

# STAR: Impact of Online Gambling on Brazilian Economy and Sectors

## Santander Thematic Alpha Research: Assessing Effects of Rising Online Gambling

**Maria Paula Cantusio\***, CFA

Brazil: Banco Santander S.A.

(+5511) 3553 5309

[paula.cantusio@santander.com.br](mailto:paula.cantusio@santander.com.br)
**Ruben Couto\***

Brazil: Banco Santander S.A.

(+5511) 3553 7959

[ruben.couto@santander.com.br](mailto:ruben.couto@santander.com.br)
**Caio Moscardini\***

Brazil: Banco Santander S.A.

(+5511) 3553 0279

[caio.moscardini@santander.com.br](mailto:caio.moscardini@santander.com.br)

## Net/Net

**ERRATUM:** In the earlier version of this report, the explanations for revenues and expenses in tables were incorrectly switched. This has been corrected in this version.

In 2024, gamblers are forecast to spend R\$71.3-239.4 billion (a negative impact on GDP of 0.6-2.1%, if this forecast proves accurate) on online betting sites in Brazil, according to our estimates, implying a net impact of R\$25.7-35.9 billion (a negative impact on GDP of 0.2-0.3%, if this forecast proves accurate), considering the potential prizes paid to winners. With the regulation of online gambling coming into effect, we estimate that the country could collect R\$3-3.4 billion in 2024 and R\$5-10 billion in 2025, which would help offset a portion of the deleterious effects in the domestic market. According to data from Statista, between 2018 and 2023, Brazil saw revenue from online gambling increase from US\$0.1 billion to US\$1.6 billion (growth of ~74% per year vs. a global average of ~19% per year, with the country representing less than 2% of the global market). Overall, the legalization of online gambling seems to have negatively affected consumers' financial and mental health, as well as general consumption, especially in the low-income demographic. Although Brazil Central Bank (BCB) data still show a healthy environment in terms of delinquency rates and non-performing loans, one CNC study showed that in 1H24, 1.3 million people went into default due to online gambling. In terms of consumers' purchasing decisions, the data show that online gamblers are foregoing purchases in order to gamble, especially when it comes to paying for items like accessories, apparel, leisure, food (supermarkets and out-of-home), internet and utility bills, beauty products, and even hygiene items and medications. Overall, we expect the most affected sectors to be retail, consumer goods, financial institutions, education, health care, and malls.

Figure 1 - Overview of Gambling's Impact on Sectors and Covered Companies

Higher Impact		Average Impact		Lower Impact	
<u>Consumer Discretionary</u> CVC Arcos Dorados Vulcabras Grupo SBF	<u>Consumer Discretionary</u> C&A Guararapes Renner	<u>Consumer Staples</u> Assaí Carrefour Brasil Grupo Mateus	<u>Consumer Staples</u> Pague Menos	<u>Malls</u> Allos Iguatemi Multiplan	<u>Health Care</u> Hapvida
<u>Education</u> Vitru Cognia	<u>Financials</u> Nubank PAGS	<u>Education</u> YDUQS	<u>Financials</u> Stone	<u>Education</u> Ser Educacional	

Source: Santander Research

**Gambling regulation in Brazil is expected to increase** the country's revenue from tax collection. Online gambling in Brazil was legalized in 2018, but regulations for the activity will only come into effect on January 1, 2025, following the approval of the Law 14,790 in December 2023. This seven-year gap between the legalization and the regulation of online gambling has led to untamed growth. According to data from Statista, revenue from online gambling in Brazil increased from US\$0.1 billion to US\$1.6 billion between 2018 and 2023 (growth of ~74% per year vs. a global average of ~19% per year, with the country representing less than 2% of the global market). In terms of revenue per capita, Brazil reported US\$7.30 in 2023, below the global average of US\$10.60. Between 2024 and 2029, online gambling revenue is forecast to increase by 16.9% per year in Brazil vs. a global average of 7.8% per year, according to Statista. Once regulations come into effect, taxation will include: (i) a licensing fee of R\$30 million per

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company; (ii) a 12% tax on gambling revenue; and (iii) a 15% tax on winnings above R\$2,112 for players. We estimate that online gambling will contribute R\$3.0-3.4 billion to government coffers in 2024 and R\$5-10 billion in 2025.

**Gambling could have an average net and gross negative impact on Brazil's GDP of 0.2-2.1%.** Data from Brazil's balance of payments (BoP) and the Brazil Central Bank (BCB) provide different perspectives of Brazil's online gambling market. According to the BoP, in the last 12 months as of August 2024, online gamblers placed bets (expenses) totaling R\$71.3 billion (+8% YoY); this amount falls to R\$25.7 billion when subtracting the winnings received by bettors and the fees paid by gambling companies in the period. Using recent BCB data, we estimate that online gamblers will spend R\$239.4 billion in 2024, an amount that falls to R\$35.9 billion when subtracting the winnings received by bettors and fees paid by gambling companies. Using our Santander macro team's YE2024 GDP forecast of R\$11.5 trillion, the annualized bids placed by bettors would account for 0.6-2.1% of Brazil's 2024E GDP and 1.0-3.3% of household consumption. Considering the net effect of gambling expenditures (i.e., bids placed by bettors minus winnings received by bettors and fees paid by gambling companies), annualized expenditures would account for 0.2-0.3% of Brazil's 2024E GDP and 0.3-0.5% of household consumption.

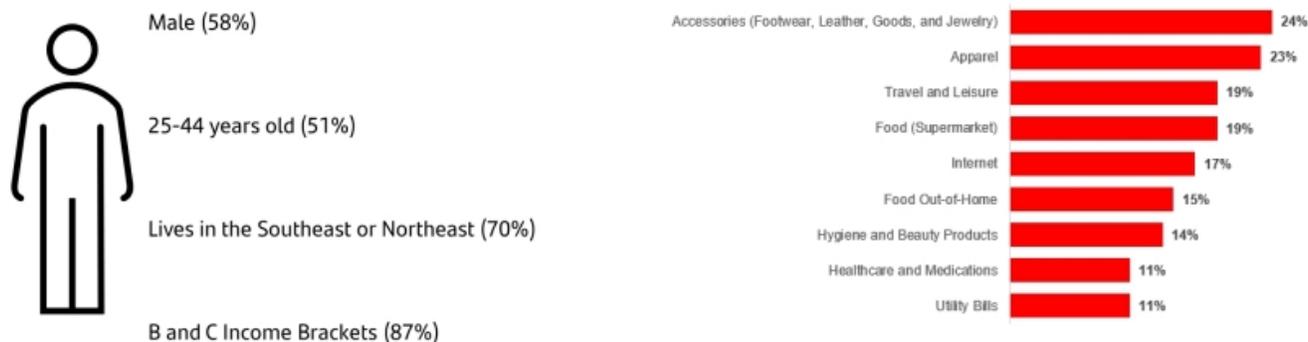
**Figure 2 - Average Impact on 2024E GDP and Household Consumption from Online Gambling and Betting Activities According to the Two Methodologies Considered**

	Balance of Payments LTM	% 2024E GDP	% 2024E Household Consumption	BCB Special Sudy 2024E	% 2024E GDP	% 2024E Household Consumption
(+) Total Revenue - Winnings Received by Gamblers and Fees Paid by Gambling Companies (billion R\$)	45.6	0.4%	0.6%	203.5	1.8%	2.8%
(-) Total Expenses - Fees Paid by Gamblers (billion R\$)	-71.3	-0.6%	-1.0%	-239.4	-2.1%	-3.3%
<b>Net Effect (billion R\$)</b>	<b>-25.7</b>	<b>-0.2%</b>	<b>-0.3%</b>	<b>-35.9</b>	<b>-0.3%</b>	<b>-0.5%</b>

Source: BCB and Santander Estimates

**Overall, we believe that legalization has had a negative impact on consumers' financial and mental health, and on consumption as well.** According to several studies and surveys both in Brazil and abroad mentioned in this report, online gambling sharply increased after legalization. The impact on the population's financial health has mostly been negative, especially among vulnerable households. According to BCB data from January 2018 to July 2024, non-earmarked loans to individuals increased at a faster pace than the market average (140.4% vs. 126.2%), but delinquency rates have been relatively stable in the last eight months, while non-performing loans and problematic assets have improved among low-income households, which seems to reflect positive outcomes from low inflation, a healthy labor market, and social benefits. Nonetheless, one of the studies show that in 1H24, 1.3 million people were in default due to online gambling. In terms of consumption decisions, the surveys show that gamblers are foregoing consumption in order to gamble, especially when it comes to purchasing accessories, apparel, leisure, food (supermarkets and out-of-home), beauty products, hygiene items and medications, and paying internet and utility bills.

**Figure 3 - Bettors' Profile in Brazil and Categories Individuals Are Giving Up Consumption to Bet**



Source: CNDL, SBVC, and Santander Research

**Retail, consumer goods, financial institutions, education, health care, and malls expected to be the most impacted sectors.** In the retail sector, gambling seems more likely to have an impact on discretionary services (leisure and entertainment) and goods (apparel, footwear, and accessories) in the lower-income brackets, especially among males. In the staples segment, the impact seems to be limited, but some staples players sales are concentrated in the lower-income brackets and in the North and Northeast, regions with the highest concentration of Bolsa Familia beneficiaries, among which there is a significant number of bettors. In the malls sector, listed players are less exposed than the market average to social classes C, D and E (~25% vs. 42%), thus leading to a limited impact from higher expenditures to gambling. Among financial institutions, concerns center on debt levels among the low-income demographic, as high debt levels can lead to higher delinquency rates in the financial system. As of October 2024, credit cards can no longer be used to place online bets, though bettors can still resort to personal loans and/or use Pix financing for such activities (72% of bettors use Pix to place their bets). In the education segment, intake rates decelerated in 1H24, especially in distance learning, where 76% of the students come from the C, D and E social classes. In a survey by Educa Insights, 35% of the 10.8k respondents stated that they did not start a higher education course in the period due to having spent money gambling. As for the healthcare, we believe that the public health segment could become increasingly burdened by incremental spending toward gambling, though private players could see an uptick as people seek therapy for gambling addiction and depression-related issues.

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## Online Gambling and Betting Regulation in Brazil

Online gambling and betting activities were legalized in 2018 after the approval of the Law 13,756/2018, which determined the need to regulate these activities within a maximum of four years. In 2023, the Brazilian government sent a Provisional Measure (MP) to Congress, aiming to improve the law approved in 2018, and the Law 14,790/2023 was approved in December 2023, which will come into force in January 2025. According to the regulation, companies have to be authorized by the Ministry of Finance to operate in Brazil's online gambling space. The regulation also demands that companies have a headquarters and legal representation in the Brazilian territory, besides a minimum stake of 20% of a Brazilian partner. Moreover, companies must demonstrate that they have implemented certain policies, procedures and internal controls related to: (i) customer service and ombudsman channels; (ii) money laundering prevention; (iii) responsible gaming and prevention of pathological gambling disorders; and (iv) betting integrity and prevention of match-fixing and fraud.

The gap between the publication of the first law in 2018, and the regulation taking effect in 2025, coupled with increasing internet penetration in the domestic market, led online gambling companies to expand exponentially in Brazil in a disorderly manner. A series of factors have led the federal government to intervene in online gambling activities during the past few months. In the beginning of September, the Civil Police from the state of Pernambuco launched an operation called "Integration" to investigate alleged money laundering from illegal gambling activities performed by companies and currency exchange houses in the state. Online platforms around the country were allowing bets to be placed on the municipal election, leading the Superior Electoral Court to approve a measure classifying bets involving the outcomes of elections as an electoral offense. A BCB study released at the end of September revealed that in 1H24, gamblers spent R\$18-21 billion to place online bets (only considering financial transfers made through Pix), with R\$3 billion of the total amount coming from beneficiaries of the Bolsa Família program. According to the BCB, 17% of the Bolsa Família program beneficiaries participated in betting activities in August 2024. Moreover, entities linked to the financial, retail, and health sectors performed several surveys that revealed negative impacts on consumers' financial and mental health, as well as reduced expenditures in the domestic retail segment due to online gambling.

As a result, the Ministry of Finance anticipated the prohibition of online gambling companies not authorized by the body to perform such activities in the domestic market from January 2025 to October 2024. The Brazilian Association of Credit Card and Services Companies (Abecs) also anticipated the prohibition of using credit cards to pay for bets from January 2025 to October 2024. Even so, according to the Retailers National Confederation (CNDL), 72% of gamblers are using Pix to place bets, and the BCB president stated that the amount of Pix transfers has increased by more than 200% since January 2024 in Brazil, which might lead to higher delinquency rates in the domestic market going forward. As a result, the Brazilian Federation of Banks (Febraban) is discussing the possibility of banning the use of Pix for placing online bets, or at least establishing maximum amounts, even though the use of Pix for online betting will be permitted under the regulation that comes into effect on January 1, 2025.

In terms of taxation, the regulation mandates that companies will have to pay a licensing fee of R\$30 million to be authorized to participate in online betting activities in Brazil, and their gross gaming revenue (GGR) will be subject to a 12% tax. The 12% tax over GGR has been criticized in the domestic market, as it is lower than the current tax rate for tobacco and alcoholic drinks in Brazil. Gamblers, in turn, will be subject to a 15% tax on winnings from online gambling platforms. Companies that are found to be illegally operating in the domestic market will have to pay fines of up to R\$2 billion. As of October 9, there were 116 companies in the gambling arena in Brazil whose operations are considered as "regular" by the federal government. Those companies will need to be compliant with the Laws 13,756/2018 and 14,790/2023 and the regulatory ordinances issued by the Ministry of Finance to continue operating in the country from January 1, 2025 onward. The companies that are definitely approved will pay the licensing fee or R\$30 million. Each license allows the registration of up to three different commercial brands. Collected taxes will be allocated to investments in sports (36%), tourism (28%), public safety (1.6%), education (10%), social security (10%), and health (1%).

