Report on
Financial
Citizenship
2018

cidadania financeira

BANCO CENTRAL DO BRASIL

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(Last update on 10/08/2018)

Overview of financial citizenship in Brazil in 2017

83,596
service points throughout the country

100%
of Brazilian cities with at least one physical service point

86,5%
of Brazilians over 15 years old had a banking account

32%
of the population had savings in the last 12 months

44%
of the adult population performed credit operations
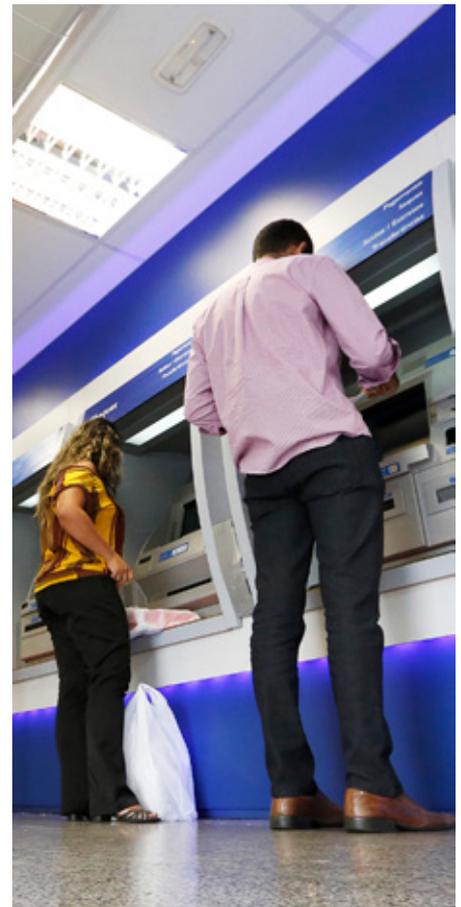
35%
of all transactions performed via remote channels

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Introduction

Presentation

It is with great pleasure that we present the first edition of the Report on Financial Citizenship (RCF), which replaces the Report on Financial Inclusion (RIF). This document is the fruit of a collective effort, involving partners in academia, the private sector and different units of the Banco Central do Brasil (BCB), under the technical coordination of the Department for the Promotion of Financial Citizenship (Depef). We would like to thank everyone who helped to make this report possible.

In 2013, the BCB used, for the first time, the term "financial citizenship" as an integrated way to look at financial inclusion, financial education and the protection for the consumer of financial services. During this year, in 2018, financial citizenship became gained better defined contours, with the publication of its conceptual definition, which includes one more dimension that underlies it. In this description, we show our view that the necessary context for the development of financial citizenship also encompasses the participation and the engagement of the citizen and other stakeholders in a constructive dialogue to enhance the financial system.

The Report on Financial Citizenship is another natural – and necessary – step in this maturing process, allowing us to monitor the progress of such inclusion, education, protection and participation context. In addition to providing a view of financial citizenship, it brings a section of related articles, that offers a more in-depth analysis of some of the challenges.

We do know that monitoring the progress of financial citizenship is a complex challenge. For this reason, we present, in this first edition, a proposal for the Financial Citizenship Index (ICF). The ICF compiles different indexes, assigning in a clearer and more synthetic manner the scenario in the several regions of the country over time.

This is a work that will be in constant evolution, in order to be always consistent with the scenario of the rapid changes and complex realities that we live in. We will be very happy to count on your partnership, reader of this new Report on Financial Citizenship, as you make suggestions and contributions regarding its content and possible paths.

Have a good reading.

Mauricio Moura
Deputy Governor for Institutional Relations and Citizenship

About the report

The Report on Financial Citizenship is replacing the Report on Financial Inclusion and will be released every 3 years

The promotion of the financial citizen is one the six strategic objectives[1] of Central Bank of Brazil (BC) and one of the pillars of the BC+ Agenda[2]. In order to better identify gaps and challenges to reach this goal and align efforts in this area, Central Bank will publish the Report on Financial Citizenship (RCF) every 3 years, replacing the Report on Financial Inclusion (RIF)[3].

The report is divided in two different sections. The first one – Outlook of Financial Citizenship – shows the general context of financial citizenship. The second encompasses a series of related articles, which provide a deeper comprehension and the analysis of this scenario, written by different departments at Central Bank and partner institutions.

In its last publication, in 2015, the Report on Financial Inclusion introduced the expansion of financial inclusion in the country during the period going from 2010 to 2014, using the period 2005-2010 as basis for comparison. This first edition of the Report on Financial Citizenship covers, in the Outlook of Financial Citizenship section, the years from 2015 to 2017. Time restrictions in the used databases, as well as methodological changes occurring during the period, might alter this coverage. The related articles, on the other hand, do not cover a particular time period, being each one adapted to the theme that intends to analyze.

The visual and contents features that guide this report were based on exhaustive interviews with the representatives of stakeholders, such as the press and members of academia. We are at your disposal via the email cidadania.financeira@bcb.gov.br in case of any questions, criticisms or suggestions.

The concept of financial citizenship as foundation

The concept of financial citizenship and its different aspects provide the framework for the report

Central Bank used the term "financial citizenship" for the first time in 2013 when it launched a program with this name: the Financial Citizenship Program. Over the course of time, the meaning of this term within the context of the autarchy has evolved. In 2017, after an extensive process that involved the discussion by and the participation of stakeholders, it was added to the concept the necessary conditions for it to become a reality. The document is available here[4]:

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[1]   Available at https://www.bcb.gov.br/Pre/sobre/Pestrategico.asp

[2]   Available at https://www.bcb.gov.br/pt-br/#!/c/BCMAIS/

[3]   Previous editions of the RIF are available at https://www.bcb.gov.br/pt-br/#!/n/RELINCFIN

[4]   The document defining the concept of financial citizenship is available at: <https://www.bcb.gov.br/?conceitocf>

> **Financial citizenship** is the exercise of rights and duties that allows a citizen to manage well his or her financial resources, in a context structured for the wellbeing of individuals and the financial stability of the country.

It is important to notice that a full implementation and the advance of financial citizenship depend on the existence of a **structured context** for its development.

> The development of a Financial Citizenship occurs by the means of a financial inclusion context, financial education, protection for the consumer of financial services, and participation in the dialog about the financial system.

Based on domestic and international references, the opinion of stakeholders and researchers, and the experience of the Central Bank team familiar with the issue, it has been concluded that the financial citizen, in his or her full capacity, includes five basic aspects:

- **Has access to the choices of formal services[5] that are adapted to individual needs and capacities;**
- **Has a business environment that generates confidence in the use of financial services;**
- **Receives simple information and ethical orientation that makes possible free and conscious decisions;**
- **Develops the comprehension, abilities, self-confidence and attitudes necessary to manage well his or her financial resources; and**
- **Has the opportunity to influence the debate concerning the operation of the financial system.**

Having now a broader scope, the Report on Financial Citizenship attempts to outline the current financial citizenship outlook, tackling not only data related to financial inclusion, which was the emphasis of prior editions of the RIF, but also aspects related to contexts related to financial education, protection for the consumer of financial services, and participation of the citizen and other stakeholders in the improvement of the financial system. In this edition, issues related to the participation, inserted in an innovative way in the conceptual definition, are addressed in an indirect way in the assessments of protection.

The definition of metrics and indexes that take into consideration all the aspects of the concept of financial citizenship is a challenge that starts with this document, but still needs to evolve and to deeper in the years to come.

To present this general view, some questions are used as guiding points:

1. **Are people accessing financial services?**
2. **Is the population using its financial resources in a sustainable manner?**
3. **Is the citizen being heard?**
4. **How can we monitor the progress of this context?**

Each one of them is related to aspects of the concept and the conditions necessary for it to materialize. This correlation is done in the introduction of each chapter, as can be verified along this report.

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[5] Includes, for the purposes of this proposal, payment, transference, deposit, credit, insurance, social security and investment.

In the spectrum of several possible questions, those selected to guide this report were chosen due to the probability to get the answers from the used databases, mostly from Central Bank. Note that the definition of the meaning of financial citizenship is recent, and, consequently, so are the attempts to measure it.

To follow this path to maturity, BC presents, in this edition, a group of key indicators considered to measure financial citizenship. In order to facilitate imagining the financial citizenship panorama, this edition also includes a proposal for the Financial Citizenship Index (ICF), allowing a comparison between regions and, over time, the identification of trends and challenges, that are important to guide the definition of strategies and actions to strengthen the country's financial citizenship.

Connections between ODS and financial citizenship

Expansion of the access to financial services is a target of the several Objectives for Sustainable Development

Analyze the advances and the challenges of the financial citizenship program is, also, pondering about its sustainability. The broadening of access to financial services, the responsible use of credit and other elements associated to financial citizenship are regarded as important catalyzers for sustainable development, having an important role in achieving the Objectives for Sustainable Development (ODS)[6] launched by the UN, in 2015. There are clear goals in reference to it in seven of the 17 ODSs: 1) Eradication of poverty; 2) Zero hunger and sustainable agriculture; 3) Health and wellbeing; 5) Gender equality; 8) Dignified work and economic growth; 9) Industry, innovation and infrastructure; and 10) Reduction of inequalities.

See below how financial services can contribute to these objectives[7].

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[6]   The list of Objectives for Sustainable Development (ODS) is available at: http://www.agenda2030.com.br/os_ods/

[7]   UNSGSA. Annual report to the Secretary-General. Nova York, 2016. Available at: <https://www.unsgsa.org/files/6214/7708/0597/UNSGSA_report_2016_copy.pdf>.

Some positive impacts of the expansion of access to financial services	Related ODS
Financial services, such as those associated to credit and the creation of savings, can help families to better absorb financial shocks, accumulate assets, better manage medical care and invest in their education. In addition, in case of rural areas, credit products and insurance enable producers to invest more in their crops, and by so doing, increase the potential of a higher economic return and greater ability to face adverse situations, such as lost harvests.	**1 ERRADICAÇÃO DA POBREZA** **2 FOME ZERO E AGRICULTURA SUSTENTÁVEL** **3 SAÚDE E BEM-ESTAR**
Guaranteeing that women have access to financial services contributes to women's empowering, for it gives to them a greater control over their finances, helping them to broaden their economic power, something that might have an impact upon their standard of living.	**5 IGUALDADE DE GÊNERO**
The expansion of access to financial services increases the possibility of mobilizing savings to finance productive enterprises, contributing to economic growth and the creation of jobs.	**8 TRABALHO DECENTE E CRESCIMENTO ECONÔMICO**
Access to credit, particularly for small entrepreneurs, has the potential to foment the creation of companies and the expansion of those in existence.	**9 INDÚSTRIA, INOVAÇÃO E INFRAESTRUTURA**
By contributing to the life improvement of poorer people, the financial inclusion helps to reduce inequalities and build a more inclusive society.	**10 REDUÇÃO DAS DESIGUALDADES**

Part 1
Outlook of Financial Citizenship

Chapter 1

Are people using financial services?

General view

*Traditionally, the first contact of the population with the National Financial System (SFN) takes place at a **physical service point** – such as branches and banking correspondents, card terminals-POS and ATMs.*

Access channels can also be remote – such as online banking, smartphones and service by phone.
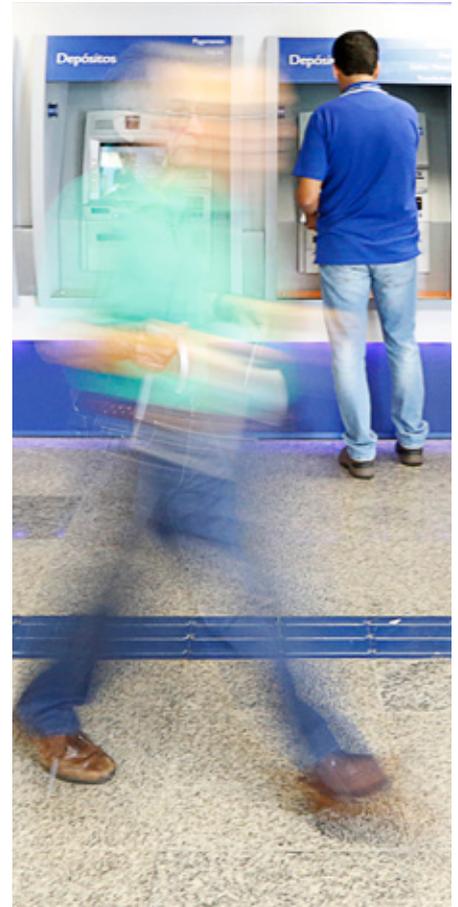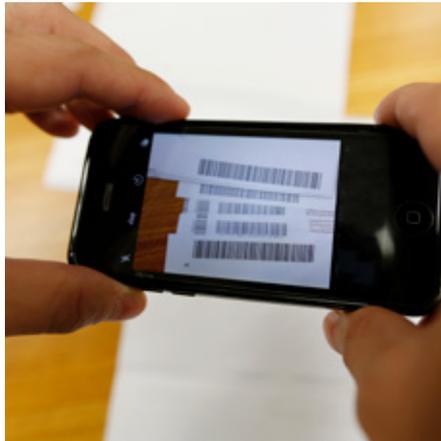
If access channels are the first contact with the National Financial System (SFN), the entrance door is, generally speaking, holding a checking account, savings account or payment account. An analysis of banking relationship data helps us to verify if, in addition to having access, people are effectively using financial services. Having an account facilitates making transactions and helps the materialization of savings.
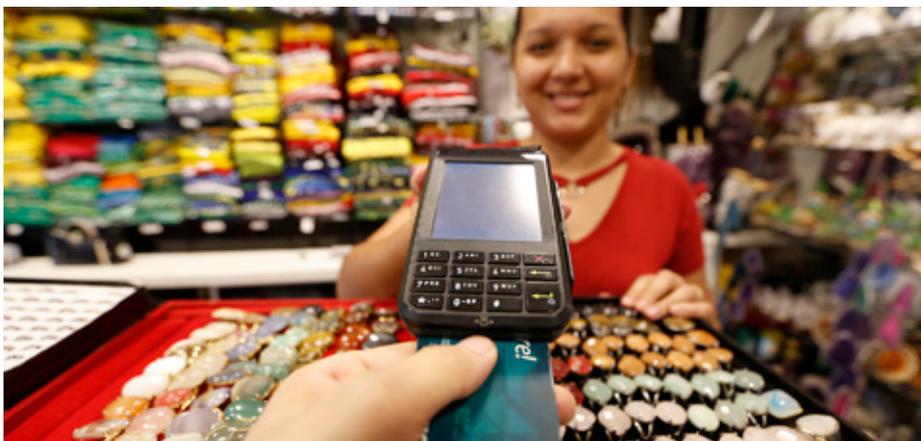
The access to credit products is also important. In order to evaluate if the population is accessing credit products, it is necessary to verify how many people have credit products, the most frequently used modalities, and how credit is distributed among the population in general.

It is **important** to point out

All the cities in Brazil have at least a physical service point. Despite the high capillarity, there is a trend for decline, and reduction in all regions. In 2017, the country had a total of 257,570 service points, in contrast to 277,982 in 2015.
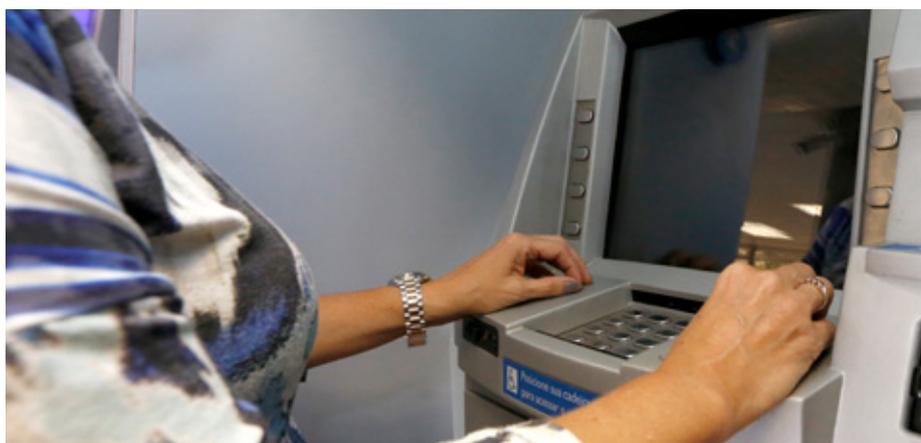
The use of remote channels has been increasing. Transactions via smartphones and PDAs increased 19% between 2015 and 2017, and already account for 35% of the total number of transactions (remote and in person). The importance of on-site channels is still large.

The percentage of the population with banking relationships remained stable between 2015 and 2017. There are 86.5% adult Brazilians who hold an account.

The number of people with credit operations also remained practically stable during this period, showing a slight oscillation from 45% to 44% of the population. Credit penetration shows variations in different income brackets. From the entire population earning up to 1 minimum wage, 11% have credit operations. In case of individual micro-entrepreneurs, 8.5% had credit operation in the company name in 2017.

Access channels: between analog and digital

The country registers a high distribution of physical service points and high growth in transactions via remote channels

Brazil has a broad range of physical service points providing financial services. In every city there is at least one banking service location. Factors such as the growing use of remote channels and the preoccupation with safety issues are starting to change this scenario.

After a settling movement in the growth of the number of service points in Brazil, which occurred between 2010-2014, a recent period showed a reduction in the majority of segments in all Brazilian regions. In 2017, there were 257,570 physical access points throughout the country, as opposed to 277,982 in 2015.

Graph 1.1 – Service points by financial institution type – 2015

- 254.327
- 9.858
- 38.506
- 447

■ Banking segment
■ Credit unions
■ Finance institutions
■ Credit companies for the micro-entrepreneur
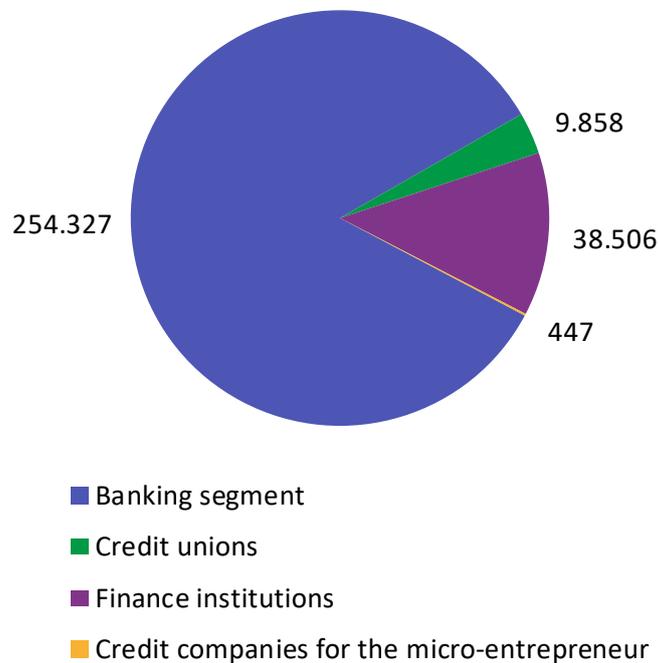
Graph 1.2 – Service points by financial institution type – 2017

9.090

233.292

40.670

544

■ Banking segment

■ Credit unions

■ Finance institutions

■ Credit companies for the micro-entrepreneur
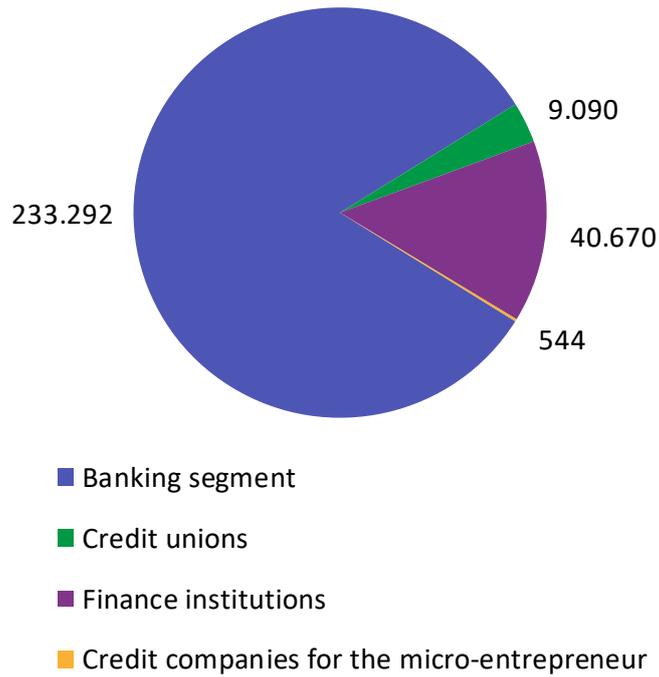
Graph 1.3 – Service locations map – 2017
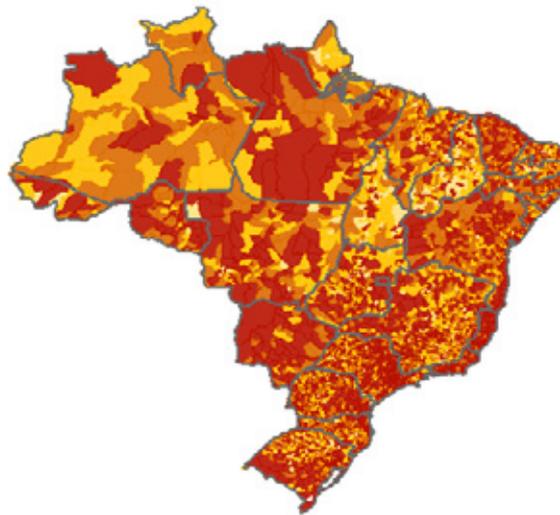
	0 service points	–
	1 to 5 service points	430
	6 to 10 service points	1541
	10 to 20 service points	1637
	More than 20 service points	1962

With the exception of service points, whose number remain stable, the other options related to banking physical services, such as branches and electronic service stations, show a downward trend, despite a slight reversal in 2017.

Graph 1.4 – Service points for every 10 thousand adults
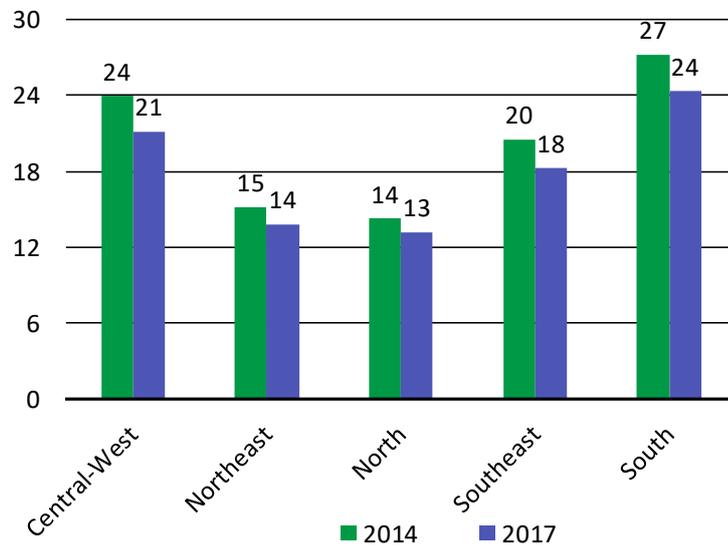
Graph 1.5 – Number of service points, except ATMs and POS
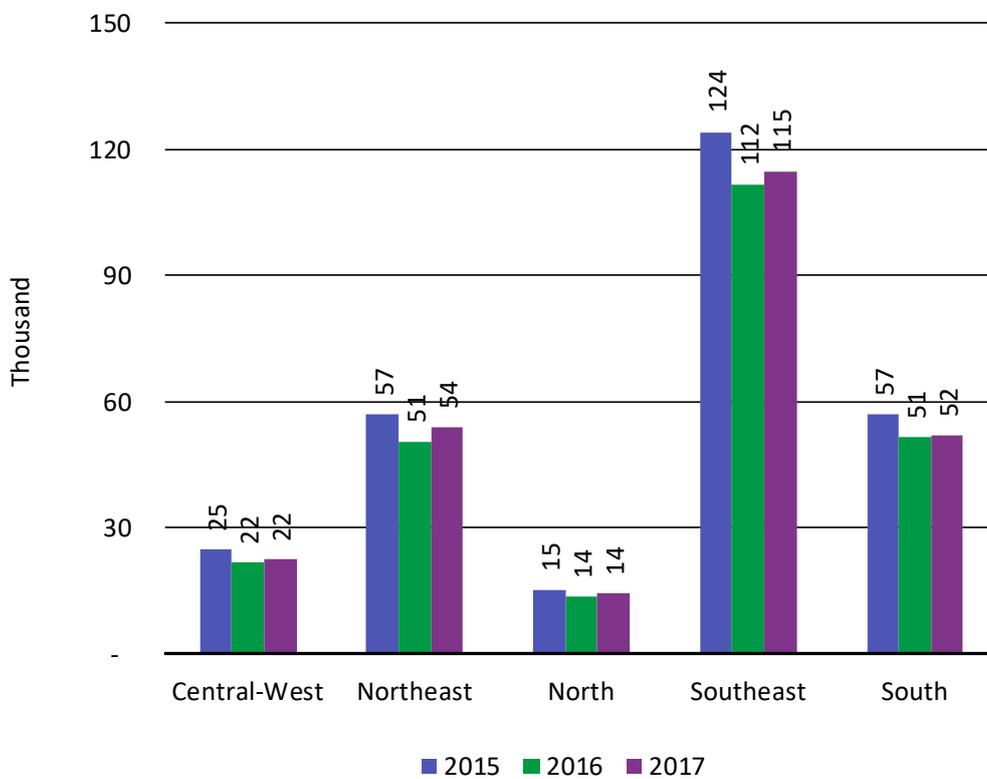
» Number of banking correspondents also declines

There has also been a declining trend in the number of correspondents beginning in 2014, with a drop of approximately 10% in the total number of locations for the period (209,938 in 2014, against 189,002 in 2017). One of the latest cases is Banco Postal, which is not actually a bank, but a network of correspondents of Banco do Brasil located inside Post Office branches. In 2017, as a result of concerns with safety, The Brazilian Post and Telegraph Company began decreasing the number of correspondents of Banco do Brasil. As of July 2018, 403 out of 6,348 units of Banco Postal had been decommissioned.

Graph 1.6 – Correspondents
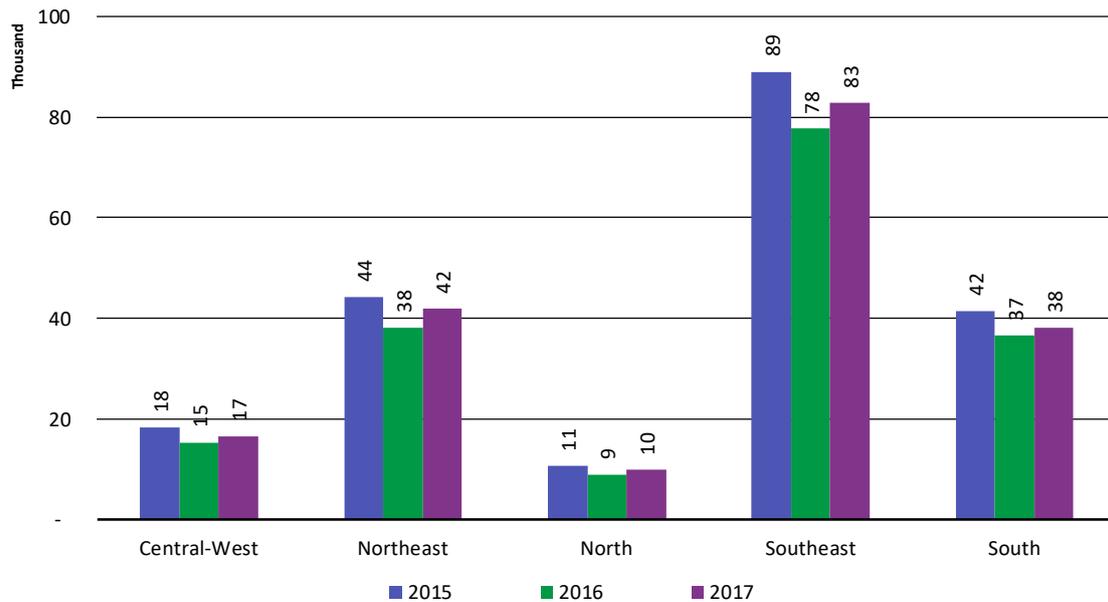
In 2017, 6.9% of the cities were served through correspondents and 45.5% of the cities (2,536) had at least one credit union service point. More information on this segment can be found at Panorama of the National System of Cooperative Credit[8], published by the BCB.

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8   Available at <https://www.bcb.gov.br/pre/microFinancas/coopcar/pdf/panorama_de_cooperativas2017.pdf>

Graph 1.7 – Types of service points in cities – 2017

6,9% 2,4%

2,4%

47,6%

43,1%

- Banks and correspondents only
- Banks, cooperatives and correspondents
- Correspondents only
- Credit Unions and correspondents only
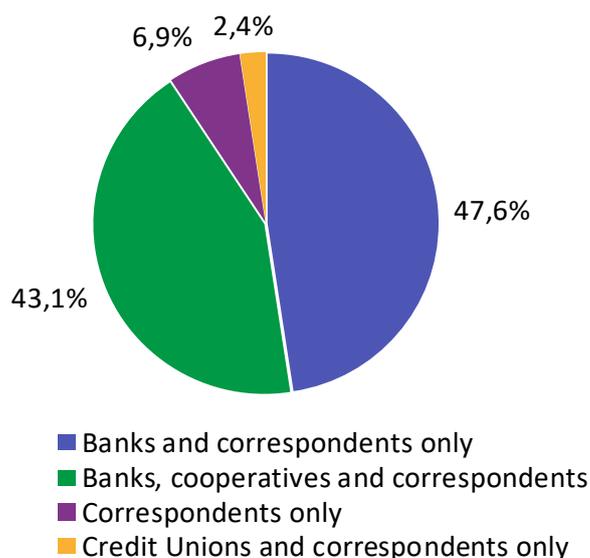
» Access to remote channels rises, but physical locations are still important

Whilst the number of physical service channels has been declining, the access to financial services has been growing in a significant way.

The transactions[9] carried out at on-site channels – in branches and regular location, ATMs and banking correspondents – declined, from 2015 to 2016, in 5%, and bounced back 7%, from 2016 to 2017. As far as growth of transactions through off-site channels - home and office banking, call centers, smartphones and PDAs are concerned– there was a substantial increase: of 20%, from 2015 to 2016, of 21%, from 2016 to 2017. Looking at this growth, transactions via smartphone stand out, showing a clear increase and, in 2017, exceeding those made via computers (internet, home and office banking).

Graph 1.8 – Number of transactions for each access channel

Billion

- Branches and traditional locations
- ATM
- Banking correspondents
- Call centers
- Internet, home and office banking
- Cell phones and PDAs (wireless)

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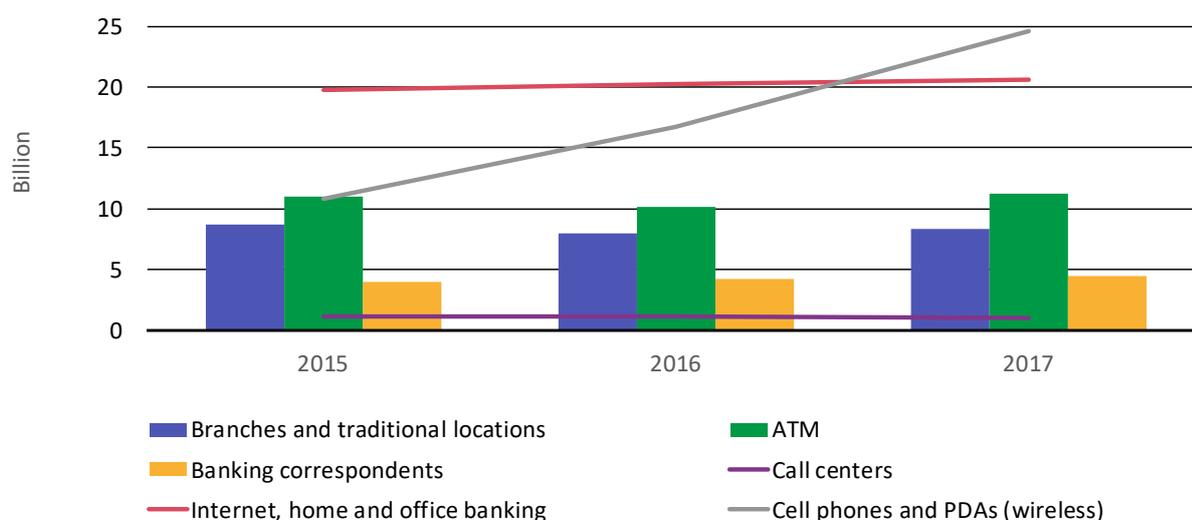
9   For a definition of transactions, check the glossary.

Data related to the number of transactions using bills of exchange and credit transfer document (TED/DOC) – two of the main services to transfer money in the financial system – show stabilization in the use of the internet for these services beginning in 2014 and a considerable growth in the use of cell phones for these type of transactions. This seems to indicate a learning curve by the population, who got more familiar with cell phone internet-banking apps, after this tool received greater exposure[10].

Graph 1.9 – Bank payment slip and TED/DOC per access channel
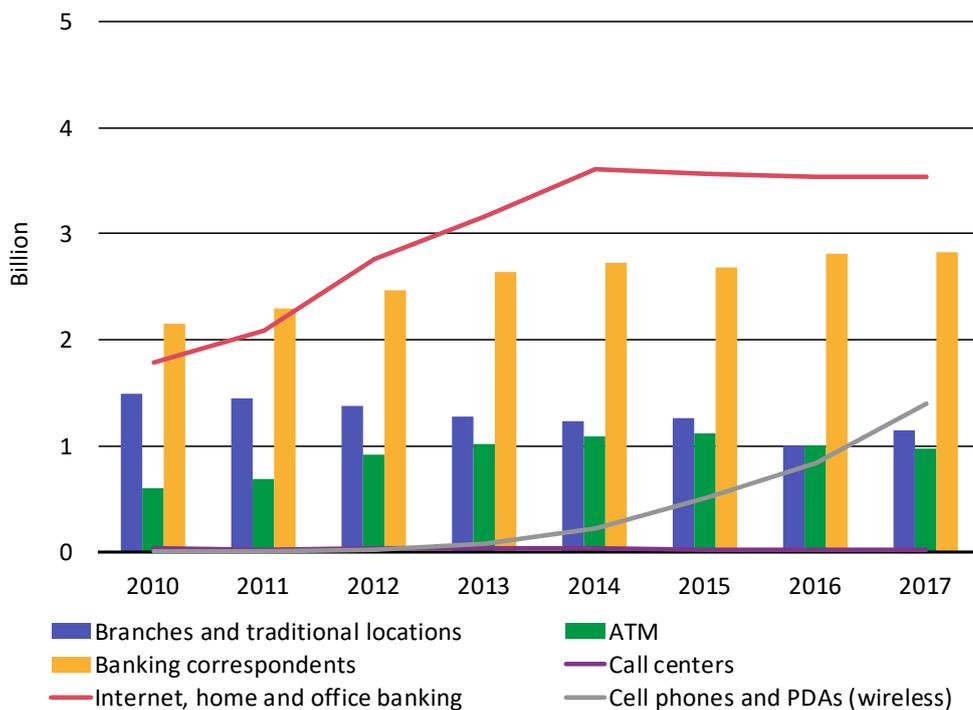
While transactions via digital channels have been rapidly increasing, channels for on-site services are still responsible for 28% of these operations (data from 2017), with particular relevance of banking correspondents, which only fall behind internet banking, which responds for 36%, and exceed those made via cell phones (14%).

This case scenario is corroborated by the results of the 2017 edition of the global survey Global Findex Database[11]. This survey is regarded as one of the top references related to financial inclusion and uses a sampling poll methodology with a population over 15 years old. According to data from the Global Findex, the percentage of people who used the internet, in Brazil, both to pay bills as well as make purchases rose from 8.7%, in 2015, to 17.6% in 2017. From the same survey sample, the percentage of people who used cell phones only for the payment of utilities bills, such as water and electricity, increased from 0.8% to 3.9% during the same period. The analysis of this data confirms the rapid growth in the access to remote channels for financial services; however, the percentages are still low.

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[10]   For this assessment, a longer period was used to highlight the idea of learning curve.

[11]   Report prepared by a research group of the World Bank that charts financial inclusion in 144 economies and 150 thousand people (representing more than 97% of the world population). It presents indicators related to account holders, unbanked, payments, use of accounts, savings, credit, resilience, and the added feature of showing data about fintechs and the use of cell phones and internet to make financial transactions. Available at https://globalfindex.worldbank.org/

It is also necessary to take into consideration that the use of internet and the possession of a cell phone is not uniform throughout the country. There are differences, oftentimes significant, among the different regions and among urban and rural localities, as the following data from IBGE show.

