

*(financial)*  
**+inclusion  
in Brazil  
2022**

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# (01) +introd

+The present study has the objective of mapping **challenges for financial inclusion in Brazil** in the last four years. This period brought important financial transformations to the base of the pyramid in Brazil, which until recently still suffered to access and use adequate financial instruments. The 140 million people of C, D and E classes (the low-income classes, who have a per capita family income of up to R\$ 2,000 – or U\$ 383,00 - per month), concentrated most of the unbanked and under-banked – that is, those who, despite having bank accounts, do not use them.

Since 2013, Plano CDE has conducted several studies on the access of financial instruments by the lower-income population in Brazil. This report brings a new perspective about the transformations that have occurred since 2020, learning from recent findings, especially the 2018 Impact Thesis on Financial Inclusion, prepared in partnership with Artemisia, on the potential for Fintechs to generate social impact. Some of our main work contributed to the debate on financial inclusion with the following findings:

<b>Study</b>	Bolsa Familia Financial Diaries 2013	Segmentation in Financial Inclusion in Brazil 2016	Impact Thesis on Financial Inclusion 2018
<b>What we did</b>	Ethnographic immersion of 120 beneficiary families, over 6 months in 2013	National survey of 1,500 people from the CDE classes and ethnographic immersion	Study on opportunities and challenges for Fintechs to generate social impact
<b>Main findings</b>	<p>Despite low income and low education, the CDE public has sophisticated managerial and financial skills.</p> <p>Poorly adequate formal and informal financial products generate a negative impact for lower-income families.</p> <p>There is little knowledge about products and understanding about rules and mechanics, which keeps the public away from formal options.</p>	<p>Financial behavior at the base of the pyramid is very heterogeneous, and differences are not explained by demographic or income factors. There are 3 main profiles:</p> <ul style="list-style-type: none"><li>Conservatives: avoid consumption and indebtedness.</li><li>Planned: Organize finances to build assets. Have greater financial knowledge</li><li>Disorganized: Do not have a clear understanding of banking rules and procedures. They are guided by consumption to meet needs and desires of social ascension.</li></ul> <p>Most CDE classes have a bank account, but never use it. It is difficult for them to save money and use digital payments.</p>	<p>As the base of the pyramid accesses financial instruments, the challenge becomes to generate usage: most do not use them, or only carry out cash transactions.</p> <p>Acquisition cost of lower-income customers is challenging for three reasons:</p> <ul style="list-style-type: none"><li>Low credit history, since CDE population does not make digital transactions</li><li>No guarantees: without asset construction, credit becomes more expensive. Access to credit comes down to credit cards, pre-approved limits and real estate credit.</li><li>Acquisition cost and low tickets: There is a challenge to reach non-digitalized customers at scale. Acquisition cost makes low-value average offers unfeasible.</li></ul>

The last four years have brought many changes from the scenario described in previous reports of Plano CDE. Recent studies<sup>1</sup> indicated, in 2019, 23% of Brazilian adults without access to the financial system. Moreover, research conducted by Plano CDE has already pointed out that almost 90% of the banked base of the pyramid used the account only to withdraw all income, at most once a month<sup>2</sup>. This situation of financial exclusion has led the Central Bank of Brazil, starting in 2015, to define financial citizenship as one of its priorities. Since then, efforts have been made to foster competition, reduce costs and ease access, which have led to a drastic change of scenario throughout the pandemic.

Over the past few years, **there has been a significant increase in the number of people with access to bank accounts**, reaching 14 million new users in 2020<sup>3</sup>, with recurrent digital use of these accounts. This expansion is due to four main factors:

**i. Digitization forced** by social isolation and reinforced by the closure of bank branches and correspondents<sup>4</sup>;

**ii.** The opening of digital accounts for **the receipt of Emergency Aid** (federal government's payment program in response to the pandemic)

**iii.** Growth in **the offer of free accounts** by so-called "digital banks"

**iv.** The **launch of Pix**<sup>5</sup> as a free mean of payment, encouraging mobile transactions

If, on the one hand, the closure of bank branches in 2020 was an effect of the pandemic<sup>6</sup>, the other factors are related to public policy decisions, whether in the regulation of payment of social benefits, or in encouraging competition and entry of new players into the national financial market and, chiefly, in the development of a new payment technology by the Central Bank that, as we shall see, has changed the way the population carries out financial transactions.

However, we **understand financial inclusion not only as the access to financial instruments**, or even by only the use of these instruments, but also the quality of this use, that is, whether the products and **services offered generate well-being and citizenship to users**. In this sense, our study seeks to



<sup>1</sup> Brazilian Central Bank, 2019. The Brazilian people and the habits of using means of payment.

<sup>2</sup> Data from the Segmentation in Financial Inclusion study, carried out by the Plano CDE and the Cemif/FGV, with support from the JPMorgan Chase Foundation.

<sup>3</sup> Financial Citizenship Report. Central bank, 2021. 2020 is the last year with data released.

<sup>4</sup> Non-financial institutions that have contracts with banks for the offer of financial services. These were regulated in the early 2000s.

<sup>5</sup> A national digital payment system implemented by the Brazilian Central Bank in October 2020.

<sup>6</sup> The number of agencies had been in a fall since before and 2020, according to the Central Bank. But the pandemic forced all agencies to remain closed.



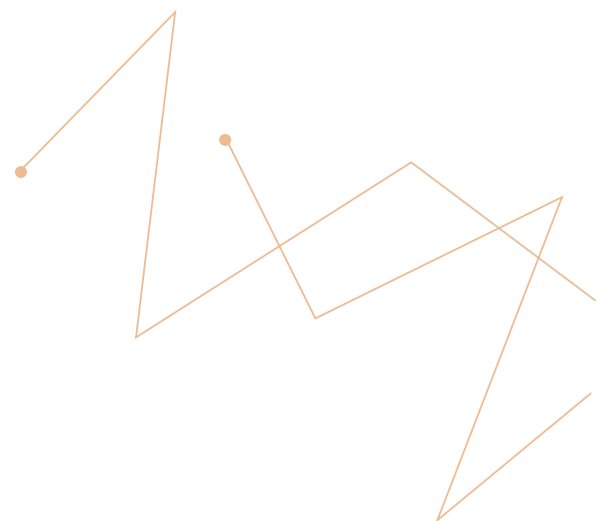
*The concept of financial citizenship, according to the Central Bank, would be "the exercise of rights and duties that allows the citizen to manage well his financial resources."*

*This means that the development of "financial citizenship takes place through a context of financial inclusion, financial education, consumer protection of financial services and participation in dialogue on the financial system."*

*Nevertheless, as Prof. Lauro González of Cemif/FGV reminds us, banking is not synonymous with financial inclusion. Inclusion presupposes the use and, more importantly, the use with quality of financial products and services. Quality concerns how much services are appropriate to the needs of the user and are capable of generating financial well-being.*

understand if changes in access and use in fact generated *inclusion*, especially in lower income users, of classes C, D and E.

Our question **was how the increase in access have impacted the use of financial instruments and indebtedness of classes C, D and E and microentrepreneurs of the base of the pyramid?**



## 1.1\_ Methodology

This study was conducted in three parts. The first was a review of the literature and data on access and usage, to understand the scenario of access, indebtedness, adoption of means of payment etc. by the population over the last three years. We surveyed 18 studies and reports:

⌘ **Financial Citizenship Report 2018 and 2021. Central Bank of Brazil.**

⌘ **Banking Economy Report 2020. Central Bank of Brazil.**

⌘ **The Brazilian people and the habits of using means of payment. Central Bank of Brazil, 2019.**

⌘ **What is Financial Citizenship. Central Bank of Brazil, 2018.**

⌘ **The Global Findex Database Report 2017 and 2021. World Bank.**

⌘ **60 Decibels Microfinance Index. 60 Decibels, 2022.**

⌘ **Global Microscope 2019. The Economist Intelligence Unit.**

⌘ **Electronic Means of Payment and pix. FGVcemif and Toluna, 2020.**

⌘ **X-ray of the Brazilian Investor 2021 and 2022. Anbima.**

⌘ **National Survey of Indebtedness and Consumer Delinquency. CNC, 2022.**

⌘ **The Role of Credit in a Moment of Resumption. Serasa and Opinion Box, 2021.**

⌘ **Card Machine Study. Sebrae, 2021.**

⌘ **Segmentation in Financial Inclusion in Brazil. Plano CDE, JP Morgan and FGV, 2016.**

⌘ **Social Impact Thesis on Financial Services. Plano CDE and Artemisia, 2018.**

⌘ **Financial Diaries of Bolsa Família Attended. Plano CDE, CGAP and World Bank, 2014.**

With the literature review at hand, we interviewed experts of academy, state and among fintechs focused on inclusion, in order to explore what were the new challenges of financial inclusion in Brazil. We appreciate the enriching comments of Diogo Nogueira Cruz, Erika Soki, Raquel Melo de Almeida and Lucas Iten, of the Department of Financial Citizenship Promotion of the Central Bank, Sérgio Mikio Koyama, Gabriel Garber and Raquel de Freitas Oliveira, of the Department of Studies and Research of the Central Bank, Caroline Augusta Paranayba Evangelista, of the Ministry of Citizenship, Prof. Lauro Gonzalez, from the CEMIF-FGV, Thiago Godoy, from XP Inc, Carlos Barros and Circe Ferrario from Jeitto, Fábio Takara, from Firgun and Guilherme Almeida Prado, from Lys and founder of Konkero.

Finally, we applied an online questionnaire in a national representative sample of 2,370 people, over 18 years old, from all social classes. The study was conducted in all Brazilian states and in the Federal District, covering 891 municipalities, between July 7th and August 9th. The margin of error was 2%, considering a 95% confidence level.

(02)  
+executive  
summary



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+This study was conducted to understand the impacts of the increase in the number of accounts in recent years in Brazil. Between 2017 and 2022, the proportion of banked population at the base of the pyramid jumped from 57% to 87%<sup>7</sup>. In order to explore impacts in use and quality of use of financial services, we conducted a survey with 2,370 cases, representative of the Brazilian adult population.

## Financial situation of families

### (01)

**Half of the CDE classes have income below their spending.** This generates low savings capacity and reduced volume in emergency reserves. Only 35% of CDE classes have the equivalent of one month of income saved for emergencies.

### (02)

80% of people have a financial goal. But indebtedness impacts the objectives of each segment of the population. **The main goal of the CDE classes is to pay off debts.** In AB classes, it is to plan a travel and save for retirement.