## Size of Brazil's Online Gambling Market

We used two main sources of data to assess the current size of the online gambling market in Brazil: (i) the country's balance of payments (BoP), which showed monthly expenses (fees paid by bettors) of R\$5.9 billion in the last 12 months as of August 2024 (R\$71.3 billion annualized), or net expenses (expenses less revenue from winnings paid to bettors and fees paid by gambling companies) of R\$2.1 billion in the last 12 months (R\$25.7 billion annualized); and (ii) the special study (119/2024) released by the BCB, which showed monthly expenses of R\$20.0 billion in the first eight months of 2024 as per our estimates (R\$239.4 billion annualized), or net expenses (deducting revenue) of R\$3.0 billion in the last 12 months (R\$35.9 billion annualized). We focused our analysis on both the expenses (fees paid by bettors) and the net effect of expenses and revenue (prizes received by winners) due to the fact that the resources spent by bettors are hardly offset by prizes, since winners concentrate the amounts.

Given that the majority of the companies currently operating in online gambling and betting activities in Brazil are headquartered outside the country, the BoP might provide some visibility on the revenue and expenses generated by the segment. Even though the recent special study released by the BCB seems to show that the numbers bring by the BoP underestimate the transactions on online betting activities, we believe the information supports an understanding of how the segment has been evolving in recent months. Starting in January 2023, the BCB made changes in the methodology of Brazil's BoP that incorporated statistics related to online betting activities (fees paid by companies, fees paid by bettors, and prizes received by winners) into two accounts: (i) recreational services, related to historical and cultural heritage and other personal services; and (ii) secondary income - other transfers.

As per Brazil's BoP data, we concluded that, in the last 12 months, total expenses related to online bets increased by 8.0% compared to 2023, to R\$71.3 billion, while revenue decreased by 5.8% in the period, to R\$45.6 billion, leading to an YoY increase of 46.0% in the negative net effect, to R\$25.7 billion. In the last 12 months, the total expenses of R\$71.3 billion would represent 0.6% of Santander's 2024 estimated GDP of R\$11.5 trillion, and the net negative effect of R\$25.7 billion would represent around 0.2%. In 2023, average monthly expenses in the segment totaled R\$5.5 billion, which increased to R\$5.9 billion in the last 12 months as of August 2024.

**Figure 4 - Estimated Revenue and Expenses from Online Gambling and Betting Activities in Brazil's Balance of Payments**

	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	2023
(+) Total Revenue - Winnings Received by Gamblers and Fees Paid by Gambling Companies (billion R\$)	3.1	3.3	4.3	3.2	3.7	4.2	4.0	4.1	4.2	5.1	4.8	4.5	48.4
(-) Total Expenses - Fees Paid by Gamblers (billion R\$)	-4.7	-4.8	-6.4	-5.0	-5.4	-5.2	-5.5	-5.4	-5.2	-6.4	-6.5	-5.5	-66.0
<b>Net Effect (billion R\$)</b>	<b>-1.6</b>	<b>-1.5</b>	<b>-2.0</b>	<b>-1.8</b>	<b>-1.7</b>	<b>-1.0</b>	<b>-1.5</b>	<b>-1.4</b>	<b>-1.0</b>	<b>-1.2</b>	<b>-1.7</b>	<b>-1.1</b>	<b>-17.6</b>

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	LTM
(+) Total Revenue - Winnings Received by Gamblers and Fees Paid by Gambling Companies (billion R\$)	5.3	3.8	4.1	5.2	4.8	3.9	5.3	4.0					45.6
(-) Total Expenses - Fees Paid by Gamblers (billion R\$)	-7.2	-5.3	-5.9	-7.3	-7.5	-6.3	-7.7	-6.3					-71.3
<b>Net Effect (billion R\$)</b>	<b>-1.8</b>	<b>-1.5</b>	<b>-1.8</b>	<b>-2.1</b>	<b>-2.7</b>	<b>-2.4</b>	<b>-2.4</b>	<b>-2.3</b>					<b>-25.7</b>

Source: BCB

Considers the Accounts of "Recreational Services" and "Secondary Income - Other Transfers"

Regarding the BCB's special study, it considered the amount of Pix transfers sent to online gambling companies. Given that other sources of payments can be used to place online bets, such as credit cards, the institution emphasizes that the number may have been underestimated. The BCB made an exercise to map companies that are not adequately classified as gambling and betting activities in Brazil, based on mentions on the internet and specific filters. According to the institution, between January and August 2024, Pix transfers to those companies varied between R\$18-21 billion per month vs. R\$1.9 billion to lotteries. In the table below, we use proxies for the amounts presented by the BCB on the line of expenses. For September to December 2024, we estimate expenses as an average of the previous period (~R\$20 billion). According to the BCB estimates, around 15% of the bets placed by gamblers in the period were retained by companies, with 85% distributed to prize winners. Thus, on the line of revenue, we calculate it as 85% of the expenses. Overall, we conclude that the total impact of expenses could reach R\$239.4 billion by YE2024, representing ~2.1% of Santander's 2024E GDP for the period. The net negative effect of R\$35.9 billion, in turn, would represent 0.3% of the 2024E GDP.

**Figure 5 - Estimated Revenue and Expenses from Online Gambling and Betting Activities According to BCB's Special Study and Santander Estimates**

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	2024E
(+) Total Revenue - Winnings Received by Gamblers and Fees Paid by Gambling Companies (billion R\$)	16.6	15.3	16.8	17.0	17.9	17.4	17.0	17.7	17.0	17.0	17.0	17.0	203.5
(-) Total Expenses - Fees Paid by Gamblers (billion R\$)	-19.5	-18.0	-19.8	-20.0	-21.0	-20.5	-20.0	-20.8	-20.0	-20.0	-20.0	-20.0	-239.4
<b>Net Effect (billion R\$)</b>	<b>-2.9</b>	<b>-2.7</b>	<b>-3.0</b>	<b>-3.0</b>	<b>-3.2</b>	<b>-3.1</b>	<b>-3.0</b>	<b>-3.1</b>	<b>-3.0</b>	<b>-3.0</b>	<b>-3.0</b>	<b>-3.0</b>	<b>-35.9</b>

Source: BCB and Santander Estimates

In summary, the annualized expenses (fees paid by bettors) with bets would represent 0.6-2.1% of the country's 2024E GDP. Since household consumption represents ~64% of Brazil's GDP, on average, the annualized expenses with bets would represent 1.0-3.3% of household consumption. Taking into account the net effect (fees paid by bettors less prizes received by winners), expenses surpassed revenue by R\$25.7 billion in the last 12 months as of August 2024 as per data from Brazil balance of payments (BoP), while we estimated a R\$35.9 billion annualized negative effect based on BCB's special study. Considering the net effect of expenses with bets, the annualized expenses with gaming and bets would represent between 0.2-0.3% of the country's 2024E GDP and 0.3%-0.5% of household consumption.

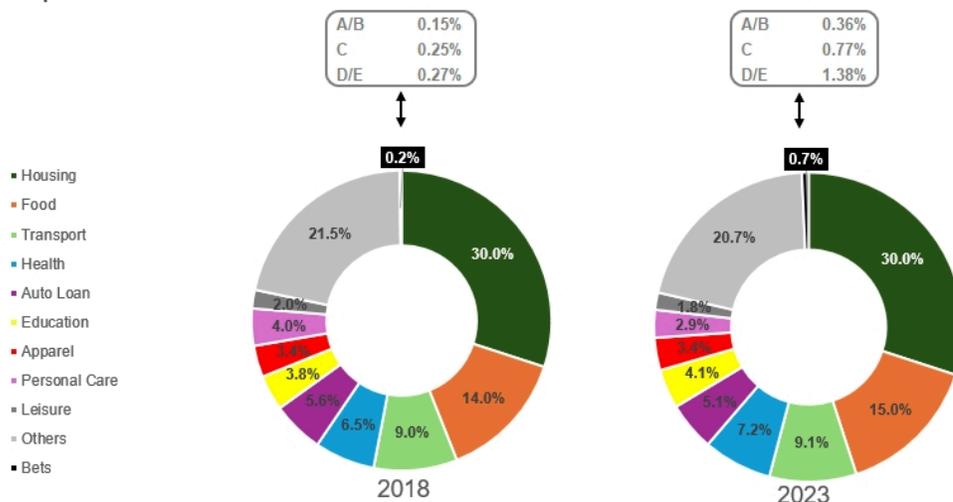
**Figure 6 - Average Impact on 2024E GDP and Household Consumption from Online Gambling and Betting Activities According to the Two Methodologies Considered**

	Balance of Payments LTM	% 2024E GDP	% 2024E Household Consumption	BCB Special Study 2024E	% 2024E GDP	% 2024E Household Consumption
(+) Total Revenue - Winnings Received by Gamblers and Fees Paid by Gambling Companies (billion R\$)	45.6	0.4%	0.6%	203.5	1.8%	2.8%
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<b>Net Effect (billion R\$)</b>	<b>-25.7</b>	<b>-0.2%</b>	<b>-0.3%</b>	<b>-35.9</b>	<b>-0.3%</b>	<b>-0.5%</b>

Source: BCB and Santander Estimates

In terms of household income, data from the BCB, IBGE and PwC shows that the net effect of gambling over families budget has increased from 0.2% in 2018 to 0.7% in 2023. The rate of gambling activities among different social classes is uneven though, with classes C, D and E having a larger proportion of their income being directed to those activities, at around 0.77-1.38%, than classes A and B, at around 0.36% in 2023. We note that those percentages consider the net effect of gambling activities in the economy (fees paid by bettors less prizes received by winners), but could be much higher if only expenses (fees paid by bettors) were considered. In a recent [analysis performed by our retail team](#), which considered only the expenses (fees paid by bettors) with gambling activities shown in the country's BoP, the conclusion was that gambling as a percentage of household income went from 0.8% in 2018 to 1.9-2.7% in 2023.

**Figure 7 - Categories Expenditures as a % of Household Income**



Source: BCB, IBGE, PwC, and Santander Research

## Impact for Brazil Fiscal Accounts with Gambling Regulation

by Ítalo Franca

With the regulation of online gambling in Brazil, the government is expected to collect R\$3-3.4 billion from gambling in 2024, as per our estimates. This amount stems from the fixed grant value set at R\$30 million for each company, as outlined in a law approved by Congress. According to data from the Ministry of Finance, the list of companies authorized to continue participating in online gambling activities in the national territory as of October 9 2024 amounted to 116 companies. According to the rules regulating the sector, companies will be taxed at 12% on the revenue obtained from each bet, after the winnings have been distributed to the bettors, and will be subject to IRPJ and CSLL. For winnings over R\$2,112, bettors will be taxed at rate of 15%.

For 2025, we expect revenue from bets to reach R\$5-10 billion. However, precise numbers are hard to determine, as this is a new market, and we do not yet know how much the regulations and taxation will affect consumers' appetite for online betting. A large portion of the 2025E revenue of R\$5-10 billion should come from taxation of the companies themselves and the payment of new licenses, since the monthly winnings of most gamblers tend to be within the exemption range. A significant share of gamblers could even lose money, so the bulk of the revenue will come from betting revenue like a regular company.

From the point of view of tax payments by consumers, the gambling regulations should have a neutral or even marginally negative net effect on government revenues, since the sector competes with consumption in other segments with respect to economic activity. In addition to the possibility of losing money by gambling, people may be foregoing purchasing other goods. All in all, these taxes should help the government a bit on the fiscal side, yet reducing other effects would be also important.