Ownership of cell phones and use of internet in Brazil – 2016[12]
Data referring to three months prior to the survey
Survey with population over 10 years

🟩 Owned a cell phone   🟣 Had already used the internet
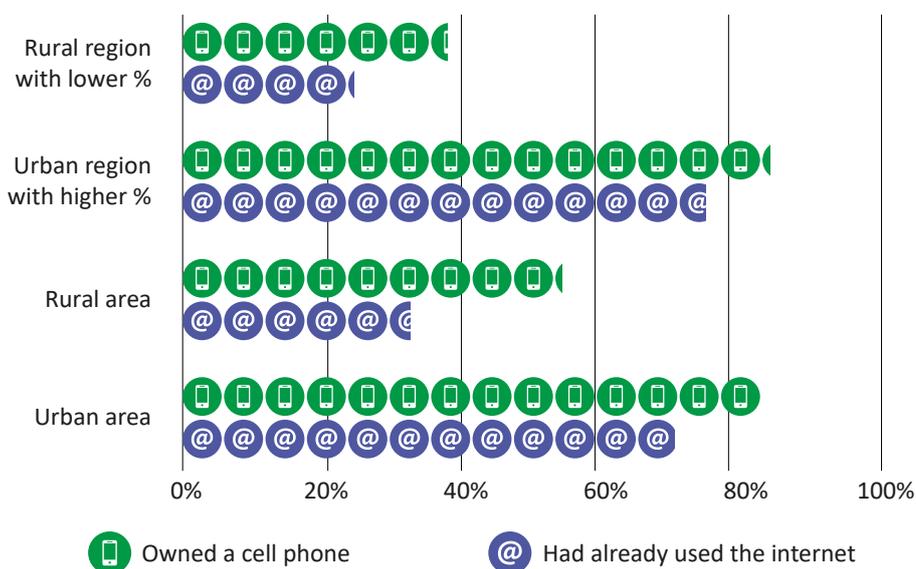
These aspects show that, despite the rapid growth of remote channels, on-site service points still have an important role to play, at least at this point in time, particularly for the population that lives farther from large urban centers and in cities that had only banking correspondents, which in 2017, totaled 382.

Stable banking activites

Number of individuals with banking relationship stabilizes

Besides having great capillarity in terms of service points, Brazil is also a country with a high percentage of banking relationships. Graph 1.10 shows that, between 2015 and 2017, the number of adults with a banking relationship13 remained practically the same. In 2017, more than 140 million (86.5%) individuals had some degree of banking relationship, such as cash deposit accounts (popularly referred to as checking accounts), accounts for deposits in savings and checking accounts for investment deposits.

These figures include all the accounts that have not been closed, even those that have very low balances or those with no record of withdrawals, deposits and transferences for long periods. BCB's data reveal the universe of owned accounts recorded at the SFN, based on information supplied by the financial institutions themselves[14].

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[12] BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS (IBGE). 2016 Information Technology and Communication Supplement (TIC) of the Continuous National Research per Domiciles Sampling (Pnad Contínua). Available at: ftp://ftp.ibge.gov.br/ Trabalho_e_Rendimento/Pesquisa_Nacional_por_Amostra_de_Domicilios_continua/Anual/Acesso_Internet_Televisao_e_ Posse_Telefone_Movel_2016/Analise_dos_Resultados.pdf.

[13] Data from the Register of Clients of the Financial System (CCS).

[14] Data from CCS. Check the glossary for more details regarding the indicator methodology.

Graph 1.10 – Adults with banking relationship
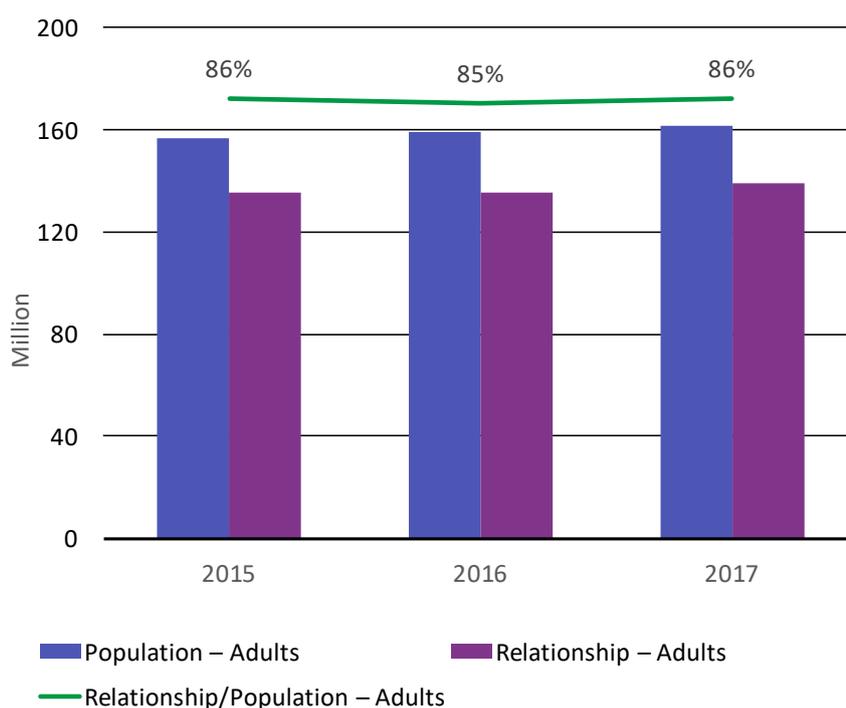
On the other hand, the sampling of the population by Global Findex points out that the percentage of adult Brazilians that hold an account at a financial institution reached 70% in 2017. In 2014, this percentage was 68%, which also shows a stable scenario for this indicator. A possible explanation for the discrepancy in the percentage assessed from BCB's database is that, in the case of Findex, when the person is asked if he or she holds an account, if he or she has not made any transactions for a long time, he or she might not remember whether it is active or not[15].

Even though the general level of banking activities is high according to administrative data from Central Bank, the percentage of adults with banking relationship by region shows variation; while the Southeastern Region shows the highest percentage – 90.9%- the Northern Region, the lowest, with 72.3%. It has been noticed that there has been a growth in the percentage of adults with banking relationships in the Northeastern, Central-Western and Northern regions, between 2015 and 2017. This growth is positive, considering that this was a period that presented a challenging economic scenario[16].

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[15] The specific question asked by the survey was: "You, alone or with another person, currently holds an account in a bank or in another type of financial institution? Yes or no?" (2017 Findex Global Questionnaire. Available at: https://globalfindex.worldbank.org/sites/globalfindex/files/databank/2017%20Findex%20questionnaire.pdf)

[16] Source: Temporary Series Management Systems (SGS) of BC.

Graph 1.11 – Adults with banking relationship by region

	2015	2016	2017
South	92%	90%	91%
Southeast	92%	90%	91%
North	70%	71%	72%
Central-West	86%	86%	86%
Northeast	77%	79%	80%

■ Northeast ■ Central-West ■ North ■ Southeast ■ South
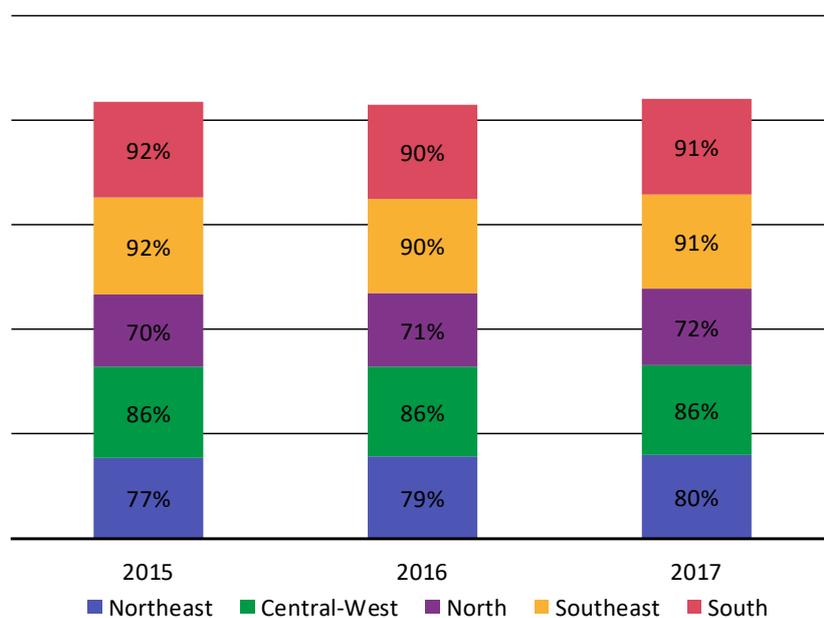
Another important segment in the analysis of accounts ownership is the Individual Micro Entrepreneur (MEI). MEI is a self-employed individual legally working as a small entrepreneur (according to Supplementary Law no. 139, from November 10, 2011). He or she can earn a maximum of BRL 81,000.00 per year (according to Supplementary Law no. 155, from October 27, 2016), and is not allowed to have a share in another company as a partner or owner, and can have only one hired employee, who must receive the minimum wage or his professional class base salary. Studies and analyses of the segment are part of BCB's efforts to finetune the diagnostics of the country's financial citizenship, as it was the case with the document published in the Financial Citizenship Series[17]. In reference to accounts held by MEIs, 20%[18] had banking relationship as a legal entity in 2017, suggesting that there is room to expand the access of this segment to the SFN.

» Who are the unbanked

58% do not hold an account because they do not have money, or because they think that fees are high.

60% have access to both, cell phones and internet (percentage markedly higher than the global, which is 25%).

Source: Global Findex

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[17] Available at https://www.bcb.gov.br/nor/relincfin/serie_cidadania_financeira_4_credito_concedido_mei.pdf

[18] Data from CCS cross-referenced with the MEI Register provided by the Special Secretariat of the Micro and Small Companies (Sempe), as part of the agreement for technical cooperation.

The implementation of digital solutions could serve the segment of the population that believes that the cost to maintain a bank account is high, considering that these solutions tend to have lower costs.

Account ownership is very relevant to evaluate the financial inclusion of the population. However, financial inclusion goes beyond holding an account. It is also necessary to assess how this account is used.

An analysis of the aggregated data from Global Findex also indicates that, even if the number of people holding an account has not changed in a meaningful manner, its use by individuals is expanding. In 2014, 61% of the adult population paid utility bills (water, electricity or trash collection) in cash and, in 2017, this percentage dropped to 40.6%. At the same time, the payment of these services via debit in a checking account increased 9.3%, in 2014, to 21.3% in 2017.

The data at BCB's disposal to assess this dimension relates to deposits – number of clients[19] and balance[20].

The information on checking, savings and term accounts is important for this analysis, since it refers to basic services offered by custodian banks and transactions of funds with safety and convenience.

Table 1.1 – Deposits

	2015	2016	2017	Evolution 2015 - 2017
Term Deposits				
Number of Clients	12.704.156	14.244.173	16.414.664	29%
Deposits Balance (BRL Thousand)	179.526.912	204.245.428	231.429.199	29%
Average Balance (BRL per depositor)	14.131	14.339	14.099	0%
Cash Deposits				
Number of Clients	87.078.513	86.843.423	100.592.603	16%
Deposits Balance (BRL Thousand)	70.404.344	76.883.920	81.722.814	16%
Average Balance (BRL per depositor)	809	885	812	0%
Savings Deposits				
Number of Clients	138.580.232	144.027.512	151.552.231	9%
Deposits Balance (BRL Thousand)	618.368.865	628.159.213	685.513.895	11%
Average Balance (BRL per depositor)	4.462	4.361	4.523	1%

Source: Credit Guarantee Fund - FGC

By looking at Table 1.1, one can observe an increase of deposits – number of clients, balance and average value (balance/clients) – between 2015 and 2017. The average balance of deposits to savings and term did not show a significant progress. Even if the average balance did not increase in a relevant way, the growth in the number of clients holding term deposits accounts was of 29% during the assessed period, indicating that more clients seem to be investing in long-term instruments. This might also be the consequence of initiatives by financial institutions, which can be encouraging their clients to invest their checking account balance in term deposit accounts with automatic redemption. Almost 80% of clients kept balances of up to BRL 5,000.00 in term deposit accounts (2017).

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[19] Clients holders of accounts: information acquired from the Credit Guarantee Fund (FGC), showing the number of clients for the several types of guaranteed products. Data from FGC consider individuals or legal entities (of any age), however, for this analysis, only individuals are considered. Note that the same client can have a checking and savings account, or have an account in more than one financial institution, resulting in this case a duplicate aggregated counting.

[20] The deposit balances refer to the last day of December in each year.

Graph 1.12 – Clients holders of term deposits – by deposit bracket – 2017
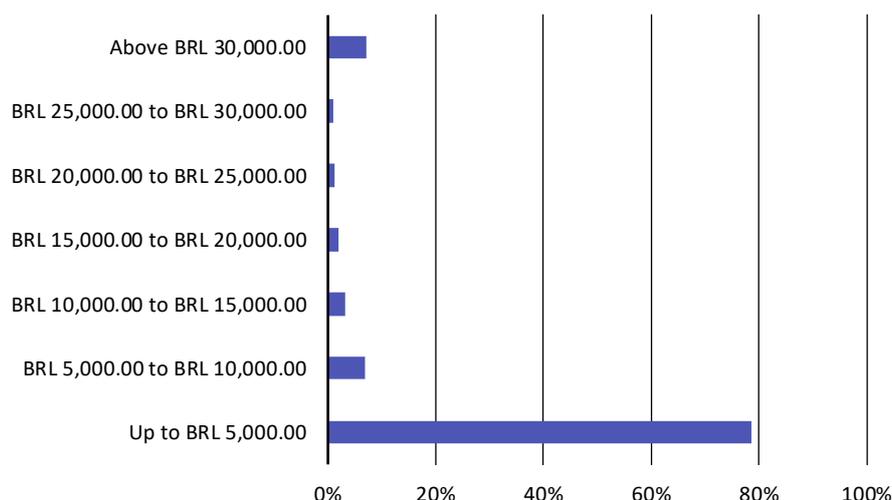
In the specific case of savings deposits, there is significant percentage of clients that have savings accounts with low balances. FGC's biannual census related to December 2017 shows that when one considers balances by amount bracket approximately 74.7 million of clients (57%) held balances of up BRL100.00 in the savings account, which represents 0.2% of the total deposits of this product.

According to the Report on Savings published by BCB[21], the average amount of these balances shows a large variation during the month. This might indicate that the majority of these accounts, in fact, are being used as cash deposit accounts (checking account), considering that both have similar functionalities in Brazil (RIF 2015). On the other hand, 63% of the savings deposit balances refer to the bracket above BRL 30 thousand being held by 3% of the total number of clients.

Graph 1.13 – Distribution and Participation of clients and balances by savings deposit brackets – 2017

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21   Available at https://www.bcb.gov.br/Pre/SalaImprensa/port/poupanca.asp.
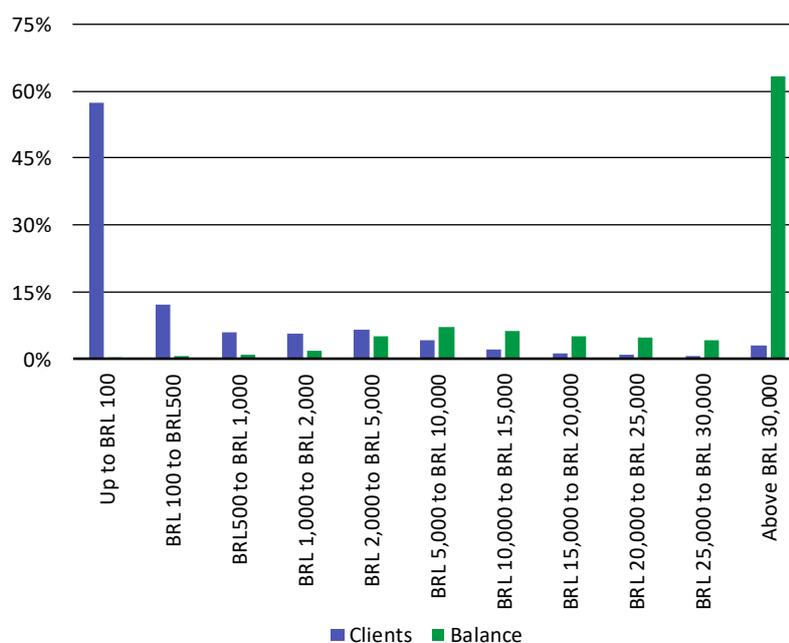
Access to credit and challenges for low-income population

Penetration of credit and portfolio balance is lower among the poorest population

When used in an appropriate way, credit, as well as savings, is the instrument that contributes for a better financial management, providing resilience and wellbeing to households. Generally, the percentage of adults that contracted credit operations remained practically constant between 2016 and 2017, going from 45% to 44%[22].

In order to better understand the current level of access to credit it is necessary to know the exact demand of the population for this service, an information difficult to capture. An analysis of credit by income bracket and a comparison with the total proportion of the population in each bracket is a way to understand its penetration.

This analysis shows that credit penetration is lower in the lower income bracket. Among the population that earns up to 1 minimum wage (m.w.) per month, borrowers represent 11%, which is the lowest index. While it is expected that people in this bracket have a harder time acquiring credit due to the difficulty to prove income and to present collateral, the credit demand by this population is not known.[23]

The following bracket, between 1 and 2 minimum wages, concentrates 32% of the total number of borrowers. Out of the totality of the population in this bracket, 41% have credit operations, a low penetration when compared to the following brackets.

Graph 1.14 – Distribution of number of borrowers by income bracket

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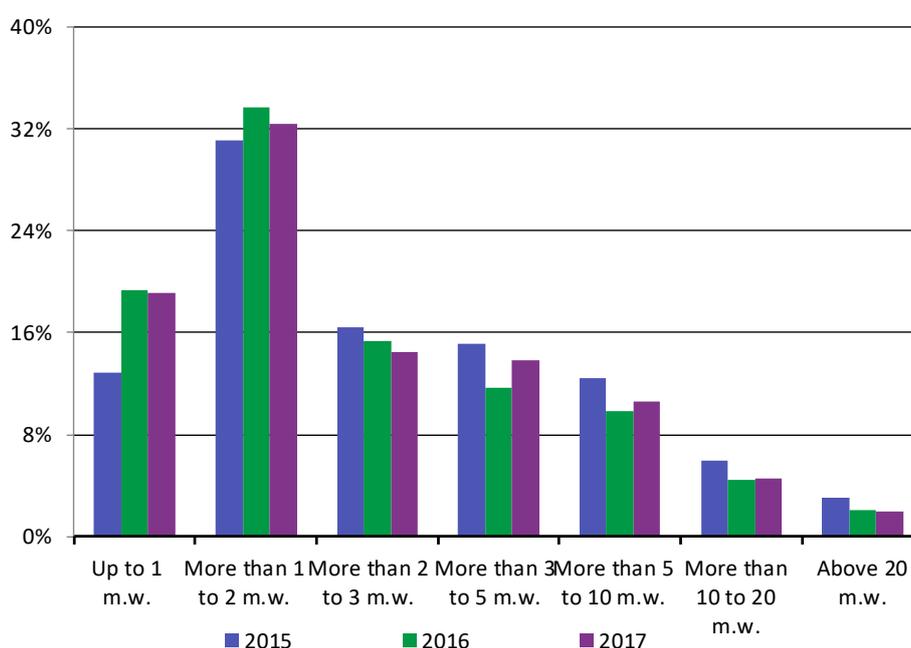
[22]   Division of the number of borrowers obtained from the BCB Credit Information System (SCR) by the adult population (older than 15 years) estimated by PNAD 2017.

[23]   The growth in the number of borrowers between 2015 and 2016 was not taken into consideration, for the result is not an expansion of access, but rather a methodological change. In June 2016, BC reduced from BRL 1,000 to BRL 200 the amount of credit operations to be informed in an individualized manner by financial institutions to SCR (Circular Letter 3.786, from March 10, 2016).

Graph 1.15 – Number of individuals and borrowers by income bracket – 2015
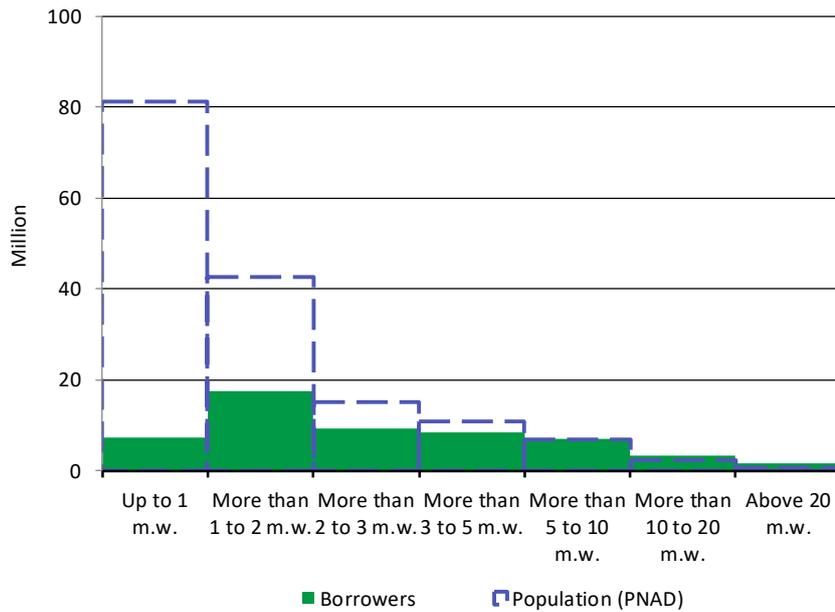
Penetration data can exceed 100% due to a divergence in the income assessment methodology. PNAD is a sampling research while SCR[24] receives income information disclosed by clients to financial institutions. Financial Institutions tend to measure the income of borrowers with better accuracy due to the assessment of credit risk that they conduct. For this reason, SCR tends to be more accurate for brackets with higher income, which usually have, at least, one credit card.

By the same token, there is a greater credit penetration in the highest brackets, and the credit balance also increases with income. In 2017, 54% of the volume of the credit portfolio for individuals was directed to consumers with income above 5 minimum wages, which corresponds to 6.2% of the population, as outlined below.

Graph 1.16 – Evolution of individuals credit outstanding by income bracket

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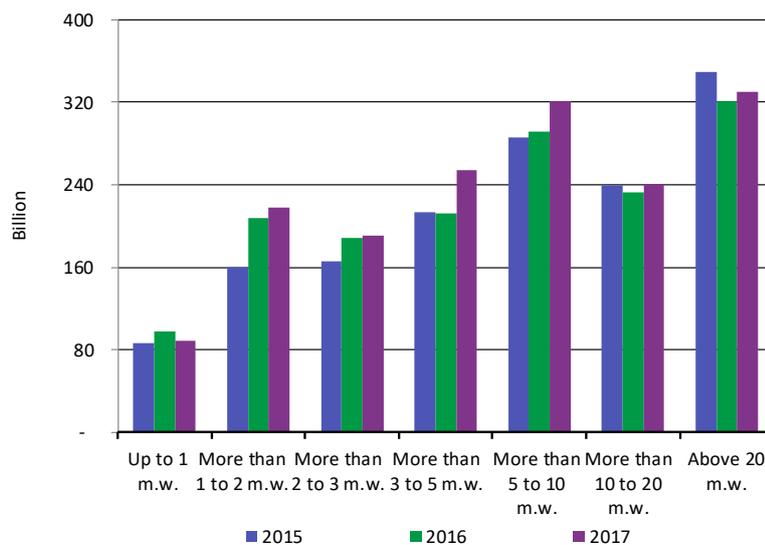
[24] Whenever there is a divergence regarding the income information for the same client by more than one Financial Institution at SCR, it shall be taken into consideration the figures informed by the financial institution where the client has a larger active portfolio in the financial system.

From 2015 to 2017, the credit balance increased for all income brackets, except the highest (above 20 minimum wages), which presented a decline of 5.6%. The most relevant growth occurred in the brackets that go from more than 1 minimum wage up to 5 minimum wages. In periods of slower economic activity, such as the period analyzed here, individuals with lower income tend to resort more often to credit products, for they usually have lower financial reserves to offset unforeseen events[25]. Part of the balance surge in lower income brackets also reflects the availability of new data, considering that, as explained before, starting in 2016, credit operations above BRL 200.00 began to be reported to BCB.

For higher income brackets, a drop or a slowdown in the growth has been noticed, both related to balance as well as the number of borrowers. This segment of the population has, in many cases, other sources of funds and more financial reserves and, in view of the uncertainty of the economic scenario, chooses to reduce credit[26]. Analysis regarding credit modalities that are used more frequently will be introduced in the next chapter.

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[25] According to data from Series CF no. 5 that analyzed data from the INFE/OCDE research applied in 2015. When asked about the possibility to cover an unforeseen expense without borrowing money, 82.4% of the respondents in the income bracket up to one minimum wage stated that they would not be able to. Available at: https://www.bcb.gov.br/nor/relincfin/serie_cidadania_financeira_pesquisa_infe_br_%200443_2017.pdf.

[26] Also according to Series CF no. 5, when asked about the possibility to cover an unforeseen expense without getting to borrow money, 60% of the respondents in the highest income bracket stated they would not be able to. Available at: https://www.bcb.gov.br/nor/relincfin/serie_cidadania_financeira_pesquisa_infe_br_%200443_2017.pdf.

Chapter 2

Are brazilians using their financial resources in a sustainable manner?

General view

Credit can be an excellent instrument to smooth consumption over time, for it makes possible the use of resources now, hoping to pay for it with future income. However, it got to be **used in a sustainable manner**.

In other words, **credit products** must be **suitable** to the profile, the specific needs and the ability to pay of each person.

When this does not occur, levels of **debt** and **income commitment** exceed the limit of what is financially manageable, leading to **delinquency**.
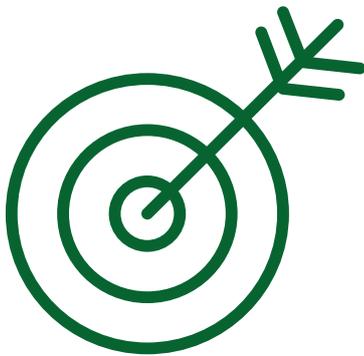
Saving helps people to have greater financial resilience, allowing them to face unforeseen circumstances with greater peace, combining resources to reach their objectives.
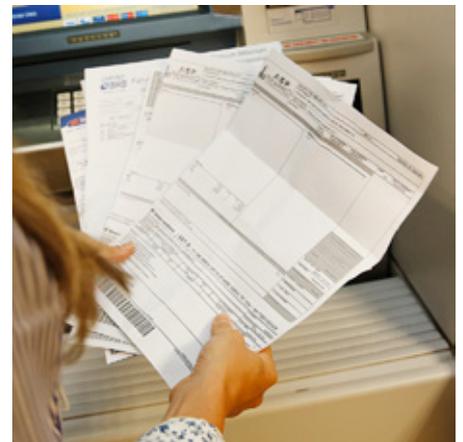
Financial education can be an important tool to stimulate the habit to save and the management of financial resources.

It is **important**
to point out

The credit card, in standard or installments offered by merchant modalities (without interest by Financial Institutions), is the credit product most heavily used by Brazilians.

When one considers the number of borrowers, the revolving credit card is also one of the most heavily used modalities, next to the account overdraft. Even though these two credit options present the highest interest rates among all modalities, they represent a small part of the total portfolio, comprised mostly of housing loans and payroll loans.

The poorest population, who receive up to 1 minimum wage, has the highest household debt ratio (25.2%) and the highest delinquency rate (6.4%). In addition, it also has suffered the highest financial deleverage, with a drop in debt from 74.3% to 51.8%, between 2015 to 2017.

Going in the opposite direction of the majority of the world, numbers related to savings and the financial resilience in Brazil improved. Data from Global Findex indicate that the percentage of Brazilians who have savings went from 28%, in 2014, to 32%, in 2017, but the number is still low.

Use of credit

Housing and personal credit are the modalities with the highest balance; credit card has the highest number of borrowers

The credit card in the standard or in installments modality, without interest rates by financial institutions, is the most heavily mean of credit used by Brazilians.

Credit Cards

81.970.327	**83,9%**	**R$ 116,51**
of active credit cards	are operations of 1 installment	average amount of operations with credit card

The revolving credit card and account overdraft – the two most expensive available credit modalities (table 2.1) – are among the four highest in the number of borrowers by all income brackets, except the 1st bracket (up to 1 minimum wage), where the overdraft appears in the 6th position and the revolving credit[27] in the 2nd position.

Table 2.1 – Interest rates of modalities with more borrowers – % per year – December/2017

Credit card – One payment and installment plan via merchant	–
Revolving – Credit card	332,14
Personal Credit – payroll	25,96
Personal Credit – non-payroll	113,28
Account overdraft	323,01
Credit card – purchase or statement in installment plan via Financial Institution	169,22
Purchase of vehicles	22,23

Source SGS, series no. 20741; 20742; 20747;20749;22022;22023; e 22024

According to the survey conducted by BCB on the use and quality of financial services[28], this can occur as result of the convenience provided by these pre-approved credit instruments.

A study published in the Report on Banking Economy for 2018[29] on the profile of credit card holders shows that "in the modalities of the revolving credit card[30], there is a lower participation of individuals with a higher level of education, and a higher participation of individuals who have recently been laid off from the formal workforce and are the beneficiaries of social services."

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[27] Sum of standard revolving and non-migrated amounts (when the statement's minimum payment has not been made or there was no installment plan for the outstanding balance). For further information check the glossary.

[28] Available at http://www.bcb.gov.br/Nor/relincfin/serie_cidadania_financeira_3_uso_qualidade_servicos.pdf

[29] Available at https://www.bcb.gov.br/pec/depep/spread/REB_2017.pdf

[30] See note n° 29.

Graph 2.1 – Credit modality more frequently used per bracket income (number of borrowers) – 2017

Legend:
- Acquisition of vehicles
- Credit Card – purchase or statement in installment plan via the financial institution
- Account Overdraft
- Personal Credit – non-payroll
- Personal Credit – payroll
- Credit card – revolving
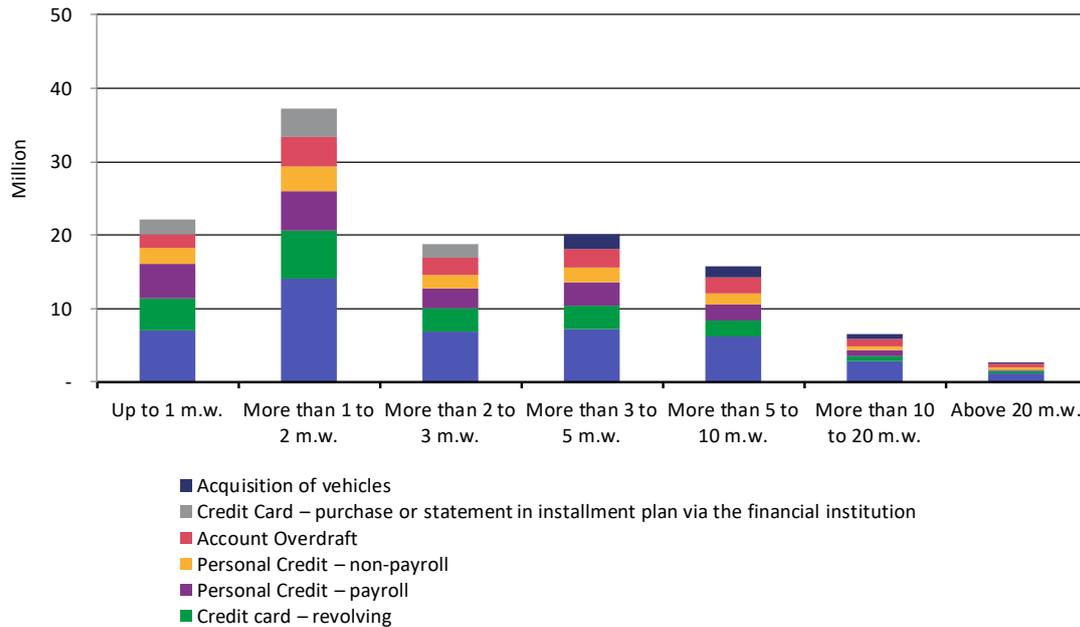
Note: Borrowers can appear more than once, since they have credit in more than one modality.

As far as balance is concerned, the most important modalities in the individual portfolio are real-state financing and personal credit with payroll loans. The exception is the last income bracket (above 20 minimum wages), which holds a higher balance in investments and funds, which are modalities of rural credit.

Even if revolving credit card is less representative in terms of balance than the number of borrowers, the lowest income bracket has, proportionally, a higher balance at this modality (4.9% of the portfolio in the 1st bracket and 3.3% in the 2nd bracket) than the other brackets (bellow 2.3% of the portfolio).

Graph 2.2 – Credit Modality with the highest volume in each income bracket – 2017

Legend:
- Funding
- Housing loan – Mortgage
- Investment
- Revolving credit linked to credit card
- Personal credit – no payroll consigning
- Acquisition of goods – automotive vehicles
- Credit card – Single payment or installment plan via merchant
- Personal credit – payroll consigning
- Housing loan – Housing Financial System (SFH)
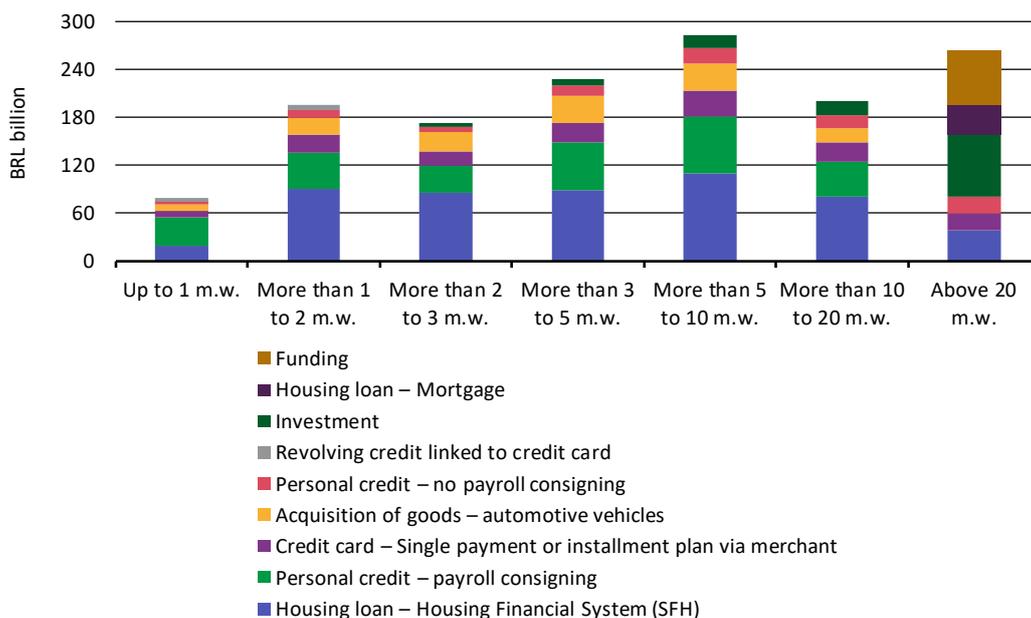
» Indebtedness, household debt ratio and delinquency rate

The household debt ratio[31], which measures how much of the income must be allocated to pay interest and amortization of debt, declined across all income brackets among individual borrowers, between 2015 and 2017, a period when there was a drop in interest rates and a rise in unemployment[32]. The second bracket (from 1 to 2 minimum wages), which concentrates the highest number of borrowers, showed a sharper decline, from 21% to 17.51%. Despite the general decline during this period, the first bracket (up to 1 minimum wage) was the only one that showed an increase in the household debt ratio in the comparison between 2016 and 2017, from 23.6% to 25.2%, remaining below the 27.67 % recorded in 2015 for this income bracket.