### (03)

**Most of the people who have entered the banking system in the last two years (newly banked) are from the CDE classes and use digital banks.** These banks are attractive to the base of the pyramid for the following reasons:

- i. Usability /ease of use
- ii. Free card access
- iii. Free accounts

### (04)

**On average, people have 3.1 bank accounts and 2.8 credit cards,** mainly due to an increase in the offer of free and easy-to-access accounts – "digital banks" are remembered as very easy to open an account. Most people have accounts and cards in traditional and digital banks simultaneously.

### (05)

By August 2021, 40 million made a digital payment for the first time through PIX. This increase in access to digital transactions was higher in the base of the pyramid: **in the DE classes, 50% of PIX users had never made digital transactions before it.**

<sup>7</sup> Global Financial Index data, 2017 and 2021.



## Investments and savings

(06)

**Savings accounts are the most common investment** and the most considered future, in all social classes.

(07)

**Crypto is the second most considered type of investment (tied with funds, and before pension, stocks and others).** Main interested in investing in crypto have the following profile:

- i. Low savings
- ii. Little knowledge about risk
- iii. Little knowledge about investment and inflation

(08)

In addition to the willingness to invest in crypto, there are other behaviors that bring risk to users. A third of people have already held sports betting. **16% of DE class bettors have already been in debt to pay for bets.**

## Credit and indebtedness

(09)

**Half the interviewed have applied for a loan in the last year.** The main "source" was family and friends, followed by traditional and digital banks.

(10)

CDE classes have difficulty to understand lending rules and conditions. **Banking cooperatives, lending institutions<sup>8</sup> and loan sharks can communicate loan terms and conditions more clearly than banks** (traditional or digital).

(11)

**It should be noted that the preeminent reason for borrowing is the purchase of food** and payment of utilities, indicating an effect of the fall in income and a cause of indebtedness mapped in the study.

(12)

Another key point is that there is a high number of people with late bills. 40% of the population says they are failing to honor their commitments. **Most of them are recently banked (became users in the last two years).**

(13)

62% say that is difficult to pay installments. **Most of these borrowed money to buy food** and have no savings.

(14)

The search for better quality food is a debt generator for a population that is borrowing money to buy food. But in addition, many are reducing their spending on food: **half of the DE population (40% of C) reduced food consumption to pay off debts.**

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<sup>8</sup> "Financeiras" are a common option in the Brazilian market. They are banks that usually only offer credit. They are popularly known for high interest rates and high accessibility.

## Entrepreneurs

(15)

**Half of the CDE population has some entrepreneurial activity.** The vast majority is self-employed, informal, without employees and work at home.

(16)

**Entrepreneurs have difficulty to access credit** (30% asked for a loan in the last year). When they access, there is a **higher prevalence of modalities designed to regular accounts:**

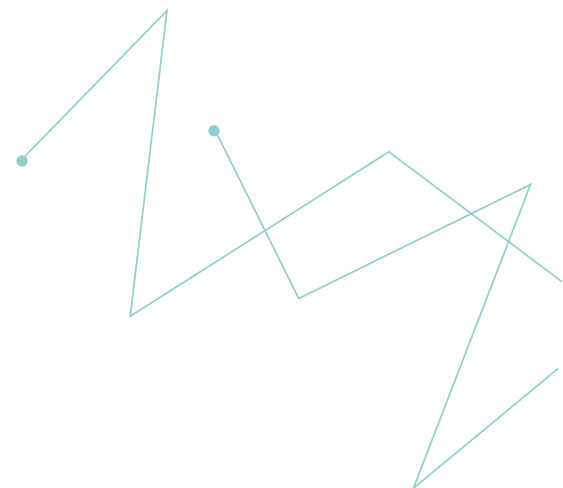
- a. Personal loan
- b. Credit card revolving credit
- c. Overdraft

(17)

**Entrepreneurs say that loans have improved their business** – especially among formalized and those with savings. **Perception of improvement is worse among women entrepreneurs.**

(18)

**90% of entrepreneurs say they encourage the use of PIX by their customers**, which also explains part of the general population's support to the PIX – which puts at risk other more costly payment offerings.



(03)

+access  
to financial  
services

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+Since 2020, Brazil has seen a significant increase in the banked population. This growth occurred largely in the base of the pyramid. Today, 99% of upper classes declare to have at least one bank account, against 87% of classes D and E. This difference shows that access to the account is no longer such a strong class marker in Brazil. For comparison, in 2017 the number of people with a bank account among the poorest 40% (mostly DE classes) was 57%, compared to 73% of the richest 60%.<sup>9</sup>

However, as we have seen before, large part of the banked population didn't use their accounts often (less than once a month). This is still true for 27% of the most vulnerable profile – this number used to be 88% in 2016. **The other 30% of the CDE population became a user of bank accounts throughout the pandemic. It's the profile we call "newly banked".**

### How long have you considered yourself a "heavy user" (uses the account more than once a month)

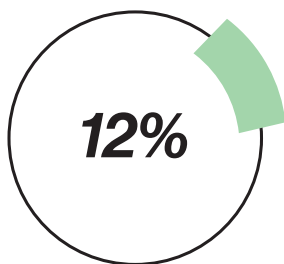


<sup>9</sup> Findex Database. World Bank.

Most of the newly banked are women (62%), of the CDE classes (67%) and use digital banks as the main bank (49%). The under-banked people concentrate most Caixa Econômica Federal's clients and are

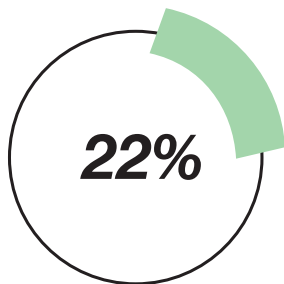
75% of the CDE classes – indicating that the opening of accounts to receive aid has been not automatically converted into use of these accounts.

**Comparing with previous users (2 years or more), the profile of the recently banked (less than 2 years) has lower income, is more female, and uses digital accounts more often**



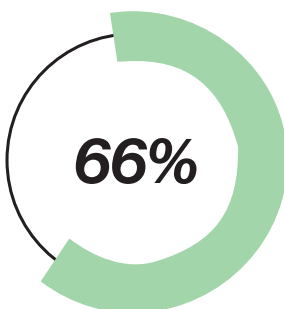
**Don't use the account often**

- :: 75% have low income (CDE)
- :: 53% are entrepreneurs
- :: 30% are under 30 years old
- :: 50% are woman
- :: 49% are black
- :: 60% have low savings
- :: 36% use digital account as main account



**Uses the account less than 2 years**

- :: 67% have low income (CDE)
- :: 40% are under 30 years old
- :: 62% are women
- :: 49% use digital account as main account
- :: 40% are entrepreneurs
- :: 50% are black
- :: 58% have low savings



**Uses the account for more than 2 years**

- :: 53% have low income (CDE)
- :: 22% is under 30 years old
- :: 53% are woman
- :: 33% use digital account as main account
- :: 56% are entrepreneurs
- :: 41% are black
- :: 51% have low savings

Digital banks, especially Nubank, are the only ones with more CDE customers than AB, indicating that financial access has been favored by the technological and public policy innovations of recent years. Among traditional banks, the only one with the most CDE customers is Caixa Econômica-

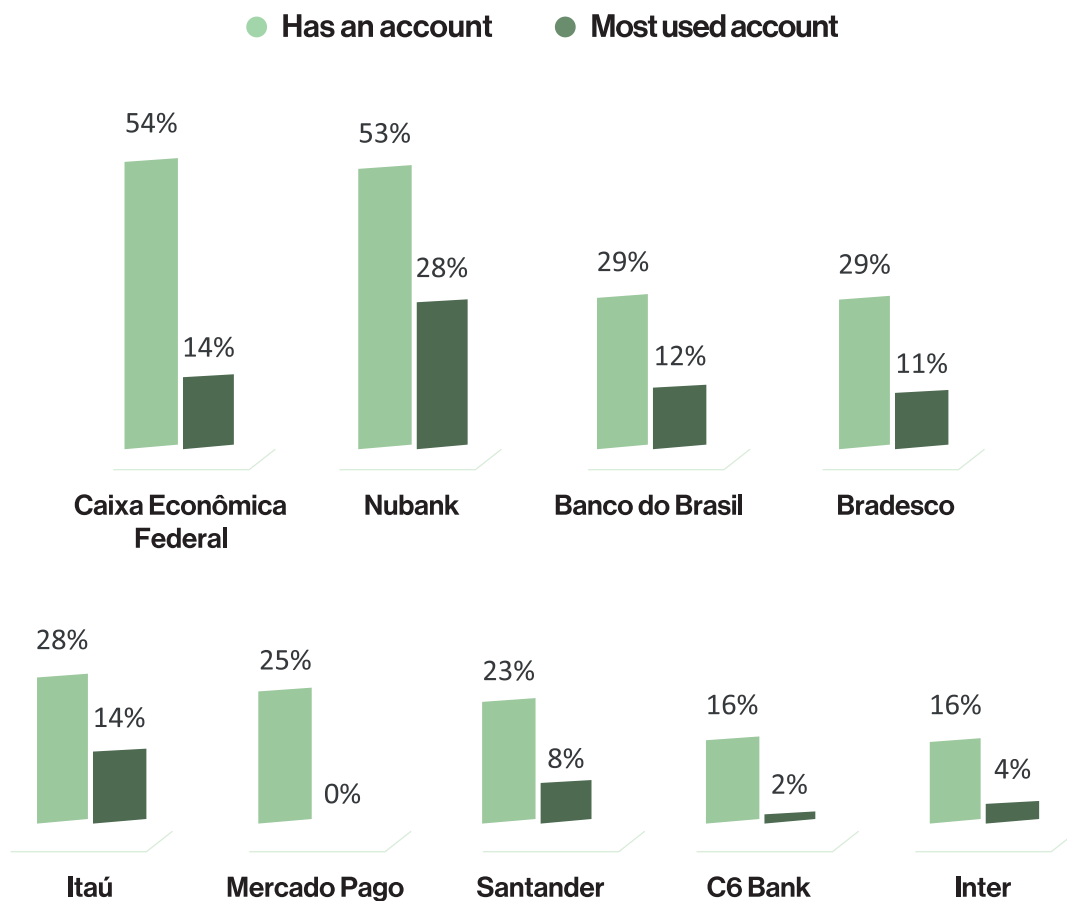
ca. **Digital banks are attractive to the base of the pyramid especially for the following reasons:**<sup>10</sup>

- i. Usability / ease of use (63%)
- ii. Free access to credit cards (51%)
- iii. Free account (33%)



