

BRAZIL – Credit Market

What Can Credit Do for Brazilian Growth?

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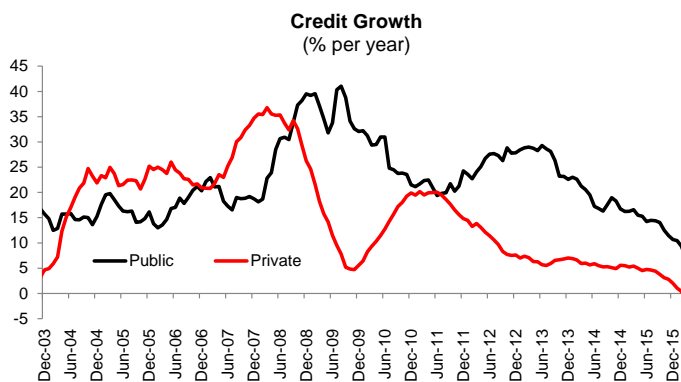
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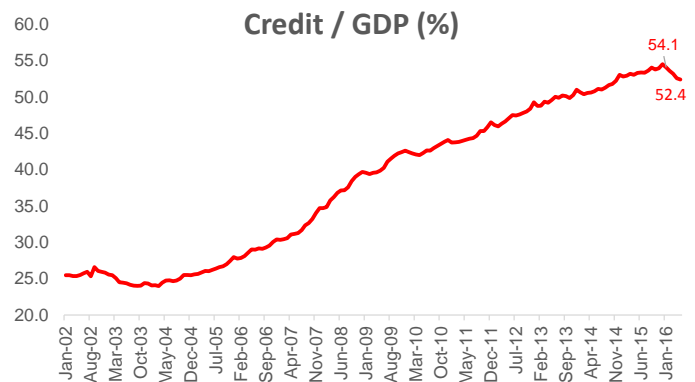
- During the last 15 years, credit has contributed significantly to Brazil's growth, especially in the aftermath of the 2009 financial crisis.
- However, in the current crisis, credit has been a strong drag on growth since the Central Bank increased the basic rate due to high inflation.
- The result has been a vicious cycle wherein weak economic activity plus high interest rates increased delinquency, which in turn pushes interest rates up further for households, consequently depressing economic activity even more and causing delinquency to rise, and so on.
- However, we do not believe this scenario will lead to a financial crisis, as Brazilian banks are well capitalized and their results remain strong, suggesting, in our view, that they will not need a deleveraging process.
- Additionally, if our interest rate forecasts prove accurate, such an outcome could disrupt this cycle. Therefore, we believe that credit could be the game changer for Brazil's economy in 2017, contributing, according to our estimates, 150 bps to GDP growth (following -180 bps in 2014 and 2015).
- We note that Brazilian households' income burden due to servicing debt is a significant restriction to credit growth, suggesting that a deleveraging process is necessary. However, in our view, as interest rates are very high, they respond for a large share of households' current debt service. Thus, when interest rates decrease, this would allow for both credit recovery and deleveraging.

Credit and the Brazilian economy during the 2000s

During the 2000s, Brazil's government implemented several credit reforms that heavily contributed to the development of the credit market. One of these reforms was the development of payroll loans, in which banks could deduct payments directly from employees' salaries, thereby reducing the risks for banks, and subsequently allowing for both a decrease in the spread and an increase in credit supply. Currently, this type of loan accounts for 20% of total household loans, and its interest rates are 35% lower than the average of all other loan types (including mortgages). In this context, credit as a proportion of GDP has increased while interest rates have decreased, playing an important role in Brazilian growth: we estimate that credit accounted for 35% of GDP growth in 2003-12.