Graph 2.3 – Household debt service ratio by income bracket
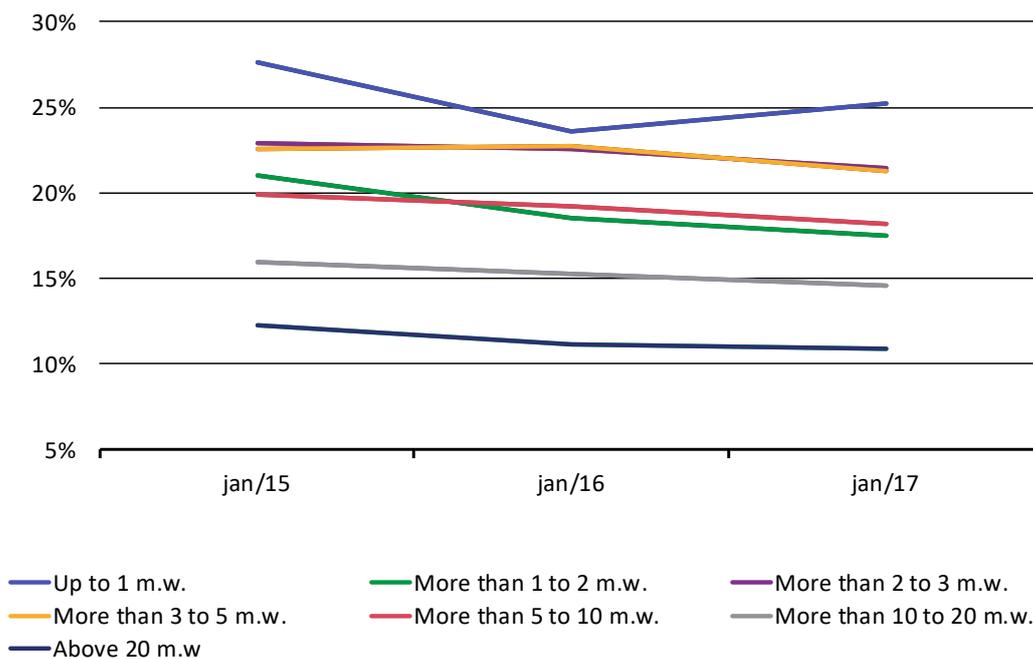
Regarding household debt service ratio[33], which is the ratio between the total debt and the annual income of the borrower, behavior was somewhat different. Whilst most income brackets showed slight upward or downward oscillations, the 1st bracket (up to 1 minimum wage) showed a significant drop, from 74.3% to 51.8%, indicating a financial deleveraging.

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[31] For the definition of this term, check the glossary.

[32] According to data from Continuous PNAD, available at https://sidra.ibge.gov.br/tabela/4099#resultado.

[33] For a definition of this term, check the glossary.

Graph 2.4 – Household debt by income bracket

Legend:
- Up to 1 m.w.
- More than 1 to 2 m.w.
- More than 2 to 3 m.w.
- More than 3 to 5 m.w.
- More than 5 to 10 m.w.
- More than 10 to 20 m.w.
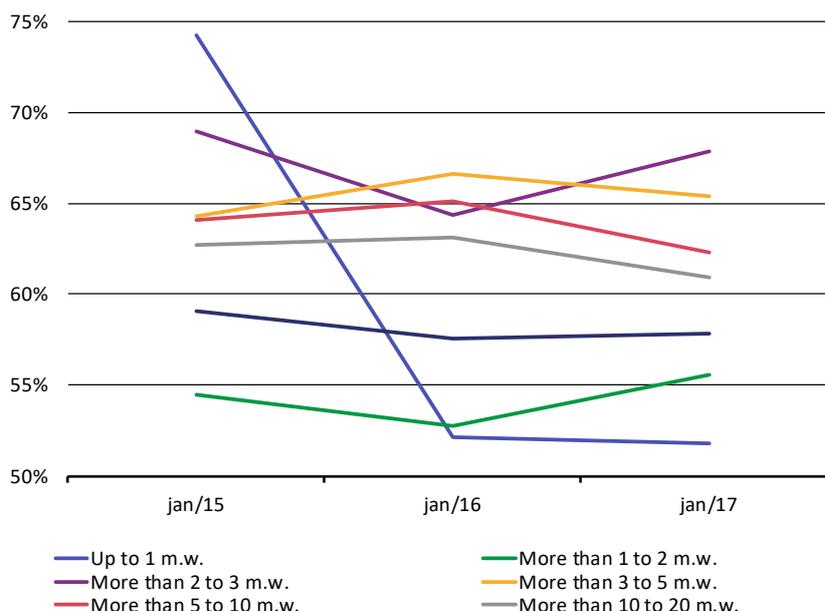
Considering that household debt ratio has increased for this bracket between 2016 and 2017, in addition to a probable decline of income and rise of unemployment, it is possible that the difficulty to get credit has led to getting lower loan amounts at higher cost34.

It should also be mentioned that, in this bracket, there was also a decline in the proportion of real estate loan, which dropped from 22.5% in 2015 to 9.9% in 2017. Real estate financing is a long-term credit, with lower cost, that is collateralized and builds wealth. The installments, however, are high and can be a burden to the household budget.

Graph 2.5 – Progress of the share committed to real estate debt

Legend: 2015, 2016, 2017

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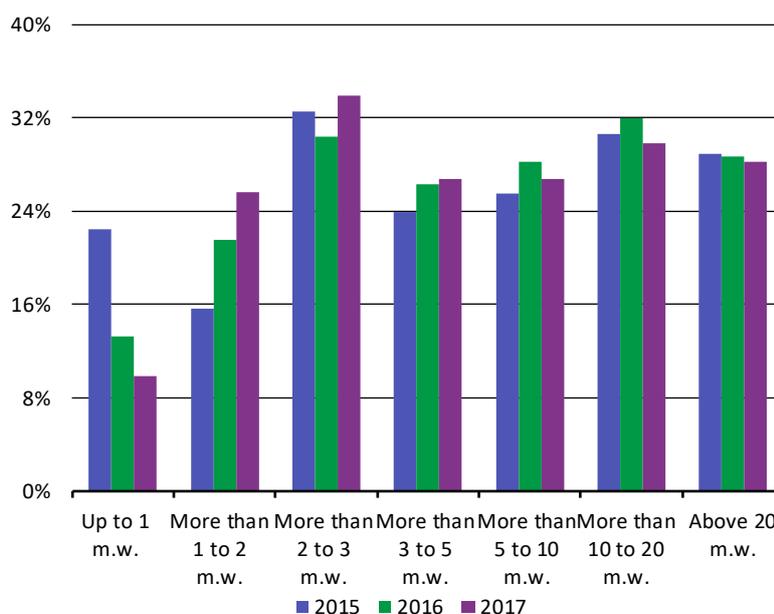
34 Between 2015 and 2017, the credit card balance for this income bracket (up to 1 minimum wage) jumped 181% in the installment modality provided by the financial institution and 89% in the revolving modality.

Ideal indebtedness and household debt ratio are those that do not trigger financial imbalance for households. An imbalance is detected when the payment of the debt is late, particularly if the delay is persistent, what characterizes delinquency (RIF 2015).

Following household debt ratio, delinquency rates[35] dropped in almost all income brackets during the observed period. Between 2015 and 2016, the most accentuated drop occurred in the income bracket from 1 to 2 minimum wages, the same bracket with the highest concentration of borrowers, and that registered the steepest drop in household debt ratio. The exception was the first bracket (up to 1 minimum wage), whose indebtedness became larger, and started to show a higher percentage of delinquency rate.

Graph 2.6 – Delinquency rate by income bracket
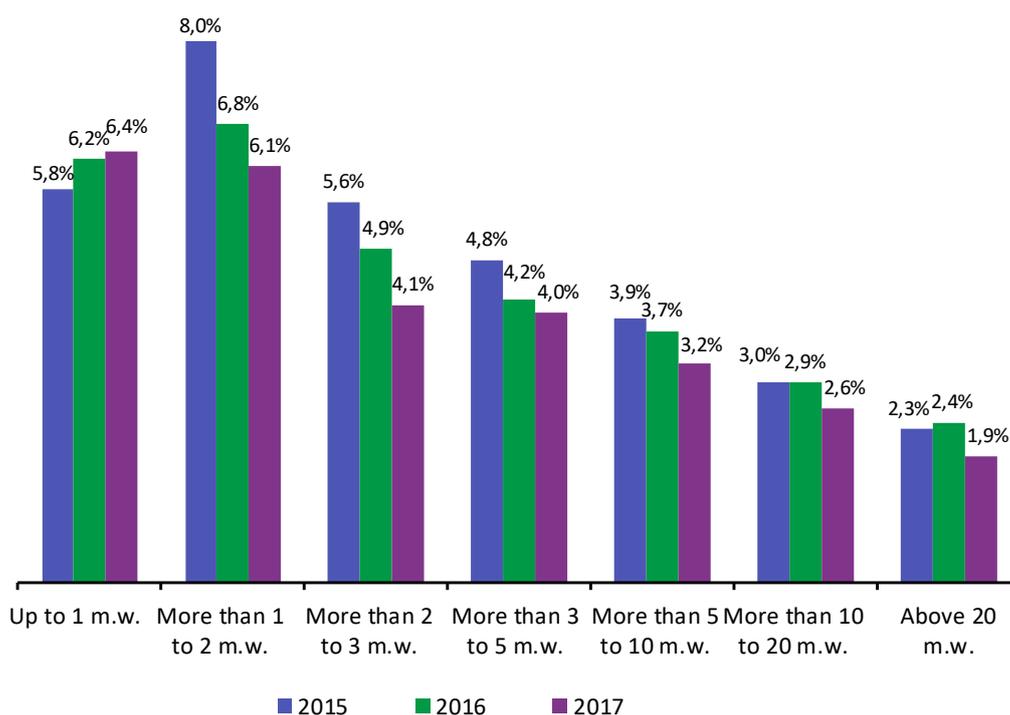
Although it represents only 2% of the credit operations balance, credit card under the revolving modality corresponds to 20.8% of the delinquency portfolio. This data underline the relevance of implementing financial education initiatives, alerting to the risks of poorly planned use of this credit modality and stressing the importance of responsible offer and use of credit cards.

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[35] For a definition of this term, check the glossary.

Graph 2.7 – Distribution of delinquency by modality – 2017

- ■ Revolving credit card
- ■ Personal credit – non-payroll
- ■ Other loans
- ■ Personal credit – payroll consigning
- ■ Housing Loan – Housing Financial System (SFH)
- ■ Acquisition of goods – automobile vehicles
- ■ Account overdraft
- ■ Others
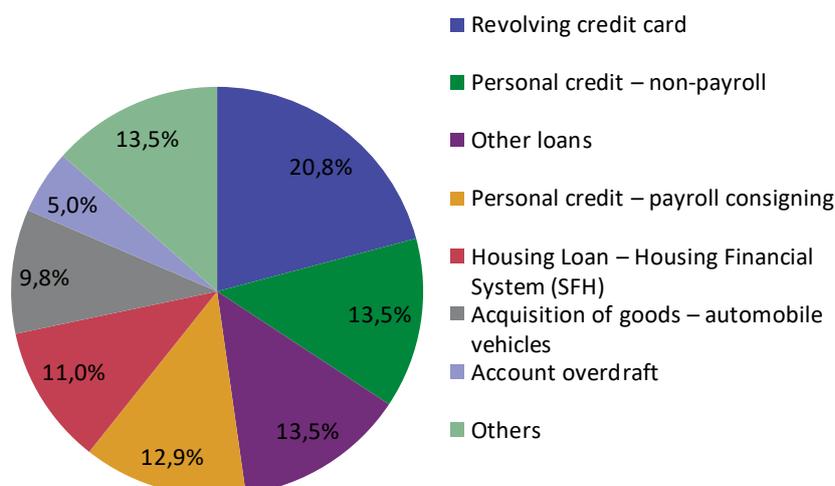
Notice: 'Other loans' corresponds to operations that could not be classified in the other modalities and were thus reported to SCR, and 'Others corresponds to the combination of modalities with smaller defaulting balance.

» Access to credit and Corporate Delinquency rate by size and region

An important nuance in evaluating the context of financial citizenship is measuring the access to credit by companies, particularly small and micro enterprises. Even though they were not more affected by the retraction of credit than other companies during the period under analysis, in terms of new credit, micro and small companies suffered a slight deterioration of their portfolio, an increase in delinquency rate and the migration to shorter-term modalities, generally, more expensive, something that might impact delinquency rate levels, particularly for the micro enterprise, in years to come. An improvement of the economic scenario from 2017 might reverse this trend and improve the ability for small companies to finance themselves. A detailed analysis about the quality of MPE's portfolio is available in the Report on Banking Economy for 2017[36].

The challenge of creating the habit of saving
More Brazilians save; however, the number is still low

The latest data from Global Findex[37], referring to 2017, indicate that, even with the drop in per capita income between 2014 and 2017, the number of Brazilians who saved increased by 4 percentage points, going against the downward trend for this indicator in developing countries of Latin America and in countries with per capita income (in purchase power parity – PPC) similar to Brazil.

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[36] Available at https://www.bcb.gov.br/pec/depep/spread/REB_2017.pdf

[37] WORLD BANK. Global Findex 2017. Available at: <https://globalfindex.worldbank.org/sites/globalfindex/files/2018-08/Global%20Findex%20Database.xlsx>. Accessed on: 08/01/2018.

Table 2.2 – Saved any amount during the last year (% of the population over 15 years old)[38]

	2014	2017
Brazil	28%	32%
Countries with high income: OCDE	71%	73%
Latin America and Caribbean (except countries with high income)	56%	48%
Countries with per capita income similar to Brazil[39]	41%	37%
World	46%	43%
	56%	48%

Source: Global Findex 2017; World Bank – GDP per capita, PPP (current international $)

Considering the margin of error of the Global Findex[40] survey, it is necessary to conduct further investigation to confirm if this growth means an actual change of behavior regarding savings by Brazilians. Despite the growth in the number of people saving between 2014 and 2017, there is room for improvement. As it can be seen on table 2.2, the habit of saving is still less prevalent among adult Brazilians than in any of the groups in the comparison.

» Why Brazilians do not save?

To build strategies to foment the habit of saving, it is important to investigate what is the reason why most Brazilians do not save. In a study ordered by BCB in 2014, the reason given by the overwhelming majority was that there was no money left: 87% as the main reason and 91% as one of the reasons.

There is a general understanding that income and cost of living affect the possibilities for the citizen to save – "the limit to which individuals can save (...) will be necessarily influenced by their salaries or benefits, and by the tax regime or cost of living" (MAS, 2016)[41]. This understanding cannot lead to a conformist stance or to apathy related to the possibility of encouraging the habit of saving also among lower income populational segments. As can be seen in the following graph, in the group of countries with higher PPC per capita income, there are more people who save. Nonetheless, the percentage variation of people who save among the different countries is very high, indicating that, although income is a factor to be taken into consideration, it is not decisive for citizens to refrain from saving.

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[38] Denotes the percentage of interviewees stating that they personally saved or set apart any amount, for any reason and using any savings format in the last 12 months (2017 Global Findex Glossary. Free translation).

[39] At Global Findex 2017, to facilitate comparisons, World Bank divides the countries participating in the study in four major groups: high income, low income, high middle income and low middle income. However, one notices that data used for this categorization is obsolete, considering, for instance, that Venezuela is in the group of high middle income next to Brazil, Russia and China. For this reason, and for the purposes of this analysis, among the countries observed in the Global Findex, 10 countries above and 10 countries below Brazil were selected in terms of per capita income in equality of purchase power during that year (2014 or 2017) (World Bank), as result of the general understanding that the habit of saving is affected by income and cost of living (MAS, 2016).

[40] The margin of error for data related to Brazil in the 2017 Global Findex 2017 is of 3.7 percentage points and in 2014 Global Findex, is of 3.5 percentage points.

[41] MAS. Measuring financial capability – identifying the building blocks. Available at: <https://masassets.blob.core.windows.net/cms/files/000/000/570/original/A4_MAS_Fincap_Measuring_Financial_Capability_Building_Blocks_Nov2016.pdf> Accessed on: 08/24/2017.

Graph 2.8 – Maximum and minimum percentage of savers in countries divided by PPC per capita income bracket (US$)
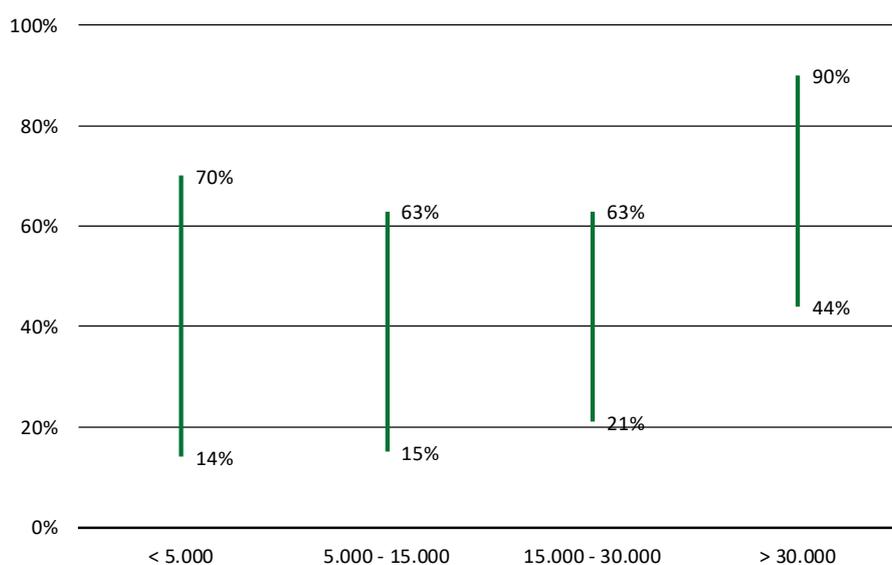
Source: Global Findex 2017; World Bank – GDP per capita, PPP (current international $)

It is important, therefore, to better investigate the other reasons why societies with similar per capita income, sometimes half of the population, save some money and, in other cases, this portion is significantly smaller. It is possible that this situation is a result of factors related to the culture, education, communication, community ties, savings instruments and nudges[42], among others. Another aspect that deserves to be considered is the impact that the relative security brought by welfare, labor[43] and social security benefits offered by Brazil to the population might have upon this type of behavior.

In Brazil, a study of classes C, D and E conducted by Plano CDE, in partnership with J.P. Morgan and FGV[44], shows that the financial behavior of Brazilians is not consistent within classes. The researchers concluded that "people in classes CDE show diverse financial behaviors" and "demographic aspects such as income and age are not sufficient to understand this diversity". It also ascertained that "contrary to stereotypes, most of the people in classes CDE have control over their finances". One fourth of them was able to save in the last year, but the majority kept money at home.

Another study about the profile of the Brazilian investor, conducted in 2017 by Anbima and Datafolha, with a significant sampling from classes A, B and C, showed that 32% of the people being interviewed encompassed individuals that had some type of savings during that year, the majority composed by men, aged between 16 and 34 with college education. Nonetheless, 25% of the sample group made some type of investment (considering the broad meaning of the term, including the purchase of real estate, durable goods and businesses) and 9% invested in fact in financial products, notably savings account, which represents 70% of the allocation.

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[42] Term in Behavioral Economics which means "give a little push" (preferably for better) to the direction of a greater welfare for all. The intention is to facilitate decision making on behalf of what is, in theory, more beneficial to society. Available at: http://www.economiacomportamental.org/nacionais/empurroezinhos-e-nossos-processos-cerebrais/ . Accessed on: 08/10/2018.

[43] An example is the Severance Indemnity Fund for Employees (FGTS), which works as a type of "compulsory savings" for all workers under the General Regime of Social Security (RGPS), by demanding from employers the monthly deposit in a specific account, to the order of employees, the equivalent to 8% of the salary of each employee. Among the situations provided for the utilization of the FGTS, stand out the acquisition of a home, retirement and difficult situations such as the loss of a job or some serious disease.

[44] PLANO CDE, J.P.Morgan, FGV/EAESP. Segmentation of Financial Inclusion in Brazil. s/d. Available at: <https://cemif.fgv.br/sites/cemif.fgv.br/files/planocde_fgv_jpmcf_segmentacaofinanceira.pdf>. Accessed on: 08/15/2018.

Knowing the profile of people who save and people who do not save might help to define the audience that needs to be targeted for initiatives aimed at promoting this kind of behavior.

Table 2.3 – Adults (over 15 years old), who saved any amount during last year (2017)

Men: 40%	15 to 24 years old: 44%	High school education or higher: 38%	60% richer: 37%
Women: 26%	25 years old or more: 29%	Primary education or lower: 22%	40% poorer: 25%

Source: Global Findex 2017

» Brazilian resilience increases

Still, according to results by Findex, there was also a significant improvement in the resilience of Brazilians. While, raising funds for an emergency[45] was possible for 35% of the interviewed individuals in 2014, it was possible for 46% of them in 2017. Once again, Brazil was different from this indicator's downward trend around the world and in populations with contexts similar to ours.

Table 2.4 – Percentage of the adult population (above 15 years old) to whom is possible to raise funds for an emergency

	2014	2017
Brazil	35%	46%
Countries with high income: OCDE	71%	74%
World	60%	54%
Latin America and Caribbean (except countries with high income)	46%	41%
Countries with high average income	65%	53%
Countries with per capita income similar to Brazil	53%	50%
Countries with per capita PPP income similar to Brazil	57%	49%

Source: Global Findex 2017; World Bank- GDP per capita (current US$)

Table 2.5 – Adults (above 15 years old), to whom is possible to raise funds for an

Men: 56%	15 to 24 years old: 43%	High school education or higher: 51%	60% richer: 58%
Women: 37%	25 years old or more: 46%	Primary education or lower: 35%	40% poorer: 27%

Source: Global Findex 2017

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[45] Denotes a percentage of interviewees reporting that, in the case of an emergency in the next month, they are able to raise 1/20 of the gross national income (GNI) per capita in local currency (2017 Global Findex Glossary). Free Translation. Available at <https://globalfindex.worldbank.org/sites/globalfindex/files/databank/Glossary2017.pdf>). In the Brazilian context, according to IBGE, the per capita GDP in 2016 was BRL 30,407, in other words, the amount asked in the survey was if a Brazilian individual would have the amount of BRL 1,520.35 in the following month.

Graph 2.9 – Sources for funding emergencies (2017)

- Family or friends — 42%
- Jobs — 23%
- Savings — 14%
- Loan from bank, employer or unknown — 14%
- Disposal of assets — 5%
- Others — 2%
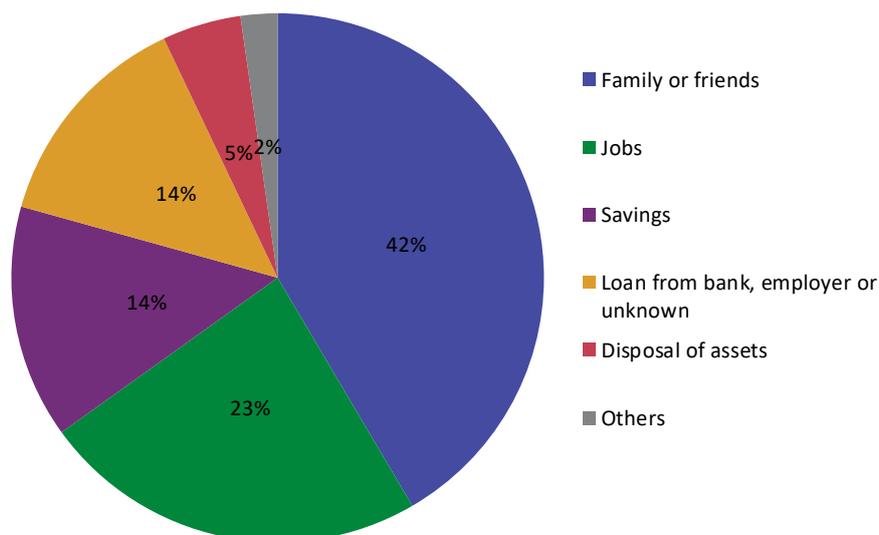
It is important to examine the sources that adult Brazilians resort to in order to raise funds for emergencies. In 2014, 57% of them turned to family or friends.

In 2017, family and friends remained as the main source (used by 42%), but now 14% resorted to their own savings, the same percentage of those that resort to outside loans, family and friends. It must be pointed out that money from working is used more often to raise emergency funds than savings or external loans.

Educate to save

Financial education can contribute to stimulate savings and the management of personal finances

Consolidating the habit of saving provides the potential for citizens to build resilience and face economic crises with less difficulties. The challenge of fomenting an increase in Brazilian saving levels can only be met if there is a more comprehensive financial education of the population. Aligned with international guidelines, which have widely considered the creation of coordinated national strategies, the National Strategy for Financial Education – ENEF was instituted in Brazil, by Decree no. 7.397/2010, whose purpose is to contribute to the strengthening of citizenship, as well as the efficiency and solidity of the national financial system and conscious decision making by consumers.

Adopted as a National Policy of a permanent nature, ENEF is coordinated by the National Committee for Financial Education – CONEF, a board with the participation of several government representatives and civil society. It operates by the means of transversal programs (financial education programs in schools; financial education for adults with vulnerable status – women receiving the social benefit Bolsa Família and individuals retired by the Social Security Service - INSS) and sectorial programs (separately developed by members of the Committee). All initiatives are guided by gratuity guidelines, prevalence of public interest (without business biases) and actions on a national level.[46]

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[46] To know more about ENEF and the actions of CONEF, and have access to material and quality information about the theme, citizens can access the site http://www.vidaedinheiro.gov.br.

One of the significant initiatives of the Committee is the National Week of Financial Education, better known as ENEF Week, created with the purpose to promote the National Strategy and financial education initiatives throughout the country. The ENEF week is held every year since 2014, usually in May. In 2018, it offered more than 7 thousand free initiatives, both virtually and in-person, in all states of the country. Within this context, BCB proved, as in previous years, to be one of the main catalyzers of initiatives, particularly thanks to partnerships built with other institutions that promote financial citizenship.

Chapter 3

Is the citizen being heard?

General view

Complaints about financial products and services have a crucial role in the financial citizenship ecosystem. It is a precious input to help financial and payment institutions to improve their services and for BCB to finetune regulations, monitor the conduct of the Financial System and create initiatives for financial education.

To resolve problems that arise, the citizens have service channels made available by financial and payment institutions, including branches, apps, Customer Service and the Ombudsman.
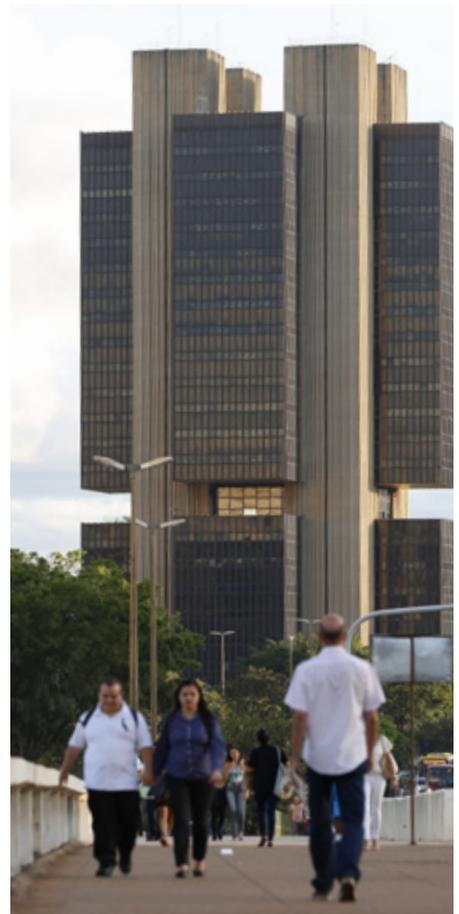
If the solution offered by institutions – including those provided by the Ombudsman – is not satisfactory, the consumer counts on the help of solution channels maintained by governmental agencies, before resorting to a lawsuit.
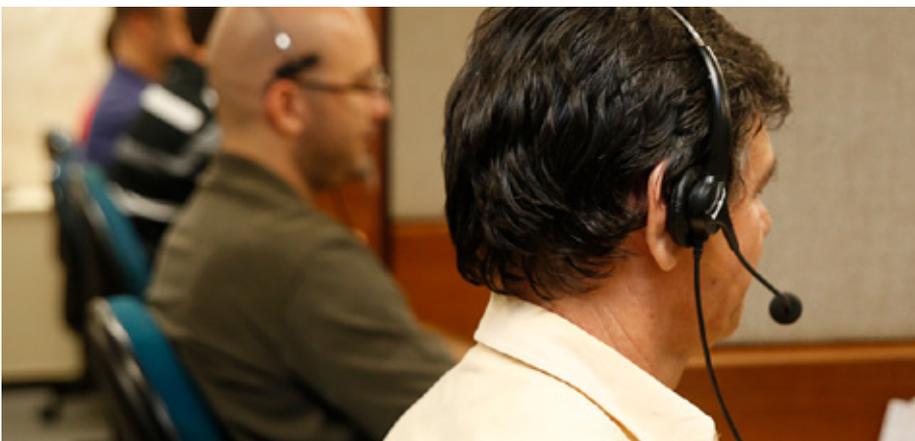
In addition to being heard via complaints, a citizen can influence the operation of the financial system by taking part in public hearings regarding regulations to be issued and expressing his or her view about the work of BCB to the autarchy's ombudsman.

It is **important** to point out

In 2017, the five largest banks in the country provided service 46.6 million times via Customer Care and 167.5 thousand times via the financial institutions' ombudsmen.

Consumers of financial services have filed 997 thousand complaints at BCB, Consumer Protection Service (Procons) and at the site consumidor.gov.

More complaints are made to governmental agencies than ombudsmanships. The reason why a citizen would prefer to go to governmental agencies before trying to solve the problem via the ombudsman of the institution that he or she has a relationship with remains unclear; there is a need for surveys and studies about the issue.

In 2017, BCB opened seven public hearings on regulations to be issued and the authority's Ombudsman received 2,555 demands about the institution.
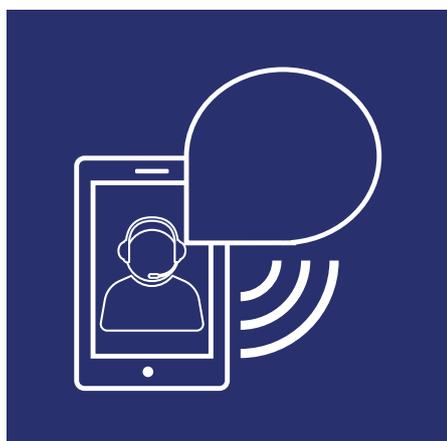
On the path of complaints

The number of complaints related to financial services registered in public agencies reaches 997 thousand

A structure that is efficient to solve problems increases consumers' confidence on the National Financial System, reduces public expenses – preventing that cases go to court – and represents an opportunity for financial and payment institutions to hear their consumers and improve their products and services.

In 2017, the five largest banking conglomerates (Banco do Brasil, Bradesco, Caixa Econômica Federal, Itaú Unibanco and Santander Brasil) provided customer service 46.6 million times via their Customer Care Service (SAC)[47]. In the last quarter of 2017, these conglomerates had 358.9 million of clients[48], which translates into a ratio of one customer service situation for every 7.7 clients.[49] In their turn, ombudsmanships of these institutions recorded 167.5 thousand services. In the three governmental agencies that dal with financial services customers a total of 997 thousand complaints against financial institutions were registered, 465.1 thousand of them related to the five largest banks. It must be clarified here that these figures might include duplicate counting, considering that the same person might file complaints in different agencies during the same period.

Five largest banking conglomerates	Customer Care Service **46.6 million** of service customers	Ombusdman **167.5 thousand** of service to customers
Central Bank of Brazil	**308.5 thousand** total complaints[50] **184.7 thousand** regulated **123.8 mil** non-regulated[51]	**220.5 thousand** complaints against the 5 largest banks
National Information System for Consumer Protection (Sindec)	**592.3 thousand** complaints related to financial issues including insurance (except health insurance	**244.6 thousand** complaints against the five largest banks
Consumidor.gov.br	**96.2 mil** Complaints for the financial sector[52]	
National Council of Justice (CNJ) – Digital Mediation	**481** requests for mediation with financial institutions	

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[47] Customer service provided by SAC include asking for information, questions, complaints, suspension or cancelation of contracts and services.

[48] Each client corresponds to one relationship between a citizen and a financial institution. Therefore, if a citizen has a relationship with two different financial institutions, he will be counted as two clients. Aggregated data from SCR and CCS, acquired from the complaints ranking published by the Department for Citizen Services (Deati) for the 4th Quarter of 2017.

[49] Data from the Ombudsman Report published by the Brazilian Banks Federation (Febraban).

[50] Complaints opened during 2017. In the Complaint Ranking are utilized complaints that have been closed, meaning, addressed during the reference period.

[51] For a definition of regulated and non-regulated complaints, check the glossary.

[52] Source: National Secretariat for the Consumer (Senacon)

However, the path foreseen for a consumer to resolve his or her problems– the institution's internal channels as a first recourse, the institution's ombudsman and finally, if the problem is not solved, governmental agencies - is not always followed. There is a higher number of complaints filed at governmental agencies than at ombudsmen.

The reason why a citizen would prefer to go to governmental agencies before trying to solve the problem via the ombudsman of the institution that he or she has a relationship with remains unclear; there is a need for surveys and studies about the issue.
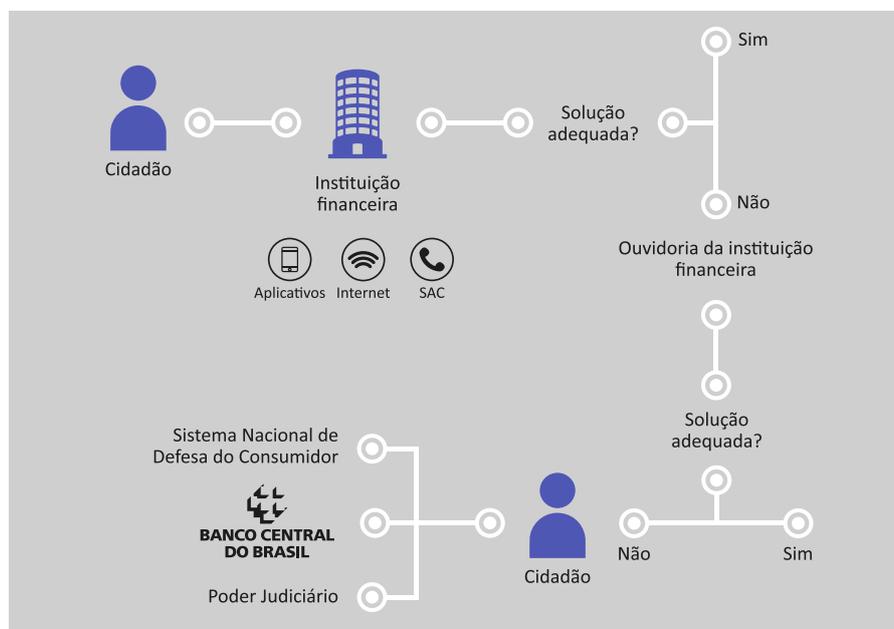
É DA SUA CONTA (IT IS YOUR BUSINESS)

Due to its capillarity, the National System for Consumer Protection (SNDC) is important in guiding and serving consumers throughout Brazil due to its capillarity. Issues related to the financial system have a complex nature and for this reason there is a need at SNDC to receive qualified and reliable information about financial products and services.

In 2017, BCB, in a partnership with Senacon, launched the program É DA SUA CONTA (IT IS YOUR BUSINESS), which includes a distance course and mentoring aimed at the several attendants in the various consumer protection agencies, offering a set of practical cases created from the most frequent questions made by consumers of financial services. The course addresses the operation and the regulations of service channels, deposit accounts, credit card, pre-paid card, loans, financings and fees, among others. Additionally, in collaboration with the Superintendence for Private Insurance (Susep), modules were created on insurance and capitalization securities.

The course will end in 2018 with five graduating classes, reaching more than 45% of the Consumer Protection Service (Procons) offices in the country. More information can be obtained at the electronic site É DA SUA CONTA. (www.cidadaniafinanceira.bcb.gov.br/edasuaconta)

» Complaints about suitability and safety increase

Published since 2002 by BCB, the Complaints Ranking[53] has the purpose to contribute for the transparency in actions by BCB, bringing to the attention of society a profile of the complaints that have been processed, analyzed and closed in each reference period[54].

In 2017, complaints related to issues regarding integrity, reliability, safety and confidentiality of performed transactions, as well as the legitimacy of the contracted operations and the services provided by the financial institution increased 37% in comparison to 2016. This includes problems related to non-recognized charges in credit card expenses, failure to perform a debit authorized by the client, duplicate charges, investment debt clearance or discrepancies in withdrawals and deposits.

There was also a growth in complaints referring to suitability and the providing of information on products and services (+31%), including cases indicating that products and services not suitable to his or her profile were offered to the client.

In order to make available to society quality information about the performance of ombudsmanships at financial institutions, as of November 2017 BCB has issued on a quarterly basis the Ombudsmanships Quality Rankings.

The Ranking is published every quarter and is based on the assessments of the complaints filed by clients and users of the SFN at BCB; from this information ombudsmanships' performances are measured as they deal with these complaints according to the following aspects:

Average time for an answer: average time to reply the complaints filed at BCB and the number of demands answered after the regulation period of 10 business days;

Quality of the answer offered by the ombudsmanships: number of complaints replied with inconclusive clarifications, in other words, cases when the answer sent by the financial institution to the complaint has been reported as unsatisfactory by the citizen;

Compliance with regulatory aspects by the ombudsmanships: number of complaints considered to be well founded by the ombudsmanships, in other words, cases reporting problematic service, that the filing number was not supplied, and refusal to provide clarifications or inform the time for the reply.

The index also considered a bonus when the financial institution signed up for public mediation tools, such as the platform Consumidor.gov.br.