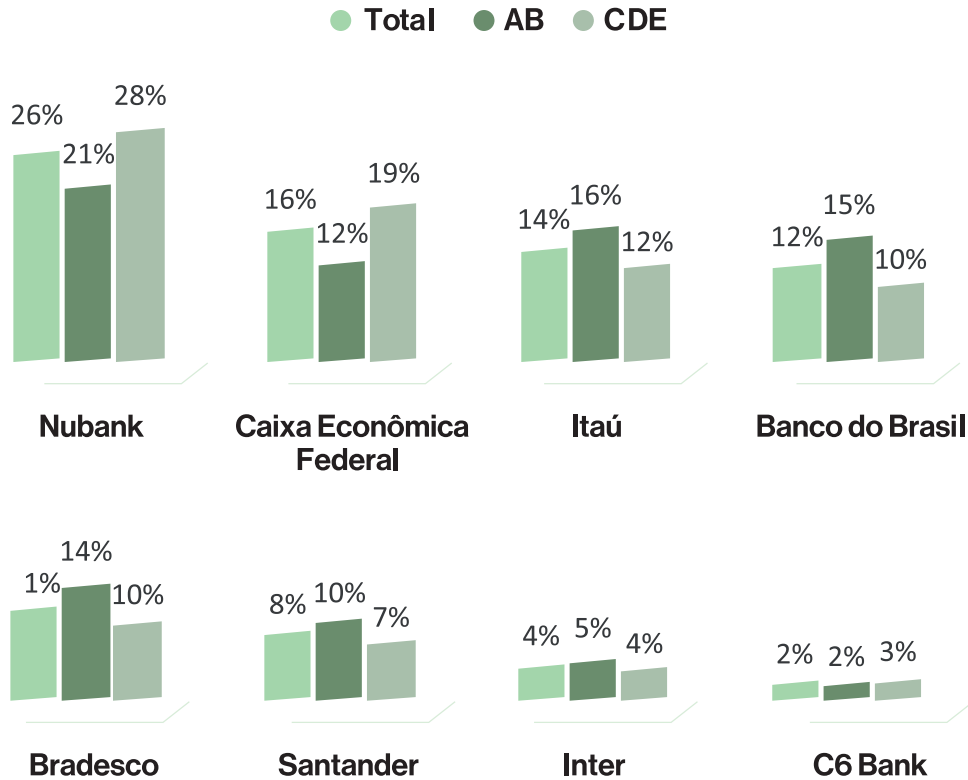
*"Why did you open an account in a digital bank?"*

## In which banks do you have an account



<sup>10</sup>What was the main reason you opened a digital account? Base (has digital account): 1478

## Most used account



More important, however, is that since there is an offer of free and easy-to-use accounts (especially because of the ease to open the account), there is also an increase in the number of people with multiple accounts. Today, on average, each bank customer has three accounts. In CDE classes, this number is 2.8. The base of the pyramid tends to use more often a digital account as their main account.

While digitization and the payment of government aids promoted account ownership, the launch of Pix boosted the use of accounts by the CDE population. Data from the Central Bank shows that by August 2021,

61% of digital account users said it was "very easy" to open an account. The average of so-called "traditional" banks is 41%.

This difference is also observed after opening the account: 65% say it is very easy to understand the statements, against 52% of traditional banks; 59% find it easy to understand the card bill, against 46% of the others.

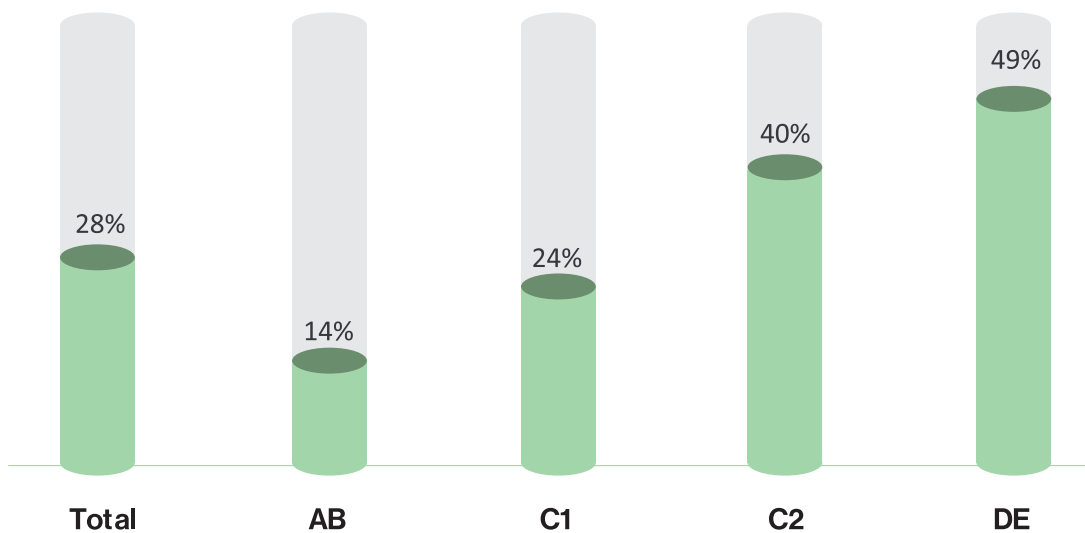
On this, a study conducted by the Central Bank with Plano CDE pointed out that simplification of the card bill has the potential to reduce the use of revolving credit, by better explaining the costs of installments.



40 million people had performed a Pix without ever having made another type of digital transaction. **This group of newly digitalized is**

**concentrated in the lower income profile – 49% of classes D and E had never performed a digital transaction before the PIX.**

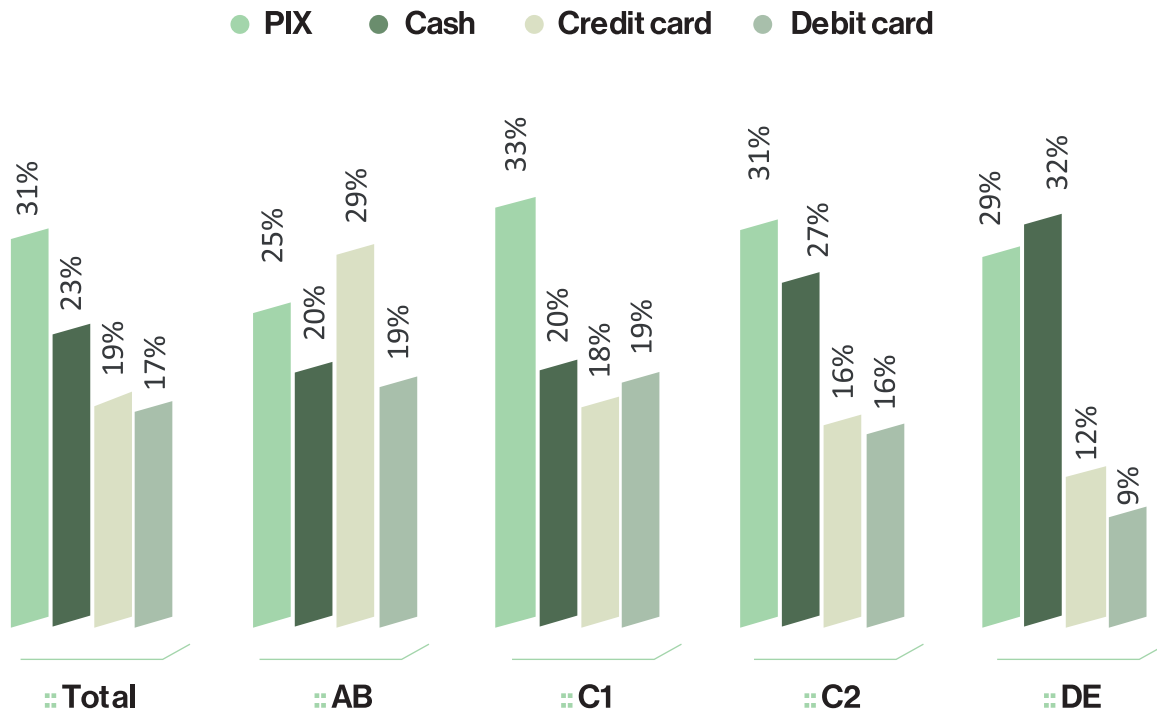
### **% who use PIX and had never made another digital banking transaction before it (DOC or TED)**



Pix has become the major form of payment for 31% of the population, also with a relevant income difference: **it is the most used**

**mean by classes C1 and C2, but is less used than money in classes D and E and less used than credit card in AB.**

## Most commonly used means of payment



A relevant group of people, however, continues to use traditional means of payment. **18% of the population goes to lottery houses<sup>11</sup> at least once a month to make payments** – that number reaches 24% in the DE population. This profile can be impacted by the fluctuation in the supply of face-to-face service points.



*In Brazil today, there is a population of 17 million people without access to bank branches in their municipalities. 1.6 million has no access to any service points.*

*Nonetheless, while the last 3 years marked a reduction in the supply of branches, there was, at the same time, an increase in the supply of correspondent banks and service stations.*

*((Financial Citizenship Report, Central Bank, 2021)*

<sup>11</sup>In Brazil, lotteries are also used to pay usual bills and debts in cash, especially by the lower income population. It is the most common bank “correspondent”.

