Brazilian Financial Institutions

The credit card conundrum

Industry Overview

Proposed interest rate cap on credit cards

The Brazilian Senate recently approved a bill that would limit credit card debt to 100% of its original amount starting January 1. It is not clear if the bill intends to 1) cap the interest paid by consumers, or 2) cap the interest rate charged by card issuers. We see limited impact for the banks in the first alternative, as we estimate that the actual interest paid by consumers is below 100% currently. On the other hand, if the bill intends to cap interest rates charged by card issuers at 100% annually, then we would expect a negative impact of c.10% to banks' earnings. Exhibits 1-2.

Market participants to make a counteroffer

The industry was given a 90-day period (or by January 1) to come up with a counterproposal to the approved bill. We expect the industry, through CMN (National Monetary Council), to propose self-regulation to limit the interest rate charged on credit card revolving balances, although we do not think that it will favor the implementation of a rate cap, as it would set a precedent for other products. In order to compensate for the lower rates, we expect the banks to propose another self-regulation to limit the interest-free installment (IFI) options offered at the merchants, aiming to increase the interest earning portion of the credit card balance (only c.25% of credit card balances yield a return to the issuer today). Exhibit 3.

Reduction of IFI is complicated, many parties involved

However, a reduction in the IFI option could have negative implications to consumption as credit cards account for 30% of household consumption in Brazil, and approximately half of the purchased value is paid in 2 or more interest-free installments offered by the merchant. Another consequence would be a significant reduction in the profitability of the independent merchant acquirers, as the discounting of credit card receivables represent almost half of their revenues. On the other hand, banks argue that IFI is partially responsible for high indebtedness of consumers and delinquency levels, suggesting that a limit could address such problems without having a negative impact on credit availability. Exhibits 4-14.

Other alternatives

Banks could also try to compensate for an expected hit on their bottom-lines by adjusting the economics of the credit card industry. They could request an increase in the interchange fees, or increase annual fees, or reduce rewards paid to their clients. However, these solutions could increase the friction with the Central Bank (which has been focused on reducing fees by promoting competition) and potentially reduce the appeal of the credit card product to consumers. In the worst-case scenario, where the banks cannot find any compensation for their lower revenues, they might end up reducing credit availability to the overall population. Exhibit 15.

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Current credit card dynamics

We estimate that consumers pay a total interest of c.80% of their overdue credit card balance, assuming the industry's average monthly rate of 15% on the revolving balance (for one month) and of 9% on the installment balance (assuming an average duration of 11 months). By CB rules, banks must convert revolving credit card balances into monthly installment payments after the first month, with a lower interest rate than the revolving rate.

We view it as a communication problem that the Brazilian CB reports an annualized interest rate charged by the Brazilian card issuers, creating a negative headline that the banks are charging an annual rate of around 450%.

Exhibit 1: Interest payments on a R$100 credit card balance
This simulation shows that clients that pay the overdue bill in one year incur an 80% interest

R$	Principal balance	Principal payment	Interest payment	Monthly installment	Monthly interest rate
Revolving credit (one month)	100.00	0.00	(15.20)	(15.20)	15%
Month 1	94.43	(5.57)	(9.40)	(14.97)	9%
Month 2	88.33	(6.10)	(8.88)	(14.97)	9%
Month 3	81.66	(6.67)	(8.30)	(14.97)	9%
Month 4	74.36	(7.30)	(7.68)	(14.97)	9%
Month 5	66.38	(7.98)	(6.99)	(14.97)	9%
Month 6	57.64	(8.73)	(6.24)	(14.97)	9%
Month 7	48.09	(9.56)	(5.42)	(14.97)	9%
Month 8	37.63	(10.45)	(4.52)	(14.97)	9%
Month 9	26.20	(11.44)	(3.54)	(14.97)	9%
Month 10	13.69	(12.51)	(2.46)	(14.97)	9%
Month 11	0.00	(13.69)	(1.29)	(14.97)	9%
Total		**(100.0)**	**(79.9)**	**(179.9)**	**80%**

Source: BCB, BofA Global Research

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Bank earnings sensitivity to lower rates on cards

We estimate the impact of implementing a simple interest rate cap of 8.3% per month (100% annual) would reduce bank earnings by c.10%.

