDP)

i_{Ait} = interest rate of assets

g_t = GDP nominal growth

g_{Ait} = federal government internal assets nominal growth

a_{et} = federal government external assets (% GDP)

i_{Aet} = interest rate of assets

g_{Aet} = federal government external assets nominal growth

g_{Ht} = money supply nominal growth

h_t = money supply (% GDP)

z_{ad} = asset adjustment (% GDP) – recognition of debt (skeletons)

z_{cd} = asset adjustment (% GDP) – cost of derivatives

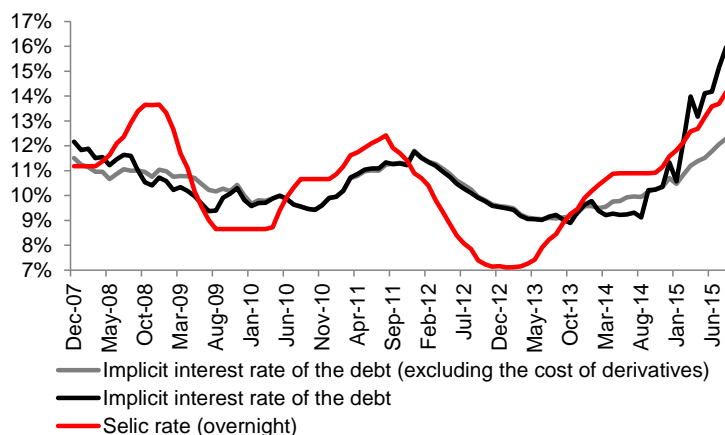
z_{de} = asset adjustment (% GDP) – external debt

² Nelson H. Barbosa Filho, *Resultado Primário, Dívida Líquida e Dívida Bruta: Um Modelo Contábil*, 2014 IBRE Ensaios.



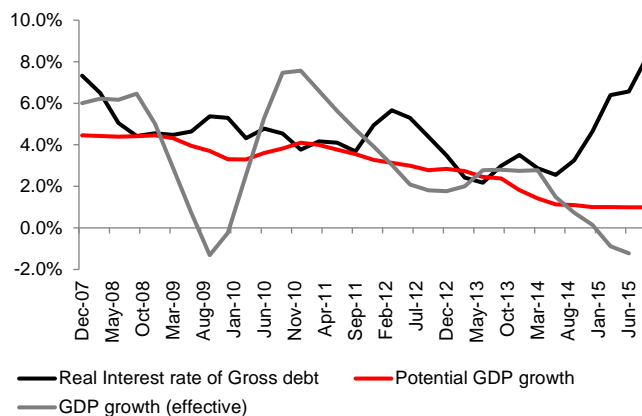
The total debt comprises internal and external debt. The implicit interest rate³ (i_{gt}) is affected by both the Selic rate, currency fluctuations, and the international interest rate, weighted by the size of domestic debt and external debt. Therefore, the implicit interest rate running above GDP growth pulls the gross debt up, and vice versa. The effect of currency depreciation on the implicit interest rate has been evident since 2012, in our view. Recently, the BRL's depreciation and monetary tightening have caused the real implicit interest rate to exceed GDP growth (potential and effective), pressuring the cost of service debt.

Implicit Interest Rate vs. Selic Rate



Source: BCB.

Implicit Interest Rate on Debt vs. GDP Growth



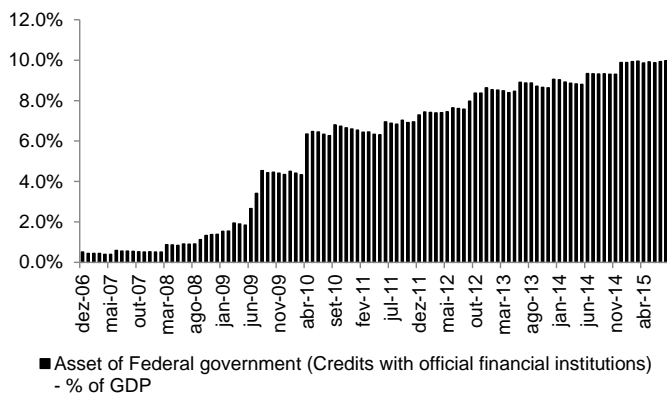
Source: BCB.