(04)

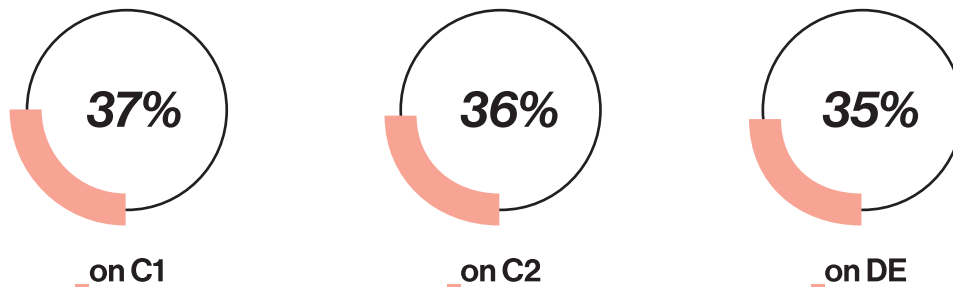
+saving habits  
and invest-  
ments



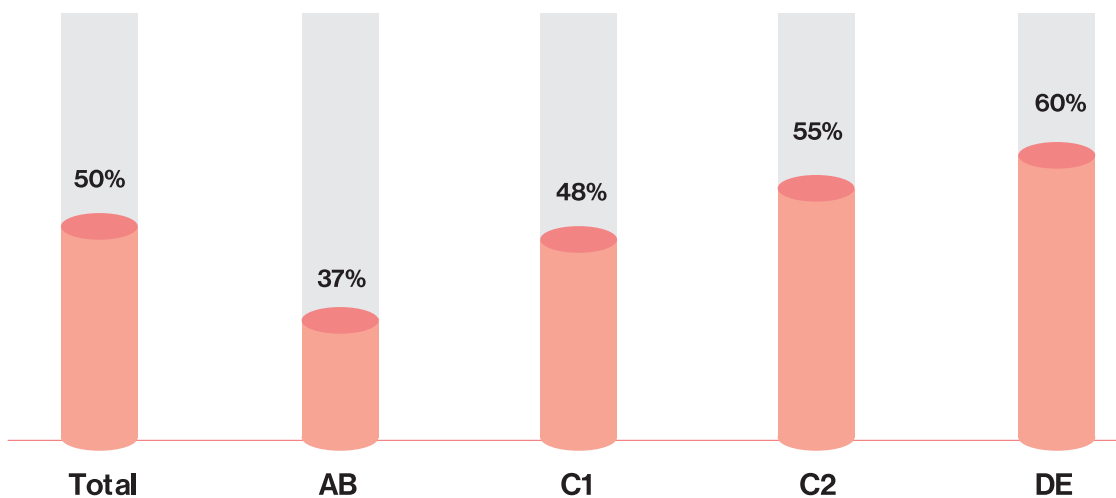
+The main hindrance for increasing saving rates at the base of the pyramid is the lack of income. In the last 12 months, 50% of the population has had higher expenditures than income. This number reaches 55% in class C2 and 60% in classes D and E. With this,

we are expected to see a limited number of people with resilience to face emergencies. Less than 40% of the CDE population has enough savings to cover an unexpected expense in the amount of their monthly income.

## Financial Resilience



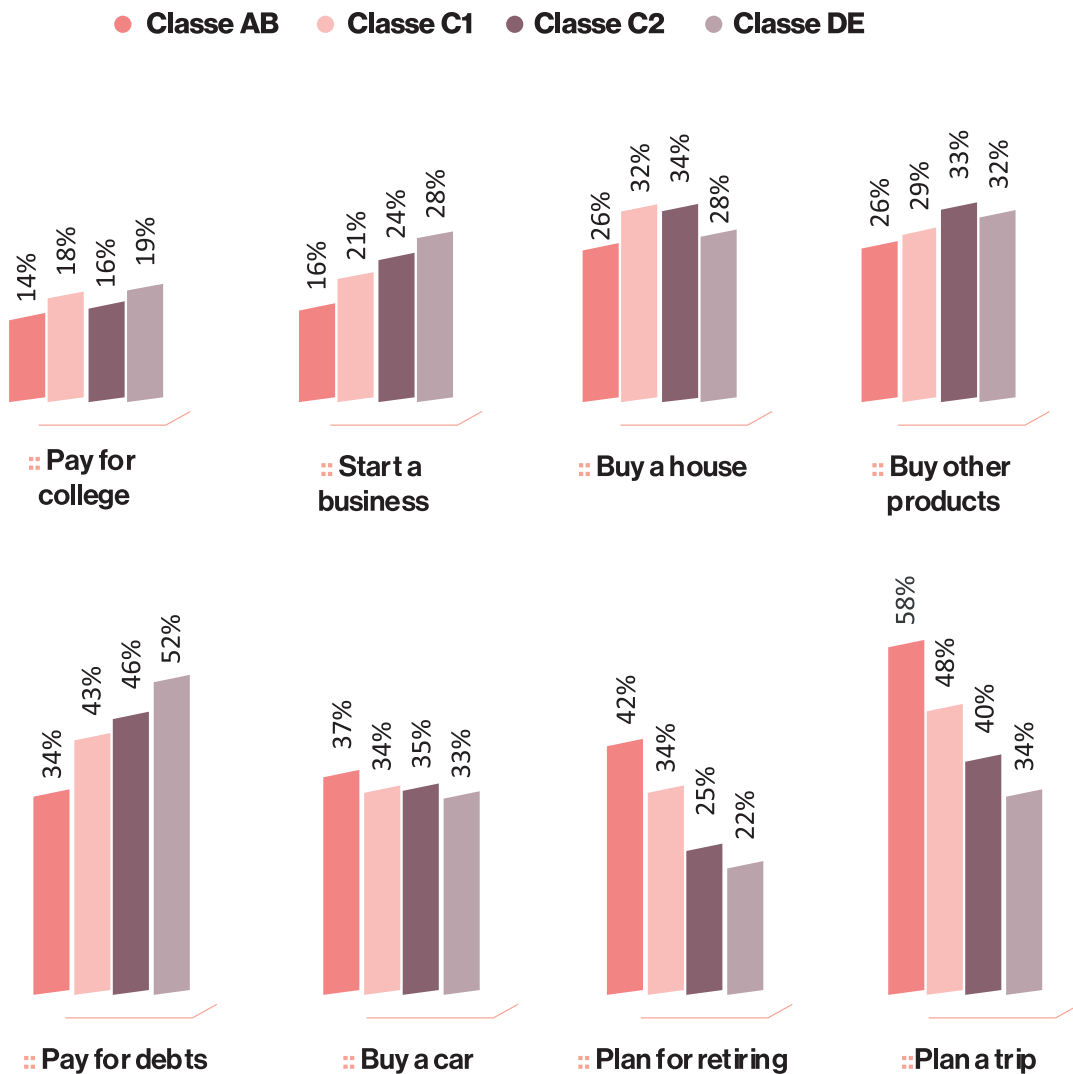
## Had spending higher than income (last 12 months)



Limited income and low financial resilience have led to indebtedness of the CDE population, which appears when this group sets its financial priorities for the future. **The main goal of the base of the pyramid is the pay-**

**ment of debts** – a goal that becomes more important as income decreases. In classes A and B, the most mentioned goals are leisure (58%) and retirement (42%).

## Most Common Goals

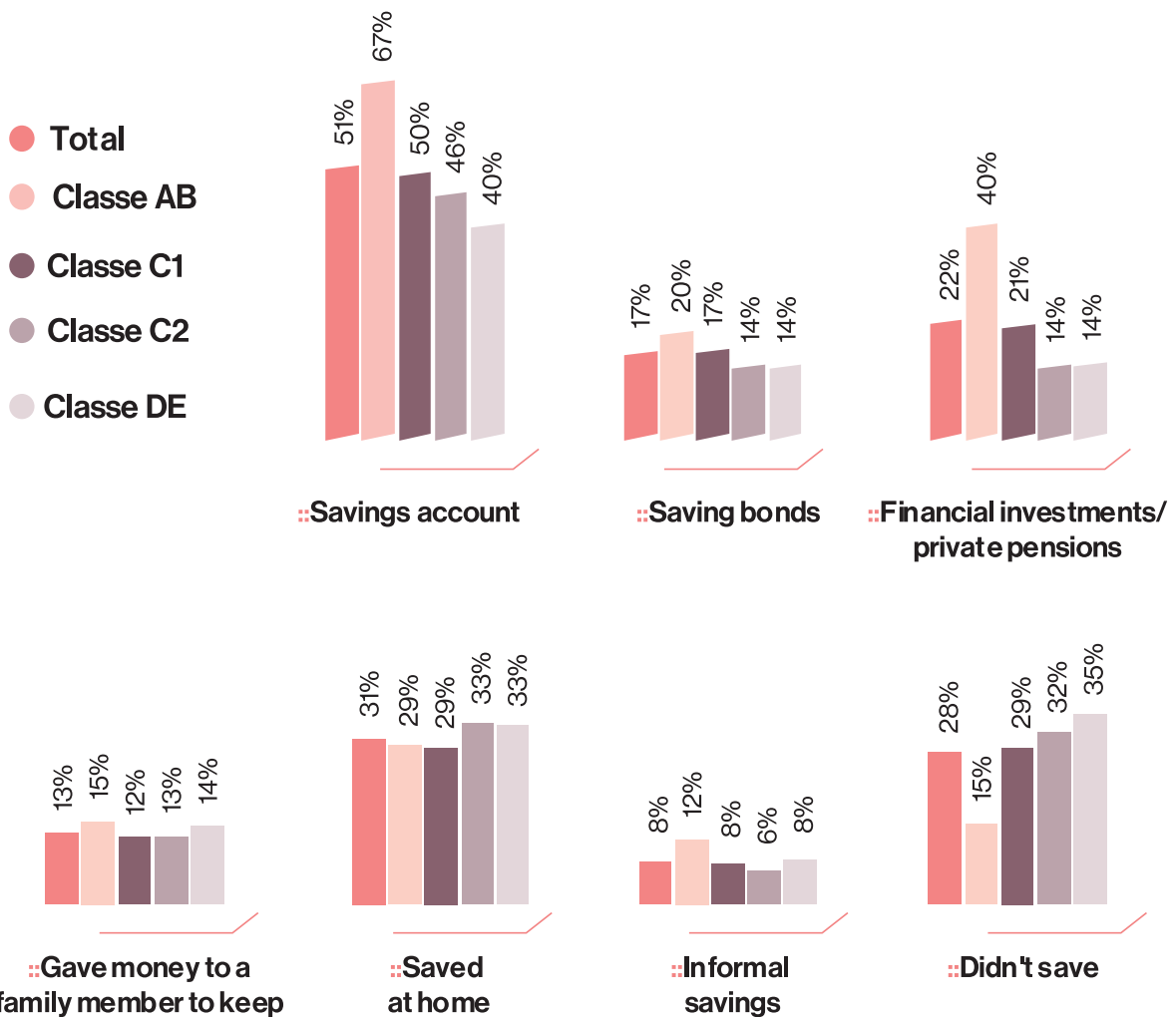


### 4.1\_Types of investment

Among Brazilians who have managed to save some value in the last year (above 60%, even in classes C, D and E), savings ac-

count remains the main investment allocation, with 50% of allocations in class C1 and 40% in ED. At the base of the pyramid, about 30% kept money at home.