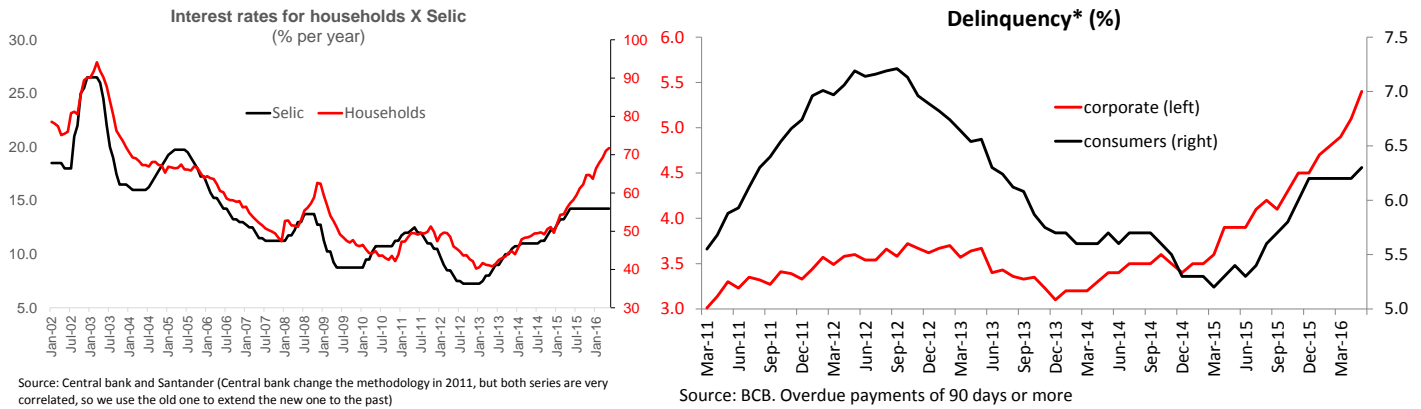
Source: BCB



Source: BCB

In addition to being a significant contributor to average growth, credit, as a transmission channel for monetary policy, has been an important weapon in the fight against economic crises, such as the subprime crisis in the U.S. However, the current crisis in Brazil has been different: when this crisis began, inflation was significantly above the target, and the Central Bank's credibility was quite low due to several years of inflation above the target; therefore, an easing cycle was not a good option. Indeed, the government increased the basic interest rate, which, together with the increased loan delinquencies (due to weak economic

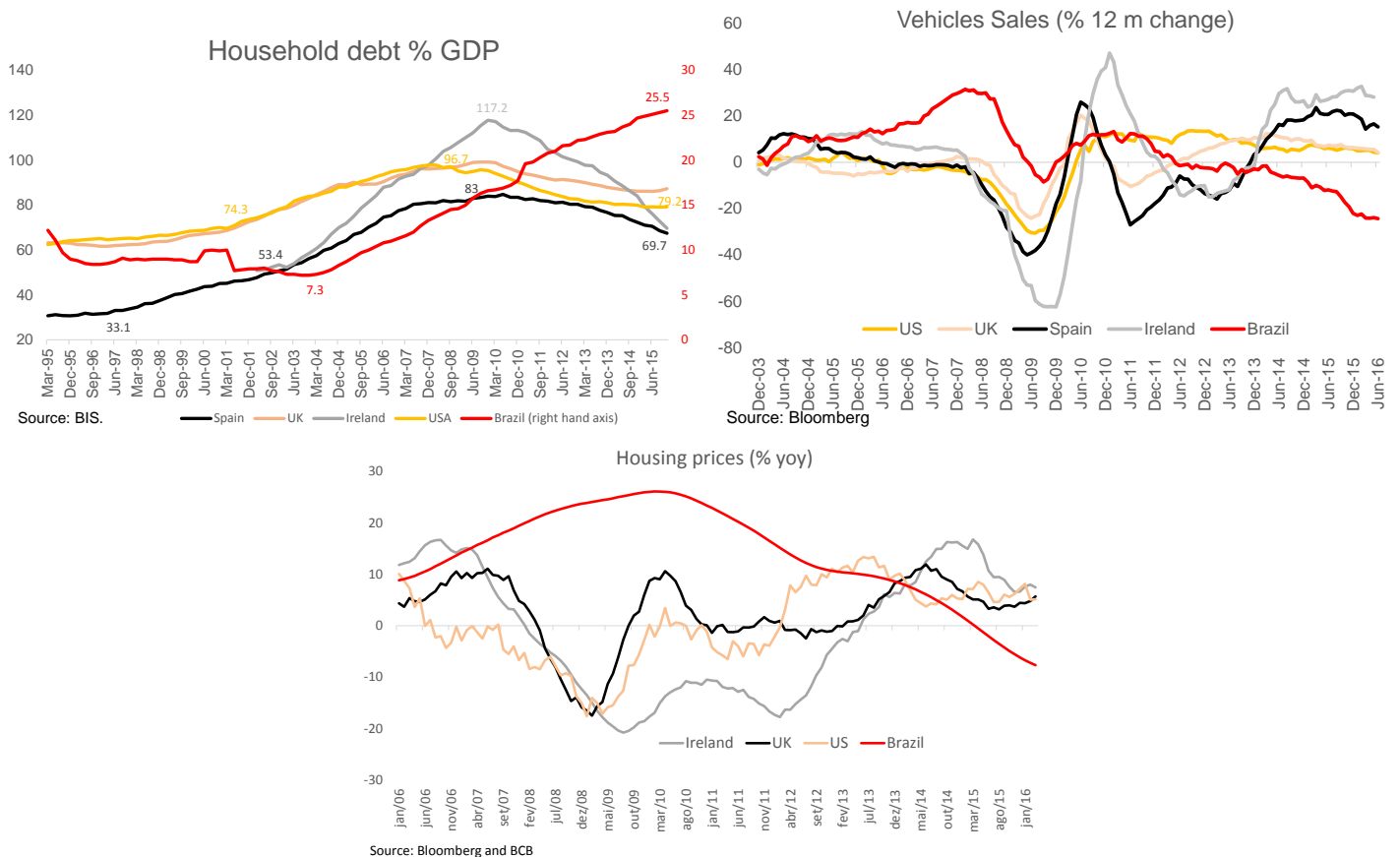
activity), led to a substantial increase in household interest rates. Considering that interest and delinquency rates are endogenous, we can say that delinquency is both one of the causes and consequences of interest rate increases. The result has been a vicious cycle wherein weak economic activity plus high interest rates increased delinquency, which in turn pushes interest rates up further for households, consequently depressing economic activity even more and causing delinquency to rise, and so on. This cycle raises two important questions: **(i) Are there significant risks of a large-scale financial crisis in Brazil?** **(ii) How and when can we leave this cycle?**