The increase in the federal government's subsidized credits with official financial institutions (state-owned banks) (a_{it}) in the last 10 years has also affected the gross debt dynamic. If the growth rate of federal assets exceeds their rate of return and GDP growth, it pulls the gross debt up, and vice versa. The federal government's credits with official financial institutions (state-owned banks) have increased by 1% of GDP per year since 2006, reaching 10% of GDP in August 2015, with a rate of return that we currently estimate at around of 7% p.a.. Another federal asset is the international reserves (a_{et}), which constitutes 22% of GDP, with a rate of return of less than 2% p.a. Both of these federal assets (credits with official financial institutions and international reserves) are significant for the gross debt composition, which means that an increase in these assets above their rate of return has a significant impact on debt dynamic.

³ We estimate the implicit cost of debt as the interest accumulated in the last 12 months divided by the gross debt in the last 12 months.

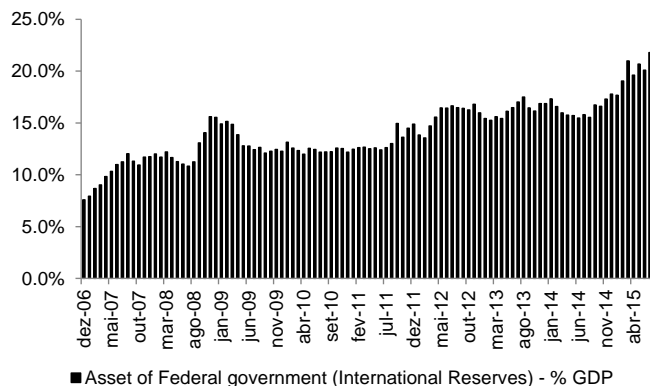


Federal Government's Credits with Official Financial Institutions – % of GDP



Source: BCB.

International Reserves – % of GDP



Source: BCB.

Seigniorage (h_t)—that is, the erosion in the money supply owing to inflation and GDP growth—must be counted in the evolution of the gross debt. In this case, the growth rate of the money supply running above GDP growth works in an opposite way, pulling the gross debt down. Inflation acceleration reduces the purchasing power of the currency, working as a tax that falls on those who hold the existing currency. However, money supply growth has a limited impact on the debt dynamic mainly because of its small weight on debt (4.8% of GDP in last August).

Finally, the asset adjustment also affects changes in the gross debt. (1) As we mentioned previously, **the cost of derivatives (z_{cd}) is counted in the interest bill and amounted to 1.8% in the 12 months of GDP through August**, which suggests an interest bill hovering around 5.2% of GDP rather than around 6.97% of GDP (the official data). Thus, the cost of derivatives must be taken into account in the evolution of the gross debt, in our opinion. **Currency depreciation pulls the gross debt up, and vice versa.** (2) The recognition of debt (z_{ad}), such as the **capitalization of federal financial institutions and state-owned companies for example, pulls the gross debt up, while privatization/concession revenue pulls the debt down.** (3) **Currency fluctuations in external debt (z_{de}) also pull the gross debt up/down, depending on whether the currency is depreciating or appreciating.**

We highlight here the importance of the economic cycle (a recession this year and the next— g_t), which has the dual effect of constraining the primary surplus and removing the benefits of GDP growth from the debt dynamic. According to this equation, one can explain the rise in gross debt. The primary deficit ($p < 0$) increases the debt; an implicit interest rate higher than nominal GDP growth, $\frac{1+i_{gt}}{1+g_t} > 0$, also increases the debt (due to the monetary policy and currency depreciation); the discrepancy between the federal government's assets and nominal GDP growth, $g_{At} + i_{At} > g_t$, also pushes up the debt. Only inflation acceleration works to mitigate the rise in gross debt, $g_{Ht} > g_t$, through the increase in the money supply (inflation tax). Additionally, the recognition of debt (skeletons), $z_{ad} > 0$, pushes up both debt and the cost of debt, as well as the cost of derivatives, $z_{cd} > 0$, as well as currency fluctuations on external debt, $z_{de} > 0$.