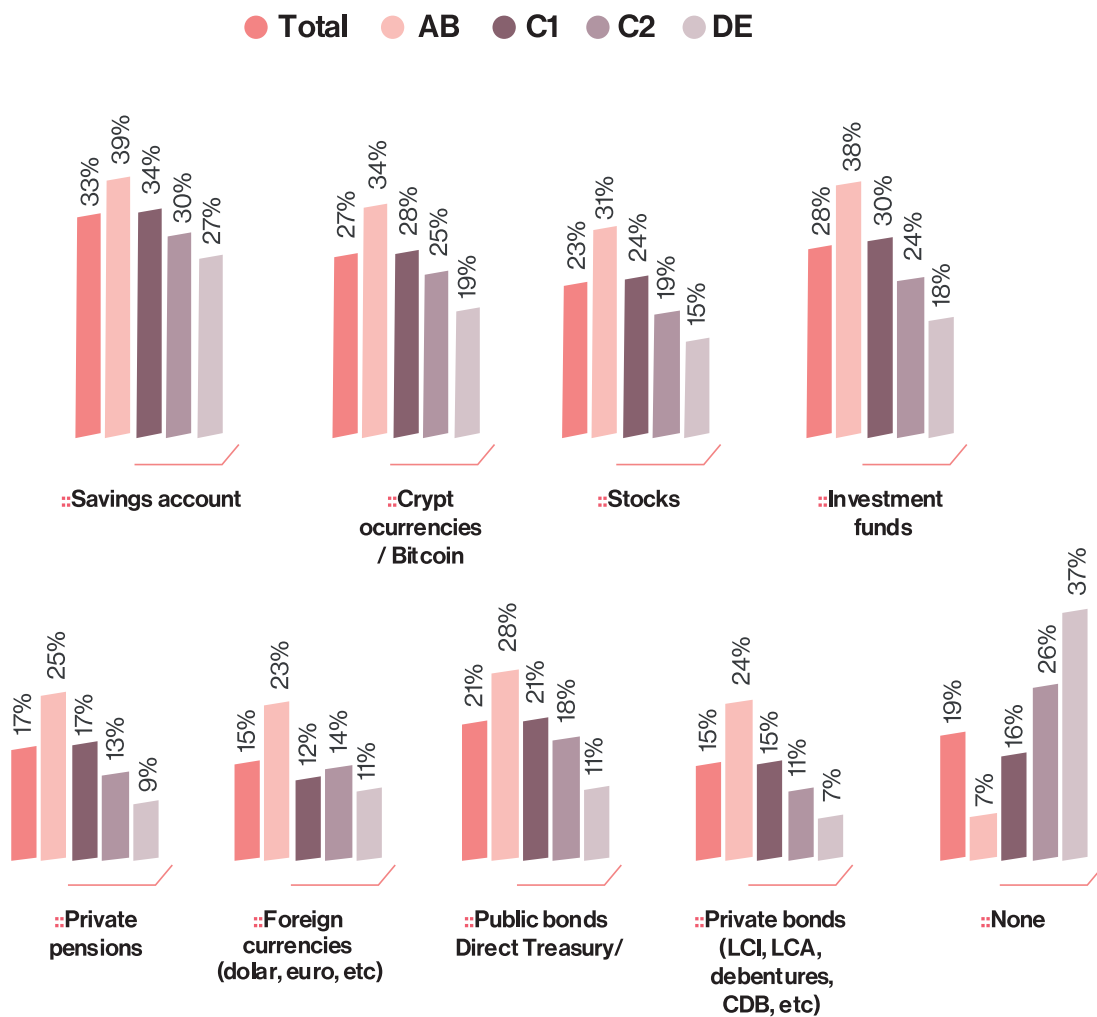
### Saving options (last 12 months)



Nevertheless, an even more important finding concerns future investment plans. 80% of Brazilians plan to make some investment next year – 63% in classes D and E. One in three Brazilians intend to save money in the savings account in the next 12 months. Another 28% would like to invest in

investment funds. **A new high-risk investment, cryptocurrencies, are in the plans of 27% of Brazilians, as one of the three main investment objectives for the future, above treasury bonds, pensions and even stocks.**

### In which applications do you intend to invest next year?



And who wants to invest in cryptocurrencies? The profile of this public does not indicate that they are qualified investors:

- ❑ 57% have no savings to deal with an unforeseen event equivalent to a month of their income
- ❑ 38% have overdue bills, and 37% had to reduce the purchase of food to pay debts in the last year
- ❑ 47% could not answer correctly about how inflation interferes with investment returns
- ❑ 48% could not answer correctly what a safe investment is
- ❑ 65% seeks information on investments through digital influencers

In another topic related to risk management, there is one more factor with potentially negative impact for the base of the pyramid: sports betting. Regulated in 2018, sports betting houses sponsor much of the championships and football clubs in the country<sup>12</sup>, a sign of the potential of this market.

Our study identified that one in three people have already held sports betting, mainly in classes A and B. However, 6% of bettors get indebted because of betting – a figure that reaches 16% in classes D and E.



*In 2020, the Central Bank mapped more than 3,600 personal finance videos on Youtube, totaling 265 million views.*

*While the demand for themes related to risky investments accounts for 17% of total views on the platform, this theme accounts for 24% of available content.*

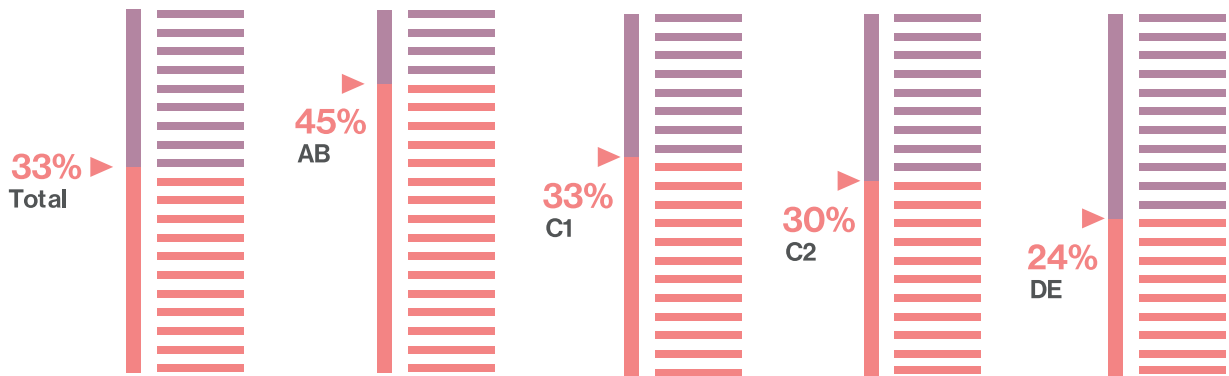
*Tips for conscious consumption and financial calculations, on the other hand, have less video supply and more demand for users.*

*(Financial Citizenship Report, Central Bank, 2021)*

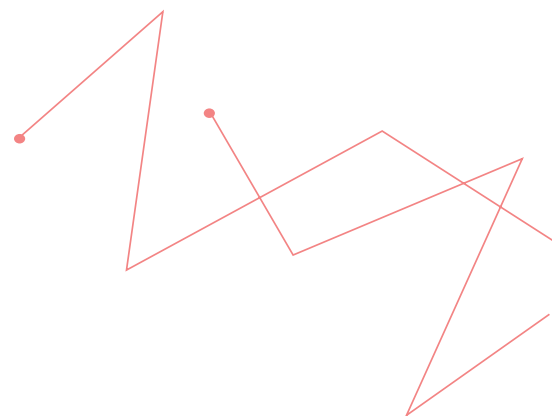
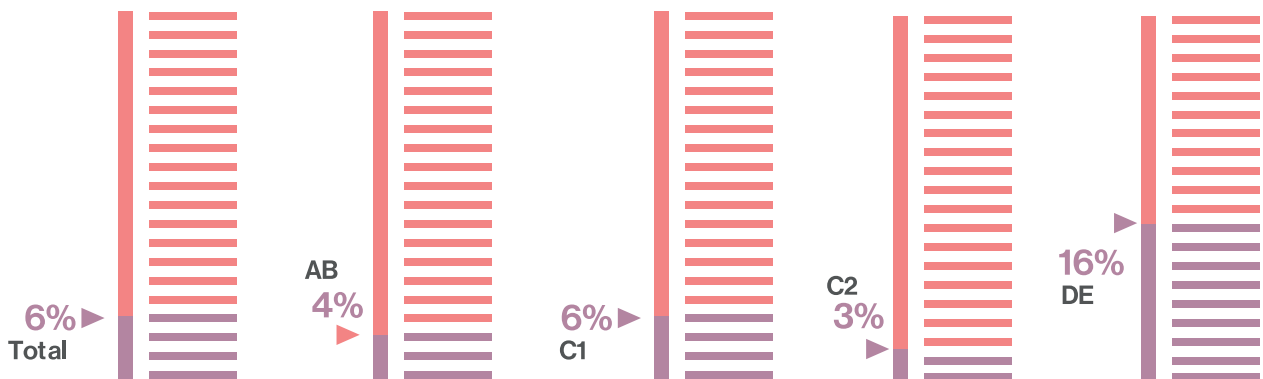
<sup>12</sup>As a report from O Globo shows: < <https://oglobo.globo.com/esportes/bet/noticia/2022/07/apostas-esportivas-sao-legais-no-brasil-entenda-como-funciona-a-operacao-no-pais.ghtml>>, accessed 02/09/2022



## Have done sports betting



## Got indebted to pay bettings





(05)

+credit and  
indebtedness

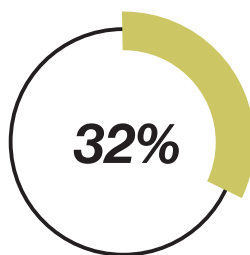
## 5.1 Access to credit cards

As with the opening of bank accounts, access to credit cards has increased greatly in recent years. Today, 73% of CDE classes have a credit card, and 41% have at least two cards. It is interesting to note the relevance of digital

banks in this growth. Among those who have only one card, half are digital bank customers. Among the others, almost 70% have a mix of digital and traditional bank accounts, showing the impact of access of these new players in the market.