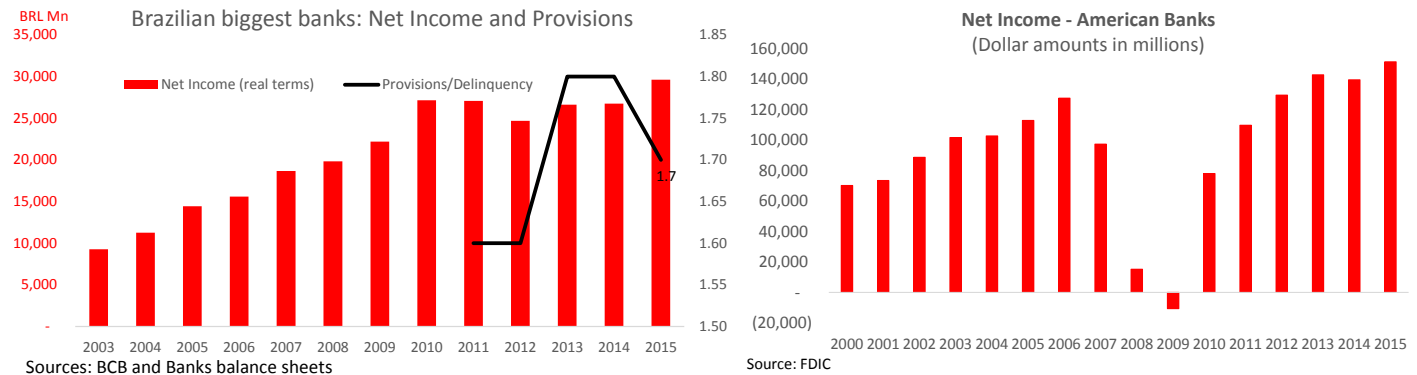
(i) Are there significant risks of a large-scale financial crisis in Brazil?

The first question is important because there is a strong consensus that financial crises are usually more severe and longer lasting than other economic crises, and followed by a long period of deleveraging. Hence, a financial crisis is feared by every economist, especially with respect to the credit market.

Brazil's present situation shares several common factors with the most recent large global financial crisis, which occurred in 2008-09. In the U.S., the UK, Ireland and Spain, countries where the crisis hit hard, some economic indicator movements showed striking similarities with factors that are occurring today in Brazil: a steady increase in debt before the crisis, a shrinking of home prices, a fast increase in unemployment rates and a strong decrease in retail sales of durable goods.