Similarly as the Complaint Ranking, this "positive ranking" is divided into two groups: one for institutions with more than four million clients and another for institutions with less than four million clients.

» Requests for information via Registrato also increase

BCB also responds to information requests by citizens related to the contents of the systems and registration systems managed by the Central Bank, such as SCR, CCS, Register of Issuers of Insufficient Funded Cheques (CCF) and Informative Register of unpaid credits of the federal public sector (Cadin)[55].

Launched in 2014 to allow the citizen, or whom he so authorizes, to check his or her information entered at CCS and at SCR directly via internet, the Registrato (Information Records Statement at Central Bank) System is a tool that has been increasingly used by society.

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[53]   Available at https://www.bcb.gov.br/?ranking

[54]   For a definition of this term, check the glossary.

[55]   For a definition of these terms, check the glossary.

In 2017, 390 thousand reports were issued at Registrato, of which 85% were directly generated via internet and 15% were requested at the several service channels offered by the Citizen Affairs Department (Deati). The SCR report was the most demanded information at Registrato, representing 71% of all issued reports, explained by its utilization in the new requests for credit and renegotiation of debts.

Currently, Registrato allows individuals and corporations to have direct access to their data kept at CCS and SCR, but the system is being updated to allow access to information recorded in other registration systems managed by BCB such as currency exchange operations.

A citizen who does not have any active relationship with the Financial System still can issue a Negative Certificate of Relationship with the Financial System via the link certidão negativa do CCS.

How a citizen accesses Registrato

Self-registration via internet banking, after the creation and validation of security phrase	Request for a password directly from the service channels of BC	By the means of a digital certificate, to get a access password without the security phrase

The Central Bank also listens to the citizen
Ombudsmanship and public hearings are ways that the Central Bank and society communicate

In addition to lodging complaints related to financial services, the population can also disclose its views about the performance of Central Bank and its employees. The autarchy keeps an Ombudsman channel[56] open to all citizens.

In 2017[57], the Ombudsmanship of BCB received 2,555 demands, as it can be seen on Table 3.1. The reduction of 6.6% in relation to the previous year (2,735) is due, particularly, to the decline in the number of complaints, compliments, and requests that should not have been directed to the Ombudsmanship – Inappropriate channel – which include, for instance, complaints by citizens against financial institutions.

Besides the Ombudsmanship, a citizen can also contribute to improve the SFN through the participation of public consultations promoted by BCB regarding regulations to be issued. In 2017, 7 public consultations were opened and in 2018, as of the month of August, this number had already reached 9 hearings. These figures have been growing year by year, an indication that more and more, BCB has been open to a dialogue and to society participation.

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[56] Available at https://www.bcb.gov.br/pre/portalcidadao/bcb/faleOuvidoria.asp .

[57] Source: 2017 Ombudsmanship Report. Available at https://www.bcb.gov.br/pre/ouvidoria/pdf/relat_ouvid_2017A.pdf

Table 3.1 – Demands received by the Ombudsmanship – 2015 to 2017

Type of demand	2017	Δ%	2016	Δ%	2015
1. Suggestions	269	10,2%	244	-7,2%	263
2. Compliments	107	-37,1%	170	-2,3%	174
3. Whistleblowing	17	142,9%	7	16,7%	6
4. Complaints	796	-7,3%	859	38,8%	619
Total of demands to the Ombudsmanship	1.189	-7,1%	1.280	1,7%	1.259
5. Incorrect channel (a)	926	-8,7%	1.014	-18,8%	1.249
6. Request for information (b)	440	-0,2%	441	3,3%	427
DEMANDS TOTAL	2.555	-6,6%	2.735	-6,8%	2.935

a) Refers to, mostly, to demands pertaining the performance of other public agencies or to consumer relationships between financial institutions and their clients, both outside the scope of the Ombdusmanship from Central Bank.

b) Demands related to requests for information or guidance are transferred to the Public Service Division.

Chapter 4

And how can we monitor the advance of this context?

Financial Citizenship Index (ICF): and the challenge to prioritize[58]

ICF tries to define the key indicators to portray the level of financial citizenship in Brazil

» Measuring Financial Citizenship

The process of monitoring, evaluating and stimulating financial citizenship depends largely on an appropriate and systematic measurement of its dimensions. The development of measuring instruments is crucial to detect how intensely the concept of financial citizenship has been incorporated into the routine of Brazilian people, and allows to set quantifiable goals, evaluate strategies and identify points that need to be adjusted.

Measuring complex concepts such as financial citizenship depends, at first, on an effort of conceptual definition, a process that has already been conducted by Central Bank with the participation of several players[59].

Secondly, we need a measuring strategy. For this strategy, four dimensions were used as a guide, which, according to the conceptual task, correspond to the structured context upon which financial citizenship is developed – financial inclusion, education, protection and participation.

The Financial Citizenship Index (ICF) can be understood as an aggregate indicator, capable to show general trends, as well as allow a comparison between geographic units as a way to verify progress and hindrances in each one of the different units of the Federation.

Therefore, the proposed index is built by the aggregation of indicators that attempt to evaluate the main features of the different dimensions of financial citizenship, allowing to decode the financial citizenship level into a numeric scale.

It is important to point out that this refers to an initial proposal, based on previously existing indicators, whose relation with the dimensions of financial citizenship can vary according to context or throughout time. This version will surely be improved by successive rounds of debates between the regulating agency, financial institutions and society in general.

» The dimensions of financial citizenship

FINANCIAL INCLUSION

Financial inclusion is a state in which all adults have effective access to the following financial services provided by formal institutions: credit, savings (understood in broad terms, including transaction accounts), payments, insurance, pension and investments[60].

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[58] This document is a product of the Central Bank team, and contributions by Mateus Ponchio, researcher at ESPM/ FGV-SP.

[59] The selection of indicators for each one of the dimensions was made with the help of experts on the subject. Several technical meetings and discussions with partners occurred with the objective to select and evaluate the indicators that are currently available. With an improvement to databases and the conduction of researches to acquire information from the side of the demand, the proposal can be reviewed and expanded. The report with the findings of the document that conceptually defines financial citizenship is available at <https://www.bcb.gov.br/?conceitocf>. Besides its employees, Central Bank thanks the participation of SPC, Plano CDE, Senacon, University of Brasília, Fundação Getúlio Vargas (SP), Febraban, Fundación Capital, Procon.

[60] The foundation here is the GPFI concept, whereby financial inclusion refers to "a condition where all adults old enough to work have effective access to the following financial services provided by formal institutions: credit, savings (understood in broad terms, including transaction accounts), payments, insurance, and investments". The concept was adapted to include retirees to this public and to add pension to the listed services.

Indicators that attempt to capture the following characteristics, identified in the work conceptualizing financial citizenship[61] as necessary to make financial inclusion feasible, were considered for this dimension:

- Suitability – Options of services suitable to the capacities and interests of the most diverse profiles;
- Proportionality – Costs, remuneration, required documentation and guarantees proportional to the risks and to the complexity of the service;
- Convenient delivery - Options of access channels, including digital, available and convenient to the several profiles; and
- Equity – dignified and equal treatment to all citizens, without prejudice because of origin, race, gender, age or any other ways of discrimination.

FINANCIAL EDUCATION

This document refers to financial education as the human capital of an individual, particularly in reference to financial knowledge and/or to its application[62] and includes: knowledge of financial concepts, aptitude to communicate financial concepts, ability to manage personal finances, capacity to make appropriate financial decisions and confidence to plan for future financial needs. It is expected that financial education efforts will bring as a result not only a surge of the population's financial knowledge, but, specially, positive attitudes and behavior to forge and maintain financial wellbeing.

The encounter of financial education and financial wellbeing literatures helped in the selection of indicators within this dimension. The measurement of financial wellbeing has been developed via different approaches. Those with objective indicators deserve to be highlighted, such as those of the Center for Financial Services Innovation[63]; as well as those with subjective indicators, such as those from CFPB[64]; or those with a mixed nature, such as the one from Ponchio et al[65]. A common denominator in these measures is the presence of themes such as: savings, management of expenses and use of credit, and financial planning to achieve goals and for the future.

The evolution of data on defaulting and indebtedness, besides the use of data on savings, indicate the citizen's level of financial education, who adopts practices to improve his or her personal financial management, using financial services in an adequate way. These data, however, presents a general overview of the theme. To better understand the incentives and conditioning elements in the behavior of citizens, it is important to move forward and improve databases, including the promotion of surveys considering the demand side and using qualitative approaches. In order to outline, implement and evaluate programs and initiatives intended to improve the population's financial well-being ways of measuring them are necessary, with objective and subjective indicators.

THE CHALLENGE OF MEASURING PROTECTION AND PARTICIPATION

The protection of the financial services consumer, in the words of the World Bank, "has the objective to ensure that consumers: (1) receive information that will enable them to make informed decisions, (2) are not subject to unfair or misleading practices and (3) have access to mechanisms and the offer of funds to resolve conflicts" (World Bank, 2012).

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[61] See note no. 58.

[62] Huston, S. J. (2010). Measuring financial literacy. Journal of Consumer Affairs, 44(2), 296-316.

[63] Available at https://cfsinnovation.org/research/financial-health/

[64] CFPB - Consumer Financial Protection Bureau (2017), "CFPB financial well-being scale: Scale development technical report", available at: https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/201705_cfpb_financial-well-being-scale-technical-report.pdf (accessed on 02/20/2018)

[65] Ponchio, M. et al. Personal Factors as Antecedents of Perceived Financial Well-Being: Evidence from Brazil. International Journal of Bank Marketing. (being printed).

Information provided by the complaints filed with the Central Bank are good indicators of the main difficulties faced by citizens in the use of financial services, but they need to be complemented with information from other service channels to guarantee a more adequate sampling. For this reason, it was not possible to use such data in the development of the index. However, advances in this agenda is expected, in partnership with the private sector.

The participation in the discussion about the financial system refers to the engagement of citizens and other stakeholders of the financial system in a constructive dialogue to improve it, as different points of view regarding the definitions about its operation would be integrated. The following features have been devised to make this dimension feasible:

- That the roles, policies, initiatives and results of regulators and operators of the financial system be actively divulged in channels that are widely accessed by the population, in a simple and objective language;
- That efforts are made to understand the opinion of different publics, by strengthening the relationship with the citizen – using also service channels, boards and social networks –, via a permanent dialogue with associations of civil society and the holding of public hearings and field research, so that the designing of policies and initiatives consider different points of view;
- That the role of the ombudsmanships be strong and robust changes are implemented as result of the views and the complaints manifested by citizens, intending to improve the quality of the relationship with all;
- There will be a pursuit of initiatives that will allow the population to understand how the financial system and the economy operate, understanding the impact that economic policies and regulatory and oversight initiatives have upon their lives.

Participation is an innovative dimension of financial citizenship and it has not yet been possible to identify indicators that capture these characteristics with the necessary regularity and level of disaggregation to compose the ICF.

» Methodology of the Financial Citizen Index

The Index for Financial Citizenship (ICF) uses 13 indicators, aggregated in two dimensions: nine indicators are considered for the Financial Inclusion Index (IIF) and four for the Financial Education Index (IEF), as shown in the Chart 4.1. In reference to the calculation methodology, the structuring of the ICF is a modification of the Financial Inclusion Index presented in the 2011 Report on Financial Inclusion, broadening the variables that measure dimensions defined by the concept of financial citizenship, and keeping the statistical methodology to choose the relative weight of each one of these variables. Details about the calculation, their weights and a little bit more about the methodology are available at RIF 2011.[66]

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[66]   Available at https://www.bcb.gov.br/Nor/relincfin/RIF2011.pdf.

Indicators of the Financial Inclusion Index (IIF)	Indicators of the Financial Education Index (IEF)
- Number of service points per 10 thousand adults - Number of POS per 10,000 adults - Percentage of the population with access to the internet - Percentage of adults with a banking relationship - Percentage of adult borrowers - Average interest rates of credit operations with free funding - Individuals – Non-consigned personal credit - % per year - Population registered at the Single Registry * with Relationship with financial institutions - % - Population registered at the Single Registry with credit card under the modality one payment/installment payments via merchant - % Registered at the Single Registry with credit operations - %	- Delinquency rate - Total - % - Indebtedness Indicator - Individuals (excluding real estate) - Percentage of the adult population that contributes to the National Social Security Institute (INSS)** - Per capita deposit

*Single Registry for Social Programs or CadÚnico is a tool for the collection of data and information that has the objective to identify all low-income households in the country to provide inclusion to social assistance programs and redistribution of income. Its management is under the responsibility of the Department of Social Development (MDS).

** This indicator was considered as a proxy to evaluate the accruing savings for the future, one of the key points of financial education. Although there is a lot of progress to be made regarding data about other retirement and long-run savings, considering INSS coverage in.

It is understood that financial inclusion and education do not have rapid dynamics, not varying abruptly from one year to the following. Thus, and with the aim of eliminating eventual noise in the indicator, the average value of the ICF, calculated for the years from 2015 to 2017, will be presented. The ICF is result of the weighting that gives equal weight to the financial inclusion index and the financial education index. The key findings are presented below.

## » ICF results

HIGHLIGHTED REGIONS

Results are graphically presented, in terms of the average for each region and the national average on Graphs 4.1, 4.2 and 4.3.

In general terms, the data indicate the challenge to foster financial citizenship in the country, particularly in the Northern and Northeastern regions.

Graph 4.1 – Financial Inclusion Index – Averages in Regions and Brazil
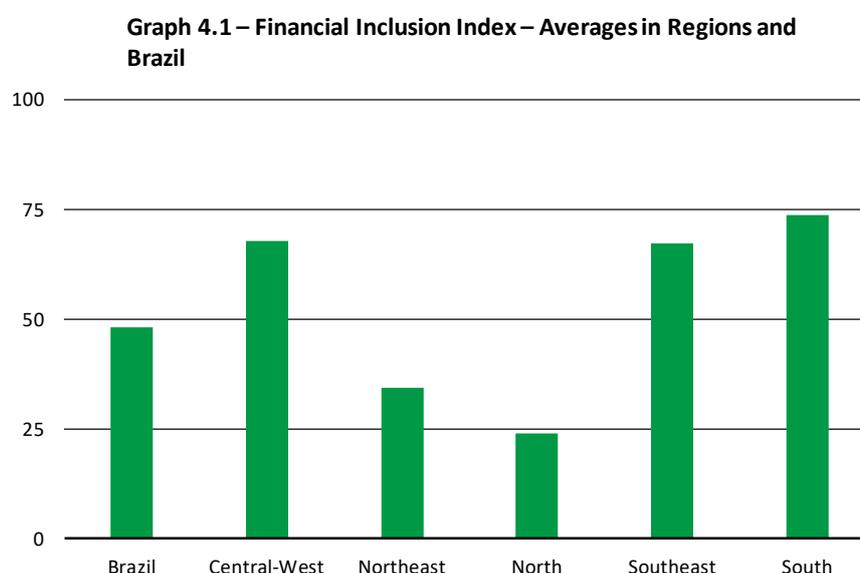
Graph 4.2 – Education Inclusion Index – Averages in Regions and Brazil
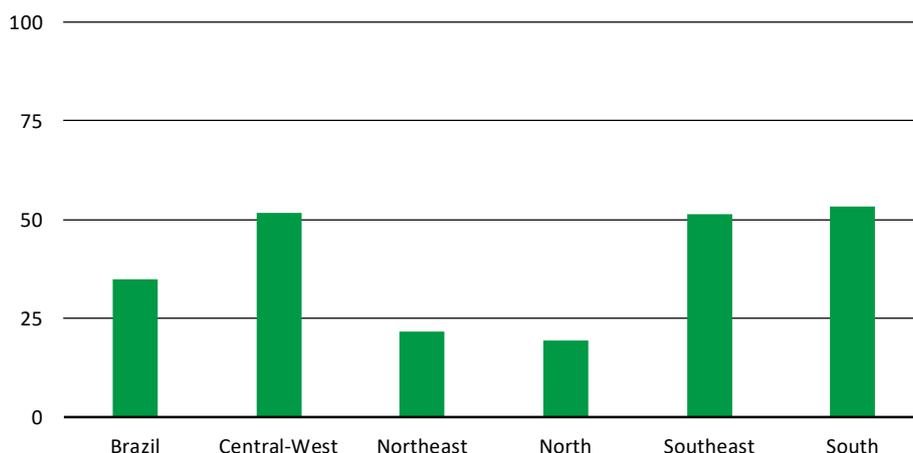
Graph 4.3 – Financial Citizenship Index – Averages in Regions and Brazil
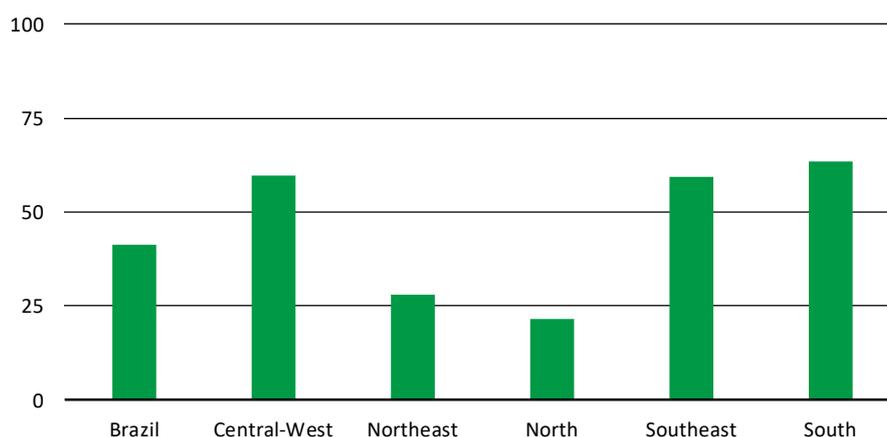
The data show that the Financial Inclusion Index (IIF) is significantly higher than the Financial Education Index (IEF) for all regions. While IIF national average is 48, the IEF is 35, in a scale from 0 to 100, in which 100 means reaching the highest level in all dimensions being considered[67]. This result reflects the improvements reached in terms of expansion of access to financial services (measured by the capillarity of the service points, banking relationship, and cost and access to credit, particularly, by the low-income population).

It also indicates that it is important to move forward in the financial education dimension (measured by indicators such as indebtedness levels, defaulting and per capita deposits[68]), either by making the population aware of the importance of planning, savings and responsible use of credit, or by the improvement of the quality and the suitability of financial products and services on offer. These initiatives contribute to expand savings and reduce default, indicators with important weight for the calculation of the Financial Education Index.

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[67] The methodology for the development of the ICF is a modification of the inclusion index proposed by Sarma and Pais (2010), which is based on the distance between given unit and a benchmark. In case, the benchmark corresponds to a fictitious unit that reaches the highest punctuation in all dimensions being considered.

[68] Cash deposits, savings deposits and term deposits, which include RDB and CDB, have been considered.

Graph 4.4 shows the average value of the ICF calculated for the period from 2015 to 2017 for each unit of the federation, as well as the national average. All the states in the South, Southeast and Mid-West are above the national average, while the states of the North and Northeast scored below this threshold.

Graph 4.4 – Financial Citizenship Index – by state
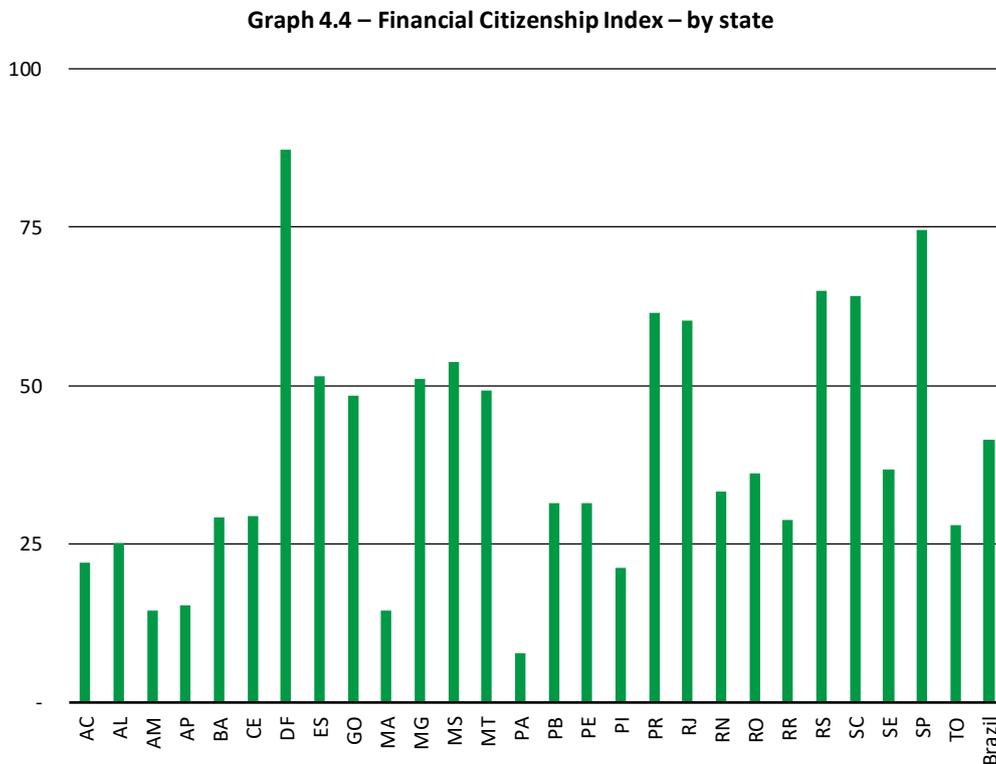
Table 4.1 shows the ICF values of all federal units as well as their position relative to the period in focus. Although such result may indicate that the level of financial citizenship tends to follow the economic development of states, looking separately at their dimensions, it is possible to draw some important conclusions in respect to the main gaps and action strategies.

Table 4.1 – Financial Citizenship Index

State	Value	Ranking
DF	87,24	1
SP	74,50	2
RS	65,03	3
SC	64,05	4
PR	61,51	5
RJ	60,27	6
MS	53,75	7
ES	51,42	8
MG	51,01	9
MT	49,22	10
GO	48,46	11
Brazil	41,45	
SE	36,71	12
RO	36,21	13
RN	33,29	14
PB	31,49	15
PE	31,36	16
CE	29,29	17
BA	29,09	18
RR	28,70	19
TO	27,90	20
AL	25,19	21
AC	22,02	22
PI	21,26	23
AP	15,37	24
MA	14,41	25
AM	14,39	26
PA	7,73	27

As Graph 4.5 shows, as in the Northeast, there is a lot of ground to cover in terms of financial inclusion in the states of the Northern region, characterized by low demographic density and large expanses. The development of technologies and solutions that are more suitable to the singularities of this region might be the first step to expand the access to payment and credit services.

Graph 4.5 – Financial Inclusion Index – by state
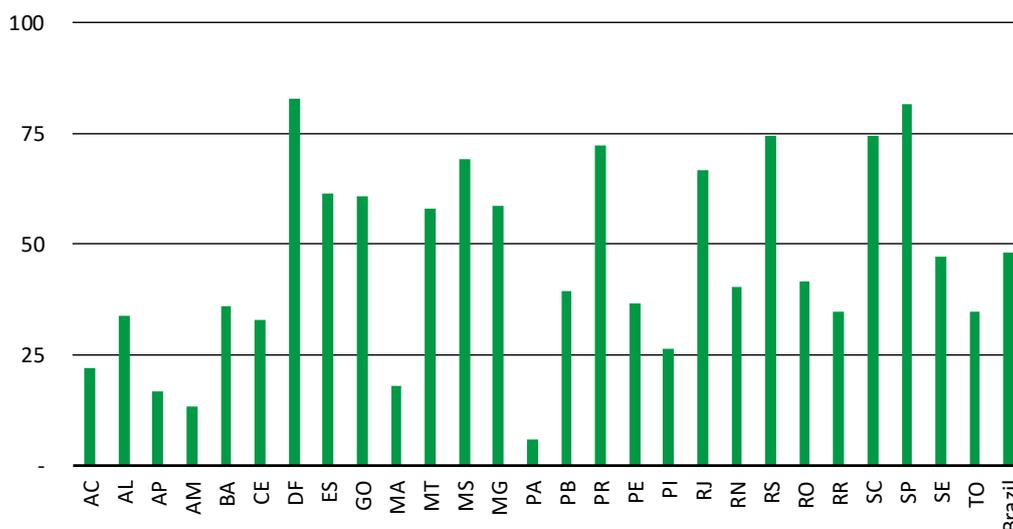
Differences between the Northern and Northeastern regions are less evident in reference to the dimension of financial education (Graph 4.6). It is expected that this dimension will be more correlated to income, considering that it is largely measured in terms of per capita deposits and by indicators associated to indebtedness and defaulting. The challenge in this case, in addition to the dissemination of financial education, is the offer of products and services that might better offset income oscillations that tend to influence in a sharper way populations with lower income, both of credit as well as of investment and savings instruments.

Graph 4.6 – Financial Education Index – by state
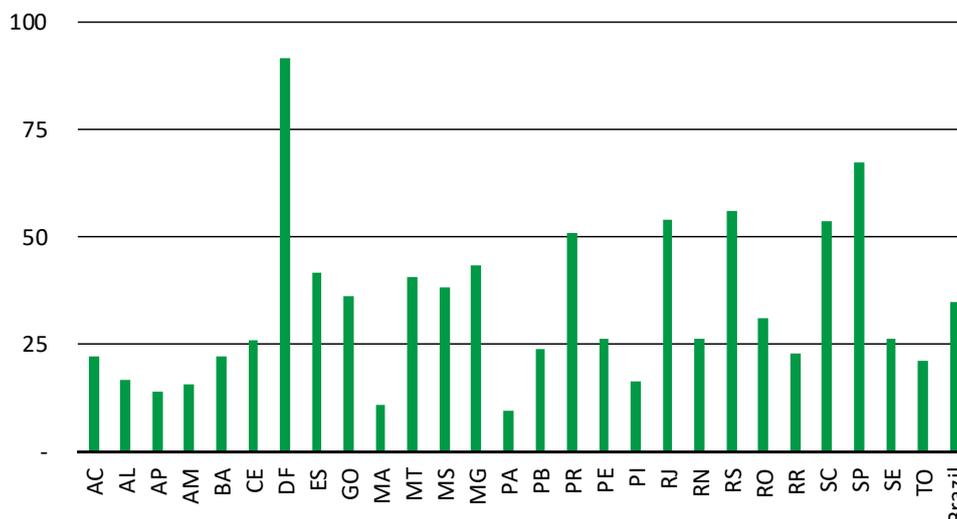
CHALLENGES AND NEXT STEPS

A more accurate measurement of the scenario under analysis allows a well-founded knowledge of the needs and interests of the population, subsiding the definition of goals for initiatives and the identification of possible improvements to the regulatory benchmark and strategies for financial inclusion and education. For this purpose, this document intends, based on data from Central Bank, to define indicators for measurement and monitoring.

The next challenge will be the articulation of information that is dispersed at the databases of banks and regulatory institutions and, also, consider the obtainment of qualitative data, which might give a view of the behavior of individuals and families in reference to planning and use of money.

The challenges that need to be overcome in the formulation of the index are diverse, such as the difficulty related to data availability and the pursuit of indicators that are less sensitive to macroeconomic variations, less subject to short term volatility, and that better reflect the general trends related to financial citizenship.

All the limitations and a priori choices associated to the elaboration of an ICF notwithstanding, this initial effort is valid, as it allows the monitoring of the evolution of financial inclusion of different geographical units such as countries, states or cities during a given period of time, or makes possible an assessment of the impact of public policies that aim at fostering financial citizenship.

The National Financial System is very dynamic and undergoes constant transformation. It is expected, therefore, that the index here proposed might undergo changes and incorporate new variables. This proposal has the precise objective to promote debate and the development of studies and research that might progressively contribute to the understanding of the context of financial citizenship in its several nuances. Therefore, we close this report inviting BCB's several partners – players in the market, regulators, academia members, among others – to contribute to the challenge to measure such crucial and overarching theme such as financial citizenship, helping to foster a financial system that is increasingly more efficient, transparent and inclusive.

Chapter 5
Conclusions

The use of remote channels has been growing in a significant way and smartphones lead this growth. Transactions via smartphones have increased 19% between 2015 and 2017, and already represent 35% of the total number of transactions (remote and on-site).

The future, as far as access to and use of financial services are concerned, goes the digital way. The use of electronic instruments can contribute to expand citizens' financial inclusion (considering the trend for lower priced devices), allowing greater efficiency and safety in the Brazilian retail market. In this scenario, instant payments have the potential to become the "new normal" in options of medium term electronic payments and the closest replacement to cash. To create an efficient instant payment ecosystem, that is competitive, safe and inclusivist, Central Bank is taking the role of leader and catalyzer for this process.

While instant payments do not become a reality, it is necessary to stimulate, in the short term, less expensive electronic instruments, such as debit cards, to be used more frequently than those that are more expensive, such as credit cards. The latter is an instrument widely used by Brazilians, however, if not handled in a responsible way, it can contribute to increase household indebtedness. A study based on a survey conducted by the National Confederation of Stores Leaders (CNDL) and the Credit Protection Service- SPC Brasil, indicates that, among card holders, 33% of them had their card blocked due to a late statement payment and 48% had a bad credit rating, in other words, were included in the defaulters' register.

For that matter, some initiatives are being promoted by the Central Bank, such as the reduction of debit card exchange fees and recent norms with adjustments on the revolving credit card.

In this scenario, of increasing digitization, it is necessary to take into consideration the share of the population that is still outside. Data indicate that the utilization of on-site channels, particularly banking correspondents, for the payment of bills of exchange and the carrying out of transferences is still very frequent. In addition, cash continues to be largely used, as seen on data based on the survey O brasileiro e sua relação com dinheiro (Brazilians and their relation to money), ordered by the Central Bank. Therefore, the transformation to digital needs to be monitored to insure that this process will be, indeed, of an inclusive nature.

To achieve this, it is crucial to better know the profile of the most vulnerable population. An important step was taken in this direction with the possibility of matching Central Bank's databases with the registries of the Cadastro Único, thanks to a partnership with the Ministry for Social Development (MDS). The results of the first studies are in the process of being completed, and will shed light to important aspects of banking relationship and use of credit by this share of the population.

In reference to access to credit, data from the Central Bank indicate that the penetration is lower in the population inside the income bracket with up to two minimum wages, a share that, as a general rule, has more difficulties to prove income and submit collaterals. The expansion of access to credit for this bracket continues to be a challenge and the obtainment of information on the payment history of this population via alternative means might be one of the solutions. By embracing information from continued service providers, the reform that regulates the registry of compliant debtors (positive credit data sharing) might contribute to this end and benefit a significant share of the population which, for several reasons, still has no access to the formal market of credit.

It is also expected that the expansion of the positive credit data sharing will reduce the asymmetry of information in the credit market, improving the quality of credit supply. Another benefit would be decreasing the dependence on guarantees and collaterals, which, while a factor in the reduction of interest rates, might lead to non-responsible credit practices, both from financial institutions, which can adopt unsuitable offers and renewal of credit, and from consumers that might take credit without due planning, as analyzed in the text regarding payroll loan.

The positive credit data sharing may also stimulate the entry of new financial institutions in this segment, such as fintechs. Consequently, the effective operation of this registry might help to bring more competitors within the scope of the financial system, a rise of credit supply and the reduction of its cost (spread). The new positive credit data sharing is, in addition, an incentive to the population financial education, for reinforcing "good payers" is also promoting a sustainable financial management.

In addition to the positive impact in credit, the dissemination of financial education might be one of the solutions to stimulate the habit of saving among Brazilians, which, despite of an advance in the last few years, continues to be low. Brazil shows the lowest level of savings when compared to the group of countries in BRICS, as it shows the Global Findex survey.

Taking the issue to the classroom tends to be one of the solutions to propagate financial education in the country. However, this is a path permeated by challenges, as shown in an introductory study on surveys and experiences related to financial education in schools.

The participation of the citizen is expected not only in the management of his or her own funds, but also in the improvement of the financial system. For this matter, it is important for the citizen to complain when financial services fail to meet his or her expectations and there is a need for financial institutions and the Central Bank to implement mechanisms to capture the aspirations and behavioral trends of the consumer in an effective way, and deliver appropriate services and regulation. The existence of a larger number of complaints at governmental agencies and the financial institutions' ombudsmanships might indicate that something in the flow, which goes from the consumer's complaint to the improvement of financial services, needs to be perfected. Finding answers for the reasons why this occurs is crucial to keep the confidence of the citizen on the financial system.

It is important to point out that, from 2015 to 2017, the country faced a more challenging macroeconomic environment, which brought a deterioration to indicators related to labor market, income, and household spending. This adverse scenario helps to explain the slowdown in the expansion of credit and levels of banking relationship.

Broader issues, possibly associated to hindrances for the economic empowering of women, seem to also influence the use and access of banking products by men and women. When credit data is examined, it shows the difference between these two groups in reference to the credit balance amount in the active portfolio, which is clearly higher for men than for women. In modalities demanding more income, such as real estate financing and the purchase of vehicles, the participation of men is still higher. This data suggests that disparities in income and the participation in the labor force between the two groups might be important factors to explain the verified differences.

The Financial Citizenship Index as a proposal

These are just some of the nuances and points to be taken into consideration in the several scenarios that shape the context that sustains financial citizenship. The Financial Citizenship Index (ICF) is being proposed to monitor the progress of this panorama in a more all-inclusive way.

We expect that the index might be useful to direct efforts and correct trajectories, in order to strengthen financial citizenship. ICF is an initial exercise, presented here as an invitation to the debate and to the forging of partnerships to improve it. After all, stimulating the participation in the discussion about the financial system is a crucial part of the development of financial citizenship.

Part 2
Related texts

Held on a periodic basis since 2005, the survey "Brazilians and their Relationship with Money"[2] presents a picture of how the population and the retail stores deal with money and, through its regularity, allows to identify transformations in the currency management.

Habits of handling and custody, recognition and differentiation of banknotes, use and hoarding of coins, employment of different means of payment – the themes addressed in the survey subsidize currency management actions, such as communication campaigns, money distribution policies and projects for new paper bills, which directly or indirectly affect the citizen's life.

Information on means of payment also subsidizes actions taken by the BC (Central Bank of Brazil) to stimulate the use of electronic instruments, which bring benefits in terms of security, efficiency, financial inclusion and prevention of money laundering and terrorist financing.[3]

Cash is still widely used by the population, although payments with **debit cards** have grown.

87,9% prefer to use cash for purchases up to **BRL 10.00**

42,6% prefer to use credit card for purchases over **BRL 500.00**

Means of payment accepted by commercial establishments

75,8% debit card

74,1% credit card

16,3% check

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[1] This text was prepared by the Currency Management Department (Mecir), with contributions from the Department of Banking Operations and Payment System (Deban) of the Central Bank of Brazil.

[2] You can access all the editions of the survey (2005, 2007, 2010, 2013 and 2018) at https://www.bcb.gov.br/pt-br/#!/n/MECIRestpesq. It is important to explain that the purpose of this article is to analyze the results regarding the use of money and other means of payment, thus not covering other dimensions of the survey, namely "handling of money" and "recognition of security features".

[3] On the BC's efforts to modernize payment instruments, see https://www.bcb.gov.br/htms/novaPaginaSPB/ArtigoSPB2R.asp?IDPAI=SPBREF. In addition, see the opening speech by the Monetary Policy Director at the plenary meeting of the SPB Forum (AIP Forum) in April 2018 (https://www.bcb.gov.br/pom/spb/seminarios/2018-Abr-ForumAIP/Discurso_Diretor_Reinaldo_Le_Grazie.pdf

» Most Used Payment Methods

The survey described herein does not have, as a specific methodological purpose, the identification of characteristics of the digital payment market. The purpose is to identify "the ratio of sales in which money is used in relation to other means of payment"[4]. It is important to stress out that the target audience of this survey is "general population" and "store cashiers". Not all payments are made at store checkouts. Therefore, the survey findings shall not be generalized over all payments made.

Compared with the previous edition, the 2018 survey shows that, among the payment methods most frequently received by the retail stores, there has been an increase in the use of debit cards (from 4% in 2013 to 15% in 2018), but also a certain stability in the use of cash and credit cards[5]. The sum of the percentages obtained by debit and credit cards (46%) is still lower than cash (52%), although it has grown by 7 percentage points in relation to the previous survey.