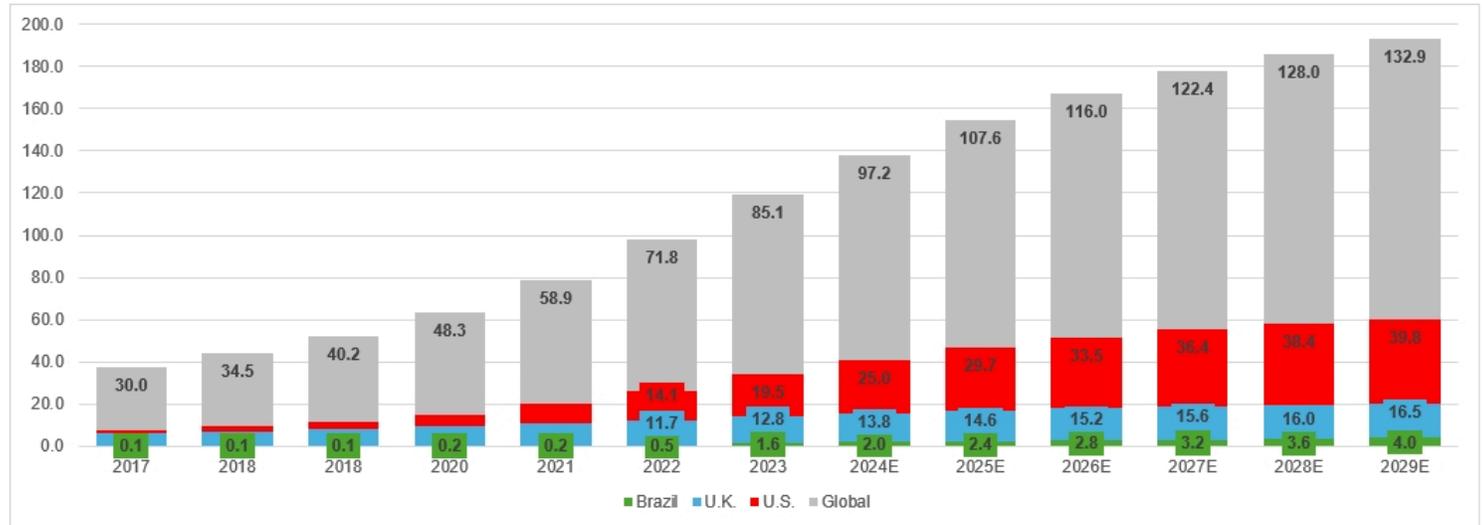
## Online Gambling: The International Outlook

According to data from Statista, the estimated size of the global online gambling market in terms of revenue in 2023, was US\$85.1 billion, with the U.S. being the largest market (US\$19.5 billion), followed by the U.K. (US\$12.8.0 billion), while Brazil accounted for less than 2% of the global market, with revenue estimated at US\$1.6 billion in the period. From 2017 to 2023, revenue from online gambling activities increased at an average rate of 19.0% per year globally, and at 74.4% per year in Brazil. According to the Statista forecast, between 2024 and 2029, global revenue from online gambling should increase by 7.8% per year, while in Brazil growth is forecast at ~16.9% per year. According to a study from PwC entitled "The impact of sports betting on consumption", developed markets have seen revenue from online gambling contract since the pandemic. In the case of the U.K., for instance, the market shrank 27% YoY in 2022. In developing markets, in turn, online gambling markets have been growing at a rapid pace since 2020.

The accelerated growth of online gambling reflects trends such as: (i) more individuals using the internet and mobile devices to play online games; (ii) the rise of online payment gateways and digital money; and (iii) changes in the legislative landscape for virtual betting, including the legalization of online betting in emerging countries. Sports betting is the format that has been increasing the most in the gambling market globally, with its share going from 39% in 2017 to 46% in 2023, and forecast to reach 49% by 2029, as per Statista's data.

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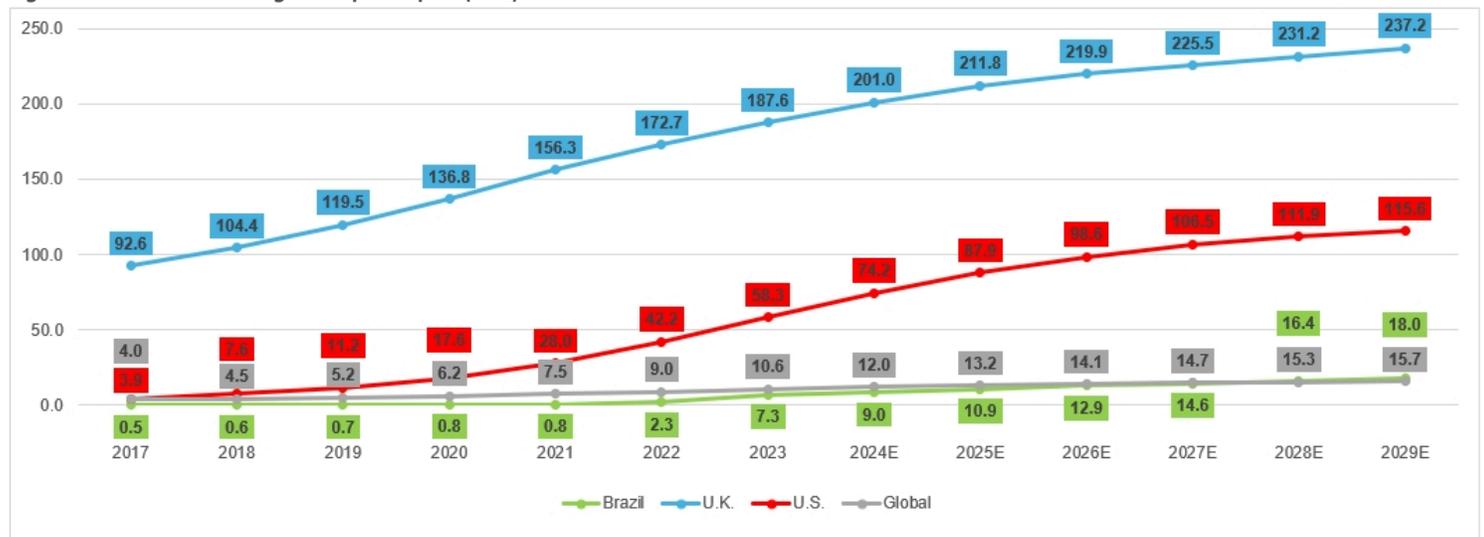
**Figure 8 - Online Gambling Sales (US\$ billion)**



Source: Statista and Santander Research

Based on data from Statista and the World Bank, online gambling revenue per capita reached a global average of US\$10.6 in 2023, with Brazil registering US\$7.3, the U.K. 187.6, and the U.S. US\$58.3. By 2028, revenue per capita in Brazil is forecast to surpass the global average. Even in countries where the online gambling market is more developed (e.g., the U.S. and the U.K.), revenue per capita is expected to keep growing in the coming years.

**Figure 9 - Online Gambling Sales per Capita (US\$)**



Source: Statista, The World Bank, and Santander Research

## Profile of Online Gamblers and Impact of Gambling on Their Financial and Mental Health and Consumer Behavior

A paper entitled "Gaming Away Stability: Sports Betting's Impact on Vulnerable Households", published in July 2024 by academics from the University of Kansas, Northwestern University and Brigham Young University analyzed the effects of the legalization of sports betting in the U.S. in 2018 on household investments, spending, and debt management decisions by tracking the transactions of over 60 million people. The study concluded that after legalization, there were sharp increases in sports betting: from January 2018 to September 2023, the average amount spent in online sports betting went from US\$0 to US\$280 per quarter, increasing by around US\$25 per quarter in the period. Even though this increased sports betting did not displace other gambling or consumption activities, it significantly reduced household savings allocations by around 14%.

According to the study, the legalization of online sports betting in the U.S. led to an actual increase in complementary entertainment-related categories (i.e. cable TV, and restaurants), and to a decrease in net deposits in traditional brokerage accounts, especially in risky investments such as equities. The paper highlights that these effects were particularly concentrated in vulnerable households, with their increased financial constraints evidenced by subsequent increased bank account overdrafts and credit card debt, and decreased credit availability. Sports betting legalization also significantly reduced household stock market participation for more financially constrained households. Overall, financially constrained households' long-term

financial health has deteriorated. The paper also concludes that as sports betting gains traction, it potentially undermines government efforts to promote savings via fiscal incentives and financial education.

In Brazil, various surveys (some detailed below) indicate that the impact of online gambling affect not only individuals' financial health, but also their consumption decisions. The BCB's special study revealed that around 24 million individuals participated in gambling and betting activities in August 2024 (more than 11% of the Brazilian population). Most of these gamblers (~35%) were 20-30 years old. Gamblers' monthly expenditures on bets varied between R\$100 and R\$3,000, with older people usually spending more. Moreover, out of the 24 million gamblers, around 5 million were Bolsa Família beneficiaries, having spent R\$3 billion gambling, with the average ticket per person being around R\$100. The BCB also highlighted that 17% of the beneficiaries registered in the Bolsa Família program participated in gambling in August 2024.

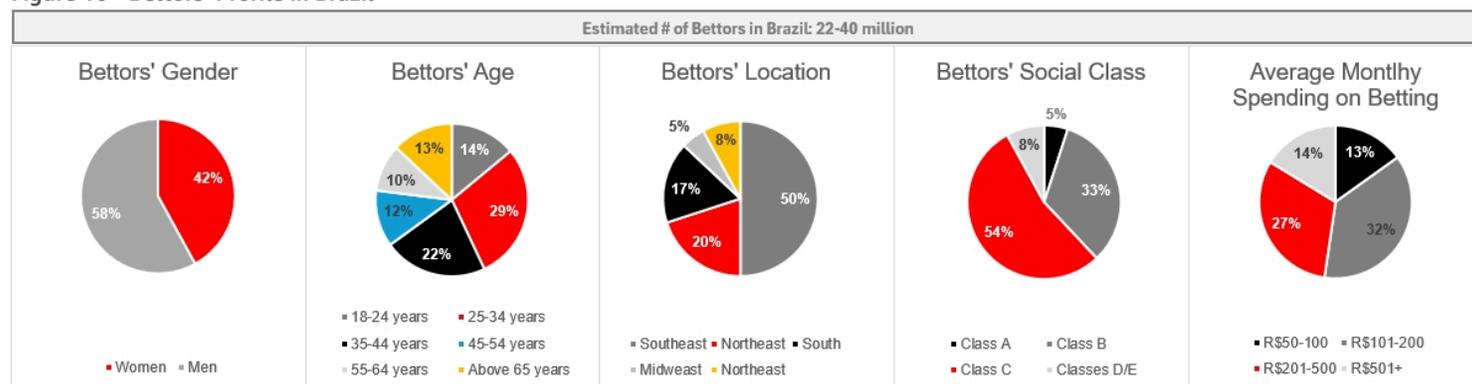
According to the Brazilian Association of Financial and Capital Market Entities (Anbima), 14% of Brazilians aged 16 or over (or around 22 million people) made at least one online bet in 2023. Among those, 3% frequently use betting apps (5 million people), 5% occasionally (8 million) and 6% rarely (10 million). Around 17% of classes A/B individuals surveyed stated they have gambled in 2023, followed by 15% of class C individuals and 10% of classes D/E individuals. Moreover, around 29% of generation Z (16 to 27 years old in 2023) stated they had gambled in 2023, followed by 18% of millennials or Gen Y (28 to 42 years old in 2023), 6% of Gen X (43 to 62 years old in 2023), and 4% of Boomers. In terms of gender, 19% of the men surveyed stated they have gambled in 2023, and 10% of the women.

A study performed by CNDL and the Credit Protection Service (SPC Brasil) on August 2024, based on market data and interviews with more than 1,000 individuals, found that 40 million people participated in gambling activities in the last 12 months, spending around R\$187 per month. Among class A and B individuals, bets averaged R\$267 per month. Pix transfers were used by 72% of the consumers, while 18% used credit cards to place bets. In terms of betting frequency, 22% of the respondents usually bet two to three times a week, 20% once a week, and 17% once a month. Around 15% of gamblers stated that they did not pay a bill at least once in order to use funds on games or sports betting. The CNDL survey also revealed that 30% of gamblers acknowledge that their gambling habit has had a negative influence on their lives, including decreased work productivity (11%) and increased debt (11%). Moreover, 46% of gamblers claim to have foregone some consumption (mainly apparel, 18%; internet, 17%; leisure, 16%; and restaurants, 16%) in order to bet.

The information provided by CNDL and SPC aligns with a June 2023 survey from the Brazilian Retail and Consumption Society (SBVC) of 1,337 individuals: 63% of the respondents affirmed that part of their income has been compromised by online betting. When gamblers were asked if they had to forego consumption in order to bet, 23% answered that had foregone apparel consumption, 19% on supermarket, 19% on travel, 15% on restaurants, 14% on hygiene and beauty products, 11% on health care and medicine, and 11% on electricity, water, and gas bills. Around 38% of the respondents stated that they bet on a weekly basis, and 16% on a monthly basis, and 13% on a daily basis.

Based on the various surveys that we analyzed, we conclude that Brazil has 22-40 million gamblers, with monthly expenditures toward this pastime at R\$101-500. The majority are men less than 44 years old, living in the Southeast, and belonging to the C and B classes. The majority seem to have foregone consumption in order to bet, especially accessories, apparel, leisure, food (supermarkets and out-of-home), internet and utility bills, beauty products, and even hygiene items and medications. Moreover, the majority are betting mostly on sports, especially soccer, and slot games.