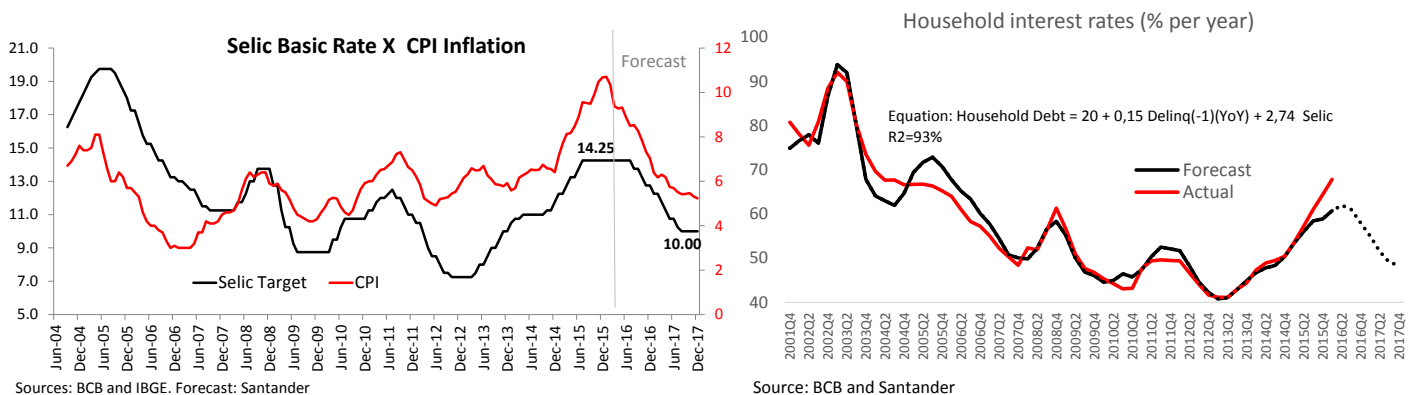


In spite of these similarities, Brazil, in our opinion, is far from a financial crisis. The increase in delinquency rates is attributable to weak economic activity (and not the cause, as was the case in the U.S. leading up to 2008). In our view, this point matters because when the increasing trend of the default rate began, banks were prepared. Provisions for loan defaults of Brazilian banks are significantly higher than the delinquency rates, and big banks' profits are still strong (a notable difference from what we observed in the American banking system during the financial crisis). Additionally, according to the Central Bank's financial stability report, even if the delinquency rate doubles, the requirement of additional capital from the banks would be low; indicating, in our view, that banks do not need a deleveraging process. Therefore, following a turnaround of Brazil's economy, we do not believe that credit supply will be a problem from the point of view of capital.

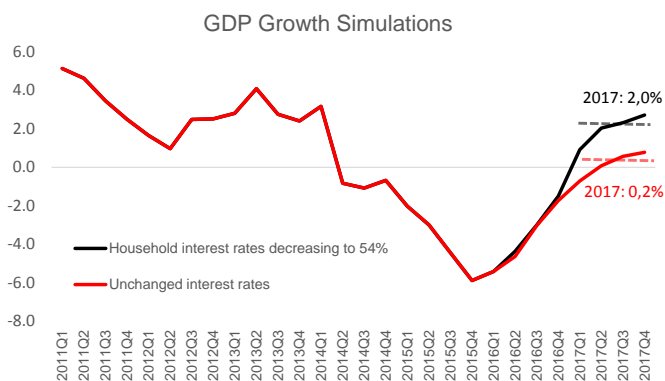


(ii) How and when can we leave this cycle?

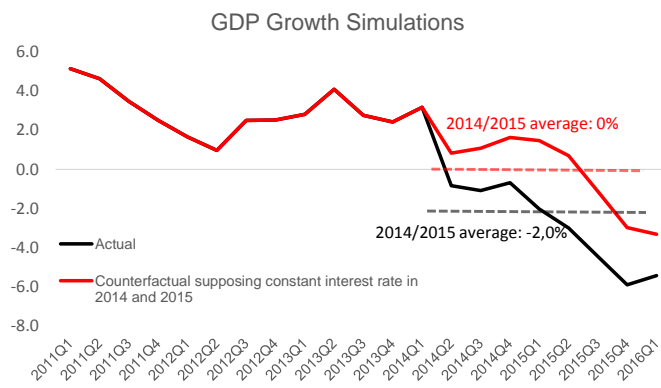
In our view, the best tool for breaking this cycle (the endogenous relationship among weak economic activity, delinquency and household interest rates) is the basic interest rate (Selic). We expect the Central Bank to have some room to start a monetary easing cycle in the second semester, due to an expected decrease in inflation and weakness in the labor market. Thus, the actual question is whether this movement can be a game changer. To answer that, we proceed in two steps: first, we build a model to forecast household interest rates using the Selic rate and delinquency rate; following this, we input the forecast we obtained from that model into another model which estimates GDP, in order to estimate the impact of an easing cycle on future growth.



Our modelling suggests that if our base-case scenario for the Selic proves accurate, household interest rates would decrease to approximately 55% per year by year-end 2017, down from the 72% per year that was observed in May 2016. We estimate that this decrease would contribute ~150 bps to GDP growth in 2017. Additionally, using the same model, we estimate that if the interest rate had not increased over the last three years, the decrease in GDP would have been around 0% accumulated in 2014 and 2015, rather than the actual -3.6%, suggesting that increased interest rates played an important role in the crisis. In summary, the basic interest rate was a strong negative driver in the last two years, and we expect that it will become a positive driver next year, with the net effect in the neighbourhood of 300 bps. It is worth mentioning that we are not considering second-order effects in the sense that the decreased interest rates could reduce delinquency rates, which could in turn further reduce household interest rates (a virtuous cycle).