Graph 1 – Payment methods received more frequently by the Brazilian trade
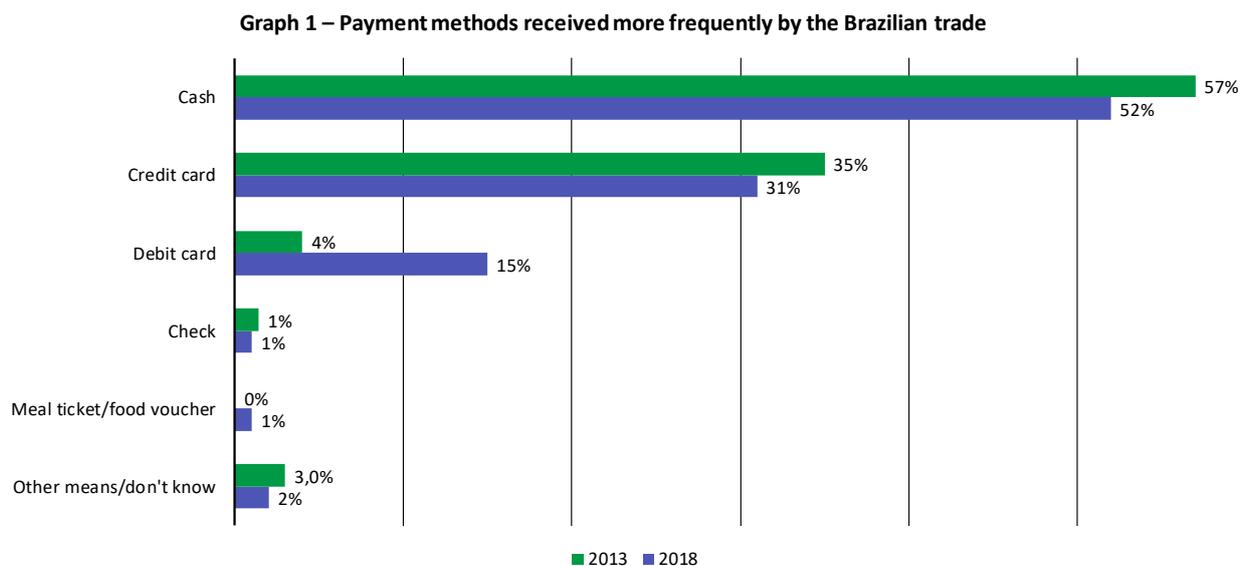
Although the usage is still less frequent, electronic means are more associated with payments of amounts above BRL 100.00. As the amount to be paid increases, so does the use of debit and credit cards in relation to the use of cash. As shown in Graph 2, the 2018 survey stated the use of cards exceeds the use of cash for amounts above BRL 100.00.

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4   See the technical specification available at https://www.bcb.gov.br/pt-br/#!/n/MECIRestpesq.

5   The changes from 35% to 31% for card and from 57% to 52% for cash between 2013 and 2018 are within the margin of error of the survey, which is 3 p.p.

Graph 2 – Payment methods used according to the purchase value

Purchase value	Cash	Debit card	Credit card	Meal ticket/food voucher	Didn't participate/don't know
Up to BRL 10.00	87,9%	9,2%	1,6%		0,7%
Over BRL 10.00 to BRL	81,5%	14,0%	2,9%		0,8%
Over BRL 20.00 to BRL	67,1%	22,6%	8,9%		0,8%
Over BRL 50.00 to BRL	51,9%	27,0%	19,0%		1,8%
Over BRL 100.00 to BRL	37,0%	23,5%	34,5%		4,7%
Over BRL 100.00 to BRL	31,3%	18,0%	42,6%		7,8%
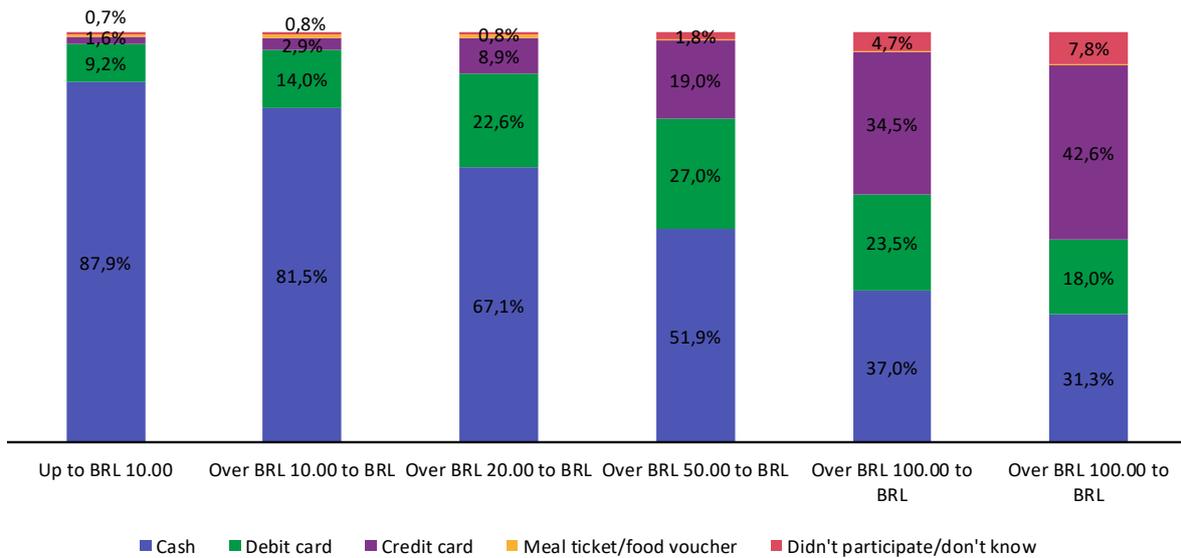
In a comparison among credit card, debit card and cash, respondents from the population group considered credit card to be the most advantageous to pay for expenses in installments (50.5%) and also a good option for emergency spending (33.1%). Debit card wins when it comes to security (35.8%). Cash stands out when it comes to getting discounts (81.5%), acceptance by establishments (69%), costs (61.5%), expenses control (55.3%), ease of use (50.8%), convenience (47.2%) and considered the best option for emergency spending (46%).

The survey conducted with the retail stores distributes the volume of payments received in: 50% cash, 25% credit card and 20% debit card (graph 3). As to the acceptance of the means of payment by commercial establishments, debit and credit cards are accepted in 76% and 74% of establishments, respectively.

Graph 3 – Volume of payments per method

Method	2018	2013
Cash	50%	55%
Credit card	25%	26%
Debit card	20%	14%
Check	1%	3%
Others/don't know	4%	2%
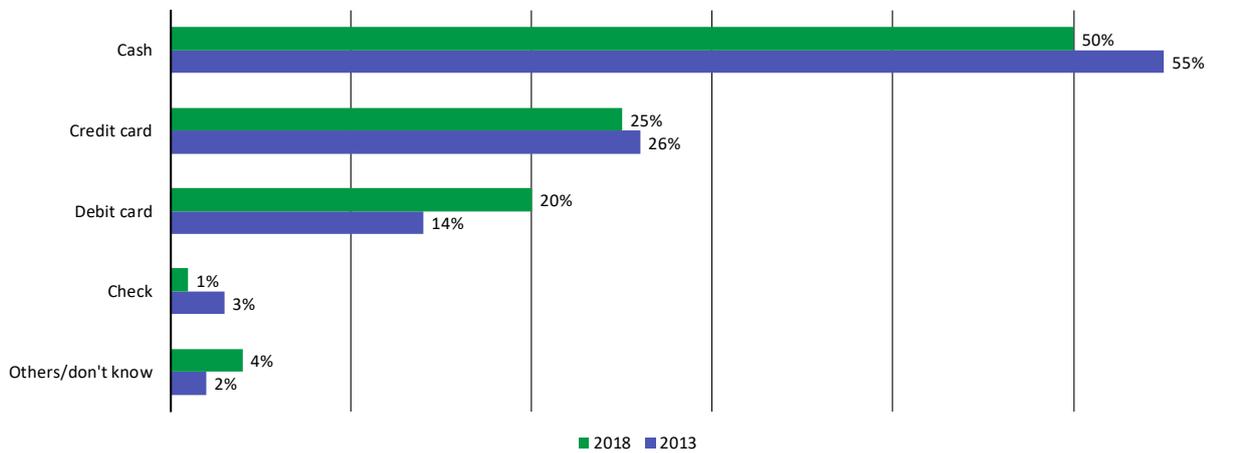
This information reveals, on the one hand, an increase in electronic means of payment, while it confirms, on the other hand, that cash still is widely used in Brazil. For the Central Bank of Brazil, this indicates the need of a continued improvement of currency management, in order to meet an actual demand of society.

It also shows the importance of prioritizing actions to stimulate the use of digital payments. The role of the Central Bank of Brazil in the modernization of payment instruments is mainly to foster cooperation among the economic agents that participate in retail payment systems by setting goals, recommendations and principles that induce the promotion of efficiency and security of payment instruments.

By acknowledging the important role of merchants in disseminating the use of payment instruments, the Central Bank of Brazil has promoted, in partnership with institutions such as Sebrae, CNDL and CNI, information actions aimed at merchants.

» Use of financial services

Another aspect that must be analyzed carefully is the Brazilian society's usage of banking services. When it comes to having a checking, salary or savings account, 72.3% respondents of the population said they have at least one account[6]. However, when analyzing the data by education (graph 4), only 51.4% of the illiterate respondents or respondents with some elementary education declared to have an account. Likewise, among respondents who receive up to two minimum wages, this percentage is 61.7%.

Graph 4 – Account owners according to education

Education	Percentage
Graduate program	100,0%
Undergraduate degree	93,3%
High school diploma/some undergraduate degree	78,2%
Some high school	59,9%
Elementary school/Some middle school	42,5%
Illiterate/Some elementary school	51,4%
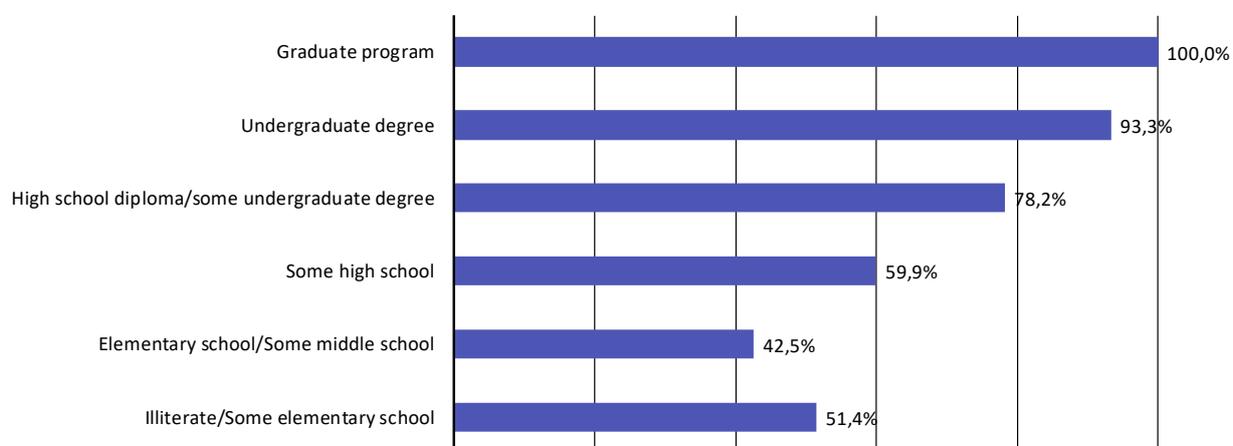
However, being an account owner does not mean full use of such services. For example, out of the 72.3% who declared themselves in the banking system, only 48% said they receive their wage in a bank account. It shows that, access to banking services does not necessarily imply the intensive use of these services and, once again, that the use of cash is still quite usual in Brazil of today, even in the face of an electronic alternative.

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6   The figure differs from the one obtained by information directly provided by financial institutions to the Central Bank of Brazil. According to the latter, over than 140 million people (86.5%) had some banking relationship, such as demand accounts (popularly known as checking accounts), savings accounts and investment accounts in 2017. It is important to stress out that the data provided by the institutions to the Central Bank of Brazil include all accounts not closed, even those that have very low balances or that have not recorded withdrawals, deposits and transfers for long periods. As with the sampling used by Global Findex, previously mentioned herein, we can conclude that people who do not operate an account for a long time tend to consider that they do not have an account, although it may still be active.

Graph 5 – How is the wage or payment received?

- Deposit to checking/savings/salary account
- Cash
- Other (check)
- Don't have any income
- Didn't participate
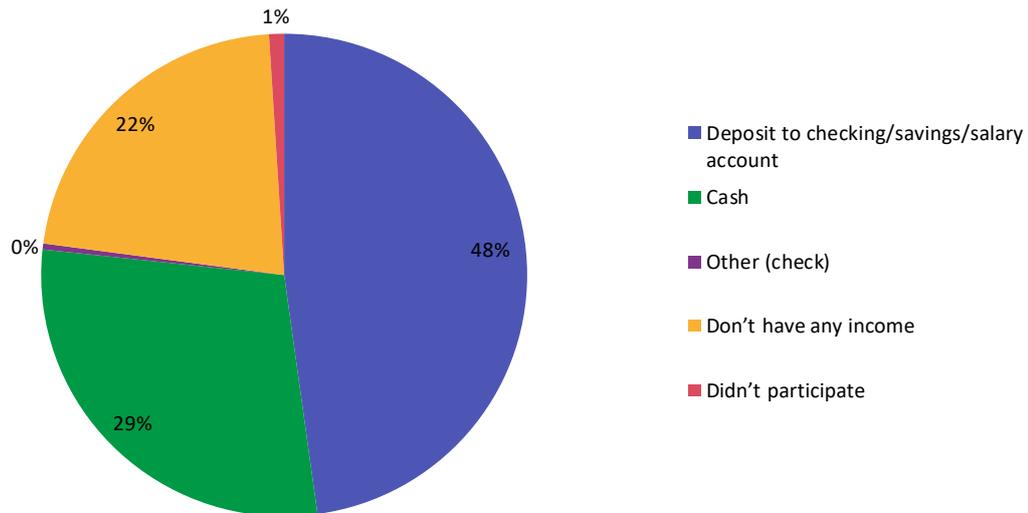
» Change: a two-way problem

When it comes to the habit of saving coins, only 25.6% of the interviewed group of people claimed to have this habit. Out of this group, 59.3% said they spend the coins in a month and only 6.9% said they keep them for over a year. As for getting change in the retail stores, the answers were balanced between those who said to get change and those who said they rarely get it. This shows the perception of lack of change is still widely held, even though the coins are not kept for a long time.

In the retailers group, 50.8% stated that the establishment where they work usually has enough change. As to the customers' behavior, 66.2% of the cashiers said customers require change, but only 39.2% reported receiving coins from these customers to facilitate the change. At the same time, in the general population group, 53.1% said they require change.

» Financial inclusion and currency management

The survey presents a picture of how the population and the retail stores deal with payment means, especially cash. The comparison with previous results states some ongoing changes, such as the increase in digital payments.

Although it is not the object of this research, we can state that financial inclusion is one of the agents of transformation identified. Greater access, use and quality of financial services have the potential to change the Brazilians' relationship with money. Likewise, stimulating the population's interest in aspects of the use of money, per se, can bring them closer to other financial products and services. It shows the relationship between the topics and the importance of a joint analysis.

Although the debate on the meaning of "gender"- including definitions encompassing the socially constructed roles of what is expected from men and women[2] and even gender identity issues[3] - is known to be broad, this paper is based on data disaggregated by sex[4], since this is the information available in the databases administered by the Central Bank (SCR and CCS[5]). The analysis also focus on the indicators available in these databases referring to banking and credit relationships.

» Brazilian context

The elimination of differences between men and women in terms of access and use of financial services is essential to have a more inclusive society and promote economic growth[6]. It has been an important topic in the agenda of financial inclusion of several Governments and international institutions.[7]

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[1] This text was prepared by the Department for Promotion of Financial Citizenship (Depef) of the Central Bank.

[2] AMERICAN PSYCHOLOGICAL ASSOCIATION. Transgender people, gender identity and gender expression. Available at: <http://www.apa.org/topics/lgbt/transgender.pdf>. Visited on: July, 2018.

[3] GENDER SPECTRUM. Understanding gender. Available at: <https://www.genderspectrum.org/quick-links/understanding-gender/>. Visited on: July, 2018>.

[4] The United Nations Statistics Division defines "sex" as the biological differences indicated at birth, turning a person into a male or female. These characteristics are usually fixed without change over time or in different cultures.
UNITED NATIONS, STATISTICS DIVISION. Gender statistics manual: integrating a gender perspective into statistics. New York, 2013. Available at: <http://unstats.un.org/unsd/genderstatmanual/Sitemap.ashx>. Visited on: July, 2018.

[5] For more details on the SCR and CCS database, refer to the glossary.

[6] WOMEN'S WORLD BANKING. Women's financial inclusion: a driver for global growth. Available at: <http://www.womensworldbanking.org/publications/womens-financial-inclusion-driver-global-growth/>. Visited on: July, 2018.

[7] Gender equality and women and girls empowerment are part of United Nations' Sustainable Development Goals (SDG). SDG no. 5 addresses this theme and includes providing women with equal rights to access financial services. In 2011, the Alliance for Financial Inclusion(AFI) launched the Denarau Action Plan focused on promoting policies to expedite women's financial inclusion among the network member countries.

In this scenario, the deepening of women's financial inclusion should be seen not only as giving access to services offered by financial institutions, but also as providing products that can promote and improve women's productive activities; reduce their vulnerability to adverse events, mitigating financial risks; and ensure their purchasing power over time through sustainable financial behavior.

However, before assessing how women are included in the Brazilian financial system, the economic barriers they face must be contextualized. Analyzing such economic obstacles is relevant because several studies show a positive correlation between income and financial inclusion. Aslan et al., for example, in working paper recently published by Internayional Monetary Fund (IMF)[8] analyze these relations, including in terms of gender inequality based on data from several countries. They conclude that income and labor market participation differences are relevant in the asymmetries found between men and women and highlight a broad range of papers with similar conclusions. In addition, chapter 6 of the Financial Inclusion Report (FIP) published in 2011[9], already showed a positive correlation between access to financial services and the Human Development Index (HDI) to Brazil states.

Recent data on female economic participation shows that there is still a lot to achieve in Brazil. According to the World Economic Forum, the country is ranked 90th in gender inequality out of 142 countries[10]. On Economic Participation and Opportunity, Brazil is ranked 83rd, well behind other South American countries, such as Colombia (ranked 32nd), Bolivia (60th) and Venezuela (67th). This dimension assesses the differences between men and women in terms of labor market inclusion, income and wage inequality.

IBGE published data on labor market and income in Brazil in 2016 reinforcing this perception.[11] Usual monthly average income of jobs and earnings ratios by gender show that women received, on average, 75% of what men earned between 2012 and 2016. In 2016, women's monthly average income was BRL 1,764 while men's reached BRL 2,306.

Other indicators of this publication also show aspects that contribute to female economic dependence. They face a higher unemployment rate (13,4% for woman vs. 10,5% of men in the 4th quarter of 2017), lower participation in the workforce (74% of men over the age of 15 are part of it, compared to 53% of women over the same age) and still account for most of domestic chores even when they work. According to the IBGE, regarding the number of employed people aged 14 or more, women spend almost twice as many hours on domestic chores as men (18.1 hours a week versus 10.5 hours for men).

» Financial inclusion of women in Brazil

In 2017, almost 140 million adult Brazilians owned a bank account, representing 86% of the population over 15 years old[12]. The analysis of aggregate data on account ownership shows that 86.4% of women over 15 years old in Brazil had some kind of banking relationship in 2017, a slightly higher number to the proportion of men with an account, which was 85.9%. Note that as of 2012, the number of women with some kind of bank relationship in absolute terms exceeded the number of men, following the Brazilian population trend (Chart 1).

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[8] ASLAN et al. Inequality in Financial Inclusion and Income Inequality. International Monetary Fund, (WP/17/236), November, 2018. Available at https://www.imf.org/en/Publications/WP/Issues/2017/11/08/Inequality-in-Financial-Inclusion-and-Income-Inequality-45344.

[9] Available at: https://www.bcb.gov.br/Nor/relincfin/RIF2011.pdf .

[10] WORLD ECONOMIC FORUM. The global gender gap report 2017. Available at <https://www.weforum.org/reports/the-global-gender-gap-report-2017>. Visited on: July, 2018.

[11] BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS (IBGE). Gender statistics: social indicators of women in Brazil. IBGE, Rio de Janeiro, 2018. Available at <https://www.ibge.gov.br/estatisticas-novoportal/multidominio/genero/20163-estatisticas-de-genero-indicadores-sociais-das-mulheres-no-brasil.html?=&t=resultados>. Visited on: July, 2018.

[12] Data of the Financial System's Customer Registry (CCS). The registry does not contain data on amount, financial transaction or accounts balances/investments; therefore, data includes all accounts not closed, even those that have very low balances or that have not registered withdrawals, deposits and transfers for long (inactive) periods. See glossary for more details on indicator methodology.

Graph 1 – Adults with banking relationship

Million
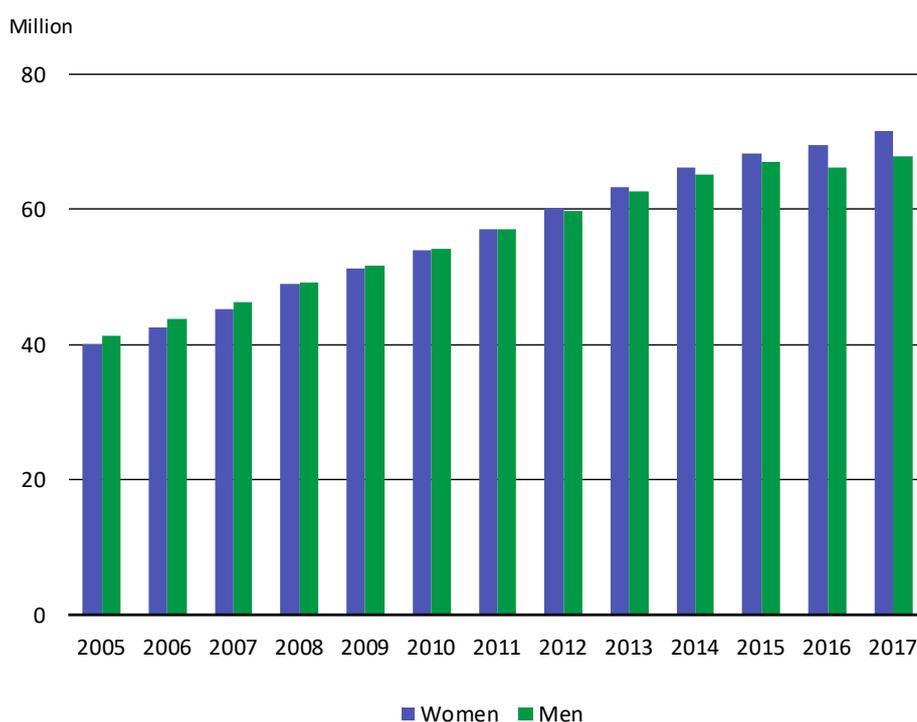
However, these numbers vary regionally. The South and Southeast regions have a higher proportion of men and women with banking relationship and greater equality between the two groups, although the proportion of men is slightly higher.

The North region has a smaller proportion of adults with banking relationship, and the proportion of women with an account is slightly higher than that of men. The Northeast has a greater difference in the number of baking relationship between both genders in favor of women (3 p.p.). Said differences may reflect the higher proportion of families enrolled in cash transfers programs when most beneficiaries are women[13] (Table 1).

Table 1 – Proportion of women and men with banking relationship (2017)

	Women	Men
Brazil	86,4%	85,9%
Northeast	81,5%	78,5%
North	72,7%	72,0%
Mid-West	85,1%	87,7%
Southeast	90,6%	90,9%
South	90,8%	91,3%

Although aggregate account ownership data[14] do not indicate large disparities between men and women, a preliminary analysis by income brackets shows asymmetries that would reflect the challenges faced by women in terms of income and labor market insertion.

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[13] According to IBGE data, the North and Northeast have the highest percentage of families with income from Bolsa Família (Family Allowance Program). The Northeast accounts for 28.4% while the North accounts for 25.8%. IBGE. Continuous National Household Sample Survey (Continuous PNAD)- Income from all sources. IBGE, Rio de Janeiro, 2017. Available at: <https://agenciadenoticias. ibge.gov.br/agencia-detalhe-de-midia.html?view=mediaibge&catid=2103&id=1899>. Visited on August, 2018.

[14] Registry data is obtained through BC databases and do not reflect the intensity of frequency of account use.

In lower income bracket - up to 2 minimum wages - women are in greater numbers than men, a possible reflection of government cash transfers, as mentioned previously[15]. This difference is higher in favor of men as the income increases. This difference in absolute numbers reflects the proportion of men and women in each income bracket, as calculated in IBGE's continuous PNAD[16]. PNAD data show that 60% of those with income of up to 1 minimum wage are women, while almost 40% are men. At the other end, almost 75% of those with income above 20 minimum wage are men and 25% are women. In the range of 1 to 2 minimum wages, the proportion of men and women is almost even, an it also reflected in the numbers shown in graph 2. These data reinforce the perception of income as a relevant factor to explain such differences.

Geographically, the regions with higher *per capita* income have a higher percentage of access to the banking system and greater equality in banking relationship between men and women.

Graph 2 – Total women and men with banking relationship per income
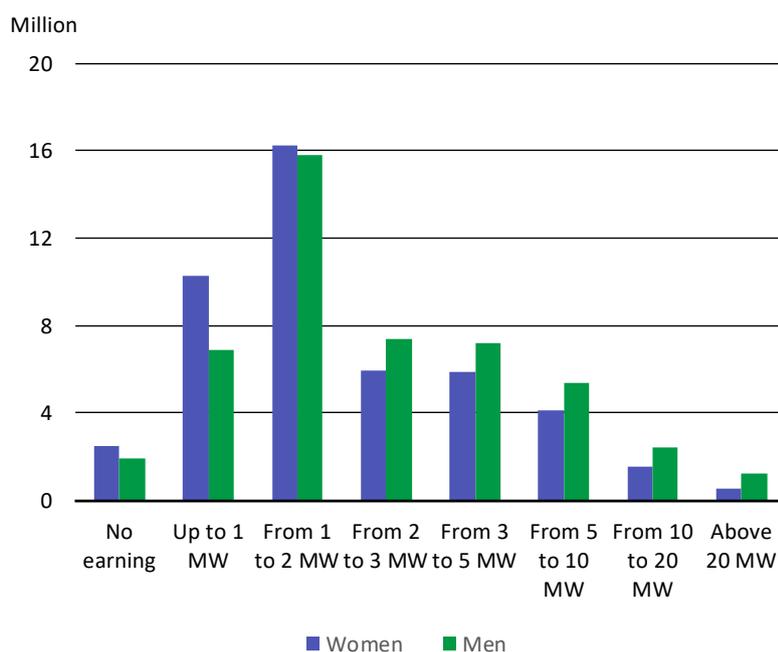
The standard already identified for banking accounts ownership is the same in credit transactions. The aggregate analysis of the number of borrowers does not indicate a significant difference between men and women in relation to access credit. However, the distribution of borrowers per income range is quite uneven.

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[15] Note that 33% of total individuals borrowers with banking relationship do not declare income. This high number of borrowers with uninformed income is due to omissions in bank records. The chart only refers to those that informed their income, and this is a limitation to the analysis.

[16] PNAD data for 2015 - https://sidra.ibge.gov.br/pesquisa/pnad/geral/pesquisa-basica

Graph 3 - Distribuition of borrowers by gender
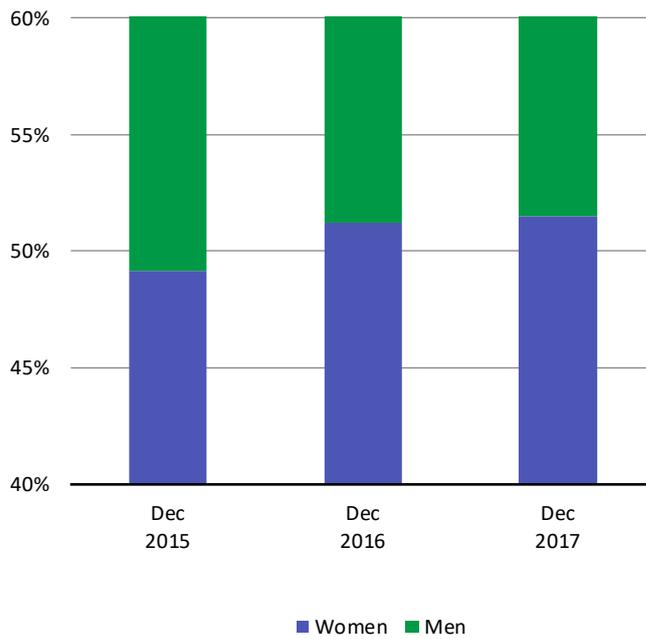
Women are the majority in the income bracket of up to two minimum wages, reflecting the largest number of their bank accounts in this income bracket. They decrease their participation as income increases, reinforcing the differences in income and insertion in the labor market between men and women, already discussed in previous paragraphs.

Graph 4 – Distribution of borrowers per gender and income range – 2017
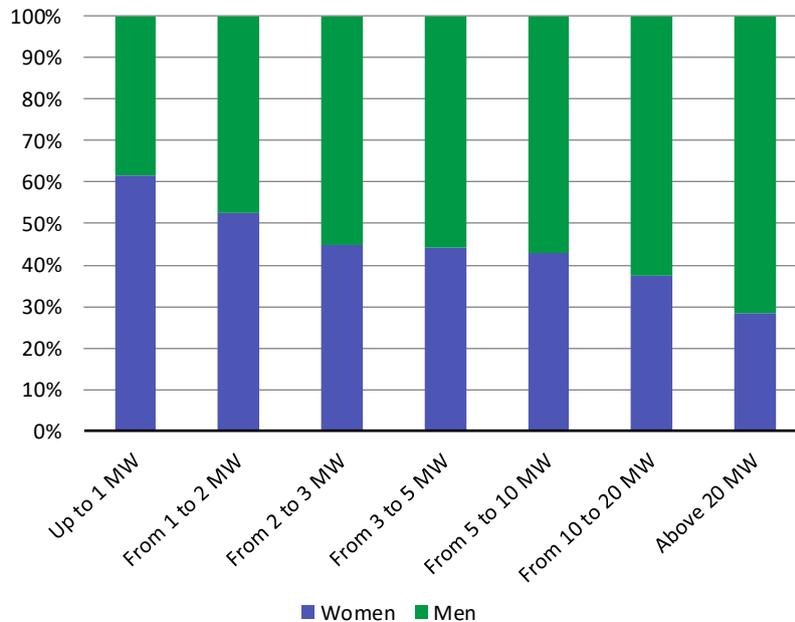
Although there is no difference in the number of total borrowers, the fact that men represent the majority of borrowers in the highest income bracket is reflected in the total balance of operations. In December 2017, men accounted for approximately 60% of total credit outstanding (Graph 5).

Graph 5 – Distribuition of credit outstanding per gender

Men   Women
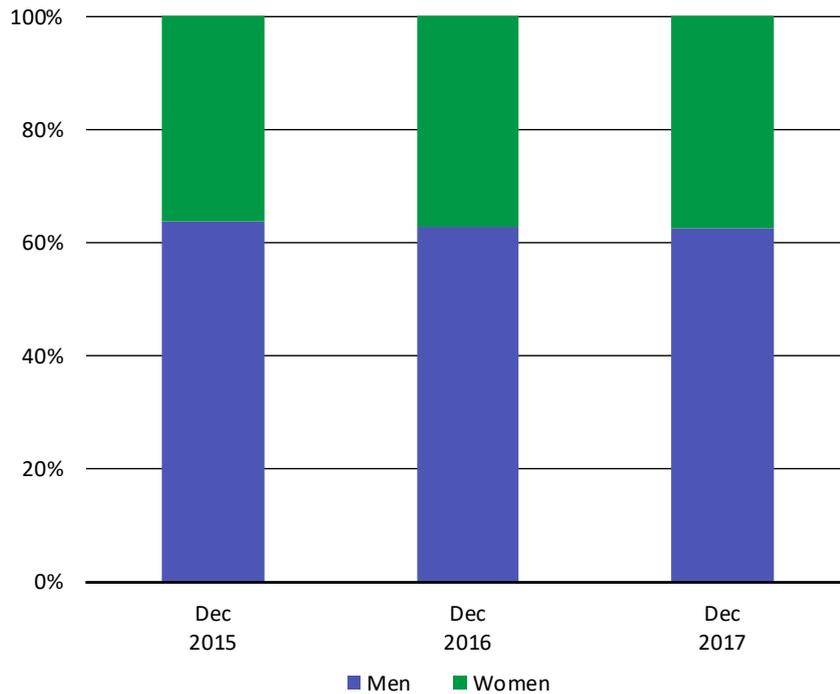
This asymmetry becomes very clear when we look at the values of the credit outstanding based on the borrower's income. Women have higher balance for the income bracket of up to 1 minimum wage. In other brackets, men have higher balances and this difference is especially relevant above 20 minimum wages in which men total credit outstanding is 325% higher than women credit outstanding. We also see that, in the credit portfolio, the correlation between higher income and lower relative participation of womenis also verified (Graph 6).

Graph 6 – Credit outstanding per income
December 2017

Women   Men
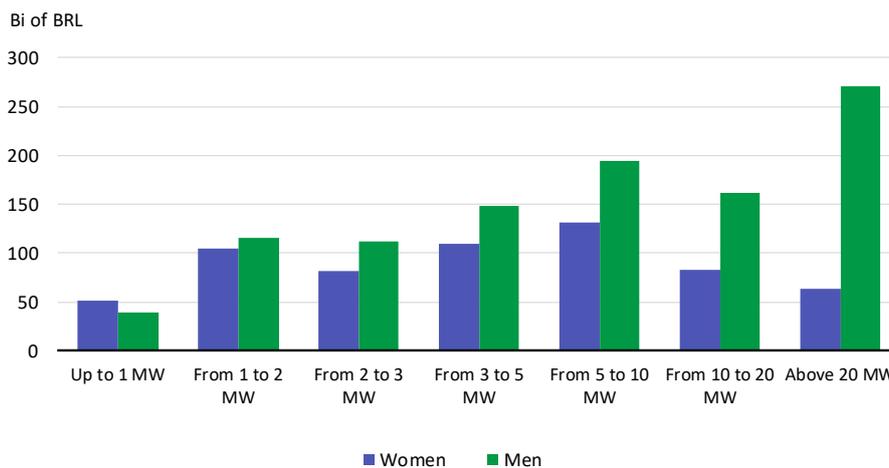
Modalities of credit with higher numbers of borrowers are the same for men and women: credit card (pay in full and pay in installments), revolving credit linked to credit card and payroll loans (Graph 7).

Graph 7 – Number of borrowers per credit modality – 2017

Million

■ Women ■ Men
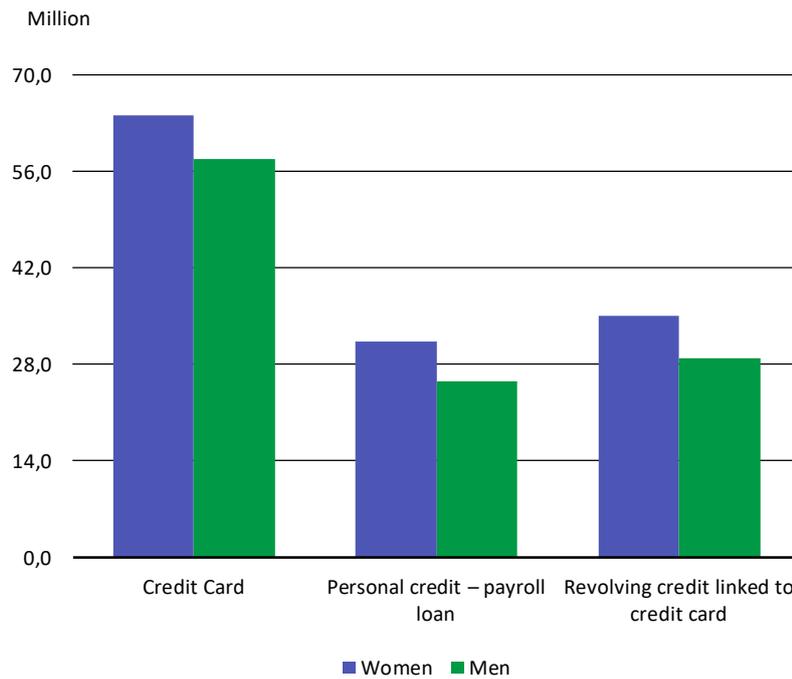
In addition, types of credit in which operations are usually higher as real estate financing and motor vehicles purchase, two products that require higher borrower income, female participation is significantly lower and men account for the largest share of total credit operations. Men account for the highest share in the balance of credit card use. However, women have a higher share in "payroll loans", type of credit with one of the largest balances (Graph 8).