Exhibit 2: Potential impact to bottom-line from an 8.3% cap on the revolving and installment credit card interest rate
We estimate a 9% hit on the bottom-line of the banks, on average

Bank	Credit card balance '24E (R$bn)	Revolving interest rates*	Installments interest rates*	Revolving balance (% of total)	Installment balance (% of total)	Implied revolving + Installment revenues (R$bn)**	Potential revenues loss (R$bn)	% of NI (BofAe)
BBAS	64.0	14.8%	10.2%	11%	8%	11.5	3.7	-5%
BBDC	83.4	14.6%	6.4%	11%	8%	12.3	3.4	-7%
ITUB	148.2	14.1%	10.7%	11%	8%	26.8	8.6	-12%
SANB	52.9	14.9%	10.1%	11%	8%	9.5	3.1	-12%
INTR	9.7	13.0%	11.4%	3%	7%	1.0	0.3	-23%
NU	92.3	13.3%	8.7%	7%	19%	21.5	2.6	-14%
Industry	**450.4**	**14.1%**	**9.6%**	**10%**	**10%**	**82.6**	**21.7**	**-9%**

Source: BCB, BofA Global Research. * Average monthly interest rate charged over the last three months. ** Considers a NPL ratio of 50%/10% on the revolving/installments balance, in line with industry data.

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Higher revolving balance can offset a cap on interest rates

We estimate that banks would be able to compensate for the lost revenues from an 8.3% cap on credit card rates by increasing the revolving balance to c.40% of the card portfolio from c.25% currently.

Exhibit 3: Required increase in the interest earning portfolio to compensate for rate cap

Revolving credit would have to reach c.40% of the credit card portfolio to offset a cap of 8.3%

	Current interest rates	Interest rates capped at 8.3%
Card portfolio (R$bn)	513	513
Revolving balance (R$bn)	75	134
% of cards portfolio	***15%***	***26%***
Interest rates (%)	15%	8%
Revenues (R$bn)*	66	66
Installments balance (R$bn)	**59**	**67**
% of cards portfolio	***12%***	***13%***
Interest rates (%)	9%	8%
Revenues (R$bn)*	60	60
Interest earning portfolio (% of card portfolio)	***26%***	***39%***

Source: BCB, BofA Global Research. * Considers a NPL ratio of 50%/10% on the revolving/installments balance, in line with industry data

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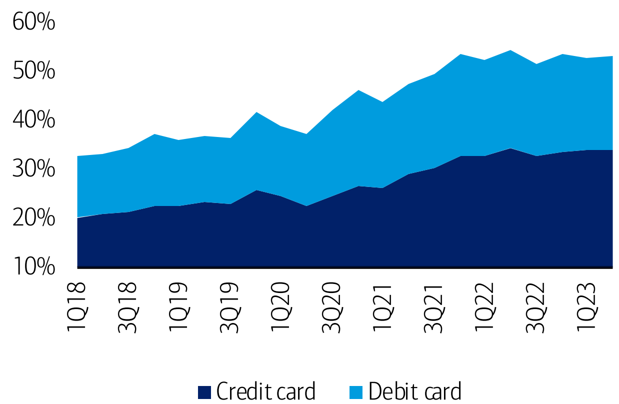
Brazilian credit card industry

The credit card industry in Brazil more than doubled in the past five years and now represent 30% of the household consumption (up from 20% five years ago).

Exhibit 4: Credit and debit card transactions (% of household consumption)

Credit and debit cards represent 53% of household consumption



Source: BCB, BofA Global Research

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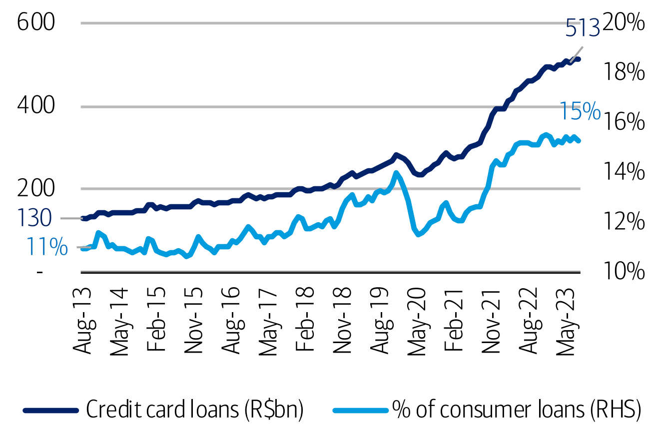
Exhibit 5: Credit card loans (R$bn, % of consumer loans)