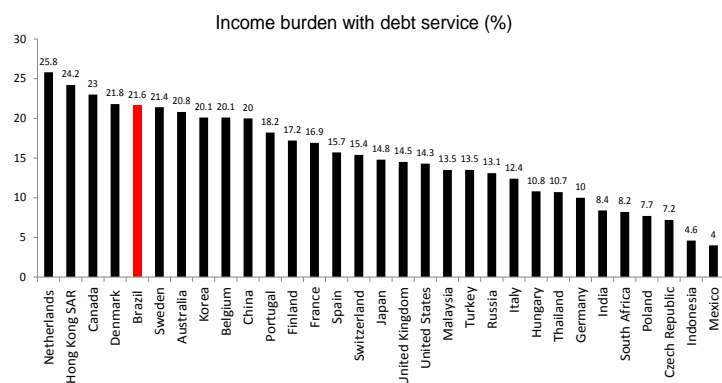


Source: IBGE and Santander

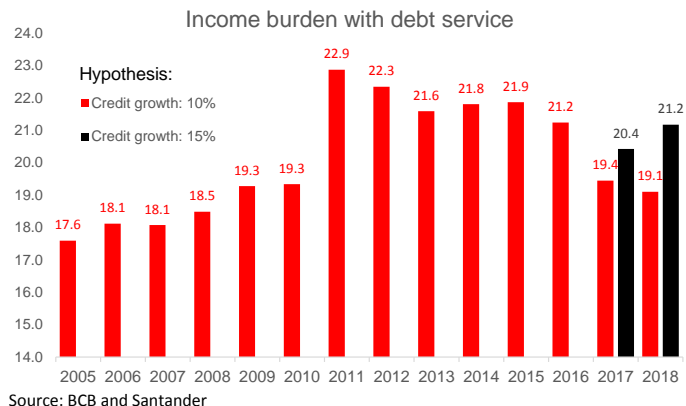


Source: IBGE and Santander

A caveat: the high proportion of income that goes to servicing household debt could limit this impact. Compared with other countries, Brazilian household debt is not high (as a percentage of GDP), but the income burden is because of high interest rates (this discrepancy is partly due to the smaller share of mortgages when compared with other countries). This fact suggests that some deleveraging is necessary.



Source: BIS



Source: BCB and Santander

In the U.S., total household debt decreased from 100% of GDP (before the mortgage crisis) to 80% of GDP. If we use this parameter to estimate the necessary deleveraging in Brazil, assuming a decrease proportional to that one, total household debt would fall to approximately 20% of GDP from its current level of 25%, which would certainly be a strong impediment to economic recovery. However, as the level of debt is not so high in Brazil, it would be more appropriate to look at the income burden. The fact that interest rates are high means that its weight in debt service is high as well, so, when interest rates decrease, the impact on the income burden will be greater than it would be in other countries. To measure this effect, we simulated how the income burden would change assuming our forecast for both interest rates and total wages, and different hypotheses for credit growth. The results show that even if credit increased 10% from 2017 onwards (current growth is only 2%), the income burden would decrease to 19% by 2018 – a decrease similar to that observed in the developed countries during the financial crisis. If we use a hypothesis of 15% growth in credit, the income burden would not decrease, which seems unsustainable.

Finally, it is worth noting that part of the global deleveraging in 2008-09 was due to the falling prices of housing. Declining home prices reduce credit in two ways: (i) lower housing prices reduce the amount of credit homeowners can obtain in order to buy a new house; and (ii) the value of the collateral that can be offered for re-mortgaging is lower. This effect in Brazil is less important than in other countries, because the share of mortgages is lower and re-mortgaging is almost zero.

The conclusion of this exercise is that leverage limits credit growth, in the sense that a 15% rate of credit growth does not seem sustainable anymore. However, falling interest rates, according to our projections, could allow growth in the neighbourhood of 10% per year (slower than it has been, but still robust) with a simultaneous deleveraging. Therefore, assuming that our interest rate forecast is accurate, credit will be a significant positive driver in 2017 (following a long period as a negative driver) and can be considered a game changer. Obviously, this scenario depends on the evolution of several variables, including the fiscal accounts and commodity prices, since deterioration in any of these factors could lead to BRL depreciation and consequently, increased inflation, limiting the room for the Central Bank to reduce the basic rate.

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