Outcomes for the Gross Debt Dynamic

In this context, we made some assumptions about monetary policy, currency fluctuations, the primary result, GDP growth, money supply expansion, and asset adjustments, especially the recognition of debt. The table below (at left) shows the sensitivity of gross debt in three scenarios (baseline, benign, and stress). For our baseline assumptions, we forecast the gross government debt-to-GDP ratio growing to 67.7% in 2015, 74.5% in 2016, and 76.8% in 2017, and declining from 2018 onward.

The gross debt-to-GDP ratio trend depends on the relationship between the primary result and the gap between the debt interest rate and nominal GDP growth, assuming that variations in other drivers are insignificant. Basically, in a scenario with no significant currency fluctuations and no increase in federal assets above their rate of return, the pace of debt growth is determined by the gap between the debt's interest rate and GDP growth, and it has to be equal to or



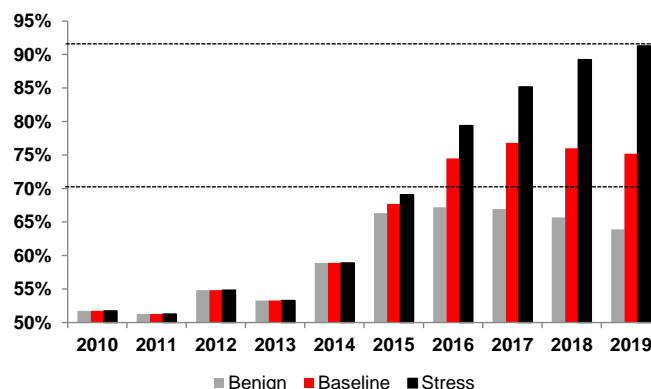
below the primary result plus the money supply expansion⁴ to promote stability or a decline in the gross debt-to-GDP ratio.

In this sense, keeping the primary result constant at 2% p.a., there are two ways to promote a decline in the gross debt: by a reduction of the implicit interest rate of debt and an acceleration of real GDP growth.

Gross General Government Debt-GDP Ratio Dynamics

Gross General Government Debt-GDP Ratio Dynamics

Baseline						
	GDP growth	Primary Balance	Inflation	USDBRL	Selic	Gross Debt/GDP
2015	-3.0%	-1.1%	10.0%	4.00	13.3%	67.7%
2016	-2.0%	-1.0%	7.0%	4.10	13.2%	74.5%
2017	2.5%	0.0%	5.5%	4.20	10.3%	76.8%
2018	2.5%	2.0%	5.0%	4.32	8.0%	76.0%
2019	2.5%	2.0%	5.0%	4.45	8.0%	75.2%
Benign						
	GDP growth	Primary Balance	Inflation	USDBRL	Selic	Gross Debt/GDP
2015	-2.8%	0.2%	9.5%	3.90	13.3%	66.3%
2016	0.5%	0.7%	5.4%	3.10	12.2%	67.2%
2017	2.5%	1.3%	4.5%	3.30	9.3%	66.9%
2018	3.0%	2.0%	4.5%	3.50	7.9%	65.7%
2019	3.0%	2.0%	4.5%	3.70	7.0%	63.9%
Stress						
	GDP growth	Primary Balance	Inflation	USDBRL	Selic	Gross Debt/GDP
2015	-3.5%	-1.5%	11.0%	4.30	13.8%	69.1%
2016	-3.0%	-2.0%	9.0%	5.00	15.2%	79.4%
2017	0.5%	-0.5%	6.5%	5.32	11.3%	85.2%
2018	1.5%	-0.5%	6.5%	5.66	10.4%	89.3%
2019	1.5%	1.5%	6.5%	6.02	10.0%	91.3%



Source: Santander estimate.

Source: Santander estimate.

According to our assumptions, the debt interest rate-GDP growth gap is positive and significant (> 2%) during 2015-17, but from 2018 onward this gap narrows more than 2%, from which point we estimate a decline in the gross debt-to-GDP ratio.

An important conclusion from our exercises is that, based on our 2016 gross debt forecast (baseline scenario), each 1% change up/down in real GDP growth decreases/increases by 0.7 p.p. the gross debt-to-GDP ratio. And each 1% change in inflation has a larger impact on the debt dynamic through the real interest rate, rather than through *seigniorage*. Each 1% down/up change in the real rate also decreases/increases by 0.7 p.p. the gross debt-to-GDP ratio.