Credit cards represent 15% of all consumer loans, vs 11% 10Y ago



Source: BCB, BofA Global Research

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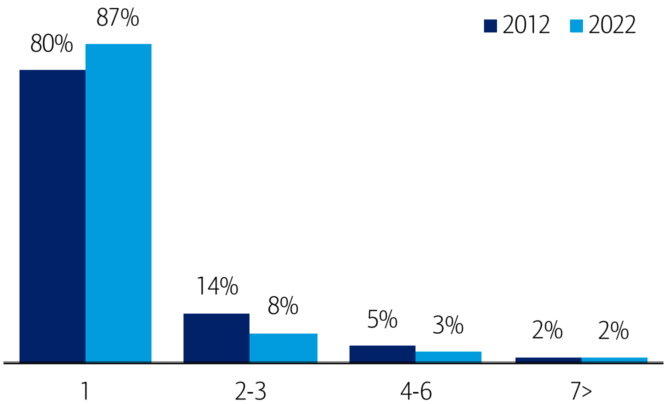
Interest-free installment purchases ("IFI") are very popular in Brazil, consolidating the use of cards as a financing product. Approximately 50% all card purchases is paid in more than 2 installments.

Exhibit 6: Breakdown of number of credit card transactions by number of installments

One-installment transactions represent almost 90% of transactions...



Source: BCB, BofA Global Research

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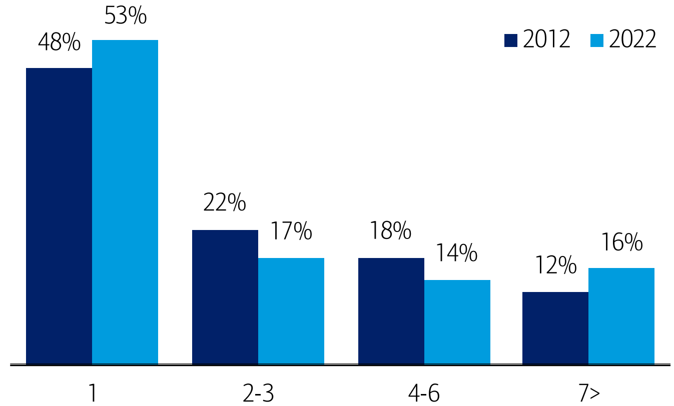
Exhibit 7: Breakdown of credit card transacted value by number of installments

...but only half of transacted value, suggesting low-ticket transactions



Source: BCB, BofA Global Research

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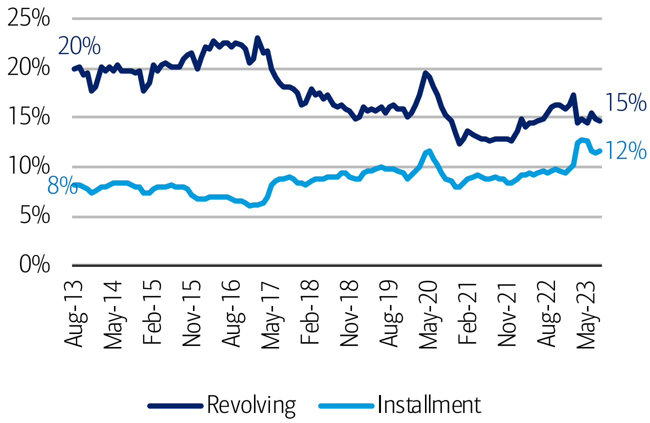
... however, IFI limits the interest earning portion of credit card balances to only c.25%.

Exhibit 8: Revolving and installment loans (% of credit card loans)

Only 15% of credit card balances revolve, and 12% are transformed into installment loans



Source: BCB, BofA Global Research

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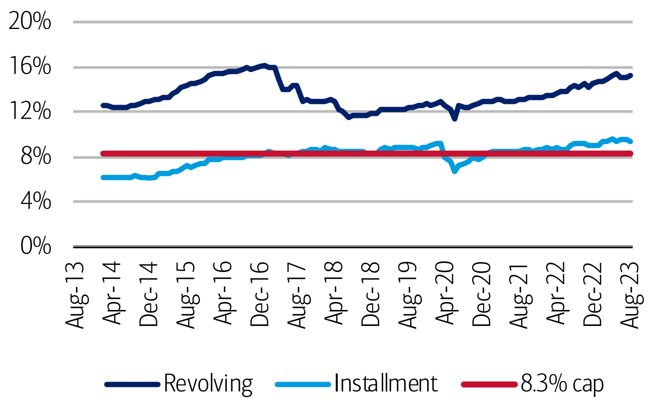
Card issuers charge high monthly rates, but face high delinquencies