Graph 8 – Total modalities with higher credit outstanding
December 2017

Bi of BRL

■ Women ■ Men
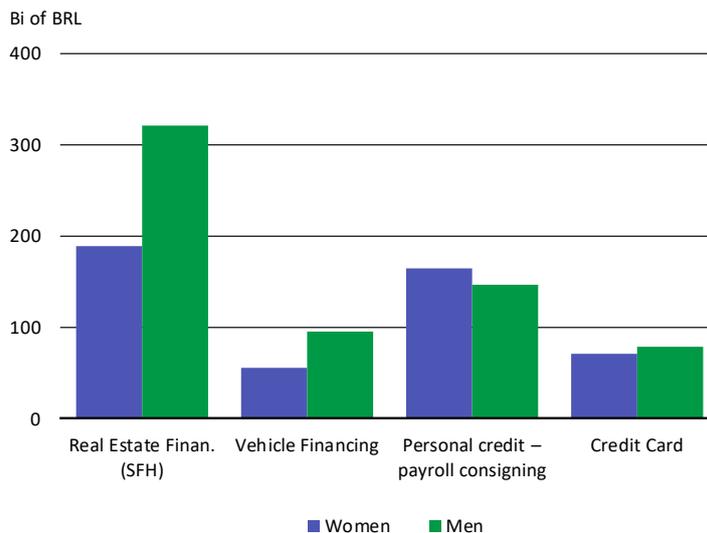
We can analyze the responsible use of credit from the perspective of delinquency rates[17], household debt and household debt income ratio.

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[17] Percent of 90 days past due loans of credit operations outstanding.

Men and women have a similar delinquency rate, approximately 4% of the credit outstanding balance per gender. The delinquency rate is higher in lower income brackets for both genders and reduces as the income raises. However, although delinquency rate is equal for both genders in the aggregate, in some types of credit women have a lower delinquency rate than men, such as personal credit and motor vehicle financing (Graph 9).

Graph 9 – Delinquency rate – selected modalities
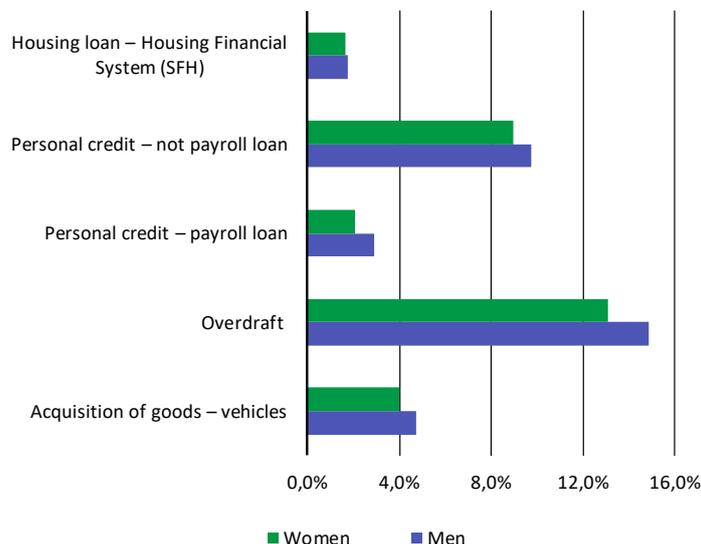
The analysis excluded the "real estate financing" for household debt[18]. Since operations in this credit modality are long term and involve greater amounts, the higher share of men in the balance of this modality impacts total debt, thus increasing men indebtedness compared to women. Without "real estate financing", household debt was approximately 35% for both genders in 2017.

'The indicator of household debt income ratio[19] shows similar figures for men and women, approximately 20%. Equivalence suggests that men's higher income is the main explanation for most of the credit portfolio being granted to male borrowers.

Graph 10 – Household debt service ratio (e.g. real estate)

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18   Relation of the current amount of borrowers debt with the National Financial System and accumulated income in the last twelve months.

19   Relation between monthly debt and income service.

Graph 11 – Household debt ratio

	Women	Men
Dec 2015	~22.5%	~20.5%
Dec 2016	~20.5%	~20.5%
Dec 2017	~19.7%	~20.3%
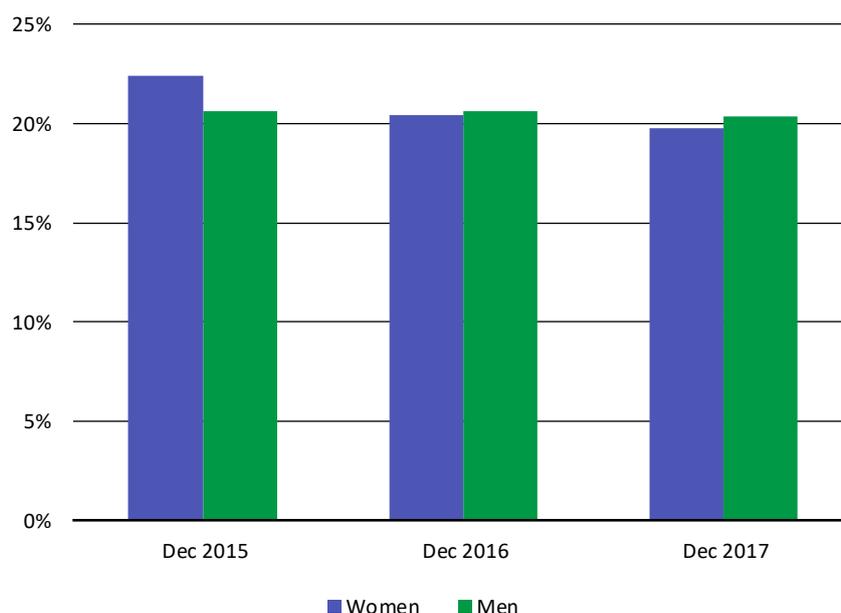
» Conclusions

The available data show that, although the aggregate analyzes do not show significant differences between men and women in relation to account ownership and number of credit operations, asymmetries appear when the analysis is deepened. They reflect broader challenges to include Brazilian women in the economy. Part of this agenda comprises availability of financial products able to promote and improve women's productive activities and ensure their purchasing power over time through a sustainable financial behavior.

Although aggregate data show that the percentage of adult women and men with bank accounts is not significantly different (table 1), there are important variations when we look at different income ranges. However, these differences seem to reflect inequalities between men and women earnings, as shown in PNAD income data. There are differences also among regions. Regions with higher income - South and Southeast- the proportion of men and women is similar, while regions with lower HDI- North and Northeast- the proportion of women is higher, probably reflecting higher impact of government cash transfers program in these regions.

Economic barriers faced by women is also evidenced in cedit market. Despite the number of borrowers is almost the same, men account for most of the credit outstanding. They are also majority in credit operations of higher amount, such as real estate financing and vehicle purchase. In both aspects, the difference may be explained for the higher average income and share of men in the labor market. In this sense, the opening of banking relationship data and the use of credit products seem to reflect more the differences and inequalities between income and inclusion in the labor market between men and women, as well as regional inequalities, than gender-related barriers in the financial market. This conclusion is in line with a broad range of academic papers (mentioned above) pointing to this same direction.

However, note that several studies and researches show relevant differences between men and women behavior when it comes to dealing with money, which may also influence differences when taking credit and relating to financial institutions.[20]

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[20] For further details on the differences between men and women behavior, please visit http://www.bcb.gov.br/nor/relincfin/serie_cidadania_financeira_pesquisa_infe_br_%200443_2017.pdf.

Brazil is a country with great differences among different regions and even within the same region. Moreover, men and women do not form homogeneous groups, and there are even intra-group differences. Thus, the analysis of different variables as race, geographical location and age is relevant to a better understanding of the different dynamics. According to IBGE, for example, black women living outside urban centers in the North and Northeast Regions form the most vulnerable groups.[21] However, the analysis in this paper are restricted to information available on BC databases and not always allow disaggregation by race, income or schooling or geographical location.

To sum up, note that this is only the first exploratory study on the theme focused on raising available data and encouraging an initial debate. Other papers filling the existing gaps, to be conducted by the BC, the academy and Financial System institutions should be focused on deepening the theme. This diagnostic effort is fundamental so that the picture of the financial citizenship of women in Brazil can be more accurately drawn.

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[21] BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS (IBGE). Gender statistics: social indicators of women in Brazil. IBGE, Rio de Janeiro, 2018. Available at <https://www.ibge.gov.br/estatisticas-novoportal/multidominio/genero/20163-estatisticas-de-genero-indicadores-sociais-das-mulheres-no-brasil.html?=&t=resultados>. Visited on: July, 2018.
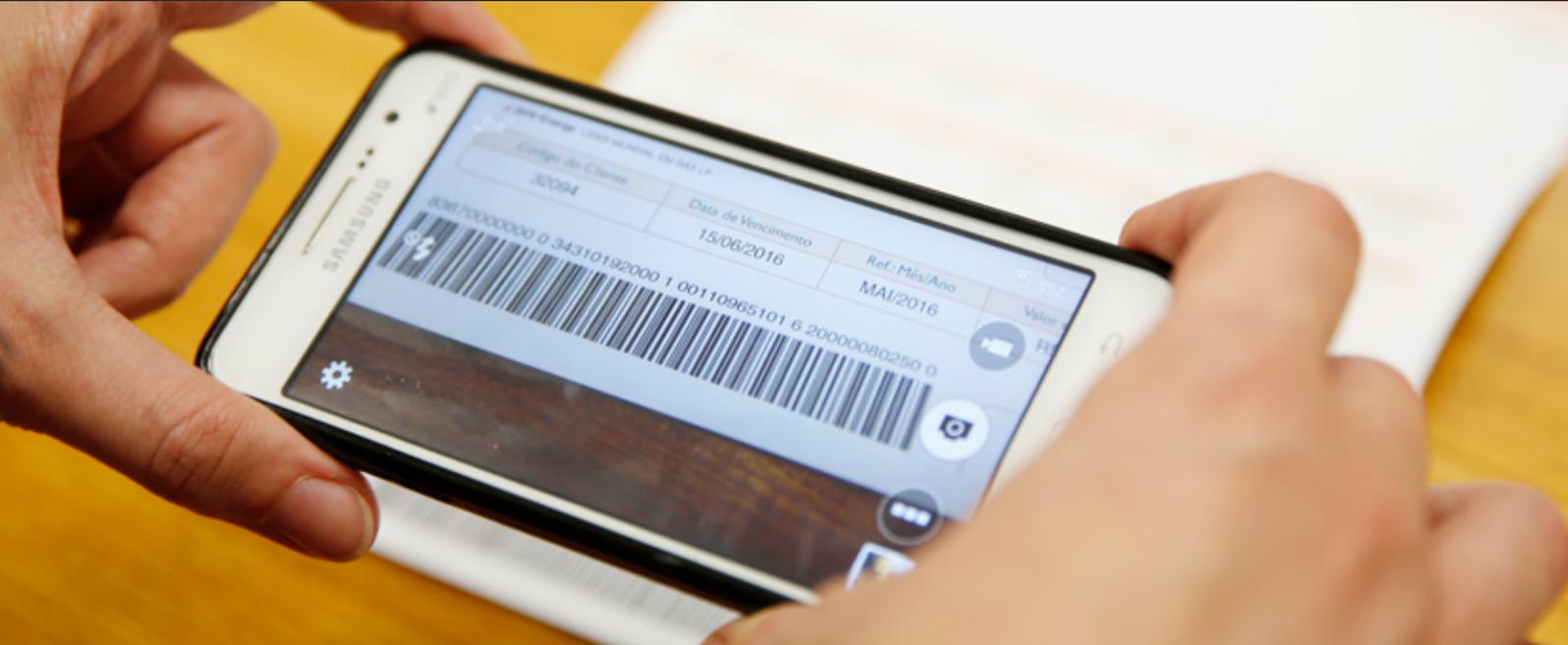
There is a growing trend in the use of electronic payments on a day-to-day basis in Brazil. In a country where there was an absolute predominance of cash or check payments for years, the payment electronization process, especially since the early 2000s, has brought convenience and security to consumers and merchants. According to statistics released by the Banco Central do Brasil (BCB)[2], the annual amount of check transactions decreased from 2.5 billion to 731 million transactions between 2005 and 2017. Over the same period, the number of direct debit transactions and credit transfers[3] increased from 5.6 billion to 15.9 billion. Meanwhile, the number of transactions with debit and credit cards that were around 2.6 billion in 2005 increased to 14.3 billion in 2017, approximately.

With the expressive growth, the card's market structure has developed and become more complex. As of October 2013, the Law 12865 granted upon the BCB jurisdiction on payment schemes[4] and institutions[5], which became part of the Brazilian Payments System (SPB). The regulation tries to ensure the safety and efficiency of the market. Since then, there has been an increase in the number of participants and the emergence of new products, which has helped to promote greater competition in this market.

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[1] This text was prepared by the Department of Banking Operations and Payments System (Deban) of the Central Bank of Brazil.

[2] Available at https://www.bcb.gov.br/?SPBADENDOS

[3] It includes TEDs (Electronic Funds Transfers), DOCs (Credit Transfer Documents), payment slips, among others.

[4] A payment scheme is the set of rules and procedures that regulates the provision of a particular payment service to the public. On the other hand, the payment service regulated in the scheme scope is the set of activities that may involve the deposits and withdrawal of funds, the issuance of a payment instrument, the management of an account for payment purposes, accreditation for acceptance of a payment instrument, remittance of funds, among others. The procedures used to make purchases with credit, debit and prepaid cards, either in domestic or foreign currency, are examples of payment schemes. Fund transfer and remittance services are also payment schemes.

[5] Payment institutions are non-financial legal entities that perform payment services within the scheme scope, in charge of the relationship with end-users of payment service. Merchant acquirers which enable merchants to accept card payments and non-financial institutions that receive funds from the public to make payments or transfers are examples of payment institutions.

Despite the strength of the current system, the BCB still looks for innovations that bring benefits to the SPB's efficiency and safety. In addition, the provision of electronic payment services, due to its advantages over paper-based instruments[6], may enable the inclusion of a large part of the population with restricted access to the financial system, so that they can take advantage of benefits associated to a greater financial inclusion. In this sense, by helping to increase efficiency and safety in the Brazilian retail payment market, and by promoting the financial inclusion of citizens, the BCB encourages the increase of the relative participation of electronic instruments vis-à-vis the paper-based instruments.

Nowadays, the electronic payment solution that has been developing the most in the world is the instant payments, which regards the electronic payment method closest to cash. This trend follows the continuous technological development and the growing expectation that end-users of payment services have for the acceleration of the payment execution process and its continuous availability, following the communication processes' developments, mainly through mobile devices, without the need for cards or point of sale terminals.

Instant payments are defined as electronic money transfers in which the transmission of the payment message and the availability of funds to the final beneficiary take place in real time, the service of which is available to end-users 24/7. Typically, the transfer of funds occurs between accounts (checking, salary, savings or payment) and the funds are immediately available to the beneficiary at any day and time, including weekends and holidays. Instant payments can be used for several types of transfers:

- between individuals (P2P transactions, person to person);

- between individuals and merchants (P2B transactions, person to business);

- between merchants, such as payments for suppliers, for example (B2B transactions, business to business).

They can also be used for transfers involving government entities, such as:

- payment of taxes and charges (P2G and B2G transactions, person to government and business to government);

- Payments of salaries and social security benefits (G2P transactions, government to person);

- payments of agreements and services (G2B transactions, government to business).

Among the benefits to the payer, it is important to highlight the improved experience and promptness to make payments. New ways to address payments and estimate to confirm incoming/outcoming funds are important features to improve convenience and usability for payers. Starting an instant payment should be as simple as selecting a person from the cell phone contact list or reading a unique ID code, like a QR Code, for instance. Another benefit of instant payments is that they can be made through payment accounts. This possibility exempts the maintenance of a traditional bank account to make instant payments. This opens up opportunities for payment institutions to act in niche markets, with the potential to develop specific products for the people that is poorly served and excluded from traditional payment services, providing greater financial inclusion.

The infrastructure architecture that enables instant payments can be designed to eliminate many intermediaries that exist in today's payment schemes, such as those based on cards. With fewer intermediaries, the trend is that the rates charged to payers will be lower. Therefore, it is expected that instant payments will cost very little, if not nil, to paying users.

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[6] There is strong empirical evidence that the electronization of retail payment instruments can lead to a significant decrease in annual payment expenditures. Among paper-based payment instruments, check has high transportation and processing costs for both banking and non-banking industries, associated with high exposure to fraud and default. The situation is similar for cash. In this case, there are high costs of transportation, security, storage, insurance, etc. In addition, illicit practices are usually enforced through the use of cash, due to its lack of traceability. That is, electronic instruments are associated with more effective mechanisms for the prevention of money laundering and terrorism financing.

Likewise, for the receiving user, the absence of intermediaries means a lower cost of acceptance as to other payment instruments. The merchant only needs a unique identification code to allow its customers to read this code. This code will contain all the necessary information for the immediate transfer of funds, from the consumer's account directly to the merchant's account. With the immediate availability of sales funds, merchants may optimize the cash flow management, reducing their need to obtain credit. In this environment of lower acceptance cost and immediate availability of funds, smaller merchants and service providers will have more incentives to accept an electronic payment instrument, which contributes to the inclusion of these agents in the national financial system. In addition, increased competition among payment instruments is critical to reducing the acceptance cost of electronic instruments, which may also stimulate the increase of their use.

Instant payments are expected to become the closest substitute for money, reducing the quantity of paper money in circulation, which has a very high cost to society. It is believed, therefore, that instant payments have the potential to become the "new normal" in electronic payment options in the medium term, contributing to increased efficiency and safety in the retail payment market and inducing a broader access to payment services.

However, the effective use of instant payments in transactions involving individuals and merchants will depend on the merchants' behavior as to the pricing of goods and services traded. It is essential that merchants make clear to consumers, through price differentiation, the costs associated with each payment instrument. Due to its low cost to merchants, the price for the use of instant payments is expected to be significantly lower as to other instruments, especially credit and debit cards[7].

The BCB's primary goal is to create an efficient, competitive, safe and inclusive instant payments ecosystem. To this end, the BCBB is assuming the role of leader and catalyst in the process of implementing this ecosystem in Brazil through a broad dialogue with the market, the definition of fundamental requirements and the discussion of solutions and the need for BCBB's action. The BCBB expects the development of solutions by the market itself. However, if necessary, in order to ensure the proper functioning of the ecosystem, the BCBB will assume a more active role in setting rules and providing infrastructure and other services.

As part of this strategy, the BCBB has created a workgroup (WG) on instant payments. About 100 institutions, including representative associations, banking institutions, scheme owners, payment institutions, credit unions, government entities, financial market infrastructures, fintechs, marketplaces, law firms and advisory companies are participating in the discussions. WG's purposes are to define the key requirements for the instant payments ecosystem in Brazil and to map the actions needed to adjust the current payment environment based on the fundamental requirements.

Among the assumptions for the definition of the fundamental requirements is the need to design a simple business model with the least number of intermediaries, in order to reduce transaction costs for all parties involved. One can visualize the Brazilian instant payments ecosystem, a model similar to that of the Electronic Funds Transfers (TED), but with wider availability, speed and ease of addressing for the payers.

A model based on transactions between accounts (checking, payment, salary or savings) is favorable to the emergence of fintechs that develop innovative solutions, being able to constitute as payment institutions, which would offer payment accounts for their customers, as well as payment initiation service providers. In addition, fintechs may offer aggregate services to the basic payment service, such as insurance, credit,

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[7]   The Law No. 13455, dated June 26th, 2017 authorizes the differentiation of prices in goods and services according to the term or payment instrument used. The possibility of price differentiation is an important mechanism to better measure the economic value of goods and services and brings significant benefits to the relationship with consumers, including: (i) freedom for merchants to make clear, through its prices, the costs of each payment instrument, promoting greater economic efficiency - the impossibility of differentiating prices tends to distort the nature of the contestability among several payment instruments, making it difficult to choose the least expensive instrument in the consumption relationship; (ii) change in balance of forces among market players- the fact that merchants can set different prices may promote a better balance in trading process among market players with potential benefits for consumers; and (iii) minimize the existence of cross-subsidy for consumers using the cheapest payment instruments (mostly the lower-income population) to consumers using more expensive payment instruments, typically credit cards (mostly used by the higher-income population).

investments, conciliation, tax payments offers, etc. The payment service would act as a gateway to the provision of these other services. It is precisely at this level of business that the creation of a competitive environment between the different providers (traditional banks, digital banks, cooperatives, payment institutions, fintechs, etc.) is expected[8].

In addition to acting for the creation of an instant payments ecosystem in Brazil, with high power of inclusion in the medium term, the BCB adopted measures to expand access to electronic instruments in the short term, while the effects of instant payments are not achieved. As of October 2018, the interchange fee of debit card transactions may not exceed 0.8% per single transaction, nor exceed 0.5%, considering the average weighted by the value of the transactions. The interchange fee is one of the components of the merchants' discount rate, which is the price per transaction paid by merchants to accept debit cards. The imposition of limits on the interchange fee will allow, through the competition process among the acquirers, the merchants' discount rate to decrease, reducing the acceptance costs of debit cards.

According to the regulations of the National Monetary Council (Resolution 3919, dated November 25th, 2010), a debit card is an essential service and, as such, charges for its supply and use are not allowed. Thus, because it is a cost-free service to consumers, they facilitate the inclusion of people with little access to financial services. With the decrease in acceptance costs of debit cards, it is expected that the number of merchants and service providers accepting the instrument will increase, contributing to amplify, through network savings effects, the access of a larger share of the population to debit cards. Similar to instant payments, the expansion of the debit card use will depend on the effective price differentiation by merchants. Only with the generalization of this practice it will be possible to ensure that cheapest electronic instruments, such as the debit card nowadays, are more used than the most expensive ones, such as credit card and paper-based instruments, like checks and cash.

In summary, the BCB has been working to broaden the population's access to electronic payment services. Payment services are expected to be the gateway to the use of other financial products that have the potential to improve the lives of the currently underserved population. The action is being focused on encouraging the use of cheap electronic payment instruments for end-users, by creating the instant payments ecosystem in the medium term and by encouraging the use of the debit card in the short term.

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[8] For more information on the Working Group on Instant Payments, see <https://www.bcb.gov.br/htms/novaPaginaSPB/PagamentosInstantaneos.asp?idpai=SPB>.

Comparing Brazil's scenario with other countries' allows the identification of current challenges to the country's financial inclusion process. The data presented in this text are based on the *Global Findex Database 2017*, a survey conducted by the World Bank which interviewed 150 thousand people in 140 countries on the progress of financial inclusion, using account ownership, payments, savings, loan, and risk management indicators. Previous surveys were conducted in 2011 and 2014 using the same methodology.

According to the publication, 68.5% of adults[2], in global terms, had an account in 2017. This number is 6.5% higher than in 2014 when 62% of the world population had an account. In 2011, this number was 50.6%. However, the report emphasizes that inequalities persist, considering national (countries' *per capita* income) and personal characteristics (age, gender, educational level, income and occupation).

Survey data show that Brazil had a modest progress from 2014 to 2017 (graphs 1 and 2) when it comes to adults with an account, from 68% to 70%. Nevertheless, Brazil has a leading position in Latin America and the Caribbean (LAC), getting closer and closer to other BRICS countries, such as Russia, India and China.

Graph 1 – Adults who have an account with a financial institution in countries forming the BRICS

Source: Global Findex

■ 2011 ■ 2014 ■ 2017
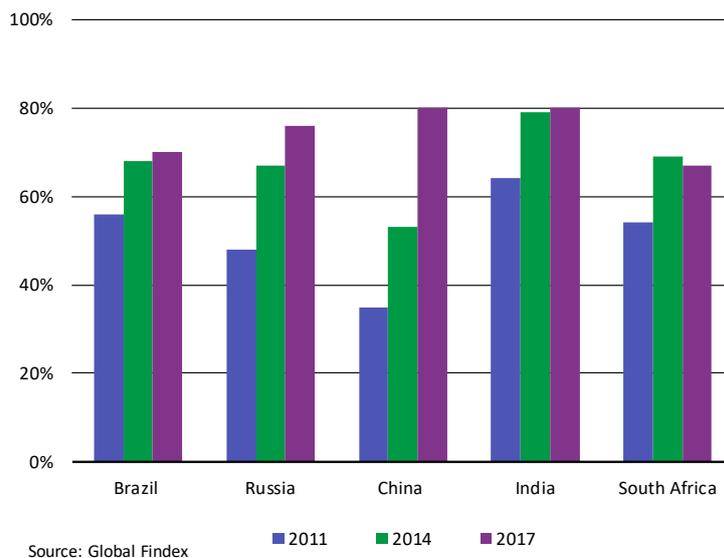
Graph 2 – Comparison between Brazil, BRICS, Latin America and the Caribbean, and OECD of adults who have an account with a financial institution

Source: Global Findex

■ 2011 ■ 2014 ■ 2017
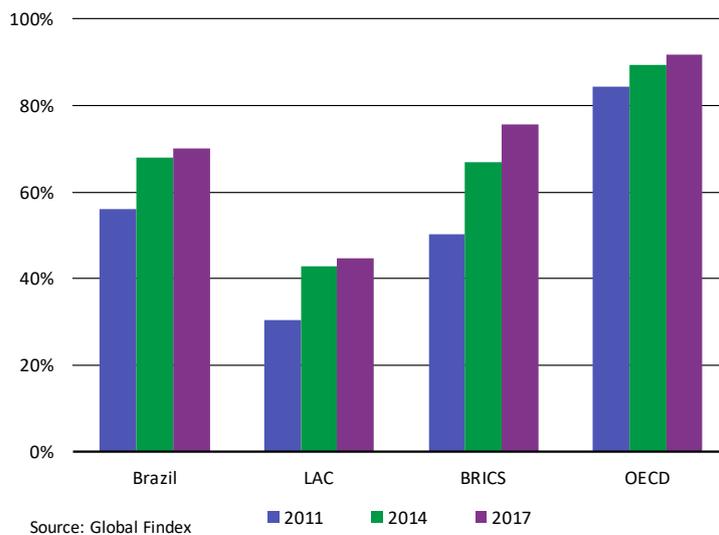
While Brazil follows the international standard in some aspects of financial inclusion, it also has considerable peculiarities. Despite the increased number of people with banking accounts, specific groups showed a reduction. The number of banking accounts decreased for 6% among young adults (from 15 to 24 years old), from 52.6% in 2014 to 46.7% in 2017. Note that, in the Brazilian case, the number of people with a banking account and the number of people with an account in a financial institution is exactly the same, and mobile money accounts are not significant.

For the first time, Findex sought to investigate the reasons why people remain unbanked, and Brazilians' responses followed the majority in the world, with most respondents pointing to lack of money as the main reason for not having a link with the financial system (57.8% of the unbanked). Other reasons include the high cost of financial services (56.5%), the fact that another family member already has a banking account (50.8%) and lack of trust in the financial system (25%). According to the report, 60% of these unbanked adults have access to cellphones and the internet, a percentage that is significantly higher than the global average (25%).

The ability of digital technology to bridge the gap is highlighted in the publication, which focuses on the opportunities to digitize transactions that people already make in cash. It pointed out, for example, that poorer women and adults could benefit most when governments digitize the payment of social benefits, as the case of Brazil, where about 10% of the women holding a bank account have obtained their first one in order to receive government cash transfers.

Despite the low use of mobile money (4.8%) and the low internet or mobile usage to access accounts (12.9%) among Brazilians, the number of people who reported having made or received a digital payment[3] was 57.9% in 2017. On the OECD countries the number was 92.1% (graph 3).

Graph 3 – Adults who have made or received digital payment last year (% age 15+)
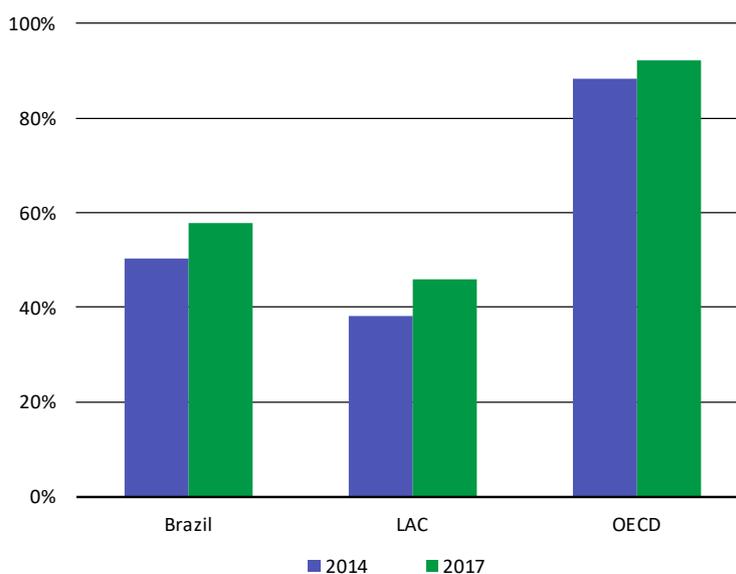
Receiving payments from the private sector is also identified in Findex as an opportunity for a considerable increase in financial inclusion. In Brazil, 38.5% of people still receive their salary in cash. In Latin America & the Caribbean 43.5% and the OECD only 6.5% (2017). The number of people who receive this type of payment with a financial institution is 58.7% in Brazil, 49.8% in Latin America and the Caribbean and 86% in OECD countries (2017).

Regarding the way that people carry out payments in Brazil, from 2014 to 2017, there was a 7% decrease in the use of credit cards and debit cards to make purchases. However, while credit card ownership decreased by 5% (from 32% to 27%), the debit card ownership remained constant at 59%.

The region of Latin America and the Caribbean presented the same movement observed in Brazil, maintaining the number of debit cards and drop in credit cards. OECD countries had an increase in the number of adults with cards. These movements are shown in charts 4 and 5 below.

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[3] Percentage of interviewees that reported using mobile money, debit or credit card or cellphone to make a payment from an account, or even reported having used the internet to pay for bills or shop in the last 12 months. It also includes respondents that reported the payment of bills, submitting or receiving remittances, receiving payments for agricultural products, government transfers, salaries, or public sector pension directly to or from a financial institution account or through a mobile money account in the last 12 months.

Graph 4 – Comparison between Brazil, Latin America and the Caribbean, and OECD of adults with a debit card (% age 15+)
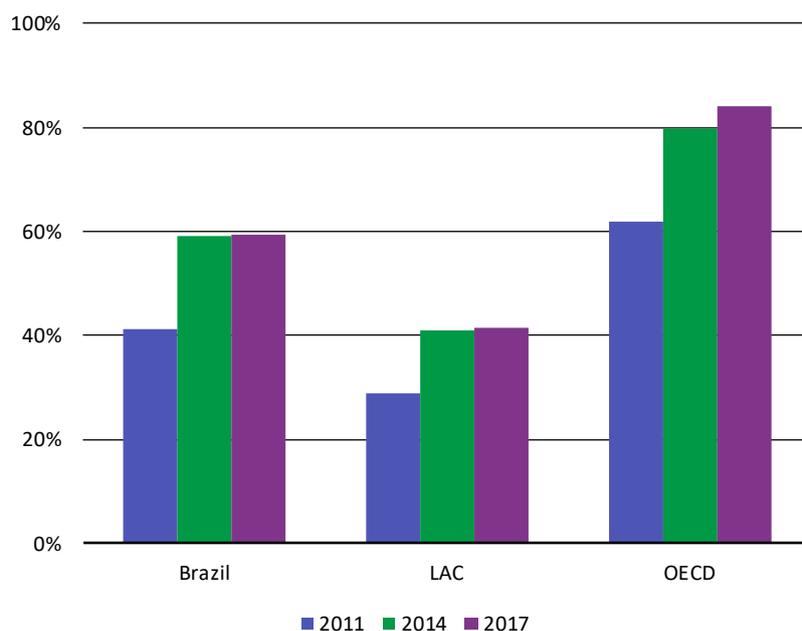
Graph 5 – Comparison between Brazil, Latin America and the Caribbean, and OECD of adults with a credit card (% age 15+)
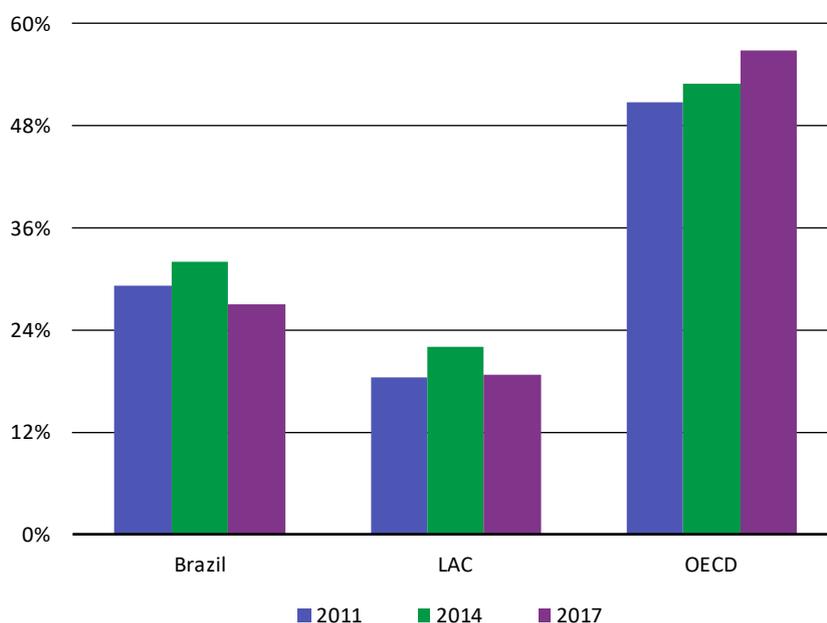
The savings habit increased in Brazil: while 28% of people declared to have saved some money in 2014, 32% did it in 2017. In all groups was observed an increase or stability in the number of people who saved money in 2017. However, Brazil still has the lowest savings level compared to other groups of countries (charts 6 and 7). Despite the increased level of savings in Brazil related to the average of Latin America and the Caribbean countries, the habit of saving is below the average of other BRICS countries, and still is a relevant challenge in the financial inclusion in Brazil.

Graph 6 – Adults with savings in financial institutions in countries forming the BRICS

Fonte: Global Findex

■ 2011 ■ 2014 ■ 2017
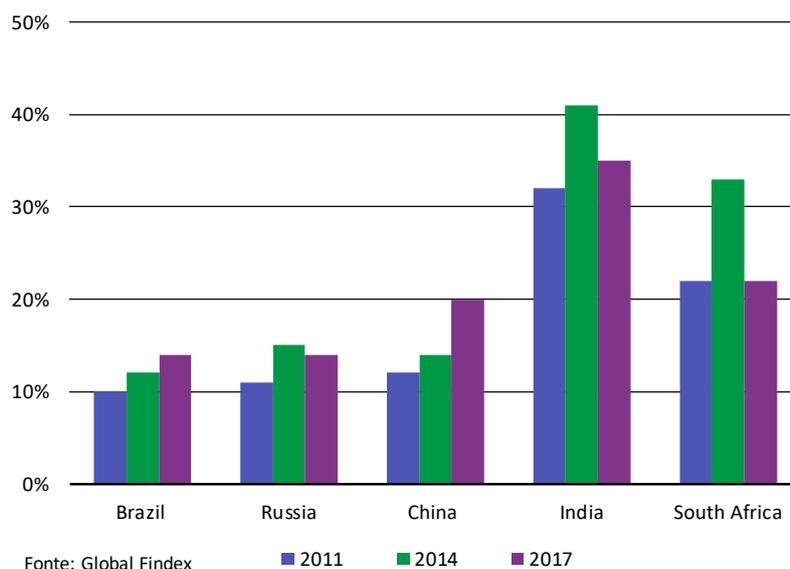
Graph 7 – Comparison between Brazil, BRICS, Latin America and the Caribbean, and OECD of adults with savings in financial institutions

■ 2011 ■ 2014 ■ 2017

Fonte: Global Findex
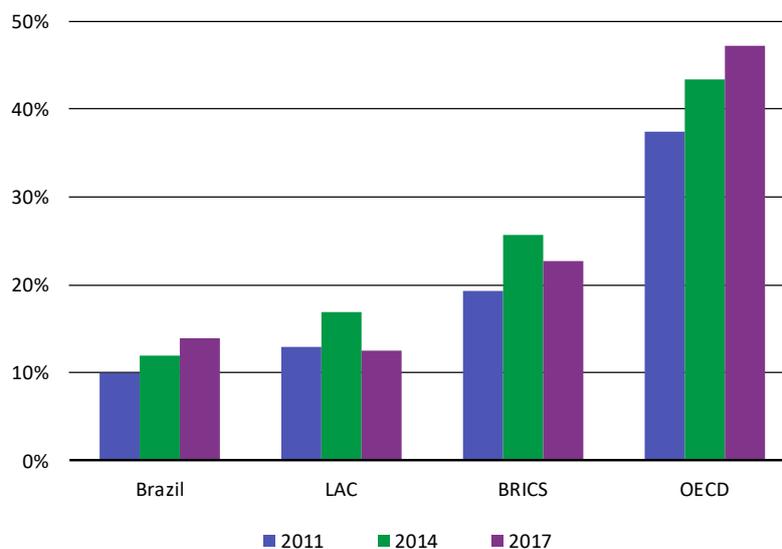
On the other hand, Brazilians' financial resilience seems to have undergone a significant 10% improvement from 2014 to 2017. While only 35% of interviewees stated to be able to obtain emergency resources in 2014, 46% made that statement in the last round of the survey. In Latin America, the movement was contrary, reducing from 46% in 2014 to 41% in 2017.