If we assume the previous primary surpluses targets for 2015, 2016 and 2017 set by the government at the beginning of this year, and a recovery in economic growth from 2016 onward, the gross government debt dynamic would be benign, since it would not reach the 70% of GDP mark. Moreover, the gross debt-to-GDP ratio would decline from 2016 onward, in our view. Based on stress assumptions—worse primary deficits, higher inflation, and lower GDP growth—for the primary balance, the gross government debt would surpass the 80% of GDP mark in 2017.

Another important issue concerns the capitalization of federal state-owned companies⁵ that might be needed in the event of greater deterioration in the macroeconomic environment. Here, we take into account that recognition of the debt of the state-owned companies (skeletons) could reach 5% of GDP (USD76 billion) in 2016, in which case the impact on the debt would depend on the BRL assumption. For this assumption, we forecast that the gross government debt-to-GDP ratio would grow to 68.8% in 2015, 84.0% in 2016, and 90.0% in 2017, and continue to rise from 2018 onward (see table on following, at left).

⁴ Money supply growth above the nominal GDP growth ($\frac{g_{Mt}}{1+g_t}$).

⁵ Government debt (net and gross) includes only non-financial public debt; it does not include federal financial institutions or the debt of the two main state-owned companies. As a result, bailouts of these debts would push the government debt up.

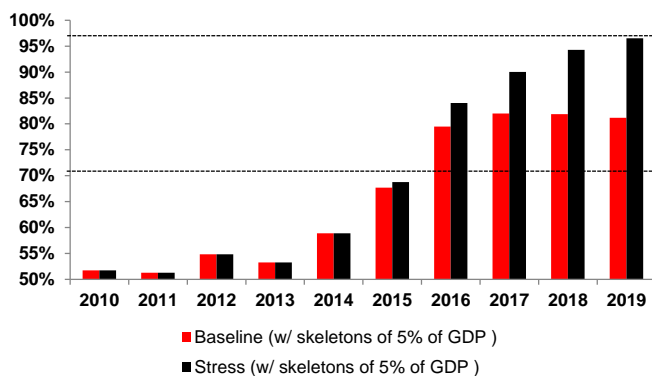


Gross General Government Debt-to-GDP Ratio Dynamics

Baseline (w/ skeletons of 5% of GDP)						
	GDP growth	Primary Balance	Inflation	USDBRL	Selic	Gross Debt/GDP
2015	-3.0%	-1.1%	10.0%	4.00	13.3%	67.7%
2016	-2.0%	-1.0%	7.0%	4.10	13.2%	79.4%
2017	2.5%	0.0%	5.5%	4.20	10.3%	81.9%
2018	2.5%	2.0%	5.0%	4.32	8.0%	81.8%
2019	2.5%	2.0%	5.0%	4.45	8.0%	81.1%
Stress (w/ skeletons of 5% of GDP)						
	GDP growth	Primary Balance	Inflation	USDBRL	Selic	Gross Debt/GDP
2015	-3.0%	-1.5%	11.0%	4.30	13.8%	68.8%
2016	-3.0%	-2.0%	9.0%	5.00	15.2%	84.0%
2017	0.5%	-0.5%	6.5%	5.32	11.3%	90.0%
2018	1.5%	-0.5%	6.5%	5.66	10.4%	94.3%
2019	1.5%	1.5%	6.5%	6.02	10.0%	96.5%

Source: Santander estimates.

Gross General Government Debt-to-GDP Ratio Dynamics



Source: Santander estimate.

Required Primary to Stabilize Debt-to-GDP Ratio

Hence, to stabilize the gross debt-to-GDP ratio ($d_{gt} = d_{gt-1}$), the primary balance must be large enough to offset the sum of the impact of the implicit interest rate, the discrepancy between the federal government's assets and GDP growth, and asset adjustments, deducting *seigniorage* (money supply growth).

$$p_t = \frac{i_{gt} - g_t}{1 + g_t} d_{gt-1} + \frac{g_{Ait} - i_{Ait}}{1 + g_t} a_{it-1} + \frac{g_{Aet} - i_{Aet}}{1 + g_t} a_{et-1} - \frac{g_{Ht}}{1 + g_t} h_{t-1} + z_{ad} + z_{cd} + z_{de}$$

Based on our estimate of a gross debt-to-GDP ratio at 74.5% at YE2016 in the baseline scenario, we estimate that a primary surplus of 3.4% would be necessary to stabilize the gross debt-to-GDP ratio in upcoming years. We assume the following: no recognition of state-owned companies' debt (skeletons); a Selic rate of around 12%; nominal GDP growth of around 7.0%; BRL depreciation of 5%; the federal government's internal assets representing 15% of GDP; the federal government's external assets constituting 22% of GDP; the money supply at the same level as in 2015 (around of 4.8% of GDP); and inflation at 5%.