Exhibit 9: Interest rates charged on revolving credit card and installments

Interest rates have consistently increased over the last years



Source: BCB, BofA Global Research

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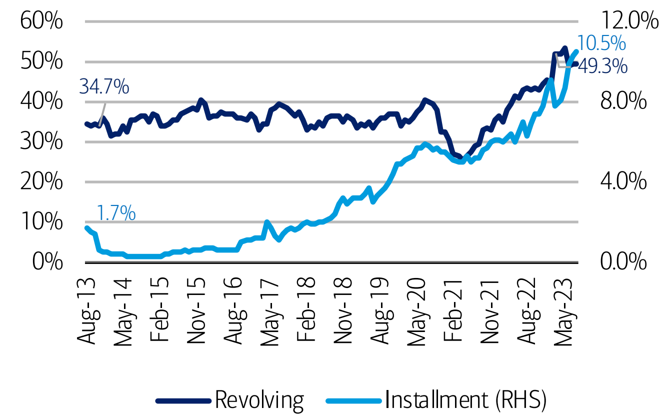
Exhibit 10: NPL ratio of revolving credit card and installment loans

NPL ratio of the revolving credit card balance is close to 50%, vs 10% for the installment loan



Source: BCB, BofA Global Research

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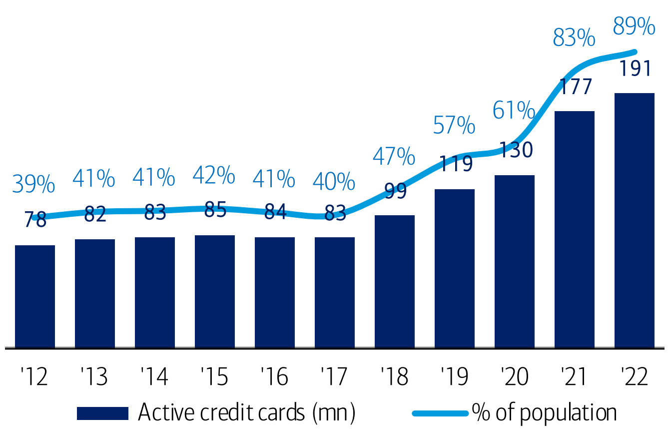
Credit cards have grown significantly in the last 5 years, reaching c.90% of the Brazilian population from c.50%. The boom was supported by the rise of fintechs.

Exhibit 11: Active credit cards and penetration (% of population)

Penetration of credit cards doubled in five years, boosted by neobanks



Source: BCB, BofA Global Research

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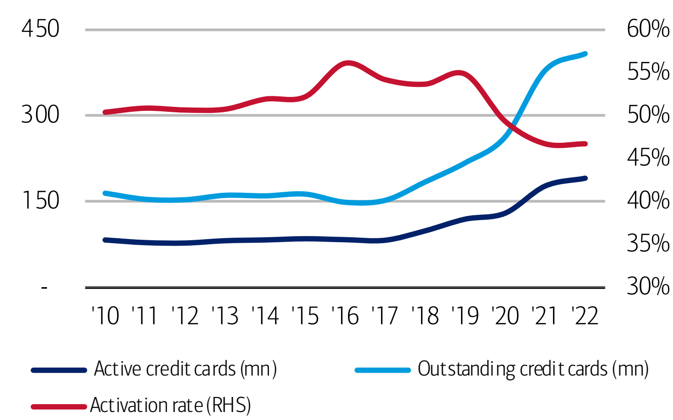
Exhibit 12: Number of outstanding and active credit cards

The number of outstanding credit cards boomed during the pandemic, while the number of active cards lagged



Source: BCB, BofA Global Research

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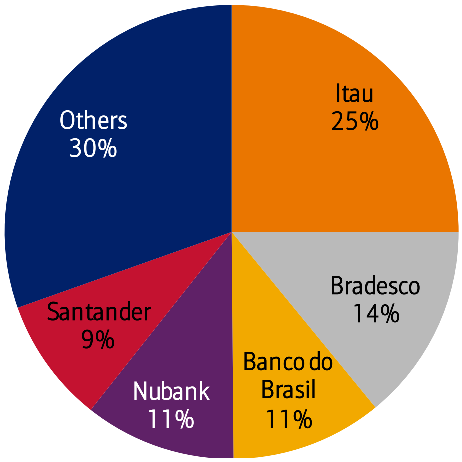
Top five players concentrate 70% of the card issuance industry and 80% of the card acquiring industry.