This situation is different regarding to credit. There was a stagnation in general terms: 40% of Brazilians declared to have borrowed in the previous year, both in 2014 and 2017. While the percentage of people who have taken a loan from family and friends increased from 6% to 14%, have taken a loan from a financial institution fell from 12% to 9%, between 2014 and 2017 (charts 8 and 9). Compared to Brazil, South Africa also had a considerable drop. However, the average BRICS countries showed a slight increase, while the

average of Latin America and the Caribbean and OECD countries showed a slight decrease in the level of loans with financial institutions.

Considering people who borrowers from a financial institution or used credit cards, Brazil (26.3%)[4] is above the Latin America average (21.3%) in 2017.

Graph 8 – Adults with loan in financial institutions in countries forming the BRICS
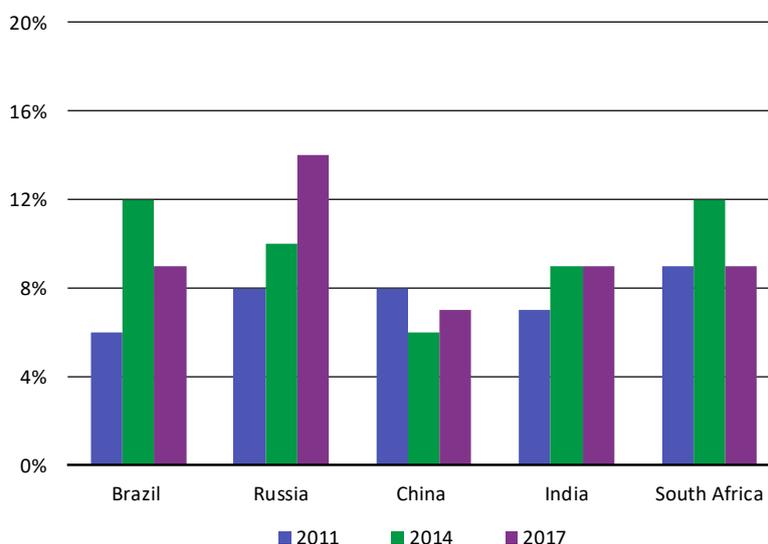
Fonte: Global Findex

Graph 9 – Comparison between Brazil, BRICS, Latin America and the Caribbean, and OECD of adults with loans in financial institutions
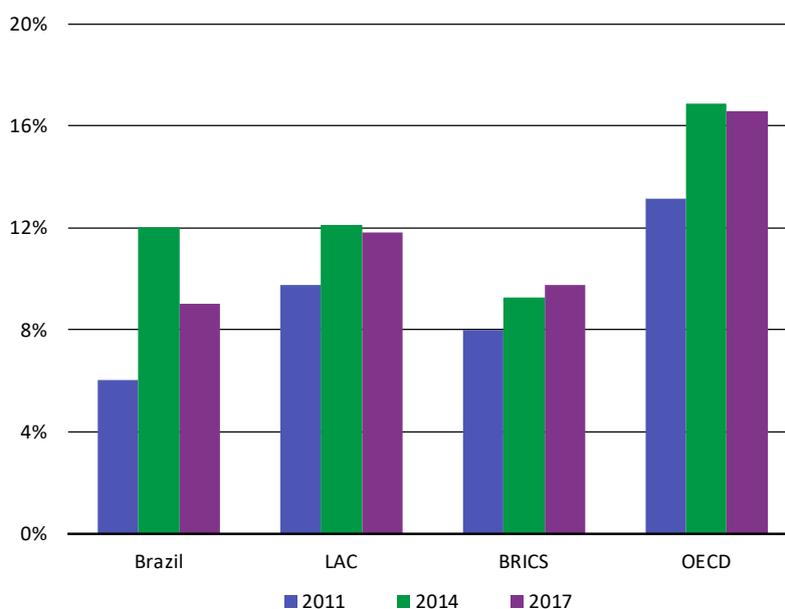
Fonte: Global Findex

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4   The difference between the amounts obtained by Global Findex and those of the Central Bank is that, in addition to the Findex data being declaratory, they consider loans contracted in the last year, while the BC borrowers data are inventories.

» Conclusion

Despite the modest progress noted between 2014 and 2017 in relation to the percentage of adults with a banking account, Brazil still has a prominent position in the continent, getting closer to other countries that are members of BRICS. The increased number of Brazilians with banking accounts contrasts with a drop in some specific groups, such as young adults.

Regarding the main reasons why people remain unbanked, Brazilians' responses followed the majority, including lack of money as the main reason, followed by the high cost of financial services, another family member with an account and lack of trust in the financial system.

In addition, Brazil still has the lowest savings level compared to other groups of BRICS countries despite the increased savings level in the country. Therefore, the habit of saving remains a relevant financial inclusion challenge in Brazil.

With regard to credit, there was a stagnation in the proportion of Brazilians who borrowers from financial institutions.

Concerning the way people make and receive payments, debit card ownership remained stable between 2014 and 2017, while credit card ownership declined, as did the use of debit and credit cards to make purchases. The region of Latin America and the Caribbean presented the same movement observed in Brazil.

The challenge of measuring all aspects of Financial Citizenship is continuous and can be approached in several ways. The reviews presented in the Outlook of Financial Citizenship section largely use the information received by the Central Bank, sent by financial institutions.

This review is quite comprehensive and detailed, but it does not capture all the nuance of financial citizenship. To complement these data, it is important to take into account information collected through household surveys. Consumer surveys help getting the whole picture, as they present consumer's preferences, difficulties, and behavior toward financial products and services.

The annual survey made by the National Confederation of Store Managers (CNDL) and SPC Brazil on the use of credit[2] maps the habits of credit utilization and investigates consumer's attitudes and choices that help to understand the representation of credit in their lives and understand the decision-making process as to the payment methods presented at the time of purchase.

» Purchase behavior

The most commonly used means of payment for purchases are cash and debit cards: 41% of respondents always prefer to pay immediately (especially C/D/E classes) and 34% choose to pay immediately if the discount is beneficial (especially A/B classes).

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[1]   This text was prepared by the Department of Promotion of Financial Citizenship (Depef) from the Central Bank of Brazil, based on SPC survey data.

[2]   Methodology of the "Uses of Credit" survey (SPC):
   •   Target audience Consumers from all Brazilian capital cities, men and women, aged 18 or over, from all income brackets.
   •   Collection method: survey made online. Data were post-weighted to be representative of the studied universe.
   •   Sample size of the survey: 910 cases, generating a general margin of error of 3.2pp for a confidence interval of 95%.
   •   Date of data collection: March 8th to 22nd, 2018.

[3]   The arrows indicate the disaggregation where it was possible to notice a statistically significant difference for the confidence interval of 95%.

Table 1 – Preference for immediate payment x in installments

	General	Gender		Age			Class	
		Man	Woman	18 a 34	35 a 54	55 ou more	A/B	C/D/E
Always prefer to pay immediately	40,6%	39,3%	41,9%	41,4%	42,7%	35,8%	27,5%	44,4%
Choose to pay immediately if the discount is beneficial	33,9%	37,5%	30,6%	30,3%	33,5%	40,9%	47,7%	30,0%
Analyze only the amount of installments of the installment plan and check if he/she is able to pay	13,8%	13,1%	14,4%	17,7%	13,0%	8,1%	14,5%	13,5%
Always prefer to pay in installments	9,3%	7,7%	10,7%	9,3%	8,4%	10,7%	9,1%	9,3%
I do not know	2,4%	2,4%	2,5%	1,2%	2,4%	4,5%	1,2%	2,8%

Source: "Uses of Credit" survey made by SPC

The preferred means of making purchases in installments are credit cards (66%), mainly for A/B classes; store installment plan/collection order (13%), most popular among women and classes C/D/E and less popular among older people; and financing (4%).

On average, installments are paid in five months. To determine the quantity of installments to be paid, 31% take into account the adequacy for their planning and budget and 18% choose the smallest number of installments possible.

» Types of credit used

Of all the types of credit investigated by the survey, the most used over the last 12 months among the respondents were credit cards[4] (paid in full, installments with and without interest, and revolving credit), 67%; store installment plan, 27%; and overdraft limit, 17%. Among those who have obtained some type of loan, 14% requested payroll loans and 12% personal loans, both in banks.

Table 2 – Have you used any type of credit over the last 12 months?

	Yes	No	I do
Credit Card (bank, store or some other institution)	67,5%	30,4%	2,1%
Store Installment plan (monthly payments, payment slip for a term or card for exclusive purchases in a store)	26,6%	70,0%	3,4%
Overdraft limit	16,7%	79,6%	3,7%
Payroll loan (discounted directly on payroll)	13,8%	82,9%	3,3%
Personal loan in banks (no payroll discount)	11,7%	85,6%	2,7%
Financing (e.g. cars/motorcycles, real estate, education, etc)	9,8%	87,2%	3,0%
Personal loan in finance companies (no payroll discount)	7,5%	89,2%	3,3%
Postdated check	7,2%	89,5%	3,2%
Personal loan in finance companies (discounted directly on payroll)	6,5%	89,9%	3,5%

Source: "Uses of credit", survey made by SPC

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[4] The card item includes the following types: payment in full, payment in installments proposed by the merchant (without interest), payment in installments and revolving credit. Even though it is used by a large number of borrowers, it is noteworthy the volume of transactions is usually low. According to data from the BC, in terms of volume, credit card accounts for 12% of the credit portfolio (9% of which paid in full; 1% in installments; 2% revolving credit).

Women used store installment plans more than men did. Older people, over 55 years old, rarely used store installment plans, preferring the payroll loan. The older the age, the larger the application for payroll loans. A/B classes used proportionally more credit cards, overdraft limit and payroll loans in relation to the C/D/E classes, which preferred credit cards and store installment plans.

Table 3 – Have you used any type of credit over the last 12 months?

	General	Gender		Age			Class	
		Man	Woman	18 a 34	35 a 54	55 ou more	A/B	C/D/E
Credit Card (bank, store or some other institution)	67,5%	67,5%	67,5%	68,9%	66,7%	66,4%	84,8%	62,6%
Store installment plan (monthly payments, payment slip for a term or card for exclusive purchases in a store)	26,6%	22,3%	30,7%	31,7%	30,2%	12,0%	23,6%	27,5%
Overdraft limit	16,7%	18,2%	15,3%	16,0%	18,9%	14,2%	29,3%	13,1%
Payroll loan (discounted directly on payroll)	13,8%	17,2%	10,6%	6,9%	12,8%	27,4%	26,7%	10,1%
Personal loan in banks (no payroll discount)	11,7%	12,8%	10,6%	12,3%	11,6%	10,7%	13,0%	11,3%
Financing (e.g. cars/motorcycles, real estate, education, etc)	9,8%	11,4%	8,3%	12,7%	9,5%	5,1%	15,6%	8,1%
Personal loan in finance companies (no payroll discount)	7,5%	9,3%	5,8%	7,2%	6,7%	9,4%	12,1%	6,2%
Postdated check	7,2%	7,0%	7,5%	6,6%	8,4%	6,4%	11,5%	6,0%
Personal loan in finance companies (discounted directly on payroll)	6,5%	7,1%	6,1%	5,6%	5,4%	10,0%	11,5%	5,1%

Financing and loans are the modalities which are more frequently requested directly to banks/institutions and stores. On the other hand, overdraft and credit cards are the most acquired modalities after acceptance of an application (by bank, institution or store).

The loan is the modality of credit where people check fees and interest rates the most since they are actively sought by the consumer, whereas the overdraft is the modality where these aspects are least observed, as it is a pre-approved credit line.

Table 4 – Verification of rates and interest per type

	Yes	No	I do not
Credit card	60,0%	30,3%	9,1%
Store Installment plan	62,4%	27,8%	7,2%
Loan	70,5%	23,2%	6,4%
Overdraft	47,9%	44,7%	7,4%
Financing	71,4%	26,3%	2,3%

Source: "Uses of Credit" survey made by SPC

Among those who have used credit over the last 12 months, the store installment plan is responsible for "blacklisting" the most people, even though 69% of the respondents have claimed to control their expenses with this modality. On the other hand, overdraft is the modality that "blacklisted" the least consumers. The postdated check is the modality of credit where the consumer has the most control of his/her expenses, whereas the credit card is the one where the consumer has the least control.

Table 5 – Have you ever been blacklisted?

	Yes	No	I do not	Base
Credit card	47,7%	48,3%	4,0%	655
Store Installment plan	58,3%	40,7%	0,9%	241
Postdated check	44,9%	54,1%	1,0%	84
Financing	39,0%	58,4%	2,6%	104
Loan	34,7%	61,4%	3,9%	203
Overdraft	29,6%	64,9%	5,5%	176

Source: "Uses of Credit" survey made by SPC

Table 6 – Do you control your expenses?

	Yes	No	Base
Credit card	66,9%	29,6%	655
Store Installment plan	69,1%	30,9%	241
Postdated check	84,6%	15,4%	84
Financing	77,1%	22,9%	104
Loan	75,3%	24,7%	203

Source: "Uses of Credit" survey made by SPC

» Credit card

Among the respondents, 67% have used credit cards over the last 12 months. There is no significant difference in the use of cards between men and women and among different ages. However, they are more frequently used by A/B classes (85%) in comparison to C/D/E classes (63%).

Graph 1 – Use of credit card over the last 12 months
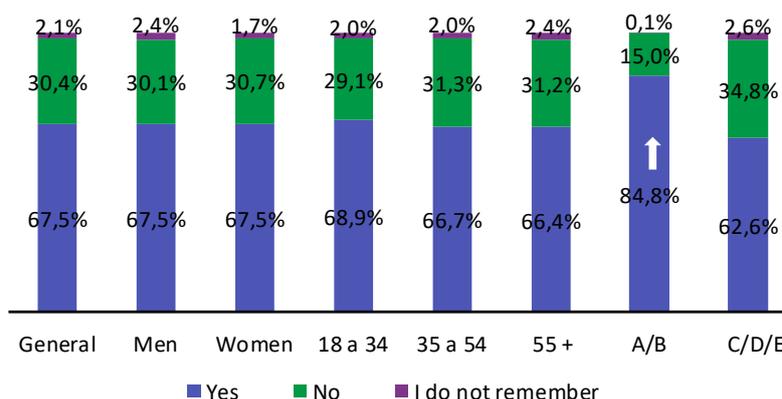
Source: "Uses of Credit" survey made by SPC

Among those who have not used credit cards, most respondents, 39%, prefer to pay immediately and the remaining respondents, 30%, does not have credit cards because they were blacklisted in credit restriction registries.

The main reasons for having a credit card were: to meet the need for some unforeseen circumstance (44%), to facilitate payment in installments (38%) and to facilitate online purchases (34%). For 17%, the main advantage of paying purchases by credit card is to be able to pay the amount of purchases in installments, 16% believe that the advantage is the safety of not having to carry money and 15%, the possibility of shopping

even without having money available. However, 33% of them believe that there is a risk of losing control of how much has already been spent and getting into debt.

On average, the respondents have 2 credit cards (A/B classes have a higher average). On the other hand, 18% do not have credit cards, especially in C/D/E classes. The average annuity for credit cards is BRL 70. However, 45% of the respondents are exempt of the annuity and 32% of them do not know the cost of it.

Banks are the main card operators. Among those with a credit card, 74% of them have bank cards (mainly men and A/B classes), whereas 39% have store cards (especially women) and 13% have a digital bank card.

Taking into account the respondants who could inform the amount of installments still to be paid (60%), the average amount of outstanding credit card installment is 6.2.

» Payment Difficulty

Among the card users, 33% of them have already had the card blocked due to late payment of the invoice and 48% have been blacklisted. While 46% of the respondents always pay the invoice in full, 21% of them have at least once paid only the minimum amount, but have not done so for over a year, 12% usually pay the minimum amount when they need it and 2% have stated they always pay only the minimum amount.

It is noteworthy that there is no significant difference between the A/B and C/D/E classes when it comes to the minimum payment frequency, which seems to show that the difficulty of managing the use of credit card properly is not only a result of lack of funds. There is also no great difference in men and women's behavior, but one can notice a difference between ages, as the minimum payment feature is used more commonly among young people.

Table 7 – Have you paid or usually pay only the minimum amount of the credit card invoice?

General	Gender		Age			Class	
	Man	Woman	18 a 34	35 a 54	55 ore more	A/B	C/D/E
I never paid the minimum, always paid the full amount	45,9%	44,5%	47,3%	43,9%	42,2%	55,5%	50,9%	44,0%
I already paid, but for at least 12 months I have not paid this way	20,6%	22,5%	18,8%	19,4%	22,2%	20,2%	18,1%	21,6%
I never paid the minimum, but I already paid only part of the invoice	12,9%	12,8%	13,0%	10,7%	14,1%	15,1%	11,4%	13,5%
Sometimes I use to pay the minimun when I need to	12,3%	11,0%	13,6%	15,5%	11,6%	7,8%	12,3%	12,4%
Always pay only the minimum	2,1%	2,1%	2,1%	2,7%	2,0%	1,2%	2,8%	1,8%
I don't know/I don't remember	6,1%	7,1%	5,2%	7,8%	7,8%	0,2%	4,5%	6,7%

Source: "Uses of Credit" survey made by SPC

Among those who have already paid only the minimum amount of the credit card invoice, the number of people who know the new credit card's revolving credit rule[5] is high (80%). Among those, 53% said they understood the rule, whereas 27% could not understand it. Out of the respondents of C/D/E classes, 25%

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[5] The National Monetary Council issued the Resolution No. 4549, dated January 26th, 2017, in order to improve the regulation and promote more proper ways of financing the outstanding balance of the credit card invoice and other postpaid payment instruments, stating that the outstanding balance not fully paid on the due date may only be financed in the form of revolving credit until the due date of the subsequent invoice (usually thirty days). Therefore, on the next due date, the remaining balance of the revolving credit for the previous period, plus interest for the period, must be fully paid by the customer. The customer may use his own funds to settle the debt or use another credit line offered by the institution, usually through the credit modality known as "invoice installment plan".

did not know the rule.

Among those who have already paid only the minimum amount of credit card invoice and are aware of the new revolving credit rule, 58% of them consider it positive, mainly because the amount of the installment now fits the budget (46%). However, 28% do not think so, especially because the interest rate was abusive and the debt amount became very high (10%).

Graph 2 – Do you know and understand the credit card's revolving credit rule?

- He/she does not know
- He/she knows and understands it
- He/she knows, but he/she does not understand very well
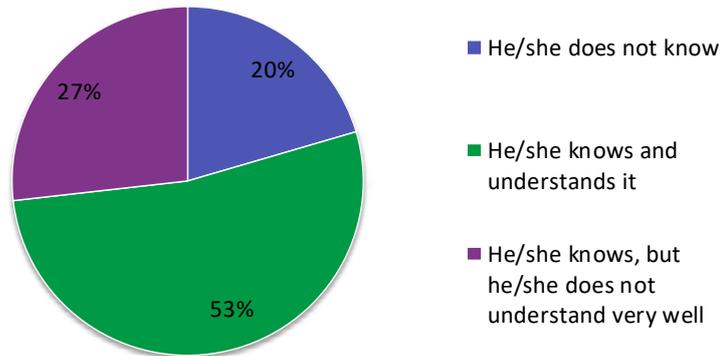
Source: "Uses of Credit" survey made by SPC

Graph 3 – Was the credit card's revolving credit rule positive?

- Yes, the amount of the installment fitted my budget
- Yes, the interests are lower
- Yes, it prevents him/her from making new purchases until he/she pays the previous ones
- Yes, for other reasons
- No, the installment as defined automatically, without my authorization
- No, the interest was extortionate and the debt amount was very high
- No, the number of installments was too big
- No, for other reasons
- I do not know/I didn't use it

Source: "Uses of Credit" survey made by SPC

» Overdraft

Among the respondents, 17% of them made use of overdraft over the last 12 months, mainly the A/B classes, whereas 80% did not, especially the C/D/E classes.

Graph 4 – Use of overdraft over the last 12 months

	General	Men	Women	18 to 34	35 to 54	55+	A/B	C/D/E
I do not remember	3,7%	3,1%	4,4%	3,6%	3,8%	3,9%	1,7%	4,3%
No	79,6%	78,8%	80,3%	80,3%	77,3%	81,9%	69,0%	82,6%
Yes	16,7%	18,2%	15,3%	16,0%	18,9%	14,2%	29,3%	13,1%

Legend: ■ Yes ■ No ■ I do not remember
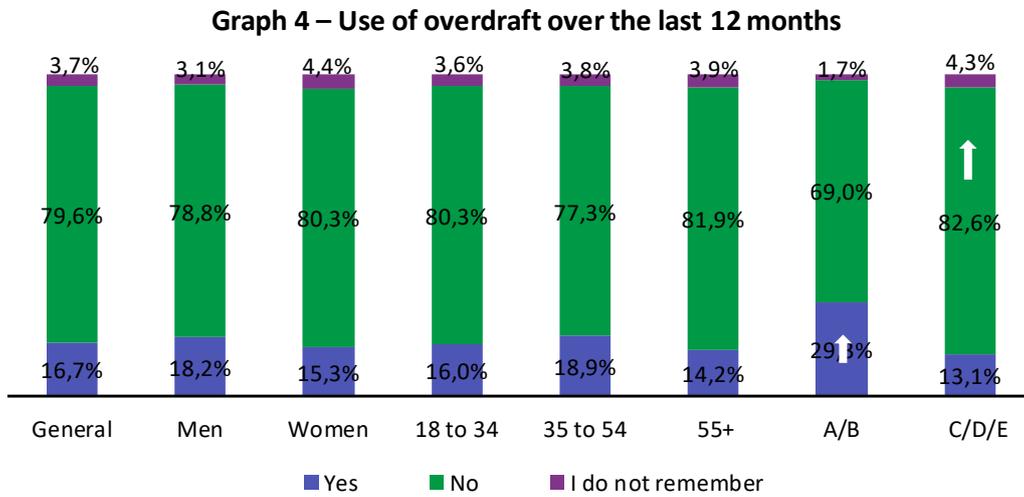
Source: "Uses of Credit" survey made by SPC

The main reasons provided for overdraft were purchase of medicine and treatment of illness (34%), payment of outstanding debts(23%) and unforeseen circumstances in vehicle maintenance (18%).

Among those who have used overdraft, 37% of them said they know the percentage of interest and fees charged by the bank, especially the A/B classes (51%). However, 63% of them are not aware of it. In C/D/E classes, 72% of them are unaware of the cost of overdraft.

Graph 5 – Do you know the percentage of annual fees and interest charged by banks for the use of overdrafts?

	General	Men	Women	18 to 34	35 to 54	55+	A/B	C/D/E
No	62,8%	64,7%	60,7%	67,9%	65,7%	46,6%	48,8%	71,8%
Yes	37,2%	35,3%	39,3%	32,1%	34,3%	53,4%	51,2%	28,2%

Legend: ■ Yes ■ No
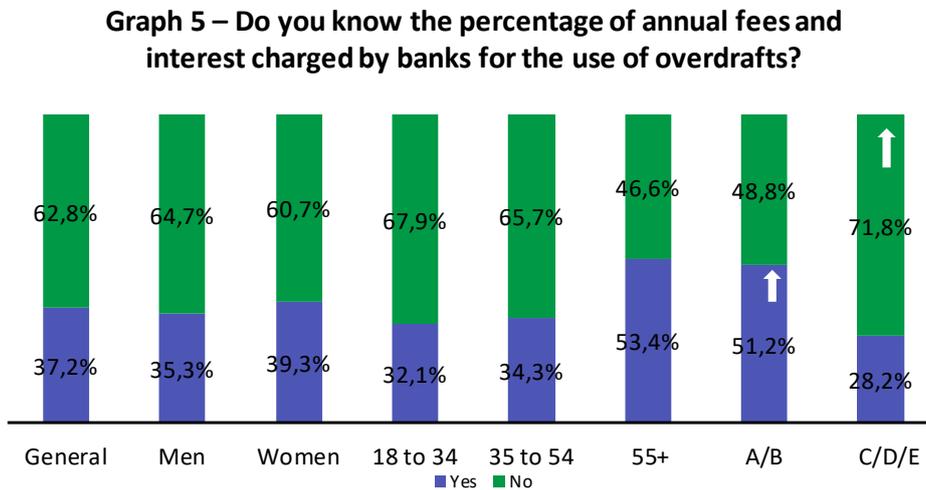
Source: "Uses of Credit" survey made by SPC

Most respondents (53%) did not seek alternatives before overdrafting, whereas 36% sought, with no success.

Graph 6 – Have you sought a credit alternative before using the overdraft?

	General	Men	Women	18 to 34	35 to 54	55+	A/B	C/D/E
I do not remember	11,6%	10,2%	13,1%	19,3%	7,5%	5,1%	7,2%	14,4%
I have not	52,7%	55,3%	49,7%	51,9%	47,8%	64,7%	60,3%	47,8%
I have, but with no success	35,7%	34,5%	37,1%	28,8%	44,7%	30,2%	32,5%	37,8%

■ I have, but with no success   ■ I have not   ■ I do not remember
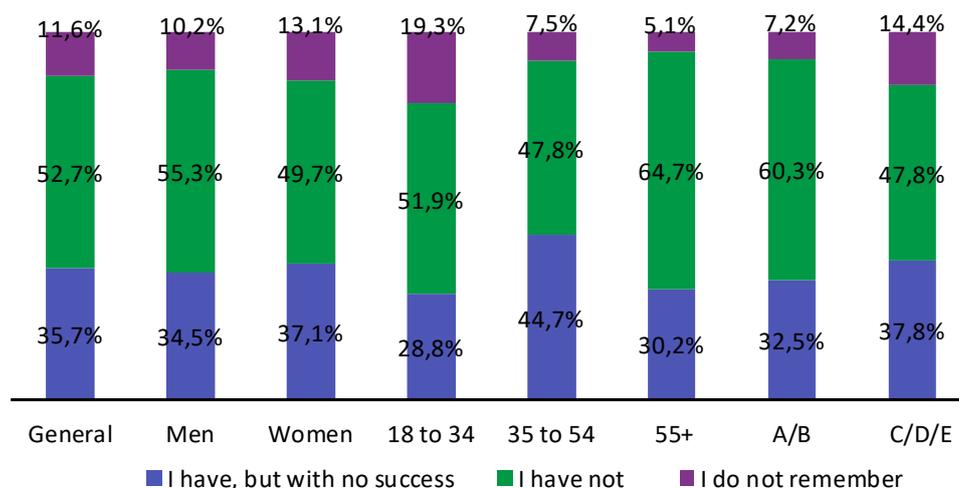
Source: "Uses of Credit" survey made by SPC

» Conclusion

Population surveys help identifying consumer's habits, attitudes, and choices about credit products, as well as understanding their difficulties in accessing credit, their understanding of the costs that are involved, and payment methods.

Immediate payment is still preferred by most respondents, with a higher preference in C/D/E classes (44.4%) than in A/B classes (27.5%).

Financing and lending are the modalities of credit that are more actively searched. Therefore, consumers are more aware of the involved costs, whereas overdraft is the type of credit where these aspects are least observed, as it is a pre-approved credit line. More than half of the respondents who have used the overdraft (53%) did not seek an alternative.

More than half of those who have used the store installment plan (58.3%) and almost half of those who have used the credit card (47.7%) had their name blacklisted at some point. There is also a high number of people who usually pay or have already paid their credit card invoice only partially (47.9%). There is no significant difference between the A/B and C/D/E classes when it comes to the minimum payment frequency, which shows that the difficulty of managing the use of credit card properly is not only a result of lack of funds.

There is still a great deal of unfamiliarity regarding fees and interest rates involved in credit operations. Although many of the respondents have declared that they perform a search on the costs of credit and control their expenses, the number of people who find it difficult to pay their debts is significant. The frequency of use of modalities of credit that are historically more expensive, such as overdraft and the credit card's revolving credit, is also high. Difficulty to pay is perceived in all mentioned modalities of credit.
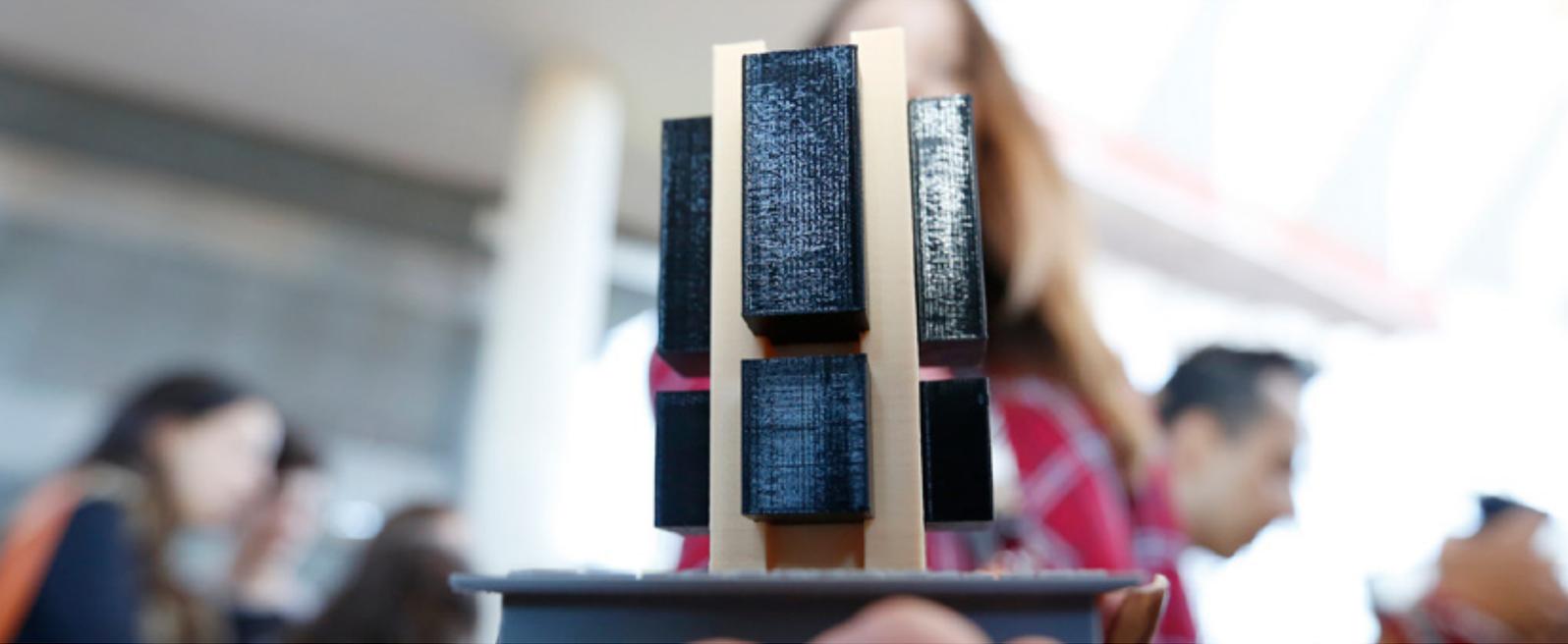
» Introduction

The study of financial citizenship acquires an even greater interest when we refer to the portion of the most vulnerable population, since these individuals can be, at the same time, affected by the lower provision of goods and services suited to their reality and by the greater need of instruments to face uncertain income. This box intends to add some data to this picture, using information from the Unique Registry for Social Programs of the Federal Government (CadÚnico), matched with the Customer Registry of the National Financial System (CCS) and with the Credit Risk System (SCR) of the Banco Central do Brasil (BCB). The information for the month of December is used for the years 2012 to 2017.

The groups used for the segmentation throughout the text are beneficiaries of *Bolsa Família* (PBF), individuals enrolled in CadÚnico, that are not beneficiaries of this mentioned program (Non-PBF) and the rest of the population (Non-CadÚnico). In order to maintain consistency with other Financial Citizenship indexes, only the information of individuals between the ages of 15 and 100 was used.

Bolsa Família's beneficiaries represent a steady participation of about 12% of the total population over the period under analysis (Table 1). On the other hand, the group of non-beneficiaries registered in CadÚnico presented a gradual increase, from 5% to 10%. Thus, these two vulnerable groups represented, in 2017, 22% of the adult population. Part of the temporal variations of the statistic we present may be due to changes in composition, given that in each period they are computed using data from the individuals belonging to their respective groups at the time.

Table 1 – Number of people between 15 and 100 years (million)[2]

Year	PBF	Non-PBF	Non-Cad.Único	Total
2012	16	8	123	147
2013	19	10	120	149
2014	20	12	119	151
2015	20	13	121	154
2016	19	14	123	156
2017	20	15	123	158

Source: BC/Cad.Único

» Relationship with the Financial System

CCS allows the identification of individuals who maintain some kind of relationship with financial institutions[3]. Although it does not present more details regarding this relationship, this information allows inferring that there is some degree of access to financial products.

In the most vulnerable populations (PBF and non-PBF) there is a slowdown between 2012 and 2016 in the number of customers[4], unlike the rest of the population (Table 2). Only in 2017 it is possible to notice a reversal of this behavior, with the two populations showing similar growth (8% in the number of customers).

Table 2 – Number of customers (million)

Year	Costumers		
	PBF	Non-PBF	Non-Cad.Único
2012	11	6	109
2013	13	8	109
2014	14	10	111
2015	14	11	114
2016	13	12	116
2017	14	13	118

Source: BC/Cad.Único

In all three groups there was an increase in the percentage of individuals with relationship (level of penetration of the financial relationship[5]), with the highest increase being outside the registry (7.8pp, reaching 96%), followed by Non-PBF (7.2pp, reaching 83%). The PBF group presented the smallest advance, 2pp, reaching the proportion of 70% (Graph 1). The ordering of penetration levels between groups possibly reflects their average income. We can notice, according to these data, that it is important to identify the reasons for the stagnation of access to accounts, especially among the *Bolsa Família* group, and how to promote access to more appropriate digital payment instruments for the public.

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2 The number of individuals in Non-CadÚnico group is the result of the subtraction of the count of individuals in the two CadÚnico groups from the total population. The total population used is the one estimated by IBGE for individuals over 15 years old (https://www.ibge.gov.br/estatisticas-novoportal/sociais/populacao/9109-projecao-da-populacao.html?=&t=resultados). It was not possible to purge from the figure the individuals over 100 years old, since there is no such segmentation in the statistics from IBGE.

3 It is understood as the relationship between customers and financial institutions in which they hold their assets and/or investments. The registry does not contain data for amount, financial activity or balances of accounts/investments. Thus, the data include all accounts not closed, even those that have very low balances or that have not recorded withdrawals, deposits and transfers for long periods.

4 A person may have more than one relationship. The relationship number considers the total, whereas, for the number of customers, each CPF (Individual Taxpayer's Registration) is considered only once.

5   The penetration is the result of the number of customers divided by the total of adults in each group. For PBF and non-PBF, the total adults of the base were considered. For the non-CadÚnico group, the total population estimated by IBGE for those over 15 years old was considered, subtracting the individuals present in CadÚnico.

Graph 1 – Proportion of Individuals with Banking Relationship

PBF — Non-PBF — Non-Cad.Único
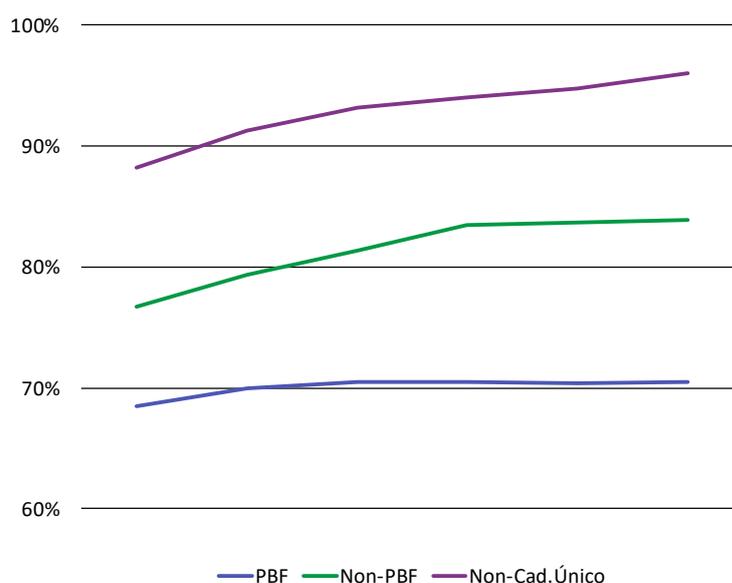
» Credit

The matching of CadÚnico with credit variables are performed using the individual transaction records at SCR. It is important to stress out that, in addition to the age restrictions already mentioned, the total liability restriction[6] equal or over BRL 1000 (in nominal terms) is applied in order to homogenize the series over the years.[7] The existence of a limit from which the obligation to report operations to the Central Bank prevails means that some customers are not included in the base, and there may be more of them among the low-income groups. The analyses performed here are made assuming that the reporting limit does not substantially affect the monitoring of these statistics over time and the comparison of this evolution between the groups.