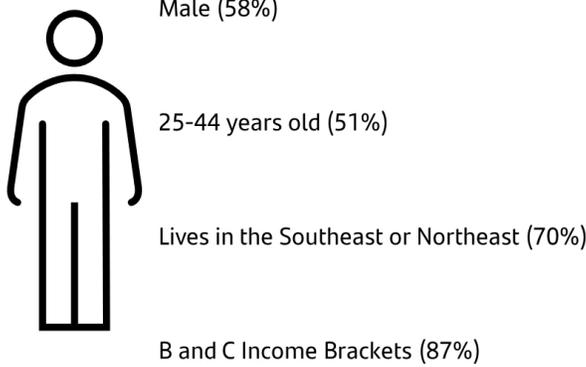
**Figure 10 - Bettors' Profile in Brazil**



Source: CNDL, Anbima, SBVC, Hibou, and Santander Research

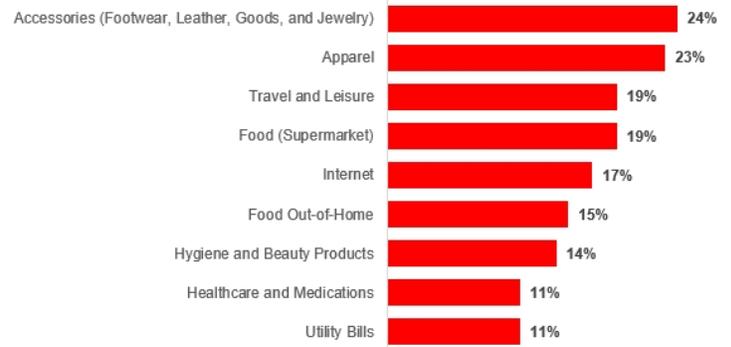
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Figure 11 - Average Bettor Profile in Brazil



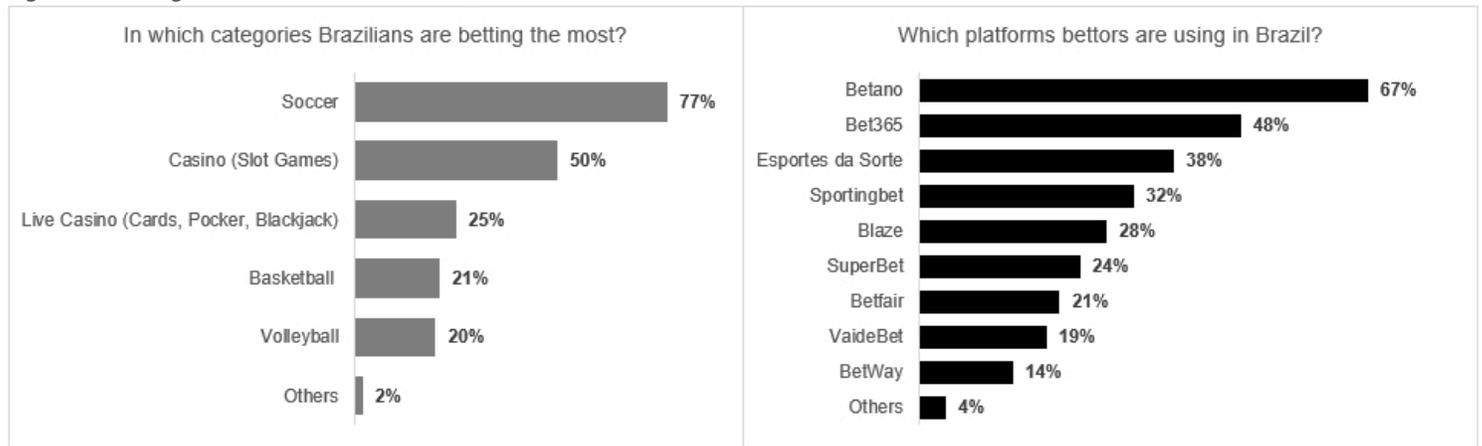
Source: Santander Research

Figure 12 - Categories Individuals Are Giving Up Consumption to Bet



Source: CNDL and SBVC

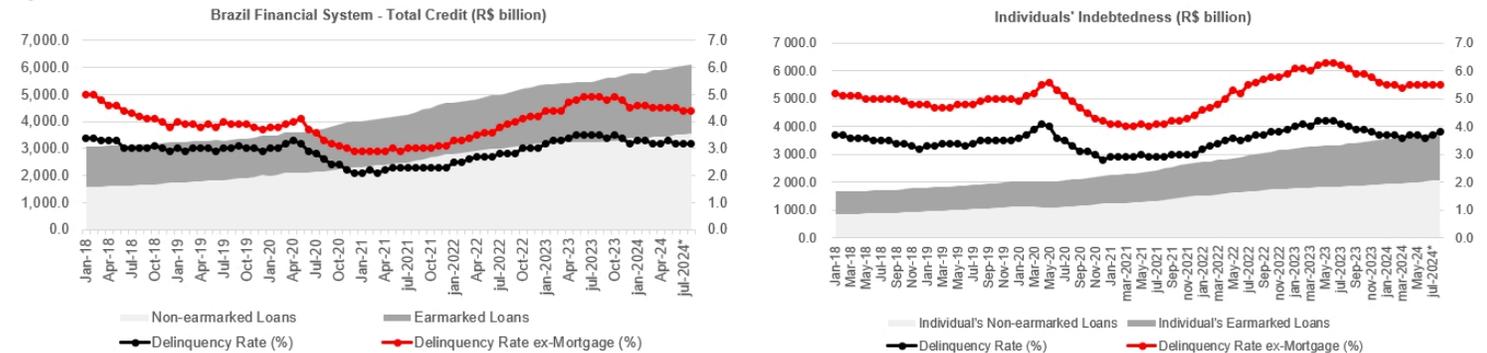
Figure 13 - Categories that Attract More Bets, and Bets Platforms Most Used in Brazil



Source: SBVC

In terms of financial health, we analyzed data from the BCB related to the domestic credit market from January 2018 to July 2024. In the period, overall loans increased 98.8%, going from R\$3.1 trillion to R\$6.1 trillion, while loans to individuals increased 126.8%, going from R\$1.7 trillion to R\$3.8 trillion. Non-earmarked loans increased at a faster pace than the market average, at 126.2% and going from R\$1.6 trillion to R\$3.6 trillion, while non-earmarked loans to individuals expanded even more, by 140.4% in the period, going from R\$0.7 trillion to R\$2.1 trillion. As for earmarked loans, these increased 70.0% from January 2018 to July 2024, going from R\$1.5 trillion to R\$2.6 trillion, and for individuals the increase was 112.3% in the period, going from R\$0.8 trillion to R\$1.7 trillion. Regarding delinquency rates, the total delinquency rate in the financial system varied from 2.1-3.5% in the period, and 2.9-5.0% in non-earmarked loans, peaking at the beginning of 2018, the beginning of 2020, between May 2023 and October 2023, and are currently at 3.2% and 4.4%, respectively. Among individuals, total delinquency rates varied between 2.9-4.2%, and 4.0-6.3% in non-earmarked loans, peaking in the beginning of 2023, and are currently at 3.8% and 5.5%, respectively.

Figure 14 - Credit Market in Brazil - Total Portfolio and Individuals' Portfolio



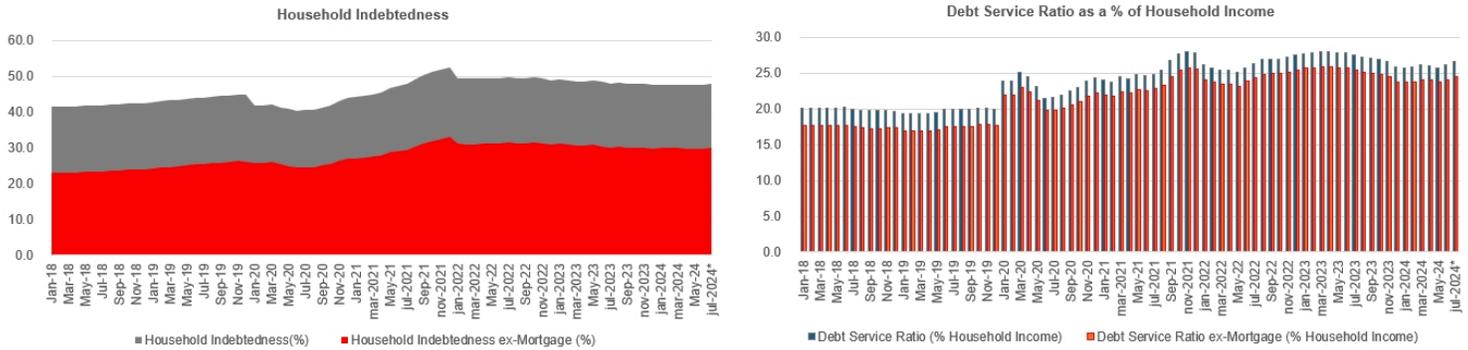
Source: BCB

The analysis of BCB data referring to household debt profile from January 2018 to July 2024, shows that total debt levels went from 41.5% to 47.9% in the period, with the highest level being in December 2021, at 52.6%. The percentage of non-earmarked loans went from 23.0% in January 2018

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to 30.0% in July 2024, with the highest level also being in December 2021, at 33.0%. As a result of higher debt levels, the debt service ratio as a percentage of household income went from 20.2% in January 2018 to 26.6% in July 2024, with the highest percentage being in November 2021, March 2023 and April 2023, at 28.0%.

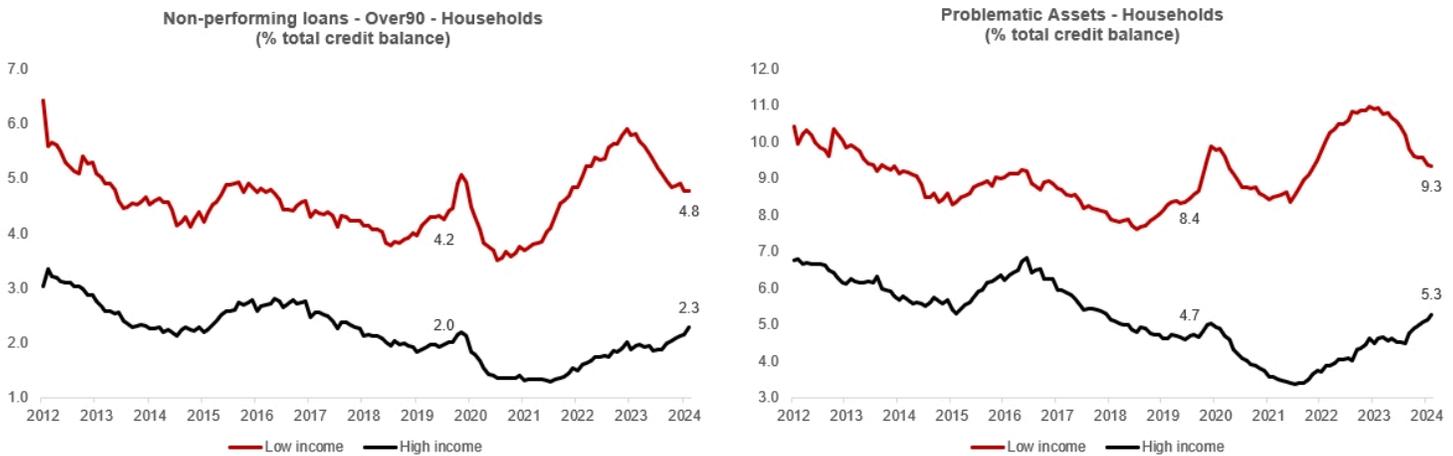
**Figure 15 - Household Debt**



Source: BCB

Taking a deeper look at household non-performing loans, specifically over 90-day non-performing loans and problematic assets (over 90-day non-performing loans that are unlikely to be recovered), the most critical situation for low income households occurred at the beginning of 2023, when 90-day non-performing loans reached 5.9% of the total credit balance, and problematic assets represented 10.9% of total credit balance. In the meanwhile, the percentages for high income classes has been deteriorating since the end of 2021. This dynamics reflects the fact that high-income classes are more sensitive to interest rates increases than low-income classes, since the latter usually pay higher interest rates independently of the macroeconomic environment. Low-income classes are usually more affected by variables such as income, inflation, and labor market dynamics, which have been positively performing over the past few months in Brazil. Financial aid through the Bolsa Familia program to the low income population has substantially increased since 2022, when the minimum amount established for the benefit went from ~R\$200 to ~R\$400 in January and to ~R\$600 in August. In addition, since delinquency rates peaked in the domestic market following the stimulus granted during the post pandemic period, large financial institutions have become more conservative in lending to individuals from low-income classes.

**Figure 16 - Over 90 Days Non-Performing Loans and Problematic Assets - Households**



Source: BCB

Brazilian regulations on gambling activities, which will come into effect in January 2025, prohibit the use of credit cards to place bets, but in the beginning of October 2024, the Brazilian Association of Credit Card and Services Companies (Abecs) put the prohibition into effect ahead of the January date. Although the regulation prohibit the use of credit cards to place bets, gamblers can still take out personal loans to use for such activities. Besides that, according to CNDL, the majority of gamblers in Brazil are not using credit cards to place bets, but mostly Pix (72%), and Brazilian banks provide Pix financing for its clients. Even though the use of Pix for online betting is allowed by the regulations that come into effect on January 1, 2025, Febraban is discussing the possibility of banning it for online betting or at least establishing limits on maximum amounts.

Based on the BCB data analyzed, we conclude that credit to individuals has been increasing at a faster pace than the market average between January 2018 and July 2024 (126.8% vs. 98.8%), especially non-earmarked loans (140.4% vs. 126.2%). The percentage of household income used to service debt service has also been increasing (from 20.2% in January 2018 to 26.6% in July 2024), which reduce the income available for other types of expenditures and consumption. Individual delinquency rates have been relatively stable in the last eight months, while non-performing loans and problematic assets have improved among low income households. Overall, based on data on Brazil financial system, signals are mixed and it is hard to conclude if the increase in online gambling has been harming household financial health so far. Even so, we note that the CNC released a study in September 2024 indicating that, in 1H24, 1.3 million people were in default due to online gambling.

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From a social perspective, we note that the World Health Organization (WHO) estimates that up to 5.8% of the population may meet the criteria for a diagnosis of gambling addiction, a compulsive gambling disorder, and the percentage of people affected by the practice is at least three times higher. Gambling addiction is also usually associated with alcohol or drug abuse, which mutually reinforce each other in a spiral of degradation. In a survey performed by the Federation of Trade, Services, and Tourism of the State of São Paulo (Fecomércio) with 3,622 individuals in July 2024, 6% of the respondents stated to be addicted to online gambling. In the UK, for instance, government estimates that around 0.4% of adults are classified as problematic gamblers, with a further 3.9% at moderate or low risk, and annual healthcare expenses, productivity losses, and social services costs reaches between US\$1.4-2.3 billion. The possibility of an increase in gambling addiction in Brazil could pressure the national health system, especially in the public service, where the majority of classes C, D and E get treatment. Currently, the Brazilian government allocates only 1% of public health expenditures to mental health services, which might not be sufficient to cope with further gambling addiction issues.