Exhibit 13: Market share of credit card loans

Incumbent banks and Nubank represent 70% of the credit card market



Source: Companies, BCB, BofA Global Research

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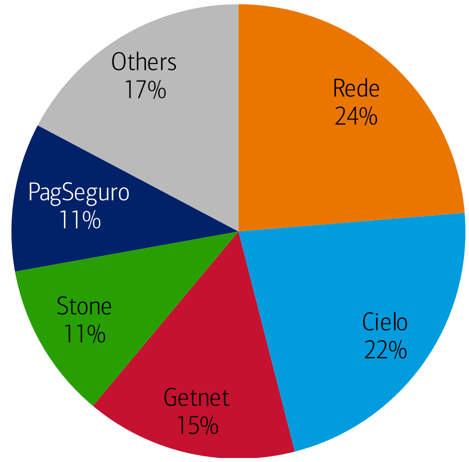
Exhibit 14: Market share of acquirers (credit and debit transactions)

Top five players represent more than 80% of the acquiring industry



Source: ABECS, BofA Global Research

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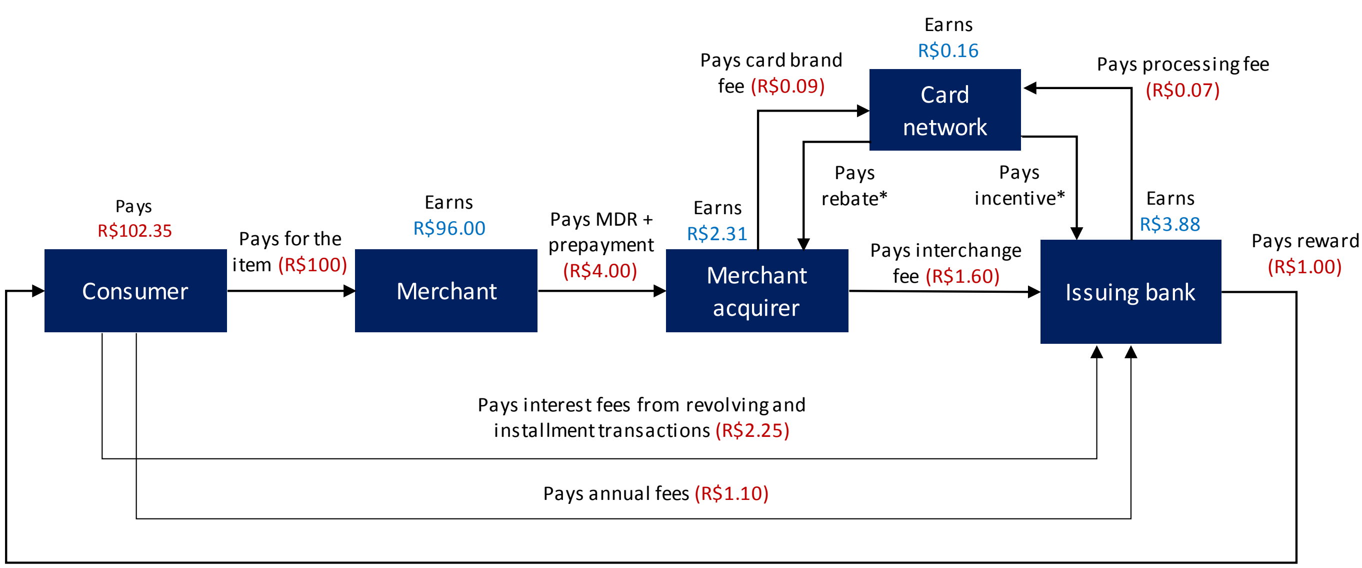
Credit card economics

Banks could also try to compensate for an expected hit on their bottom-line from an interest rate cap by adjusting the economics of the credit card payment cycle.

Exhibit 15: Credit card economics of a R$100 purchase

There are several players involved in the credit card payment cycle



Source: BofA Global Research. Note: We assume i) MDR of 2.30% (in line with BCB industry data) + prepayment fee of 1.70%, ii) interchange of 1.60% (in line with BCB industry data), iii) cashback of 1% of the TPV, iv) brand and processing fees of 9bp and 7bp (based on Mastercard fees), v) annual fee of R$110 (based on BCB data) and average annual TPV/card of R$10k, and vi) interest fees calculated by assuming 15% of the purchased value will revolve at a 15% monthly interest rate. * Rebate and incentive fees depend on number of issued cards, TPV growth, special campaigns, etc.

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