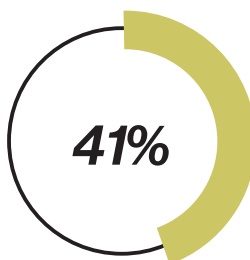
\* *"On average, each person has 2.8 credit cards"*

### 73% of the CDE group has a credit card



**32%** of the CDE have one credit card

- 49% are entrepreneurs
- 35% have savings
- 49% have a card in a digital bank



**41%** of the CDE have two or more cards

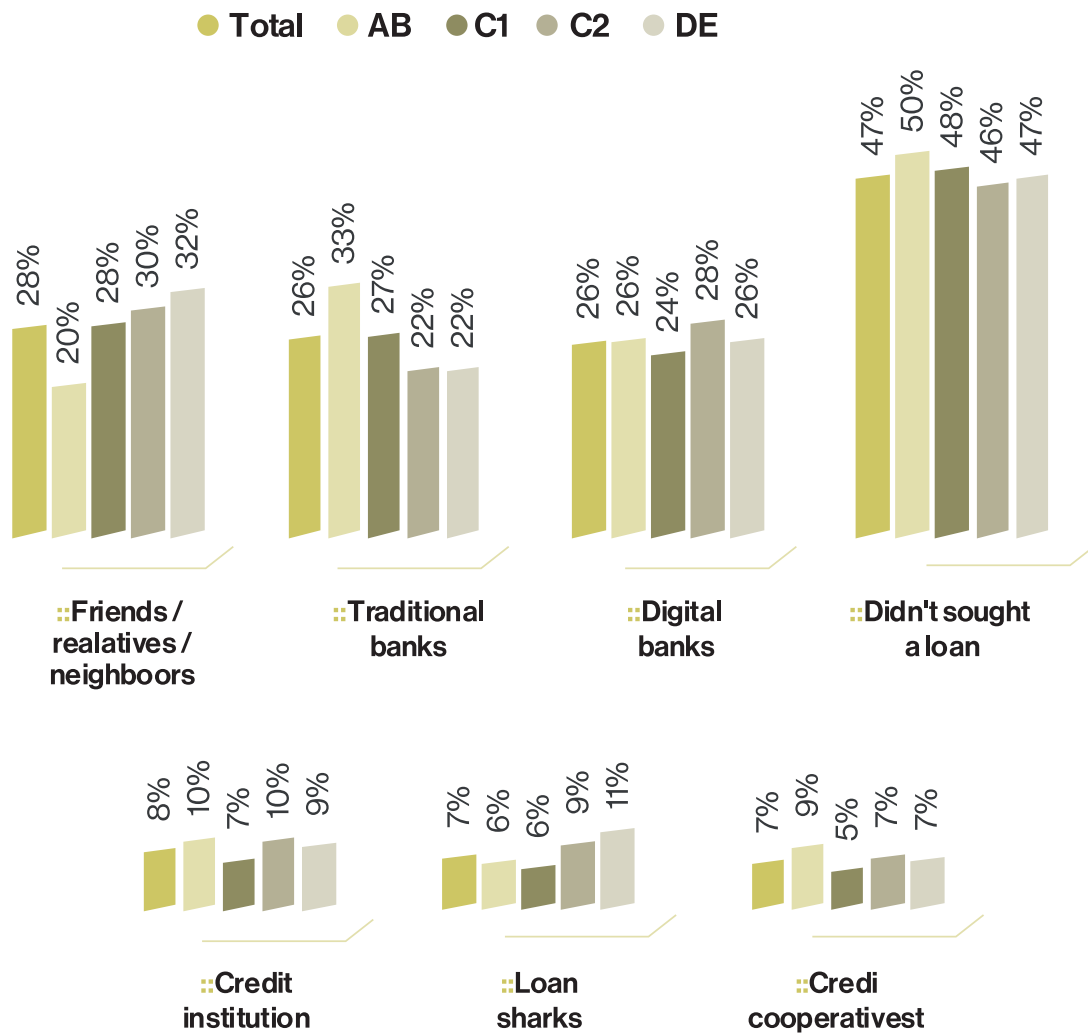
- 59% are entrepreneurs
- 43% have savings
- 68% have a card in traditional and digital banks

## 5.2\_ Other credit modalities

Half the people had to borrow in the last year. At the base of the pyramid, the first option of financial help are family or friends –

which are triggered by only 20% of classes A and B. The lower the income, the greater the probability of credit applications for loan sharks, even though the contact with digital and traditional banks prevail.

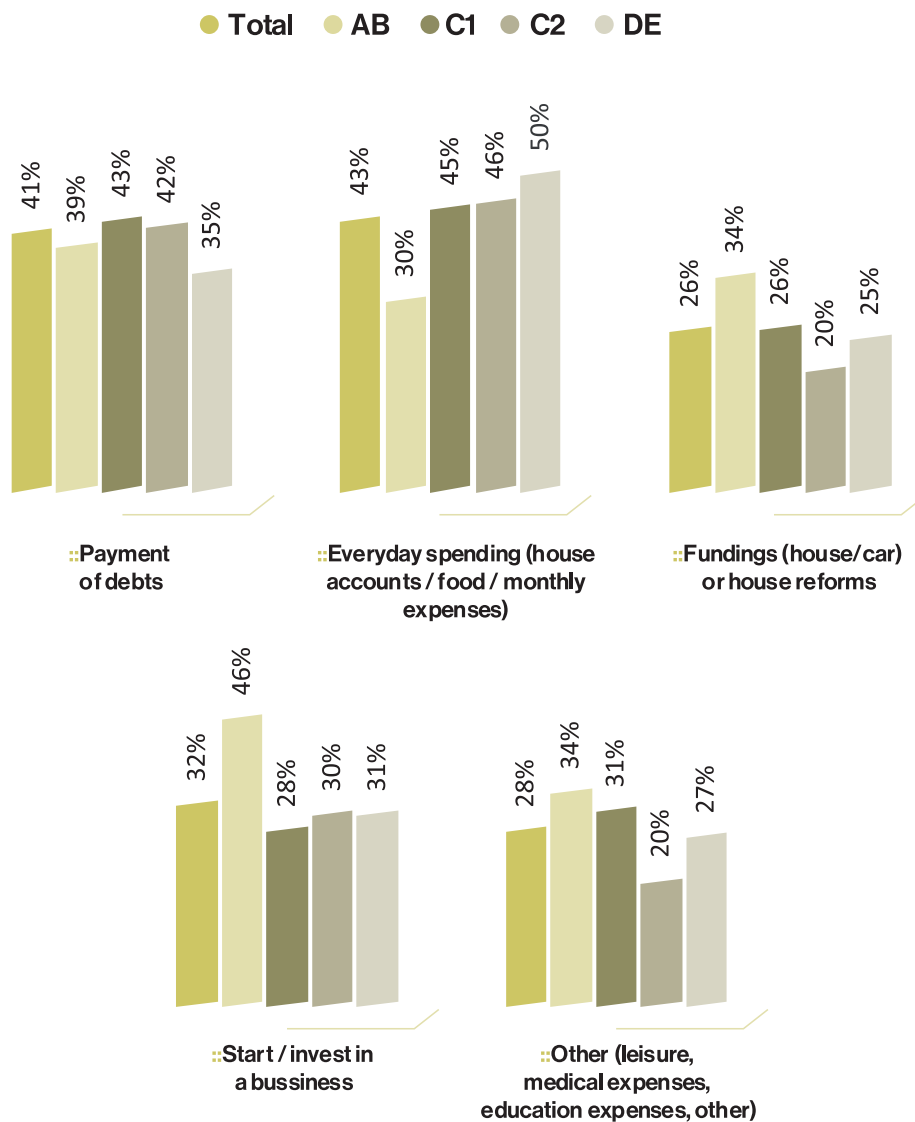
### % who have sought a loan with (last 12 months)



The two dominant reasons for loan seeking by the base of the pyramid were buying food and paying utilities, followed by the payment of debts, a sign of indebtedness and reduction of income that families are facing. Considering the fact that there are ba-

sic needs to be addressed, accessing new loans can force consumers to accept more restrictive terms and conditions of loans. Only 31% of borrowers consider that the loan terms were very easy to understand, but with great differences by type of lender.

### For what purposes did you need a loan?



Cooperatives and lending institutions are perceived as options with clearer rules. **Third, in front of the banks, are the loan sharks.** Qualitative research conducted by Plano CDE shows that this informal loan, although having a potentially abusive interest and potentially violent forms of collection, meets specific demands of an economically vulnerable public:

- ⚡ Quick release of money
- ⚡ Quick and simple explanation of the loan conditions – in the borrower’s daily terms (no mention of interest rates, charges, etc)



- ⚡ Lack of bureaucracy, such as requests for documents that the borrower sometimes does not have access to

We have mentioned that digital banks are valued by their ease of use, especially for opening accounts. Thus, we can **also understand the value of simplifying processes for access to credit, and the comparative advantage of informal options.** Therefore, the challenge is the generation of simple offers, easy to understand and with capillarity, to ensure that access is given in a truly inclusive way.

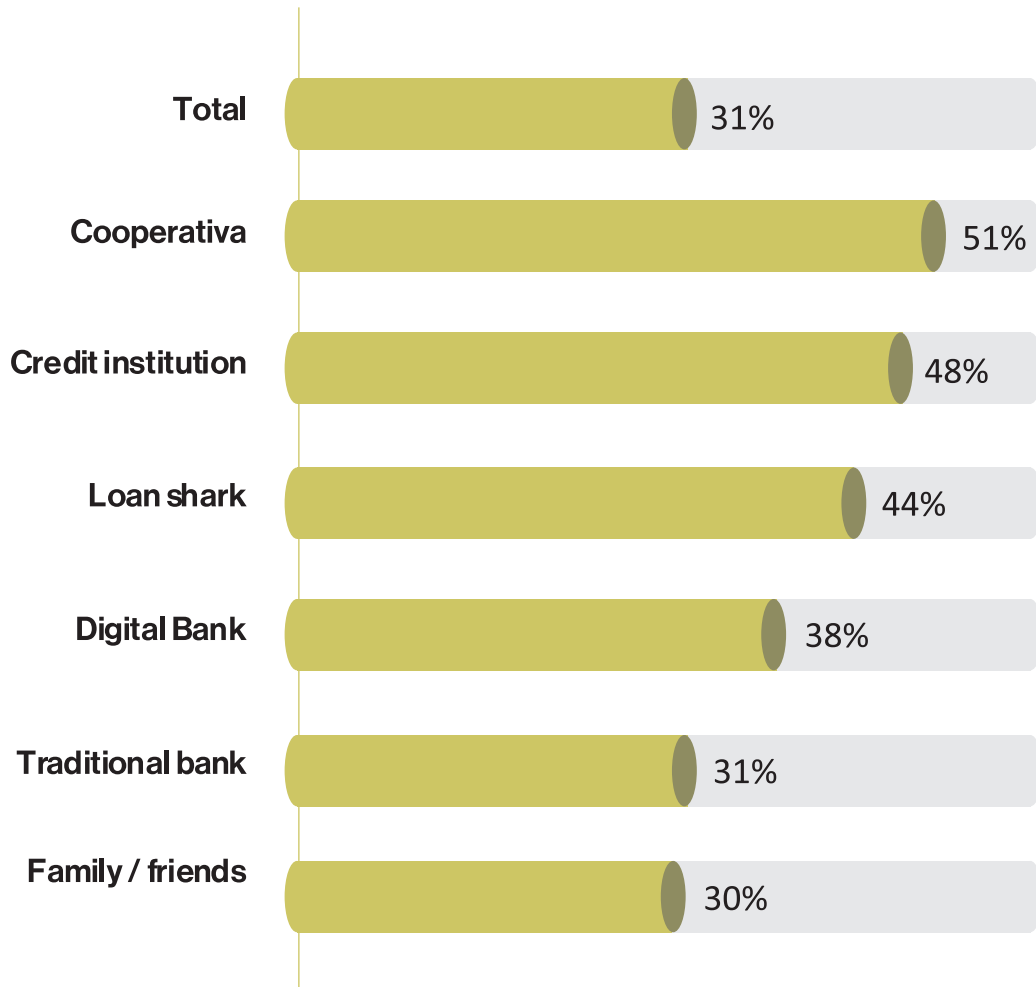
*In your book **Scarcity: Why Having Too Little Means So Much**, sociologists **Sendhil Mullainathan and Eldar Shafir** demonstrate how scarcity leads to greater difficulty in making decisions: there is no slack, all decisions are urgent, which puts pressure on the most vulnerable to bad decisions and to depend on simple solutions.*