## Sector Impact of Increasing Expenditures on Gambling

We believe that retail, consumer goods, financial institutions, education, health care, and malls could be the sectors most affected sectors by increasing gambling expenditure in Brazil. In the retail sector, bets seem to be only one of the many factors impacting consumption, together with high debt service ratio over household income, cross-border and e-commerce purchases and cryptocurrencies investments. Gambling seem more likely to impact discretionary services (leisure and entertainment) and goods (apparel, footwear, and accessories) in lower-income brackets, especially among males. In the staples segment, the impact seems to be limited, but some players sales are concentrated in lower-income brackets and in the North and Northeast, which has the highest penetration of Bolsa Familia beneficiaries. In the malls sector, listed players are less exposed than the market average to social classes C, D and E (~25% vs. 42%), thus leading to a limited impact from higher gambling expenditures.

Among financial institutions, associations within the sector have been vocal about the risks related to gambling, especially regarding debt in the low-income demographic, which can lead to higher delinquency rates in the financial system. As of October 2024, credit cards cannot be used to place bets anymore in Brazil, but gamblers can still take out personal loans and Pix financing (72% of the gamblers use Pix to place bets). As a result, we believe that financial institutions more exposed to lower-income brackets and to Pix transactions will possibly be the most affected in the sector.

In the education segment, intake rates decelerated in 1H24, especially in distance learning, in which 76% of the students come from C, D and E social classes. In a survey performed by Educa Insights, 35% of the 10.8k respondents stated that they did not start a higher education course in the period due to expenditures on bets. As for the healthcare, the public health segment is likely to face stronger burden of incremental spending arising from bets, but private players could see some uptick on utilization for therapies and depression related treatments.

Figure 17 - Overview of Bets Impact Over Sectors and Covered Companies

Higher Impact		Average Impact		Lower Impact	
<b>Consumer Discretionary</b> CVC Arcos Dorados Vulcabras Grupo SBF	<b>Consumer Discretionary</b> C&A Guararapes Renner	<b>Consumer Staples</b> Assaí Carrefour Brasil Grupo Mateus	<b>Consumer Staples</b> Pague Menos	<b>Malls</b> Allos Iguatemi Multiplan	<b>Health Care</b> Hapvida
<b>Education</b> Vitru Cogna	<b>Financials</b> Nubank PAGS	<b>Education</b> YDUQS	<b>Financials</b> Stone	<b>Education</b> Ser Educacional	

Source: Santander Research

## Retail

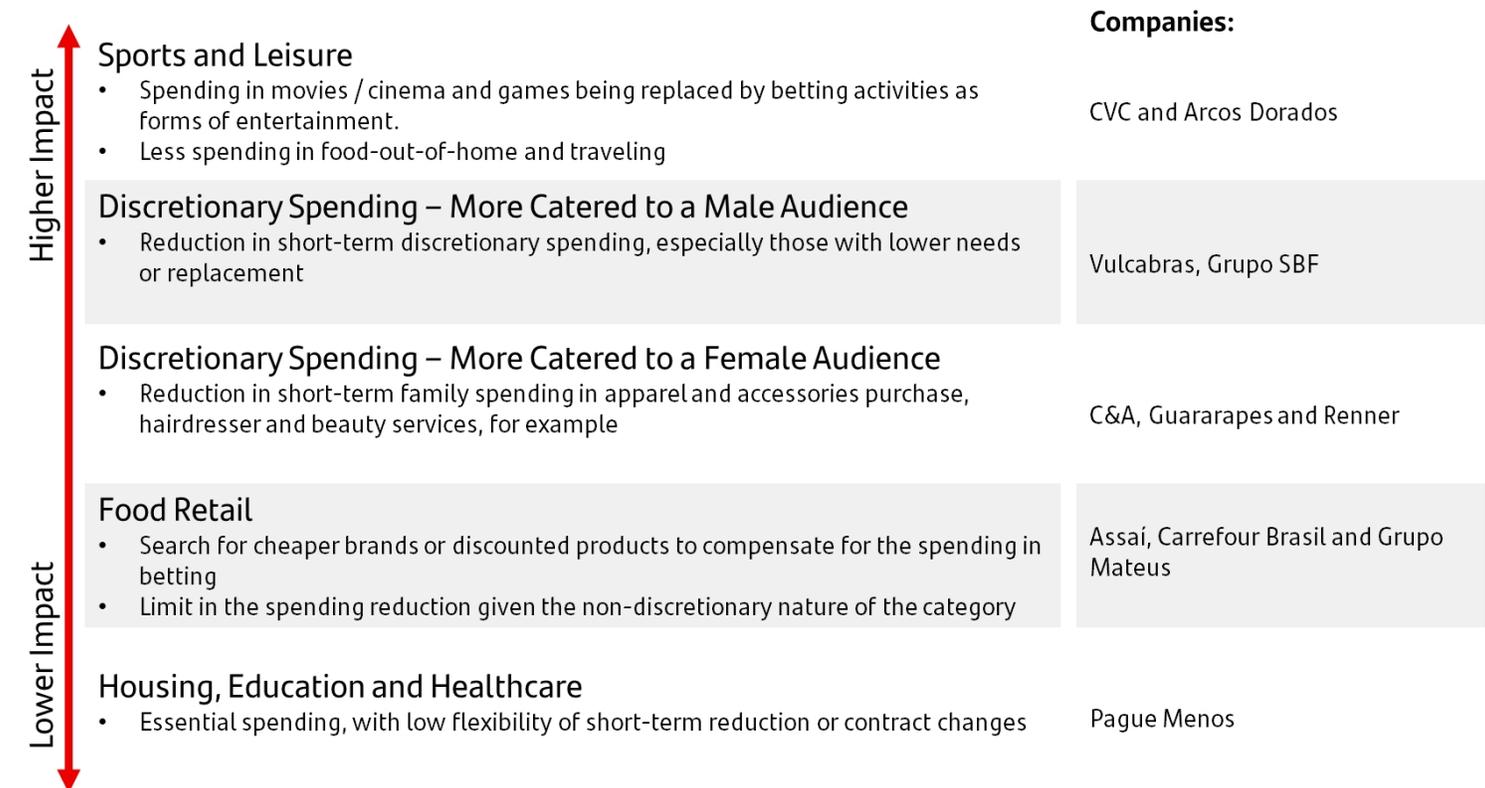
by Ruben Couto\* and Team

The meteoric rise in online gambling activity in Brazil is usually associated with individuals spending less in retail/consumer activities while increasing their overall debt. As discussed over the last pages and in a [previous report](#), we do believe the massive growth in gambling likely grabbed part of families' income that was previously dedicated to retail segments. However, betting spend is just one of the many factors currently influencing consumption patterns in the population. Retail sales activity is still encumbered by families' high Income commitment to debt service, while also emerging and new spending habits such as gambling, cross-border e-commerce and even crypto, become a greater source of competition for retailers as they vie for consumers' share of wallet. That said, we do not have enough data to conclude that retailer XYZ is not delivering the expected sales growth due to the rise in betting, but below we do our best to explain our thoughts on what companies under our coverage might be seeing the most money being siphoned away to betting.

Given the limited data available, we based our analysis on the different surveys by varied entities that gives us a glimpse on the Brazilian bettor profile and its habits. Based on those survey findings, we can compare how this bettor profile compares to the average customer profile of listed retailers from segments that were cited as categories that were replaced in part by betting. Based on at least 3 different surveys, in [Figure 11](#) we share the key aspects of the "average bettor" in Brazil, while in [Figure 12](#) we show categories where gamblers cited giving-up to support their betting habits.

In a nutshell, the “average bettor” in Brazil is male, part of lower-income brackets, located in the Southeast. Moreover, discretionary consumption that includes services (Leisure/Entertainment) and replacement goods (i.e. Apparel/Footwear/Accessories) appear as spending habits most likely impacted by betting. While this only gives us a rough idea on spending profile/patterns, it helps us narrow down our coverage universe by removing companies that are not much exposed to the average bettor directly. Because of this filter, **we excluded from our list companies that cater to higher-income brackets, serve predominantly women and that are not in activities mentioned in Figure 12 Vivara, Azzas, Natura, RD, GPA, SmartFit.** This leaves us with the list below, which we ranked them all in terms of most and least impacted by betting:

**Figure 18 - Discretionary Consumption is likely the most impacted by Betting Activities**



Source: Santander

As illustrated in [Figure 18](#), we believe discretionary purchases to likely be the most impacted, particularly Leisure/Entertainment activities. Among companies under our coverage, **CVC and Arcos Dorados** fit the description well. Both companies have a high exposure to lower income clients, given their democratic positioning, and a 50/50 mix of male and female clients, in our view. None of the companies identified any clear demand weakness because of betting, but in the pecking-order of budgetary constraints to free space for betting, we believe they could very well be on top of the list. Worth noting that only 40% of Arcos revenues comes from Brazil, thus not all of its sales are affected.

Moving on in the remaining discretionary retailers, **Vulcabras** stands as the company most likely impacted by the betting habits, given its democratic product offering, which in our view tend to cater to lower income brackets, despite the recent increase in offerings focused on higher income clients. **SBF** follows next given the discretionary aspect of its offerings, coupled with our view that SBF's clients are more likely to be Soccer and other sports' fans, another common factor among bettors in Brazil.

Then we have the Food Retailers: **Assai, Carrefour and Grupo Mateus**. This group is a bit harder to gauge as in one hand we see food retailers' activity as a basic needs type of purchase that would hardly be significantly reduced to support gambling activity. But on the other hand, food retailers have been one of the most vocal segments raising the yellow flag on the hazards of betting growth. Moreover, these three listed food retailers have a high portion of their sales coming from the cash & carry format (100% in the case of Assai), which caters more to lower income clients. Nevertheless, we believe there is a limit on to how much betting spend can eat up of families' monthly food & beverage budgets, but it can make consumers more price sensitive and curb trade-up intent. All in, food retailers were likely impacted by the growth in betting given that expenditure on food is only trails Housing in families' monthly budgets, but the extent to which we can pinpoint the recent deceleration in some of its participants could be more linked to the current competitive scenario than betting, in our view. A similar scenario could be traced for **Pague Menos**, with its positioning towards lower income brackets, but at the same time, selling health related products, which could also be considered basic needs.

We rank fast-fashion retailers the lowest impacted among discretionary retailers, as we believe the majority of **C&A, Guararapes and Renner** clients are women. So despite each brand's different income-bracket positioning, we believe these might have been impacted more indirectly by decisions of the main income earner in families, but not to a material extent.

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Another interesting finding in the special report published by the BCB suggests that among Bolsa Família beneficiaries, there is a significant number of bettors. Therefore, we tracked the penetration of Bolsa Família beneficiaries per state, and crossed this information with retailers geographical presence.

**Figure 19 - Companies' Bolsa Família Exposure and Geographical Concentration of the Benefits**

**Bolsa Família Penetration Among Families per State - Top 10**

State	2013	2017	2019	2022	2023	2024
MARANHÃO	52%	48%	46%	47%	48%	48%
PIAÚÍ	49%	45%	42%	46%	47%	47%
ACRE	45%	44%	41%	43%	45%	46%
AMAZONAS	38%	37%	37%	39%	44%	45%
PARÁ	41%	40%	39%	41%	43%	44%
PARAÍBA	44%	40%	39%	41%	42%	42%
ALAGOAS	46%	39%	37%	40%	41%	42%
CEARÁ	45%	38%	36%	40%	41%	41%
BAHIA	41%	37%	36%	40%	41%	41%
PERNAMBUCO	41%	37%	35%	39%	40%	40%

**Companies' Exposure to N and NE**

Company	Footprint Exposure to N and NE regions % of Total Stores
Grupo Mateus	100%
Pague Menos	77%
Assaí	34%
Carrefour Brasil	19%
RD	19%

Source: Santander Estimates, Company Data and IBGE

**Grupo Mateus and Pague Menos**, through their higher focus the North and Northeast regions of the country are the companies with the highest exposure to Bolsa Família beneficiaries. So should we see any measures by the government seeking to block or limit Bolsa Família beneficiaries' spend on betting, we would see this as a minor tailwind to Grupo Mateus.

**All in all, we believe that within the Retail Sector in Brazil, the companies highlighted in this section could have faced an impacted from the growing betting habits, especially among the male and lower income brackets of the population.** Upon the increase in scrutiny expected from 2025 onwards as new rules are implemented, these companies could benefit from a normalization in the growth rate of betting but that is still to be confirmed. **We remind that in our view, not only the increase in bets spending should explain the apparent reduction in the share of wallet directed towards consumption, as other emerging trends such as cross-border purchases (not accounted in IBGE's retail sales data), and cryptocurrency investments could help to explain the decrease in share of wallet recently, and therefore, the evolution of all these trends should be monitored by investors going forward.**

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## Financials

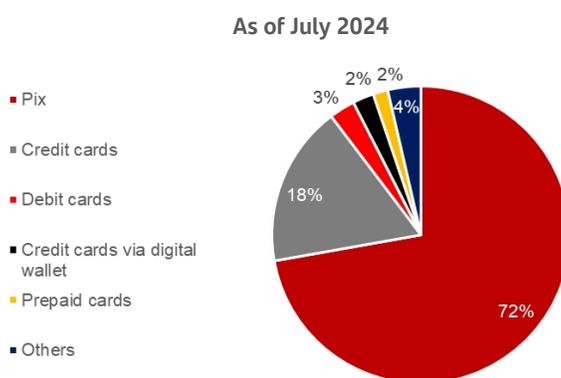
by Henrique Navarro\* and Team

Associations related to banks and other financial institutions have been vocal in the past months about the risks related to bets and gambling activities, especially when it comes to indebtedness, and, more specifically, to “super indebtedness” (when one cannot afford to pay its debt without compromising its minimum income), considering how the low-income segment is exposed to these activities.