Positive GDP growth is important to stabilize the gross debt-to-GDP ratio; however, given the limited potential for GDP growth in the short term and an unusual gross debt composition, the minimum condition to curb the government's gross debt-to-GDP ratio would be maintaining a primary surplus of around 3.5% of GDP, in our view.

Required Primary to Stabilize Debt to GDP Ratio - % GDP

real GDP growth	Nominal interest rate (Selic rate)						
	10%	11%	12%	13%	14%	15%	16%
0%	3.5%	4.2%	4.8%	5.5%	6.1%	6.8%	7.5%
1%	2.8%	3.4%	4.1%	4.7%	5.4%	6.0%	6.7%
2%	2.1%	2.7%	3.4%	4.0%	4.6%	5.3%	5.9%
3%	1.4%	2.0%	2.6%	3.3%	3.9%	4.6%	5.2%
4%	0.7%	1.3%	1.9%	2.6%	3.2%	3.8%	4.5%

Source: Santander estimates.

Based on our estimate of a gross debt-to-GDP ratio of 84.0% at the end of 2016, which takes into account a scenario with skeletons of 5 of GDP, we estimate that a primary surplus above 5% would be required to stabilize the gross debt-to-GDP ratio in upcoming years.



Conclusion

The value of federal assets (internal and external) is significant for the gross debt composition, so an increase above their rate of return has a significant impact on debt dynamic, in our view. In our view, therefore, a benign gross debt-to-GDP ratio dynamic in upcoming years depends on the amount of these assets growing below their rate of return.

Although the growth rate of the money supply running above GDP growth works to pull the gross debt down, it has a limited impact on the debt dynamic mainly because of its small weight on debt (4.8% of GDP in last August). Based on our 2016 gross debt forecast (baseline scenario), each 1% of inflation variation has more significant impact on the debt dynamic through the real interest rate, rather than through the *seigniorage*. Each 1% down/up change in the real rate decreases/increases by 0.7 p.p. the gross debt-to-GDP ratio.

According our exercises, based on the assumption of no change in the federal assets-to-GDP ratio and no asset adjustments, the biggest influence on the gross debt dynamic is the relationship between the primary result and the gap between debt interest rate and nominal GDP growth. In our view, the debt interest rate-GDP growth gap in upcoming years will be positive, and higher than the primary result expected for this period, which means that the gross debt-to-GDP ratio will rise, and by our estimates, only from 2018 onward would it decline for the gross debt-to-GDP ratio, when the debt interest rate-GDP growth gap is smaller than 2% (i.e., lower than our assumption for the primary result).

Our estimates for the baseline scenario suggest that, stabilizing the gross debt-to-GDP ratio would require a primary surplus at 3.4% of GDP, significantly higher than the former medium-term target of 2% of GDP. Moreover, given the limited potential for GDP growth in the medium term and an unusual gross debt composition, the minimum condition to curb the government's gross debt-to-GDP ratio would be maintaining a primary surplus of around 3.5% of GDP.

CONTACTS / IMPORTANT DISCLOSURES

Macro Research

Alejandro Estevez-Breton	Head Macro, Rates & FX Strategy — LatAm	aestevez@santander.us	212-350-3917
Maciej Reluga*	Head Macro, Rates & FX Strategy – CEE	maciej.reluga@bzwbk.pl	48-22-534-1888
Sergio Galván*	Economist – Argentina	sgalvan@santanderrio.com.ar	54-11-4341-1728
Maurício Molan*	Economist – Brazil	mmolan@santander.com.br	5511-3012-5724
Juan Pablo Cabrera*	Economist – Chile	jcabrera@santander.cl	562-2320-3778
David Franco*	Economist – Mexico	dfranco@santander.com.mx	5255 5269-1932
Tatiana Pinheiro*	Economist – Peru	tatiana.pinheiro@santander.com.br	5511-3012-5179
Piotr Bielski*	Economist – Poland	piotr.bielski@bzwbk.pl	48-22-534-1888
Marcela Bensión*	Economist – Uruguay	mbension@santander.com.uy	5982-1747-5537