*"We fail to build slack because we focus on what must be done now and do not think enough about all the things that can arise in the future. The present is imminently clear whereas future contingencies are less pressing and harder to imagine. When the intangible future comes face to face with the palpable present, slack feels like a luxury."*

*This lack of "slack", or time to make thoughtful decisions, pushes vulnerable populations to worse-quality financial decisions, always in a high-pressure context.*

Source: "Scarcity: Why Having Too Little Means So Much" Sendhil Mullainathan, Eldar Shafir

### Considered rules “very easy to understand”



### 5.3\_ Indebtedness

In line with income drops, we identified 42% of the population with overdue installments, whether from loans or utilities. Indebtedness and late payments are not distributed unifor-

mly. Unemployed people are 50% more likely to have overdue installments, and those without an emergency reserve are 94% more likely to be in this situation. While these two factors are expected, it draws attention that **the recently banked – those who became**

**users of the financial system during the pandemic – are 74% more likely to be in this situation<sup>13</sup>.** This may be related to a few factors, including:

- ∴ Difficulty to understand rules
- ∴ Banking followed by credit offer not suitable for the new customer

**Two out of three indebted people find it difficult or very difficult to pay the installments**, and this is directly related to financial resilience and loan use. Those who do not have emergency reserves (resilience) are 80% more<sup>14</sup> likely to consider the installments difficult to pay. Here, we consider having financial resilience as having savings equivalent to one month's rent. For someone who earns a minimum wage, that corresponds to the average value of debt delinquency in Brazil (R\$ 1,216.65 or U\$ 233,00)<sup>15</sup>. Thus, financial resilience can explain the ability to even avoid *debt*. Also, those who **borrow to buy food or pay everyday bills are 82%<sup>16</sup> more likely to have difficulty in paying installments.**

In addition to these difficulties in payment capacity, debt leads to a reduction, debt leads to a reduction in quality of life. **40% of the population had to reduce the purchase of food to pay debts (50% in classes D and E),** and almost 20% (28% in D and E) had to sell goods.

---

<sup>13</sup>These results are the fruit of a regression logistics binomial (CI 1.20 - 2.53, Note: 749), and robust to a 95% confidence interval. Controls were used to income, age, unemployment, gender, education, financial knowledge, account usage time, number of cards, presence of financial target and use of loan to invest in the business.

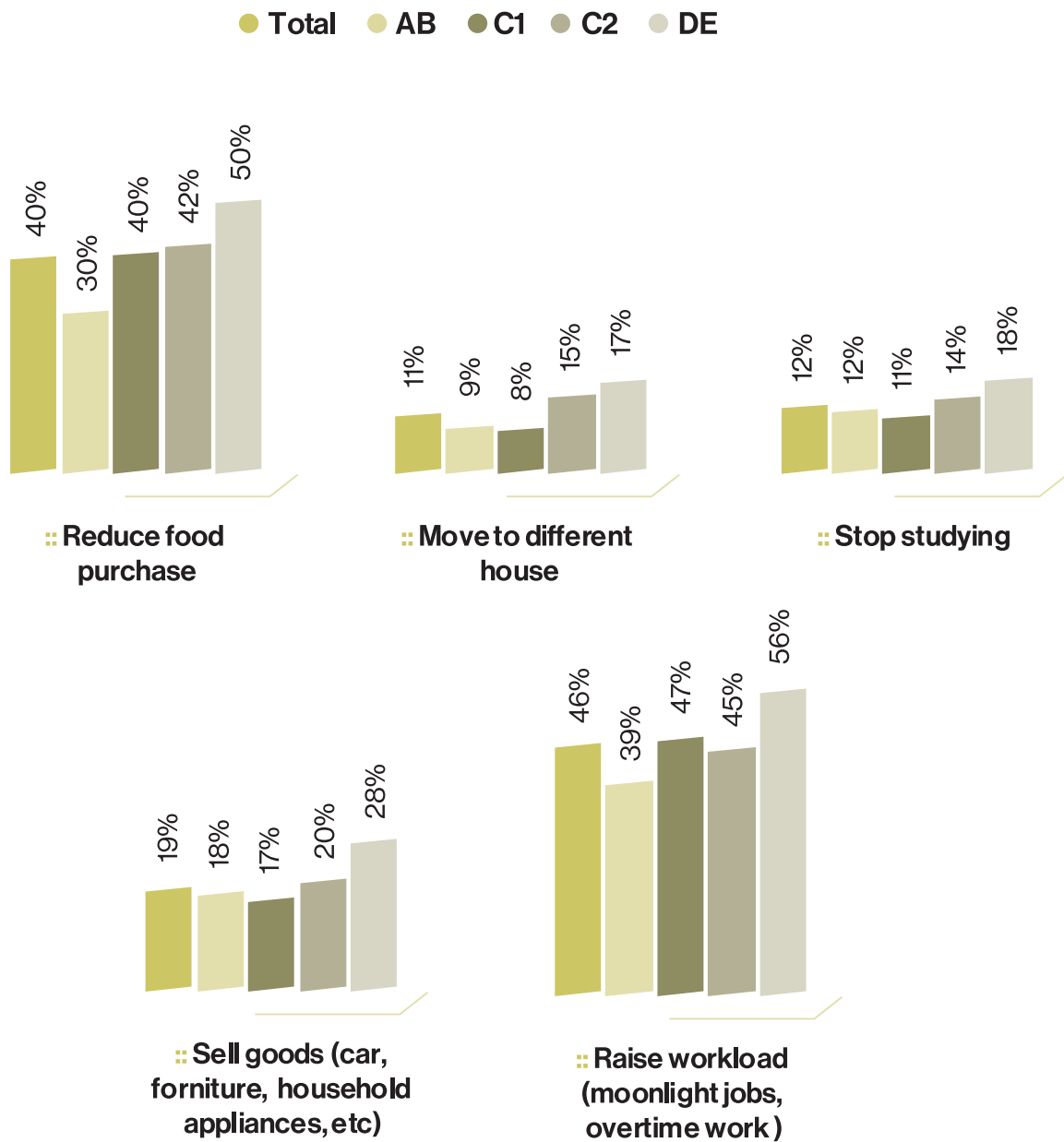
<sup>14</sup>Regression result logistics binomial (CI 0.14-0.30, Note: 749)

<sup>15</sup>Data from the Map of Debt Delinquency and Renegotiation in Brazil, June 2022 (Source: Serasa)

<sup>16</sup>Logistic regression result binomial (1.31 CI-2.53, Note: 749)



## Have you or anyone in your family had to do any of the following to pay off debts?



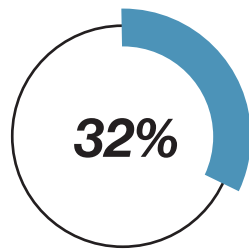
(06)

+financial  
inclusion and  
microentre-  
preneurs

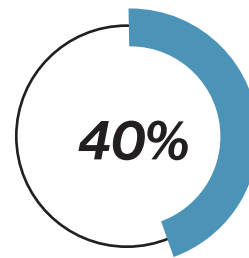
+Entrepreneurship is part of the income of class C, D and E families. In general, families organize themselves around multiple sources of income, largely variable. Those incomes come from jobs as self-employed and small business-owners, complemented, sometimes, by some other sources of fixed

income, not necessarily formal. Our study identified **51% of microentrepreneurs in classes C, D and E, including those who perform moonlight jobs, to complement income.** These “businesses” are mostly informal and work in the place of residence.

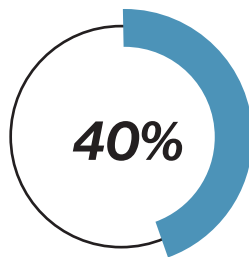
### Características do negócio



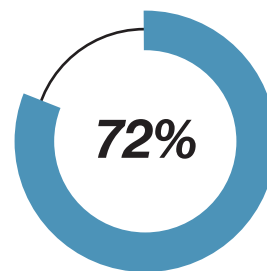
Has employees



Has a business bank account



Is formal



Works from home

Like the rest of the population, these small entrepreneurs feel the effects of a new scenario of access to financial products and services. However, as we have seen, access has not necessarily brought all the expected promises of financial well-being. The vast majority (83%), for example, did not have access to credit at the opening of their business, and the use of indirect sources (friends and family) is as common as bank loans.

In the last 12 months, only 34% of entrepreneurs have applied for loans for their businesses. The main modalities were:

- i. Personal loan (71%)**
- ii. Credit card revolving credit (46%)**
- iii. Overdraft (35%)**



**Options directed to entrepreneurs are cited in fewer responses than options directed to regular individuals.** Only 19% of the loans were taken on behalf of the business, even though around 40% of businesses are formalized. Data from the Central Bank<sup>17</sup> shows that, in 2020, Individual Microentrepreneurs (MEIs)<sup>18</sup> that took out loans in regular accounts paid 78% higher interest on revolving credit than loans taken with business accounts.

That said, even with credit quality challenges, **entrepreneurs tend to agree more often that the loan has improved their quality of life** than non-entrepreneurs.