As a reflection of this concern, combined with issues related to the effects of bets and gambling on retail and services, the cards' association Abecs decided to forbid credit cards of being used as a payment method in online bets and gambling. Importantly, this ruling had already been implemented by the Ministry of Finance, but would only become effective in January 2025, in oppose to Abecs' determination, which became effective immediately.

It is important to highlight, though, that credit cards account for only 18% of volumes paid in these activities, whereas Pix accounts for roughly 72%, according to research conducted by CNDL (see [Figure 20](#)). That said, Febraban not only is opposed to the use of credit cards in sports betting and gambling, but also raised concerns regarding the use of Pix finance or overdraft via Pix – as both are financing methods, but that would be accounted for as a Pix transaction.

Figure 20 - Online betting - types of money transfer



Source: CNDL

Among our coverage, we see a few segments as the most affected ones:

**Banks.** As highlighted by Febraban, banks could see an increase in delinquency, either because individuals can fail to meet their financial obligations to pay their debt related to betting, but also because individuals could be using financing methods to make Pix transfers, which would increase the loan portfolio's risk. Among banks, we would highlight **Nubank** as potentially being more exposed. Not only the bank is the financial institution with the largest number of Pix accounts (we believe Nu might have a market share of ~20% of all pix transfers in terms of volume) in Brazil in 1H24, but Pix finance represented a material part of its credit card origination in 2Q24. That said, we believe there could be a risk of Nubank seeing an increase in delinquency coming from clients who used Pix finance to pay online betting platforms.

**Payment companies (Stone and PAGS).** We believe payment companies are exposed to the risks associated with online betting because (i) reduced retail activity if individuals replace consumption of goods and services for online betting, which lead to a deceleration in volumes processed by payment companies; (ii) a large part of the volume that is processed by payment companies related to online betting (especially **PAGS'** cross-border volumes) could be at risk with the new regulation; and (iii) the take rate on onshore TPV is lower compare to offshore TPV, and with the regulation, online betting volumes must be registered locally. While the company does not disclose how much online betting represents of total volumes, we estimate something below 5% of TPV. Stone has said in previous meetings that does not operate with online betting platforms.

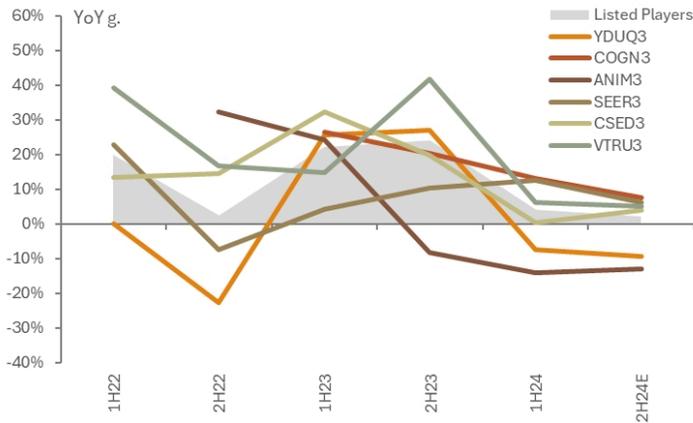
# Education

by Caio Moscardini\* and Team

**Bets starting to become a debate within the education space.** Overall, the distance learning (DL) segment faced a significant deceleration in the intake during the 1H24, which raised questions on the issues behind this dynamic, especially considering that the economic environment was still positive (low unemployment and controlled inflation). Among the different hypothesis, companies and investors' were debating if the bets' phenomenon could be one of the drivers.

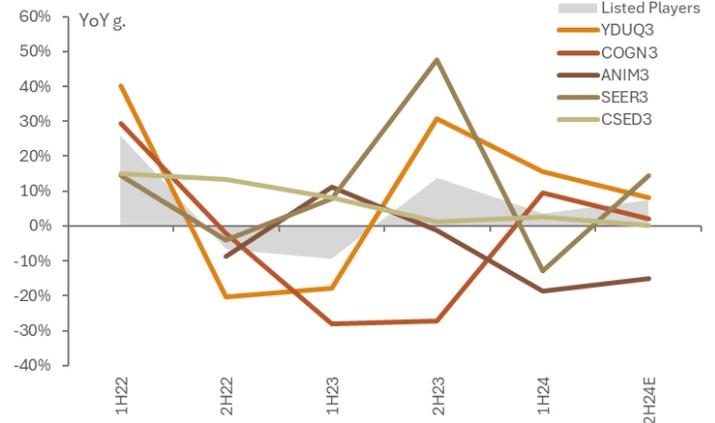
**No consensus on bets impact, so far.** At this point, companies and investors' remain uncertain about the real impact of the bets within the sector. More bullish market participants believe that bets are more harmful to products/services that are non-recurring like restaurants, bars and other things. On the other hand, skeptical investors' believe that bets can indeed negatively impact demand for the sector.

Figure 21 - Distance Learning segment intake per company



Source: Companies data and Santander estimates

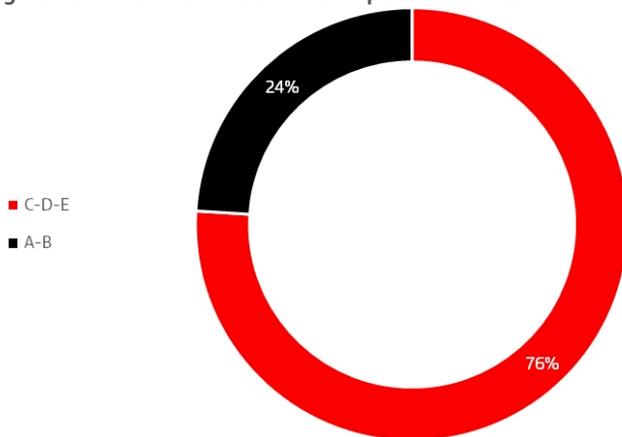
Figure 22 - On campus segment intake per company



Source: Companies data and Santander estimates

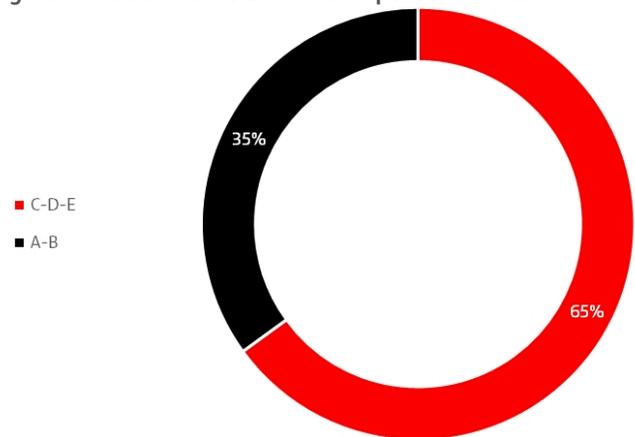
**Distance learning seems more at risk vs. On-campus.** In our opinion, the bets impact seems more significant in the distance learning segment due to the socioeconomic profile of students in this modality (approximately 76% of distance learning students are from classes C-D and E, compared to 65% in on-campus, according to ENADE 2022 data).

Figure 23 - DL students break-down per social class



Source: ENADE 2022

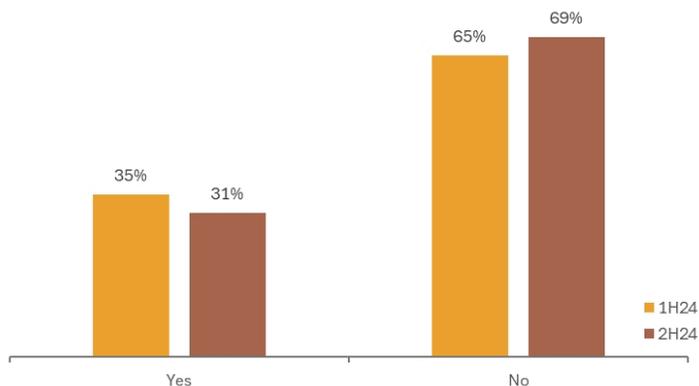
Figure 24 - OC students break-down per social class



Source: ENADE 2022

**Educa Insights shed some light on the potential Bets impact.** Educa Insights conducted a survey to evaluate the impact of sports betting on higher education. The survey was conducted with 10.8 thousand respondents who intended to enroll in a private college in 2024 and in the first half of 2025. The data showed that more than half of the respondents who habitually engage in sports betting wish to enroll in a higher education course. However, 35% of the respondents did not start a higher education course during 1H24 due to their spending on sports betting.

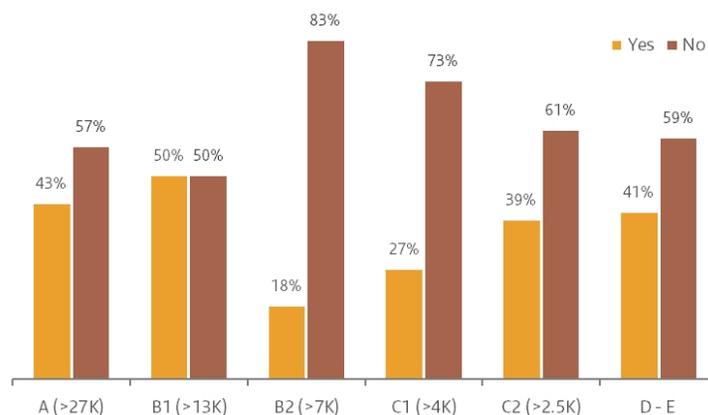
**Figure 25 - 35% of the respondents have not started a post-secondary course because of bets expenditure in 1H24.**



Source: Educa Insights Survey and Santander Research

Question: Do you believe that you have not started a post-secondary course because of your bets expenditure (free translation from portuguese) in 2024?

**Figure 26 - Respondents break-down per social income class related to the 1H24.**



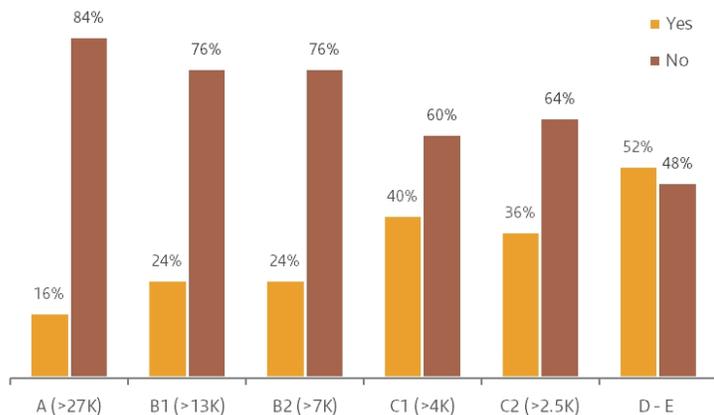
Source: Educa Insights and Santander Research

Question: Do you believe that you have not started a post-secondary course because of your bets expenditure (free translation from portuguese) in 2024?

**The impact of betting on education could be greater among lower-income classes in 2025.** Data from Educa Insights shows that the potential impact in the intake during 2025 could be concentrated in lower-income social classes (see [Figure 27](#)). In other words, the higher the household income, the lower the impact on the decision to start higher education (16% of respondents from Class A stopped studying vs. 52% in Classes D/E). Interestingly, this dynamic was different during 2024.

**The North could face the highest impact.** According to Educa Insights survey, 54% of the respondents from the North region will need to interrupt their bets expenses in order to initiate a post-secondary degree during 2025. At this point, the most exposed companies under our education coverage to the North region would be **Ser, Yduqs and Cogna**.

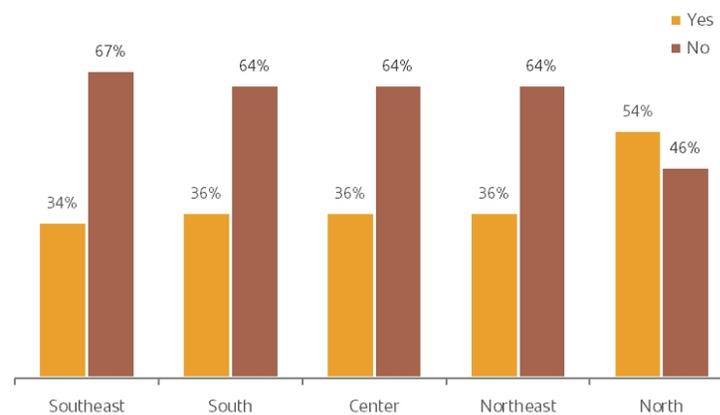
**Figure 27 - Question: Do you believe that you need to interrupt your sporting bets expenses to initiate a post-secondary course in 2025?**



Source: Educa Insights and Santander Research

Lower income classes respondents more likely to not start a post-secondary degree because of bets in 2025.

**Figure 28 - Question: Do you believe that you need to interrupt your sporting bets expenses to initiate a post-secondary course in 2025?**



Source: Educa Insights and Santander Research

Geographical dispersion of respondents that may or may not initiate a post-secondary course during 2025

**Companies that have higher exposure to DL could suffer more.** All in all, the real impact related to the bets within the education segment seems difficult to access. Nevertheless, it seems clear to us that lower price “products” like the distance learning courses could be poised to face stronger pressures vs. the more expensive on-campus courses. Thus, in our view, companies like **Vitru, Cogna and Yduqs** could face a stronger negative impact from this “bets” phenomenon.