Fixed Income Research

David Duong	Macro, Rates & FX Strategy – Brazil, Peru	dduong@santander.us	212-407-0979
Brendan Hurley	Macro, Rates & FX Strategy – Colombia, Mexico	bhurley@santander.us	212-350-0734
Juan Pablo Cabrera*	Chief Rates & FX Strategist – Chile	jcabrera@santander.cl	562-2320-3778
Nicolas Kohn*	Macro, Rates & FX Strategy - LatAm	nicolas.kohn@santanderibm.com	4420-7756-6633
Aaron Holsberg	Head of Credit Research	aholsberg@santander.us	212-407-0978
Isidro Arrieta	Credit Research	iarrieta@santander.us	212-407-0982

Equity Research

Jesus Gomez	Head LatAm Equity Research, Strategy	kgomez@santander.us	212-350-3992
Andres Soto	Head, Andean	asoto@santander.us	212-407-0976
Walter Chiarvesio*	Head, Argentina	wchiarvesio@santanderrio.com.ar	5411-4341-1564
Valder Nogueira*	Head, Brazil	jvalder@santander.com.br	5511-3012-5747
Pedro Balcao Reis*	Head, Mexico	pbalcao@santander.com.mx	5255-5269-2264

Electronic Media

Bloomberg	SIEQ <GO>
Reuters	Pages SISEMA through SISEMZ

This report has been prepared by Santander Investment Securities Inc. (“SIS”) (a subsidiary of Santander Investment I S.A., which is wholly owned by Banco Santander, S.A. (“Santander”), on behalf of itself and its affiliates (collectively, Grupo Santander) and is provided for information purposes only. This document must not be considered as an offer to sell or a solicitation of an offer to buy any relevant securities (i.e., securities mentioned herein or of the same issuer and/or options, warrants, or rights with respect to or interests in any such securities). Any decision by the recipient to buy or to sell should be based on publicly available information on the related security and, where appropriate, should take into account the content of the related prospectus filed with and available from the entity governing the related market and the company issuing the security. This report is issued in Spain by Santander Investment Bolsa, Sociedad de Valores, S.A. (“Santander Investment Bolsa”), and in the United Kingdom by Banco Santander, S.A., London Branch. Santander London is authorized by the Bank of Spain. This report is not being issued to private customers. SIS, Santander London and Santander Investment Bolsa are members of Grupo Santander.

ANALYST CERTIFICATION: The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed, that their recommendations reflect solely and exclusively their personal opinions, and that such opinions were prepared in an independent and autonomous manner, including as regards the institution to which they are linked, and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report, since their compensation and the compensation system applying to Grupo Santander and any of its affiliates is not pegged to the pricing of any of the securities issued by the companies evaluated in the report, or to the income arising from the businesses and financial transactions carried out by Grupo Santander and any of its affiliates: Everton Gomes* and Tatiana Pinheiro*.

*Employed by a non-US affiliate of Santander Investment Securities Inc. and not registered/qualified as a research analyst under FINRA rules, and is not an associated person of the member firm, and, therefore, may not be subject to the FINRA Rule 2711 and Incorporated NYSE Rule 472 restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account.

The information contained herein has been compiled from sources believed to be reliable, but, although all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading, we make no representation that it is accurate or complete and it should not be relied upon as such. All opinions and estimates included herein constitute our judgment as at the date of this report and are subject to change without notice.

Any U.S. recipient of this report (other than a registered broker-dealer or a bank acting in a broker-dealer capacity) that would like to effect any transaction in any security discussed herein should contact and place orders in the United States with SIS, which, without in any way limiting the foregoing, accepts responsibility (solely for purposes of and within the meaning of Rule 15a-6 under the U.S. Securities Exchange Act of 1934) for this report and its dissemination in the United States.

© 2015 by Santander Investment Securities Inc. All Rights Reserved.