*As of 2010, the Central Bank has published several resolutions encouraging competitiveness in the payments sector. This generated a multiplication of card "machine" options for merchants, who could receive payments of any flag.*

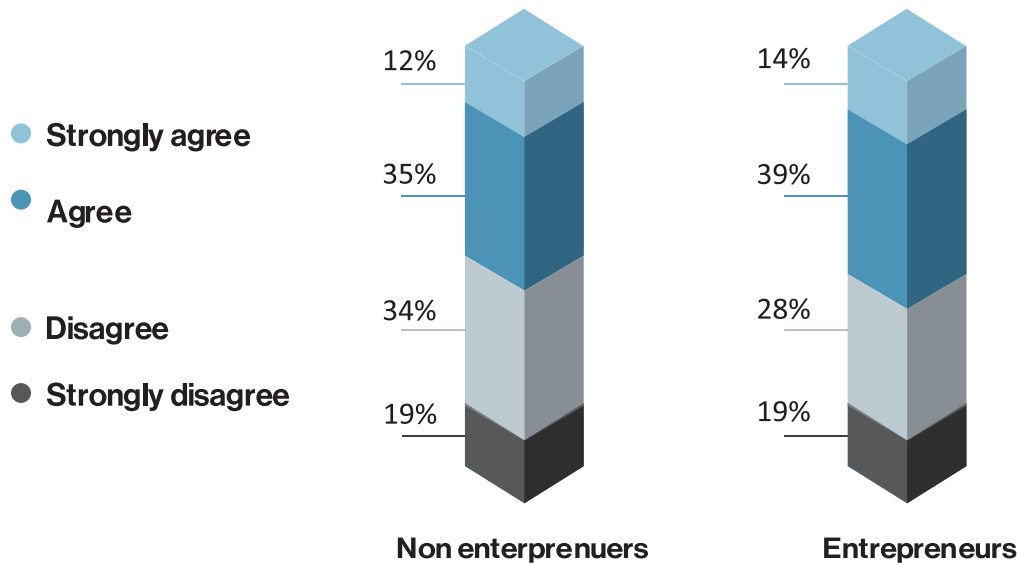
*Not surprisingly, Brazil's second unicorn start-up was PagSeguro, a spin-off of the Folha group that helped democratize access to credit card terminals by microentrepreneurs.*

*The first unicorn in Brazil was the transport app 99. We should point out that one of its differentials was the offer of payments of bills - also authorized by Central Bank regulations benefiting the entry of non-financial companies into the payment market.*

<sup>17</sup>Financial Citizenship Report 2021.

<sup>18</sup> Individual Microentrepreneur (MEI) is a simplified formalization status for small businesses. In 2022, there are 13 million "MEIs" in Brazil, roughly 70% of all formal companies.

## The loans I have taken improved my quality of life



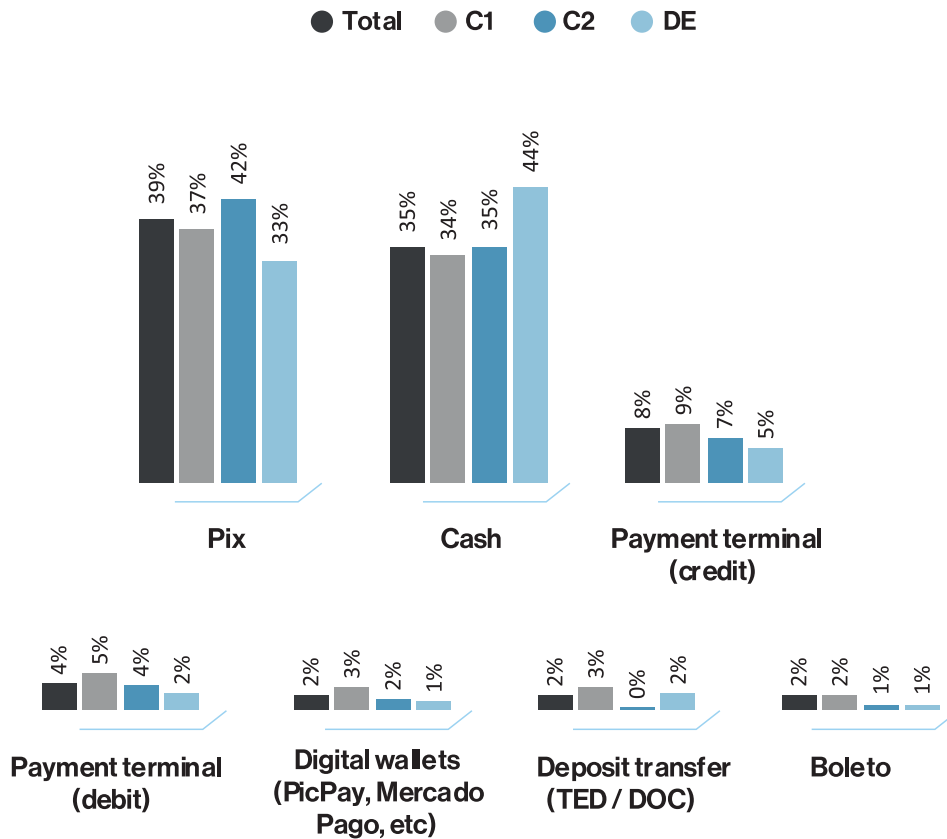
The loans also helped businesses to grow, according to respondent's perceptions. **Two out of three agree with this statement. Financial resilience and formalization increase the probability of agreeing by 60% and 44%, respectively.** Conversely, women entrepreneurs have a 29% lower chance of considering that the loan was good for business – indicating greater difficulty in accessing better quality products for their business needs<sup>19</sup>.

### 6.1 Means of payment

Similarly to the general population, the implementation of Pix has brought significant changes for small businesses. Today, 89% accept Pix as a mean of payment, the same proportion of cash acceptance, and considerably above debit cards (51%) and credit cards (50%). Around 40% says that Pix is the main mean of payment, especially in class C. But for D and E classes, money is still the main form of payment (44%). The use of payment terminals grows as income increases.

<sup>19</sup> Findings of a regression logistics binomial (Note: 992), and robust to a 95% confidence interval. Controls were used to income, age, unemployment, gender, education, financial knowledge, time of account use, number of cards, presence of financial goal and use of loan to invest in the business. The model considered all entrepreneurs, not just those of the CDE class.

## Most commonly used means of payment



A common complaint of small entrepreneurs regarding the receipt by credit or debit card are the rent and sale fees, in addition to the fees for advance of receivables<sup>20</sup>. Even with the increase in competition in the sector in the last 10 years<sup>21</sup>, which has made access cheaper, there are average charges of 2% per sale in debt and 2% to 5% per sale in credit among the main brands<sup>22</sup>, not to mention

the costs of acquisition of the terminal itself. 45% of entrepreneurs consider high costs a reason why they could stop using payment terminals.<sup>23</sup> It is not surprising, therefore, that **89% of entrepreneurs usually encourage their customers to pay in Pix to reduce their fees and speed up the receipt of the amounts.** 82% say they are receiving less payments in card since Pix was launched.

<sup>20</sup> Users of payment terminals may pay a fee to receive processed payments in advance.

<sup>21</sup> Financial Citizenship Report 2021. Central Bank of Brazil.

<sup>22</sup> What's the best card machine? Look at the ranking! (idinheiro.com.br)

<sup>23</sup> Search Card Machine. Sebrae, 2021.

(07)

+conclusion

Baillie Gifford  
Plano CDE

✦ The economic situation of classes C, D and E is worrisome. Half have income below their monthly expenses and less than 40% built a reserve equivalent to a month of their income. This contributes to the increase in credit delinquency, monitored by Serasa, which reaches 66 million people, in September 2022. In the first year of the pandemic, more than 3 million jobs were lost, strongly affecting the base of the pyramid, which generally accesses more precarious opportunities, with greater turn-over and less formalization.

However, during a severe economic crisis, the pandemic period was also marked by a high banking inclusion of a large part of the population. The account ownership reached more than 80% of classes C, D and E, due to three factors:

- ✦ Easy to open free accounts in “digital banks”
- ✦ Access to free credit cards
- ✦ Payment of social benefits
- ✦ Easy and free to use transactions with PIX

The so-called “digital banks”, especially Nubank, proved to be promoters of banking inclusion at the base of the pyramid. Today, Nubank is the most described as “main bank”, in a population that has, on average, 3 accounts. The only other bank that is used by the CDE classes more often than by the upper income group is Caixa Econômica. In 2016, only 7% of the base of the pyramid used their bank accounts more than once a month.

Today, 88% of clients use their account often. Only 12% use the account only once a month or less, and another 22% have become users of their accounts in the last 2 years. PIX explain much of this behavioral change. Today, in class C (the Brazilian “middle class”), PIX is the main mean of payment. Even in classes D and E, it is the second main mean, tied with cash. It also competes with the use of credit card in classes A and B.

Access to accounts has also opened the doors for card access. Today, users have an average of 2.8 credit cards. Large part of them merges the use of a “digital” and a traditional option, even at the base of the pyramid. That is, the emergence of digital banks as free alternatives, combined with regulations and public policies, brought a new level of access to the lower income population, which until 2019 concentrated all Brazilian un- and underbanked.

Digital banks solve pains of the lower-income user providing better usability (combined with greater understanding of rules, conditions, statements etc.), lower transaction cost (not only by PIX, but also by reducing the need for travel to an agency) and access to credit cards.

With greater access and use, the base of the pyramid has the possibility to create a transaction history that, ultimately, allows credit acquisition of better quality. In addition to credit card access, 50% of classes C, D and E applied for a loan in the 12 months prior to



the survey. Again, there are indications of the relevance of digital banks here, which are present at the same level as traditional banks in number of applications, and give to the base of the pyramid another formal alternative, potentially reducing the appeal of informal loans and of less measurable risk.

However, due to the economic crisis and other factors related to recent banking, there are indications that credit is not necessarily positive. **The main reason for borrowing was the payment of utilities and purchase of food**, followed by the payment of other debts. Around 40% had to reduce the purchase of food to pay debts. That situation is even more serious among the recently banked, most of them at the base of the pyramid and users of so-called “digital banks”.

Despite the improved access, **there are still points of attention among the newly banked, who have more overdue debts**, and probably are accessing other products and services for the first time, without necessarily understanding conditions and costs – something that **is demonstrated by the loan shark’s relevance as a “very easy” to understand source of loan**, above the banks.

In relation to microentrepreneurs, the market has been accessing them for credit supply but **is not necessarily offering appropriate products and services**. These entrepreneurs still heavily rely **on their own resources and personal loans**. Despite this, most entrepreneurs seem to have used loans for productive purposes. A majority understand that **loans have helped busi-**

**nesses grow** – especially among those formalized and with greater savings. Another relevant impact of the changes in access for entrepreneurs is the centrality of PIX as a mean of payment, already used at the same level of cash and considerably ahead of credit and debit card options. However, there is room to convert this increase of transaction history with credit offerings better targeted at the small entrepreneur.

Finally, the low financial knowledge of the population raises concern about **the high consideration for investment in cryptocurrencies and sports betting**. Potential crypto investors demonstrate little **knowledge on risk and inflation issues and high vulnerability** in relation to the use of loans. On sports betting, we **see a possibility of generating indebtedness, especially in lower income groups**, which deserves more attention of regulators.

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