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# Healthcare

by Caio Moscardini\* and Team

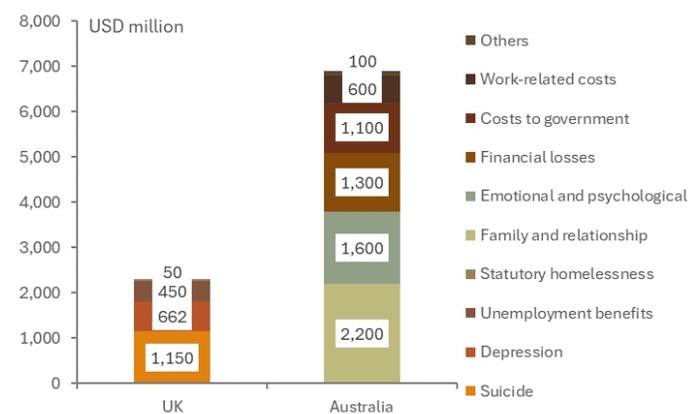
**Online gambling still not a big debate for healthcare investors.** At this point, gambling has not led a large debate for healthcare investors. In our view, the public healthcare segment is more likely to be burdened by incremental healthcare spending due to the rise of online gambling. Nevertheless, we could see some uptick in spending for psychotherapy and depression-related treatments within the private system.

**It is more likely that the public healthcare system face stronger pressures vs. the private healthcare sector.** The global experience suggests a significant impact across the economy due to the rise of online gambling, including higher expenditure in healthcare and social benefits. The lower income classes D/E allocate a larger share of their income toward gambling, and these are the income classes within the lowest private healthcare penetration in Brazil. In the country, roughly 24% of the population does have private healthcare insurance, and the higher concentration is within the A to C classes.

**The international experience shows high likelihood of healthcare being affected by the online gambling.** Experiences from countries such as the U.K., Australia and China offer valuable insights into the potential health impacts of online gambling. In the UK, for instance, government estimates that around 0.4% of adults are classified as problematic gamblers, with a further 3.9% at moderate or low risk. The social and economic costs associated with gambling-related harm in the U.K. are considerable, with annual healthcare expenses, productivity losses, and social services costs combining for a total loss range of US\$1.4 billion and US\$2.3 billion.

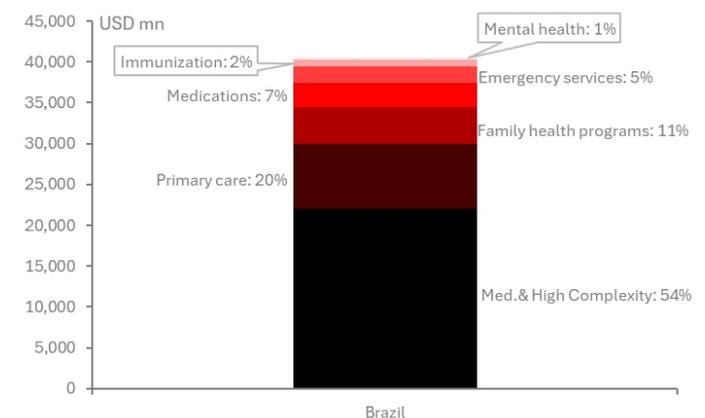
In the U.K., gambling-related harms extend beyond individual gamblers, significantly impacting public health services and society. The Public Health England report, updated in 2023, revealed that the costs associated with gambling-related suicide alone range from US\$314 million to US\$1.253 billion annually. Additionally, gambling-related depression costs in the UK health system accounts for approximately US\$662 million per year. The economic burden of harmful gambling is also linked to unemployment and homelessness, with unemployment benefits costing around US\$100 million annually and statutory homelessness applications adding another US\$64 million.

**Figure 29 - UK and Australia governments expenditures on gambling-related harms (mn USD)**



Source: UK and Australia governments and Santander Research

**Figure 30 - Brazilian government expenditures on health breakdown (mn USD)**



Source: Brazilian Government and Santander Research

In Australia, the financial burden of gambling-related problems is substantial, contributing significantly to the overall health and social welfare expenditure. The total health expenditure for 2021-2022 was ~US\$241 billion, a considerable portion of this is indirectly related to gambling through mental health services, addiction treatment, and social support programs. Specifically, the economic and social impacts of gambling, including healthcare, family support, and crime prevention, are estimated to cost around US\$7 billion annually. These costs encompass the treatment of mental health conditions such as anxiety, depression, and addiction, as well as addressing physical health issues linked to gambling stress, like heart disease.

**China decided to ban gambling.** In 2015, China reinforced its prohibition on gambling to combat the health issues linked to gambling addiction and the broader societal problems it fosters. Alongside mental health concerns, gambling has been linked to financial instability, family breakdowns, and increased crime rates. The government's ban was aimed at curbing these associated harms, as unchecked gambling can lead to severe financial losses, which ripple through communities, causing stress, family neglect, and even domestic violence. Furthermore, this gambling is closely tied to illegal activities such as money laundering and corruption, which further exacerbate social instability. Considering these significant societal issues, the Chinese government deemed it necessary to reinforce the prohibition on gambling, a stance that continues to be upheld today.

**Overall, Brazilian government could face higher expenses with healthcare.** With more individuals facing gambling addiction and its associated mental and physical health problems, there could be a rise in demand for psychiatric care, addiction recovery programs, and financial counseling services. Currently, the Brazilian government allocates only 1% to mental health services, and this may not be sufficient to cope with further gambling addiction issues. All in all, as online gambling becomes more prevalent, Brazil is likely to see a growing need for mental health services, potentially leading to a redistribution of healthcare resources to meet these emerging demands (Figure 30).

**Potential impacts for listed healthcare players?** At this point, we see a limited impact within the private healthcare system. Nevertheless, healthcare operators could face the higher burden arising from stronger therapies demand, and companies exposed to the lower income classes (i.e. **Hapvida**) could see a larger impact. As discussed during this report, lower income classes commit a higher part of their budget into bets, and therefore could

either (i) cancel their HC private plans, if they have one or (ii) increase utilization of services related to therapies. We note, however, that Hapvida is vertically integrated and therefore can better control their costs related with therapies.

# Real Estate

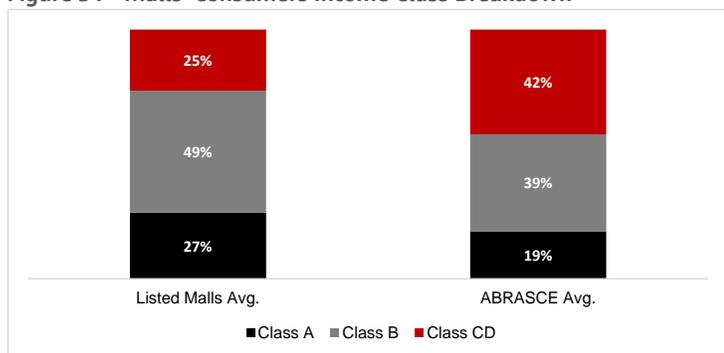
by Fanny Oreng\* and Team

It is hard for us to determine the impact of online gambling on mall operators, but in this report we take a look at the overall sales performance of malls according to the income level of its consumers in order to try to get a sense of the potential impact of online gambling on the sector.

According to Figure 10, ~60% of the consumers that participate in online gambling are within the C and D income classes. In addition, we note that the average of malls in Brazil (using ABRASCE data as a proxy) tend to serve a higher share of consumers from either C and D income classes (~42% exposure to both classes) compared to the average of listed mall operators (including Allos, Iguatemi and Multiplan), in which only 25% of consumers are within those income bounds.

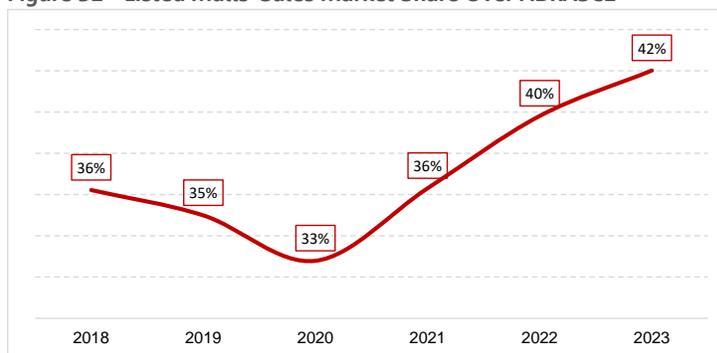
We have also been observing that listed mall operators are gaining share over ABRASCE's sales (Figure 32) and it is interesting to notice that the gap increases dramatically in 2022-23. During this period, online gambling sales growth spiked to up to ~210% YoY and ABRASCE's total sales coincidentally started to underperform (as observed in Figure 33). This trend also corroborates the view from our retail team that the rapid growth in gambling is likely diverting household income away from retail, particularly among lower-income families, which reinforces our preference for companies with mall portfolios more exposed to the higher-income classes, such as Multiplan and Iguatemi.

**Figure 31 - Malls' Consumers Income Class Breakdown**



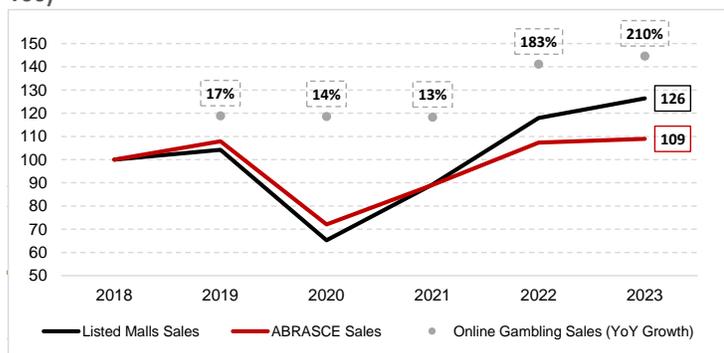
Source: Allos, Iguatemi, Multiplan, ABRASCE and Santander  
Note: Data as of YE2023; Listed Malls include Allos, Iguatemi and Multiplan

**Figure 32 - Listed Malls' Sales Market Share Over ABRASCE**



Source: Allos, Iguatemi, Multiplan, ABRASCE and Santander  
Note: Listed Malls include Allos, Iguatemi and Multiplan

**Figure 33 - Listed Malls Total Sales vs. ABRASCE (indexed, 2018 = 100)**



Source: Allos, Iguatemi, Multiplan, ABRASCE, Statista and Santander  
Note: Listed Malls include Allos, Iguatemi and Multiplan

## COMPANIES MENTIONED

ABECS; Not Listed

ABRASCE; Not Listed

Allos (ALOS3 BZ); CP: R\$22.38; TP: R\$29.50; Outperform

Anbima; Not Listed

Arcos Dorados (ARCO US); CP: US\$9.33; TP: US\$14.00; Outperform

Assai (ASAI3 BZ); CP: R\$7.09; TP: R\$15.00; Outperform

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Azzas (AZZA3 BZ); CP: R\$40.39; TP: R\$76.00; Outperform  
 Carrefour Brasil (CRFB3 BZ); CP: R\$6.98; TP: R\$16.00; Outperform  
 C&A (CEAB3 BZ); CP: R\$12.14; TP: R\$11.20; Neutral  
 CNDL; Not Listed  
 Cognac (COGN3 BZ); CP: R\$1.35; TP: R\$4.00; Neutral  
 CVC (CVCB3 BZ); CP: R\$1.86; TP: R\$3.60; Neutral  
 Educa Insights; Not Listed  
 ENADE; Not Listed  
 Febraban; Not Listed  
 Fecomercio; Not Listed  
 GPA (PCAR3 BZ); CP: R\$3.17; TP: R\$5.70; Neutral  
 Grupo Mateus (GMAT3 BZ); CP: R\$7.32; TP: R\$10.10; Outperform  
 Grupo SBF (SBFG3 BZ); CP: R\$13.63; TP: R\$15.30; Neutral  
 Guararapes (GUAR3 BZ); CP: R\$8.15; TP: R\$5.80; Neutral  
 Hapvida (HAPV3 BZ); CP: R\$3.76; TP: R\$5.50; Outperform  
 Hibou; Not Listed  
 Iguatemi (IGTI11 BZ); CP: R\$21.26; TP: R\$36.50; Outperform  
 Lojas Renner (LREN3 BZ); CP: R\$18.40; TP: R\$23.00; Outperform  
 Multiplan (MULT3 BZ); CP: R\$25.93; TP: R\$37.00; Outperform  
 Natura (NTCO3 BZ); CP: R\$14.89; TP: R\$17.00; Neutral  
 Nubank (NU US); CP: US\$14.45; TP: US\$8.00; Underperform  
 PAGS (PAGS US); CP: US\$8.42; TP: US\$14.00; Outperform  
 Pague Menos (PGMN3 BZ); CP: R\$2.83; TP: R\$3.50; Neutral  
 PwC; Not Listed  
 RD (RADL# BZ); CP: R\$25.16; TP: R\$35.00; Outperform  
 Ser Educacional (SEER3 BZ); CP: R\$5.72; TP: R\$9.40; Neutral  
 SmartFit (SMFT3 BZ); CP: R\$22.40; TP: R\$32.00; Outperform  
 SBVC; Not Listed  
 SPC; Not Listed  
 Statista; Not Listed  
 Stone (STNE US); CP: US\$11.02; TP: US\$16.00; Outperform  
 Vitru (VTRU3 BZ); CP: R\$9.19; TP: R\$15.00; Outperform  
 Vivara (VIVA3 BZ); CP: R\$26.16; TP: R\$37.00; Outperform  
 Vulcabras (VULC3 BZ); CP: R\$16.46; TP: R\$22.00; Outperform  
 World Bank; Not Listed  
 YDUQS (YDUQ3 BZ); CP: R\$10.24; TP: R\$22.00; Outperform  
 Source: Santander estimates; Bloomberg. Priced as of October 18, 2024.

## Allos - Valuation & Risks

Our YE2024 target price based on a free cash flow to firm analysis, using a WACC of 12.0% in reais, and nominal terminal growth of 4.5%. Risks to our investment thesis include: (i) higher-than-anticipated unemployment rate leading to weaker retail sales and increasing vacancy and delinquency rates; (ii) unanticipated increases in the Selic rate leading to higher financial expenses; (iii) irrational competitors increasing the amount of GLA in oversupplied cities; (iv) potential fiscal reform which could adversely impact taxes in the sector; and (v) higher-than-expected expenses and/or lower-than-expected synergies associated with the merger with brMalls

## Arcos Dorados - Valuation & Risks

Our TP is derived from a DCF model that uses a WACC of 11.4% (17.7% cost of equity, assuming a 1.0 beta), and a 3.0% terminal growth rate. Main Risks Include: (i) Lower than expected SSS, with number below headline inflation; (ii) Worse than expected royalty rates in the MFAs renewal; (iii) Arcos Dorados Inability to secure the renewal of the MFAs; (iv) fiercer competition from main QSR peers in LatAm.

## Assai - Valuation & Risks

Our target price is derived from a DCF model which considers a WACC of 12.2% and a terminal growth (g) of 4.0%. Main risks include: i) slower than expected financial deleveraging; ii) fiercer competitive environment in C&C pressuring sales and/or gross margins; iii) macro environment deterioration, with higher interest rates for long depressing consumption.

## Azzas 2154 - Valuation & Risks

Our YE2024 target price is based on a DCF analysis for which we consider a WACC of 11.7% and a perpetuity growth rate of 4.5%. Main risks include: (1) worst-than-expected sales growth deceleration as the company faces tougher comps; (2) increased competition in the apparel segment as the company's effort in the segment increase; (3) volatile results in the US operation as the company balances growth and profitability; (4) integration/execution risks in new M&As and licensing agreements.

## C&A Modas - Valuation & Risks

Our YE2024 target price is based on a DCF analysis for which we consider a WACC of 14.4% and a perpetuity growth rate of 4.0%. Main risks include: (i) execution risks associated with the new 100% company-operated consumer finance division; (ii) slower-than-expected recovery of merchandise gross margin, mainly hampered by the fashiontronics segment; and (iii) worsening macroeconomic environment in 2024, hindering the company's recovery from the pandemic.

## CVC Corp. - Valuation & Risks

Our YE2024 target price is based on a DCF analysis for which we consider a WACC of 14.1% and a perpetuity growth rate of 4.0%. Main risks include: (1) delayed recovery in the economy, (2) FX volatility and limited credit availability, (3) tougher competition coming from players entering the franchise model and from pure OTC players, (4) store expansion may require new operators that do not necessarily share the same culture, (5) new stores could be less productive versus the current base, (6) significant changes in the suppliers' dynamics.

## Carrefour Brasil - Valuation & Risks

Our YE2024 target price is based on a SoTP model based on DCF analysis for which we consider a WACC of 11.1% and a perpetuity growth rate of 4.0%. Main risks are: (1) further deterioration in macro indicators, especially in food inflation (2) margin deterioration in the retail unit with slower than expected SSS (3) fiercer competition in the cash & carry business (4) disruptions caused by the integration of BIG

## Cogna - Valuation & Risks

We value the company using a sum-of-the-parts (SoTP) method, with an EV/EBITDA multiple target for the post-secondary and K-12 businesses. For post-secondary, we apply 7.0x EV/EBITDA in 2024E, which is at the top range of peers. For Vasta, we apply 7.0x EV/EBITDA in 2024E, which is the multiple implied at Bloomberg consensus average target prices for Vasta. Main risks include regulatory risk, competitive environment, and dependence on positive macroeconomics, execution and acquisition risks.

## GPA - Valuation & Risks

Our YE2024 target price is based on a consolidated DCF, with a WACC of 12.5% and a perpetuity growth rate of 3.0%. Main risks are: (1) further deterioration in macro indicators, especially food inflation; (2) execution risks related to the expansion of Pão de Açúcar banner, chiefly outside São Paulo state; and (3) fiercer competition, particularly from Cash and Carry competitors, which could include Assai.

## Grupo Mateus - Valuation & Risks

Our YE2024 target price is based on a DCF analysis for which we consider a WACC of 13.2% and a perpetuity growth rate of 4.5%. Main risks include: (1) Increased competition in their core states by national chains; (2) shortage of good locations (lowering new store's IRR); and (3) non-renewal of significant fiscal benefit in Maranhão state.

## Grupo SBF - Valuation & Risks

Our YE2024 target price is based on a DCF analysis for which we consider a WACC of 11.6% and a perpetuity growth rate of 4.0%. Main risks include: (1) lower-than-expected SSS; (2) increased competition in ecommerce; (3) acceleration of direct-to-consumer (DTC) trend from international sporting goods brands in Brazil; (4) execution risks in Fisia

## Guararapes - Valuation & Risks

Our YE2024 target price is based on a DCF analysis for which we consider a WACC of 13.3% and a perpetuity growth rate of 4.0%. Main risks include: (i) slower than expected Selic rate cuts which directly impact on Guararapes financial expenses, given their higher leverage when compared to peers; (ii) execution risks related to the ongoing initiatives on digitalization and consumer finance; and (iii) end of fiscal benefits, which would heavily impact the effective tax-rate paid by Guararapes.

## Hapvida - Valuation & Risks

Our target price is based on discounted free cash flow to firm, assuming an average 12.5% WACC over our projection years and a 13.8% cost of equity and 6.0% growth in perpetuity in nominal terms. Main risks include: Stronger competition, execution risk, macro environment, medical loss increase, management change, regulatory changes, public healthcare system obligations and contingency payments.

## Iguatemi - Valuation & Risks

Our YE2024 target price based on a free cash flow to firm analysis, using a WACC of 11.5% in reais, and nominal terminal growth of 4.5%. Risks to our investment thesis include: (i) higher-than-anticipated unemployment rate leading to a slower than anticipated retail sales recovery and consequently further increases in vacancy and delinquency rates; (ii) unanticipated increases in the Selic rate leading to higher financial expenses; (iii) irrational competitors increasing the amount of GLA in oversupplied cities; and (iv) higher-than-expected costs associated with the development of Iguatemi 365

## Lojas Renner - Valuation & Risks

Our YE2025 target price is based on a DCF analysis for which we consider a WACC of 11.6% and a perpetuity growth rate of 4.5%. Main risks include: (1) lower-than-expected SSS; (2) increased competition; (3) deterioration in the Consumer Finance business, with rising NPLs and delinquency rates; (4) disruptions in push & pull logistics, leading to possible wrong orders or stock-outs at the store level; and (5) FX depreciation weighing on imported goods.

## Multiplan - Valuation & Risks

Our YE2025 target price is based on a free cash flow to firm analysis, using a WACC of 11.0% in reais, and nominal terminal growth of 5.0%. Risks to our investment thesis include: (i) higher-than-anticipated unemployment rate, leading to slower-than-anticipated retail sales and consequently further increases in vacancy and delinquency rates; (ii) higher-than-expected increases in the Selic rate, leading to higher financial expenses; (iii) irrational competitors increasing the amount of GLA in oversupplied cities; and (iv) potential fiscal reform which could adversely impact taxes in the sector.

## Natura - Valuation & Risks

Our YE2025 target price is based on a DCF analysis for which we consider a WACC of 13.4% and a perpetuity growth rate of 3.5%. Main risks are: (i) fiercer competition in key markets such as Brazil, (ii) Natura-Avon integration challenges; and (iii) difficulties in executing simplification strategy such as Avon International spin-off.

## Nubank - Valuation & Risks

We value the bank using a three-stage valuation model based on a residual income approach, with a terminal cost of equity of 15.3%. In the first stage, we consider the explicit modeling of up to 2029), and for the second stage, we evaluate until year 2033 using an average ROAE of 24% with a dividend payout of 50%. Lastly, the final stage is based on a terminal growth rate of 6% for a perpetual ROE of 28%. Main risks follow: (i) execution worse-than-expected delivery poses downside risk ; (ii) competition arising from new and existing players ; (iii) economic scenario unfavorable environment may postpone growth; and (iv) regulatory risk potential impact is still uncertain.

## PagBank - Valuation & Risks

We valued the company using a discounted free cash flow to equity, with cost of equity of 14.5% and a terminal growth rate of 6.0%. Main risks include: (i) Economic environment. An economic downturn could cause a slowdown in the company's growth, and could lead to a deterioration in revenues; (ii) Regulatory. The possible cap in the credit card and changes in installments payments can possibly harm PAGS revenues (iii) Competition. An increase in competition in SMB could make it more difficult for PAGS to gain market share.

## Pague Menos - Valuation & Risks

Our YE2024 target price is based on a DCF analysis for which we consider a WACC of 14.0% and a perpetuity growth rate of 4.0%. Main risks include: (i) increased competition, (ii) higher cannibalization effect, (iii) changes in sales mix (lower-margin categories), (iv) changes in industry regulations, (v) end of fiscal benefits, (vi) shortage of good locations (lowering new stores' IRR), and (vii) disruptions caused by the integration of Extrafarma.

## SER Educacional - Valuation & Risks

Our target price is based on a discounted free cash flow to firm, assuming an average 17.6% WACC over our projection years (2024- 2032E), including 300bps liquidity discount, a 15.7% cost of equity and 4.0% growth in perpetuity in nominal terms. Main risks include regulatory risk, competitive environment, and dependence on positive macroeconomics, execution and acquisition risks

## SmartFit - Valuation & Risks

Our YE2025 target price is based on a DCF analysis for which we consider a WACC of 12.3% and a perpetuity growth rate of 4.5%. Main risks include: (1) increased competition, (2) maintenance of high service levels amid fast expansion; (3) increase in churn rates; and (4) international expansion and new business

## Stone - Valuation & Risks

We valued the company through a DCF model (Free Cash Flow to Equity), applying a cost of equity of 14% and adopting a terminal growth rate of 6.0%. Risks include: (i) poor execution (for credit and new initiatives); (ii) intensifying competition (which is increasing in the SMBs segment); (iii) regulatory challenges (government intervention in the industry, including the quantity limitation on interest-free installments); and (iv) deterioration in macroeconomic environment.

## Vitru - Valuation & Risks

Our target price is based on a discounted free cash flow to firm, assuming an average WACC of 20.1% over our projection years (2024- 2032E), including 400bps liquidity plus regulatory risks penalty, a 16.7% cost of equity and 4.0% growth in perpetuity in nominal terms. Main risks include regulatory risk, competitive environment, execution and M&A risks.

## Vivara - Valuation & Risks

Our YE2025 target price is based on a DCF analysis for which we consider a WACC of 13.4% and a perpetuity growth rate of 4.5%. Main Risks Includes: (i) slower than expected expansion of Vivara and Life stores in Brazil, coupled with lower profitability from new stores; (ii) higher than expected profitability pressure stemming from the international expansion; (iii) future management changes, with a new perspective about the company's future; (iv) worsening of the macro scenario.

## Vulcabras - Valuation & Risks

Our YE2025 target price is derived from a DCF model that uses a WACC of 15.5% (16.5% cost of equity, assuming a 1.0 beta) and a 4.0% terminal growth rate. Main risks include: (i) Worsening of the macroeconomics conditions in Brazil; (ii) unsuccessful products launches, leading to markdowns; (iii) weaker than expected results from any additional M&As or licensing agreements; and (iv) additional headwinds regarding fiscal benefits, as the Brazilian government's revenue increasing agenda persists throughout 2024.

## Yduqs - Valuation & Risks

Our target price is based on a discounted free cash flow to firm, assuming an average 16.4% WACC over our projection years (2024-32E), with a 17.1% cost of equity and 4.0% growth in perpetuity in nominal terms. Main risks include regulatory risk, competitive environment, and dependence on positive macroeconomics, execution and M&A risks.

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Rating	Definition	% of Companies	
		Covered with This Rating	Provided with Investment Banking Services in the Past 12 months
Outperform	Expected to outperform the local market benchmark by more than 10%	66.23%	52.29%
Neutral	Expected to perform within a range of 0% to 10% above the local market benchmark	28.14%	43.08%
Underperform	Expected to underperform to local market benchmark	3.90%	33.33%
Under Review		1.73%	100.00%

The numbers above reflect our Latin American universe as of July 31st, 2024.

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Target prices are year-end 2024 unless otherwise specified. Recommendations are based on a total return basis (expected share price appreciation + prospective dividend yield) unless otherwise specified.

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As per the requirements of the Brazilian CVM, the following analyst hereby certifies that I do not maintain a relationship with any individual working for the companies whose securities were evaluated in the disclosed report. That I do not own, directly or indirectly, securities issued by the company evaluated. That I am not involved in the acquisition, disposal and intermediation of such securities on the market: Maria Paula Cantusio\*, Ruben Couto\*, Caio Moscardini\*, Henrique Navarro\*, Fanny Oreg\* and Ítalo Franca\*

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