The increase in total debt and the number of customers for the Non-PBF group stands out (Table 3), since both more than doubled, following the number of people in the registry in this condition. For the PBF group, the number of customers had a decrease of 9.4% and the balance, 13.9%, which is consistent with the gradual decrease of the average balance that resulted in a contraction of 5% (Table 4). The Non-PBF and Non-CadÚnico groups presented a cycle of increase of average balance, followed by a decrease, with a small recovery in 2017, tracking the economic cycle. The peak was for both in the year of 2014 and even in the recession years (2015 and 2016) the average balance remained higher than the one from 2012.

The proportion of people with credit in each population (use of credit) presented similar increases in non-PBF and non-*Cadastro* groups (2.8pp and 2.4pp), while the PBF group had a 4.5pp decrease (Graph 2).

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[6]   The total liability amount includes all amounts due and overdue, in addition to those referring to sureties and guarantees provided by financial institutions to their customers, as well as contracted credits to be disbursed recorded in the monthly trial balance sheets.

[7]   Since 2016, individual information has been reported from the total liability of BRL 200 and above.

Table 3 – Active Portfolio and Customers

Year	Active Portfolio[1]			Customers[2]		
	PBF	Non-PBF	Non-Cad.Único	PBF	Non-PBF	Non-Cad.Único
2012	23	22	1401	3	2	46
2013	28	36	1532	3	3	48
2014	29	46	1623	3	4	49
2015	24	49	1567	3	4	49
2016	20	49	1534	2	4	49
2017	20	54	1571	2	4	49

Source: BC/Cad.Único

[1]Amounts in billion Brazilian

[2]Number of people in million

SCR-cadúnico;

RT>=BRL 1000, Brazilian Reais in December 2017

Table 4 – Average Balances[1]

Year	PBF	Non-PBF	Non-Cad.Único
2012	9.003	11.129	30.139
2013	8.969	11.903	32.014
2014	9.211	12.439	33.218
2015	8.791	11.662	32.014
2016	8.558	11.414	31.326
2017	8.552	11.954	31.895

Source: BC/Cad.Único

[1]Brazilian Reais in December 2017

Graph 2 – Access to Credit
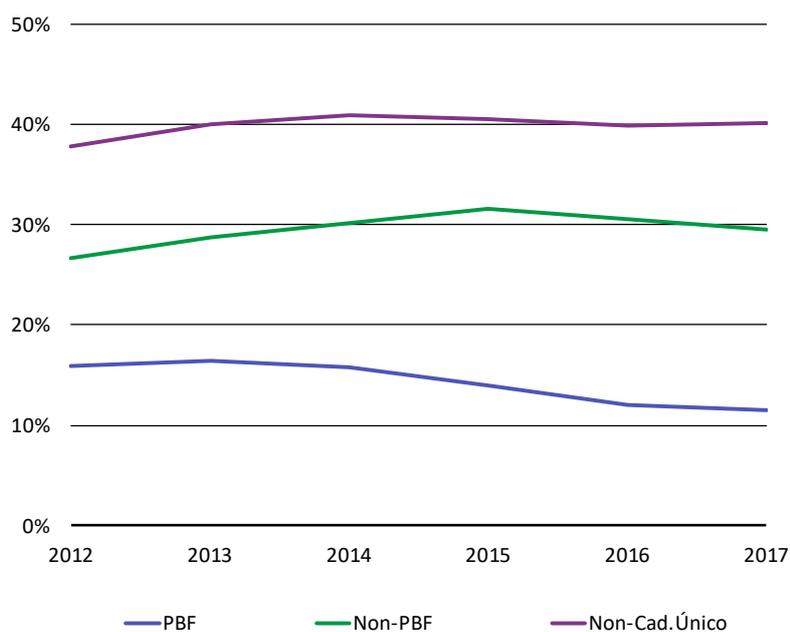
However, credit aggregates are not homogeneous, since they are composed of different products according to purpose, interest rates, terms, existence of collateral, among other characteristics. These differences make it difficult to compare performance measures such as delinquency rates. In order to improve the comparability of these measures, it is important to consider the credit composition in terms of credit category[8] (picture 3) and the borrower's profile (picture 4).

We can notice that SFH real estate financing is an item with a significant participation and that it has grown in all three groups, although it has increased more in the PBF group (16.2pp). Please note that *Minha Casa Minha Vida* (My Home My Life program) Tier 1 loans are not included in this analysis, since they are not reported in SCR[9].

The participation of purchases paid in full and interest-free installments on credit cards has also grown in the three groups, more strongly so in the PBF group, 3.1pp, almost twice the increase in participation of the category in non-PBF group and more than triple the result for Non-CadÚnico.

On the other hand, auto loans had a decrease in participation in the three groups. In their turn, payroll loans have presented an increase in non-PBF group participation and a decrease to the PBF, remaining fairly steady in Non-CadÚnico.

Graph 3 – Composition of Active Portfolio
Bolsa Familia

■ 2017 ■ 2012

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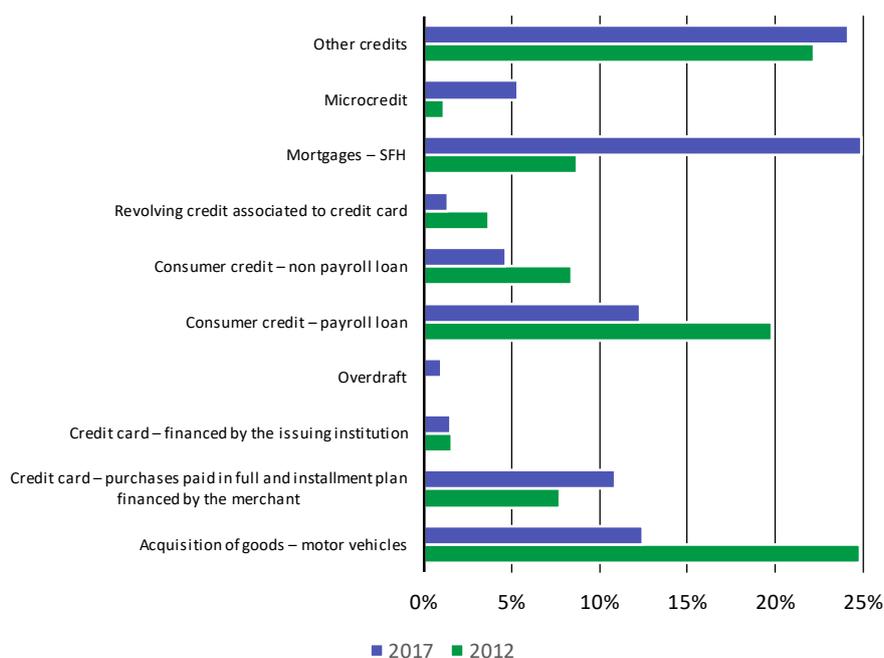
8   The most prevalent credit categories were reported individually, while the other ones were aggregated in the group "others".

9   These loans, although operated by a financial institution, are financed with funds from the Residential Leasing Fund, which assumes the risks of operations.

Graph 4 – Composition of Active Portfolio
CadUnico non Bolsa Familia
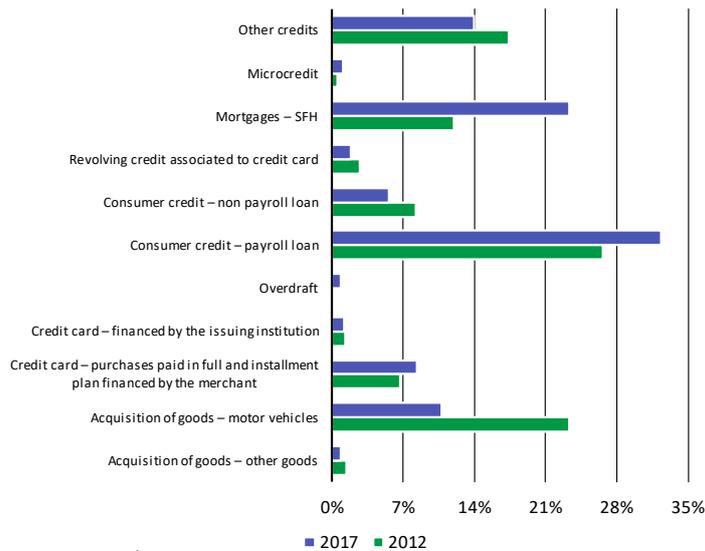
Source: BC/Cad.Único

Graph 5 – Composition of Active Portfolio
Non CadUnico
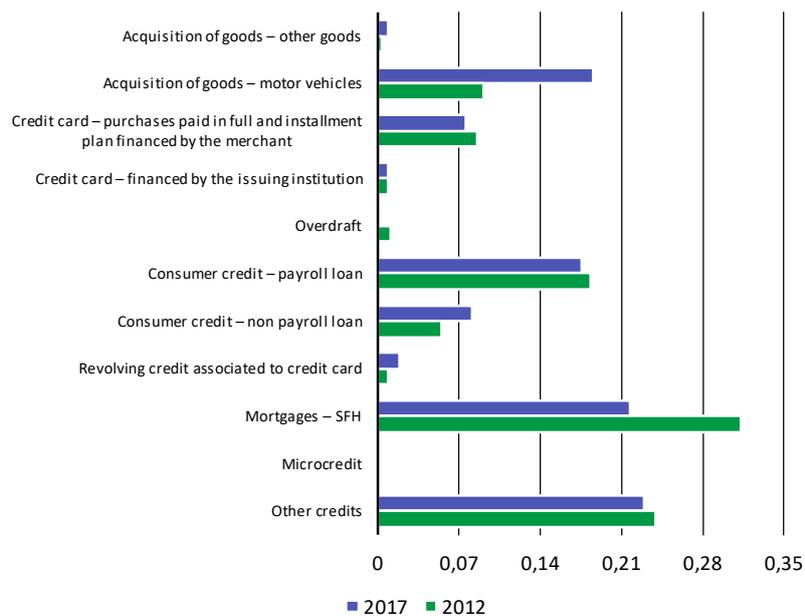
Note: Individuals between 15 and 100 years old, with active portfolio>0, RT>BRL 1000.

Default rates[10] increases as we focus on subsequently lower-income groups (Graph 4). However, given the heterogeneous composition of the debt between the groups, it is not possible, at first glance, to say how much of this difference is derived from the use of credit lines with inherently different risks profiles. To address this issue, synthetic default rates are computed for the PBF and non-PBF groups, indicating what would be the default rate for these groups if, maintaining the observed default rate of each category, they had the same debt composition as the Non-CadÚnico group.

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[10] For the calculation of default rates, the total amount of operations with some installments overdue for more than 90 days (drag concept) was deemed in arrears.

The comparison between observed and synthetic defaults shows that the composition effect generally tends to increase the rate. For the PBF group, about 2pp of default is derived from the composition, showing that expanding access to cheaper credit products, most easily accessed by high-income groups, is important to reduce default in this group.

Graph 6 – Default

Souce: BC/Cad.Único
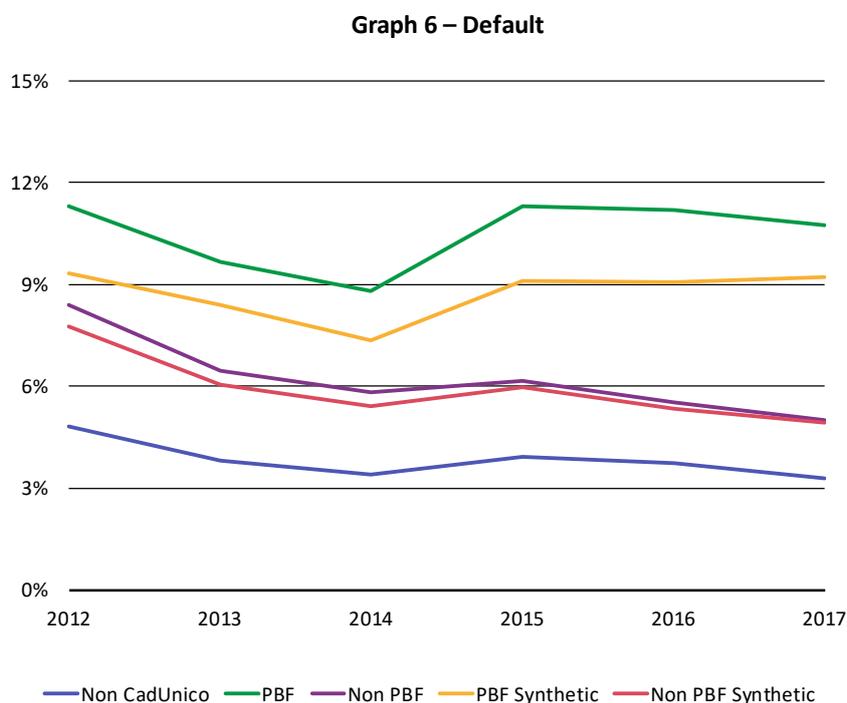
» Credit access and use: segmentation of CadÚnico public

Given the richness of information in CadÚnico, the rest of the text explores the heterogeneity of credit, subdividing the population by gender and education.

GENDER

Women's participation, initially lower than that of men, was higher at the end of the period under review in both CadÚnico groups (Graph 5). As to the average balances (Graph 6), all series presented an increase, except for women in PBF. Men maintain higher average balances than women, and it is noteworthy that men that are *Bolsa Família*'s beneficiaries have a higher-average balance than non-beneficiary women.

For most of the period, women within each group presented higher default rates than men, although the difference between genders was very slight among non-PBF beneficiaries (Graph 7).

Graph 7 – Access to Credit per Gender
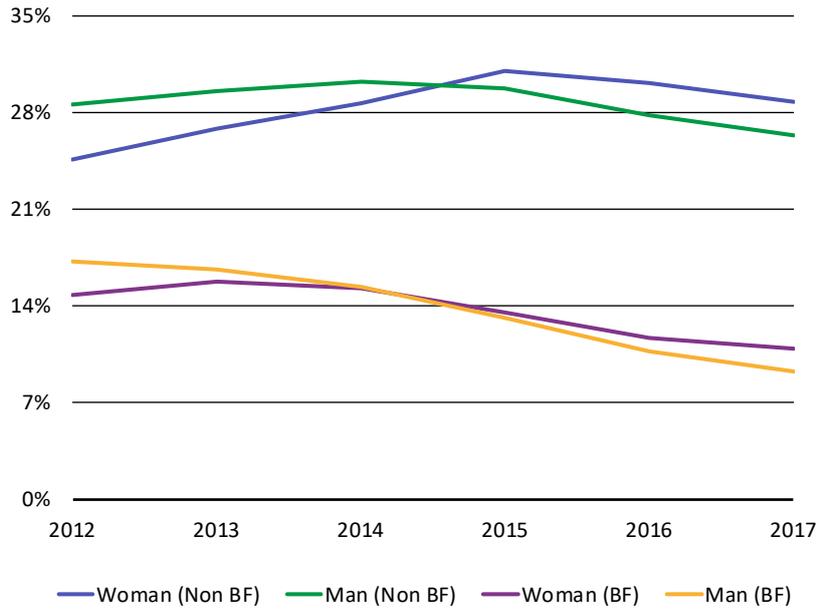
Source: BC/Cad.Único

Graph 8 – Average Balance per Gender
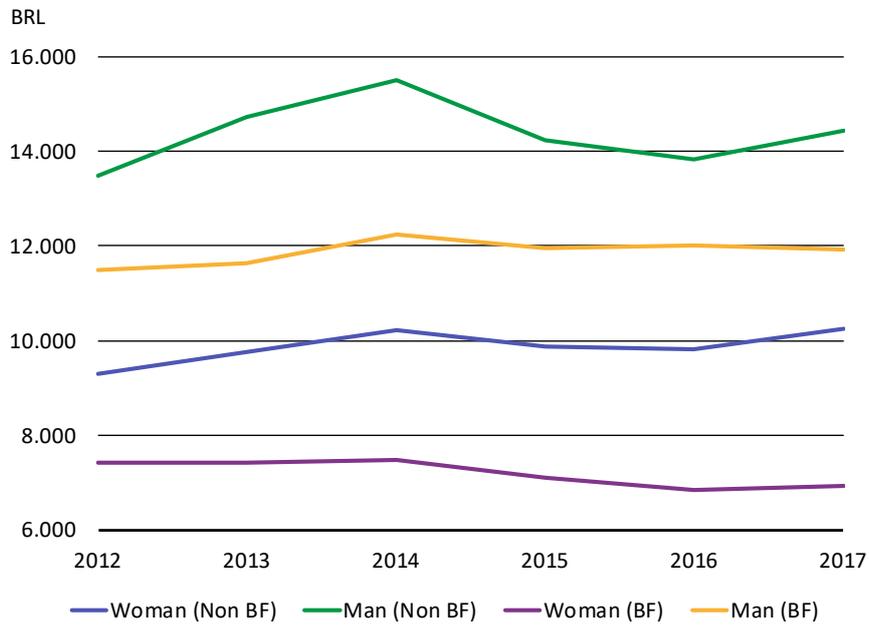
Source: BC/Cad.Único

Graph 9 – Average Balance per Gender

Woman (Non BF) — Man (Non BF) — Woman (BF) — Man (BF)
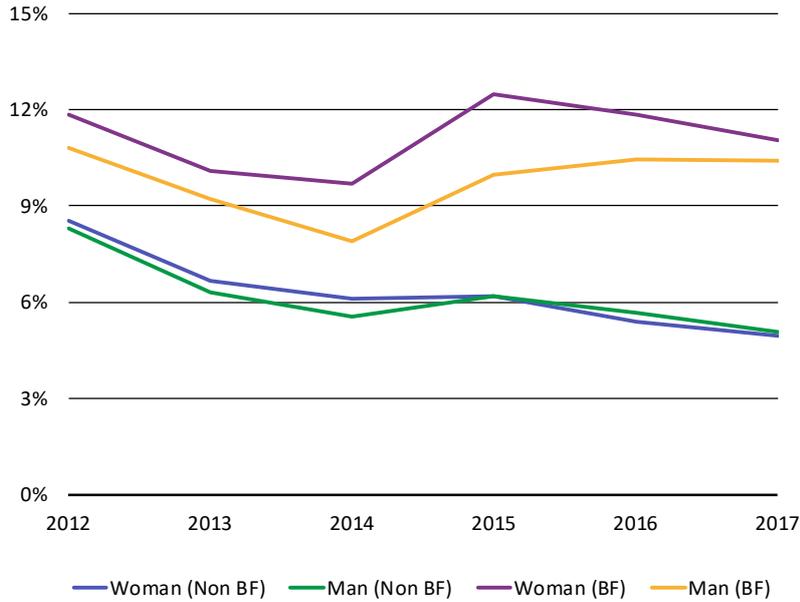
Source: BC/Cad.Único

LEVEL OF SCHOOLING

Use of credit and average balances, in general, increase with the level of schooling (Graphs 8 and 9), with occasional reversals between consecutive schooling levels. The segment with elementary school or some middle school is the group that diverges the most from the rule in the PBF and non-PBF groups, with penetration relatively lower.

Regarding the default (Graph 10), it is noteworthy that it seems to increase with education until some high school, presenting a decrease therefrom.

Graph 10 – Access to Credit
Bolsa Familia

Elementary school or some Middle school
Some Elementary school
Middle school or some High school
High school diploma
No formal education
Higher education started or higher level
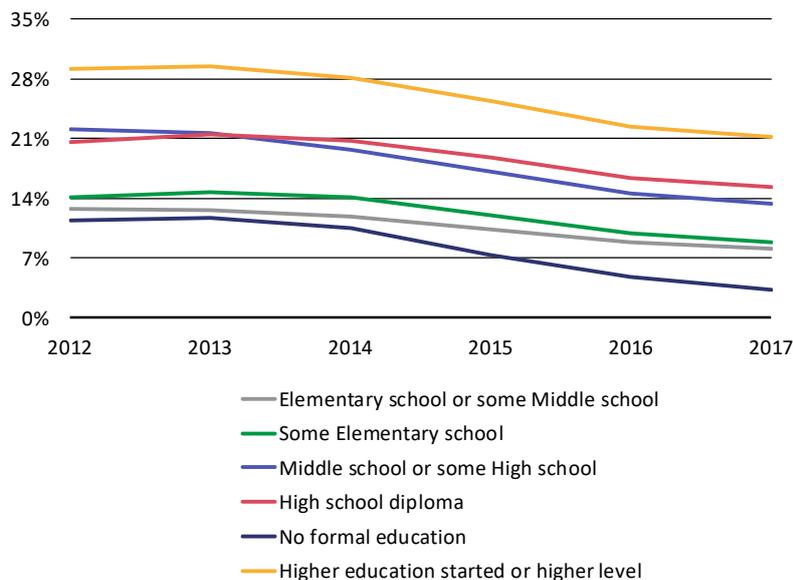
Source: BC/Cad.Único

Graph 11 – Access to Credit
CadUnico Non Bolsa Familia (NBF)

- Elementary school or some Middle school
- Some Elementary school
- Middle school or some High school
- High school diploma
- No formal education
- Higher education started or higher level
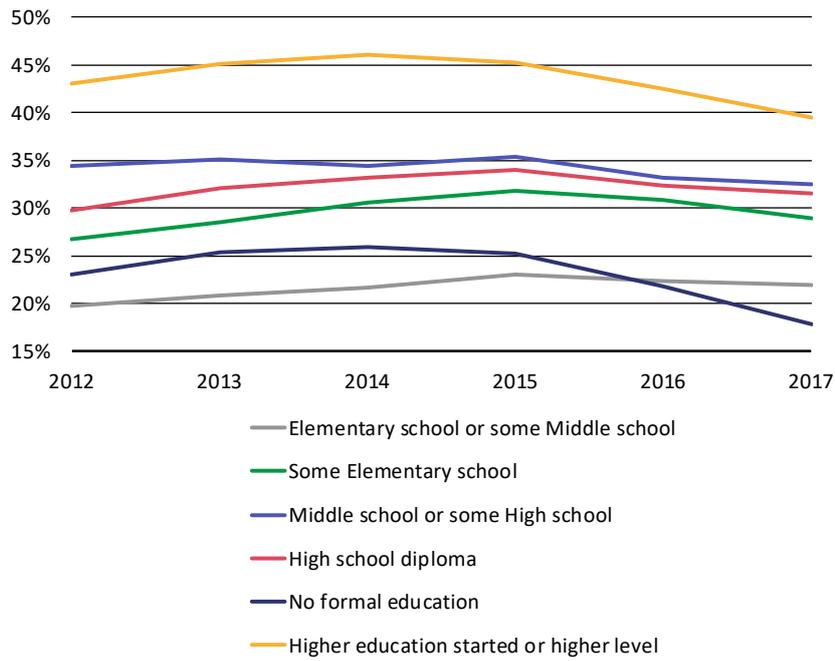
Source: BC/Cad.Único

Graph 12 – Average Balance of CadaUnico
Non Bolsa Familia

- Elementary school or some Middle school
- Some Elementary school
- Middle school or some High school
- High school diploma
- No formal education
- Higher education started or higher level
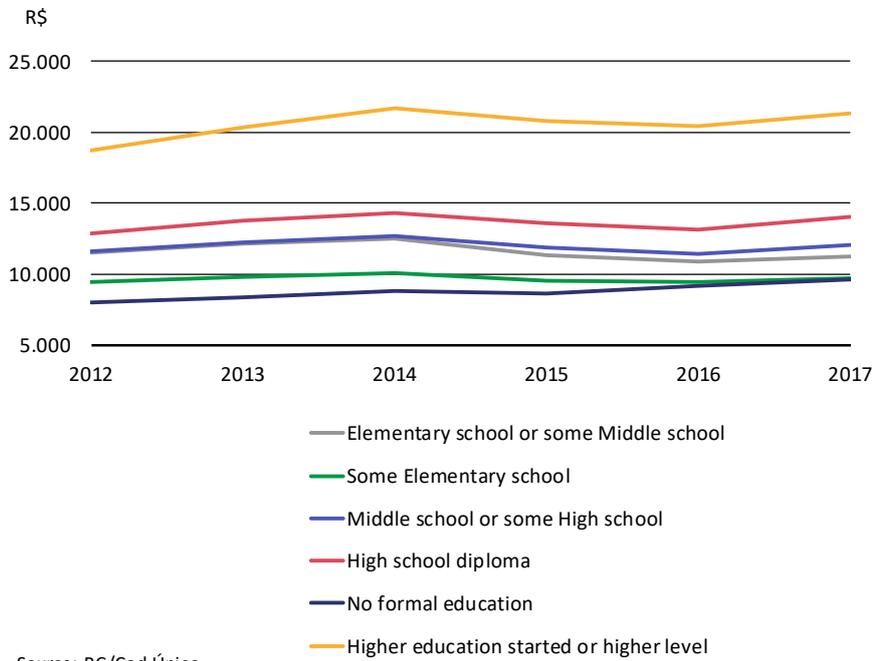
Source: BC/Cad.Único

Graph 13 – Average Balance
Bolsa Familia

R$

- Elementary school or some Middle school
- Some Elementary school
- Middle school or some High school
- High school diploma
- No formal education
- Higher education started or higher level
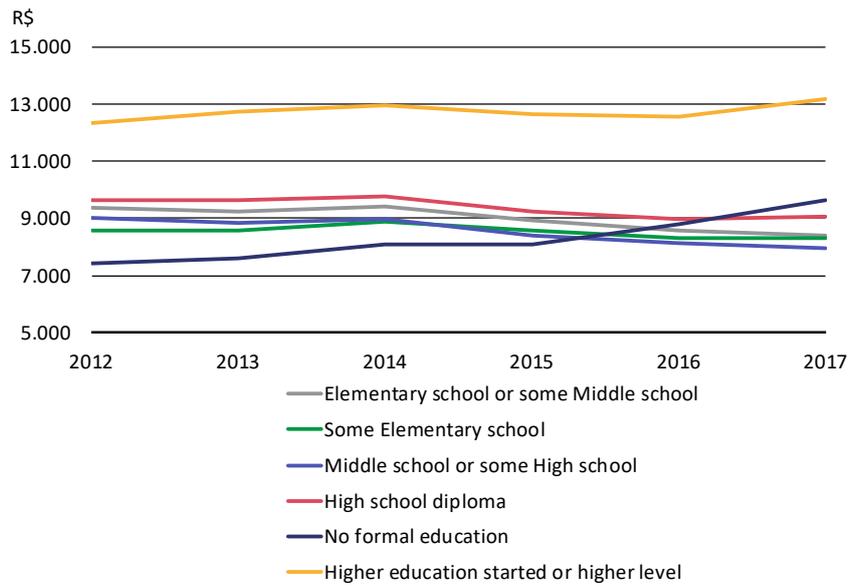
Source: BC/Cad.Único

Graph 14 – Delinquency rate
Bolsa Familia

- Elementary school or some Middle school
- Some Elementary school
- Middle school or some High school
- High school diploma
- No formal education
- Higher education started or higher level
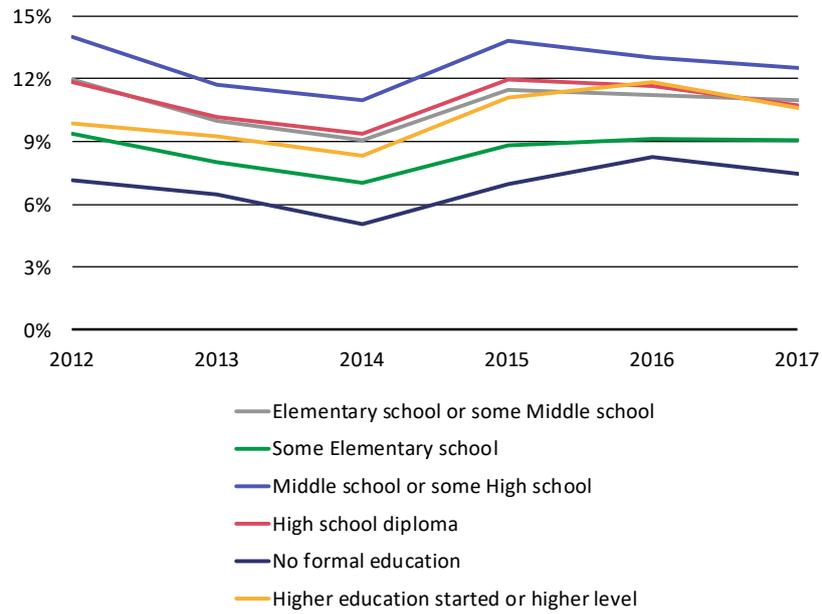
Source: BC/Cad.Único

Graph 15 – Delinquency rate
Cadastro Unico non Bolsa Familia

Elementary school or some Middle school
Some Elementary school
Middle school or some High school
High school diploma
No formal education
Higher education started or higher level
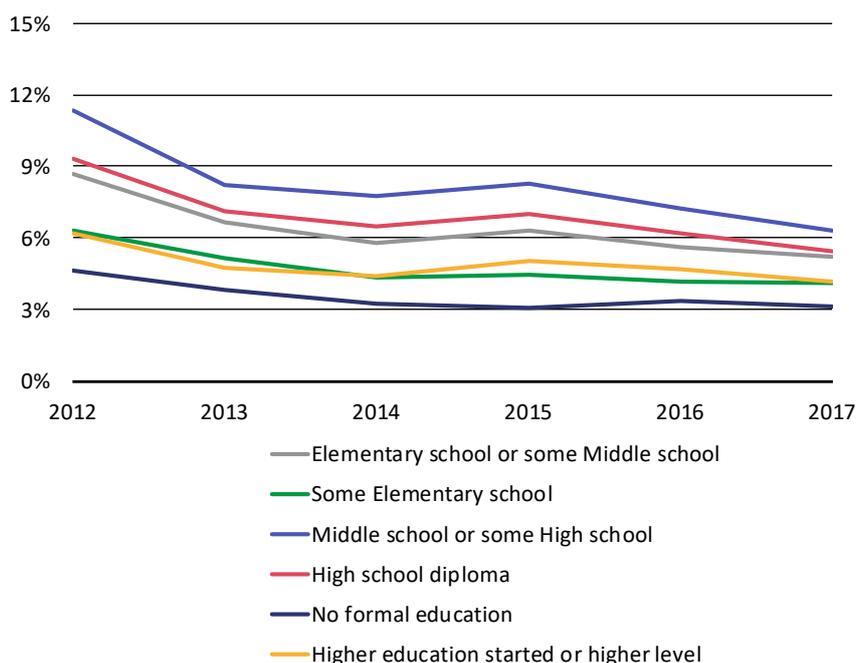
Source: BC/Cad.Único

» Conclusion

The comparison between the PBF, Non-PBF and Non CadÚnico groups as to the penetration of relationships with the financial industry and credit, average balance and default generate ordered results, possibly reflecting the income level of these populations.

In particular, when evaluating default, it is noteworthy that a significant portion of this rate for the PBF group is derived from the composition of the types used by that public.

The text explored the heterogeneity within the Unique Registry, finding some relevant characteristics, such as the credit penetration among women having surpassed that of men in the period under analysis and the fact that the average default rate does not always decrease with the increase in level of schooling.

The heterogeneity of the credit characteristics (use, average balance, composition of types and default) throughout the groups observed and the characteristics analyzed illustrate the need to follow up the exploitation of these data in future studies. Thus, it is expected that this initial study be followed by others that contribute to the deepening of the understanding of the financial habits of families, particularly those with low income, helping in the design of public policies aimed at them.

Payroll loan is a credit modality, which deducts loan installment directly from the payroll or from the social security benefit perceived by the contracting party.[2] This feature leads to a reduced risk of default, once the loan collateral is part of the salary allowing the lender a reduction in the interest rate charged. In fact, studies show that payroll loan had an important role in credit expansion for consumption and reduction of the credit cost since its implementation.[3]

Although it is non-earmarked and not linked to a specific asset that guarantees the operation, the automatic deductions from the salary increases the credibility of the operation and reduces its cost, as shown in Graph 1. Payroll loans is non-earmarked for individuals and, in Brazil, they have a lower cost. In October 2017, interest rates of non-payroll loans were five times higher than payroll loans on average. In the analyzed period, the lowest ratio was the one of March of 2011, in 2.5 times[4].

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[1]   This text was prepared by the Department for Promotion of Financial Citizenship (Depef) of the Central Bank with contributions from Eugênia Motta, professor at UFRJ and officer of the Real Economy Institute.

[2]   For more information, please visit https://www.bcb.gov.br/pre/bc_atende/port/consignados.asp

[3]   Coelho, Mello and Funchal. The Brazilian Payroll Lending Experience, The Review of Economics and Statistics, November 2012, 94(4): 925–934.

[4]   Series of credit data, and other indicators can be obtained in the Central Bank Time Series System available at: https://www3.bcb.gov.br/sgspub/localizarseries/localizarSeries.do?method=prepararTelaLocalizarSeries

Graph 1 – Average interest rate of credit operations non – earmarked – Individuals – % p.y.
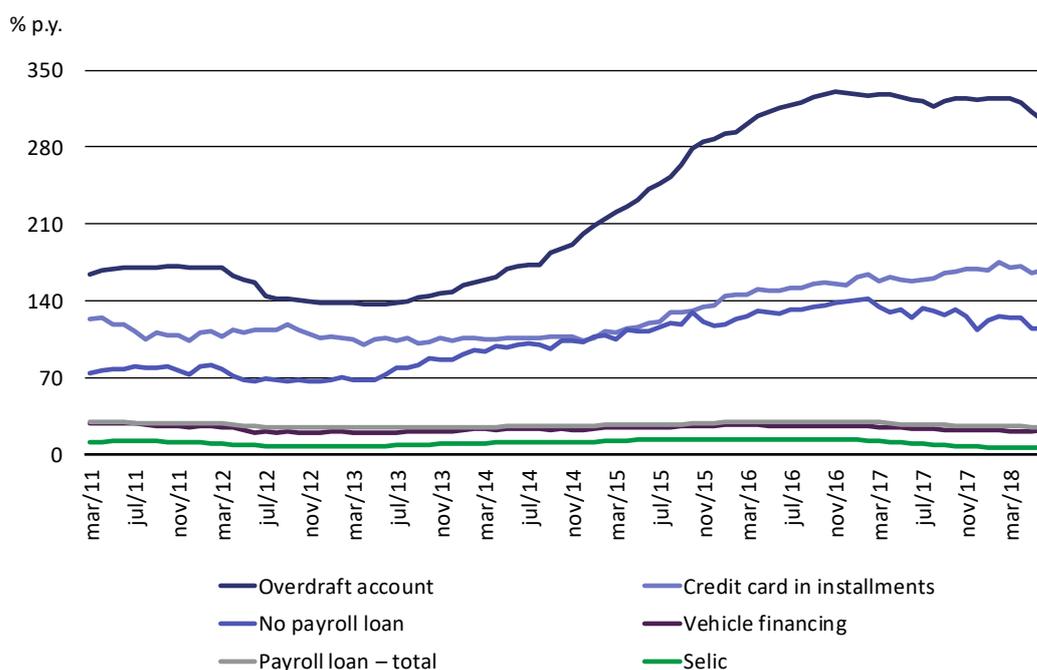
Since 2011, the Central Bank discloses data on payroll loans in three different segments: the ones intended for government employees; for retirees and beneficiaries of the INSS; and for private sector employees ruled by the Consolidation of Labor Laws – CLT[5].

In general, the existing regulation[6] limits the commitment to payroll loan up to 35% of a person's income, 5% of which is intended for credit card payment. Therefore, the borrower can contract more than one operation, as long as the limits are respected.

From 2015 to 2017, public employees had 2.5 payroll loans contracted on average. Retirees and beneficiaries of INSS had 2.8 operations and CLT employees 1.3 operation.

Contracts of public employees reached the average amount of BRL 10.8 thousand in the analyzed period, compared to BRL 3.3 thousand for retirees and beneficiaries, and BRL 5.6 thousand of CLT employees. These numbers reflect the average income differences of each group.[7]

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[5] The regulation of this credit modality is different for the several groups of potential borrowers. Employees under the CLT are governed by Law 10.820 dated 2003. For INSS retirees, article 6 of the aforementioned law authorized this body to regulate the matter and published the Normative Instruction INSS/PRES no. 28, dated 05/16/2008, providing for criteria and operational procedures regarding the assignment of discounts for payment of loans and credit cards, contracted in Social Security benefits. Federal employees are governed by Law 8.112, dated 1990 and Decree 8.690 of 2016. Lastly, state and municipal employees have specific laws for each case.

[6] Military, legislative and judicial bodies have their own regulations.

[7] For reference purposes, average monthly income in the 4th quarter of 2017 was BRL 3,363.00, BRL 1,220.00 and BRL 2,110.00, respectively (amounts calculated by IBGE and Social Security).

Graph 2 – Operation average amount – Payroll loan – Per Sector

BRL thousand
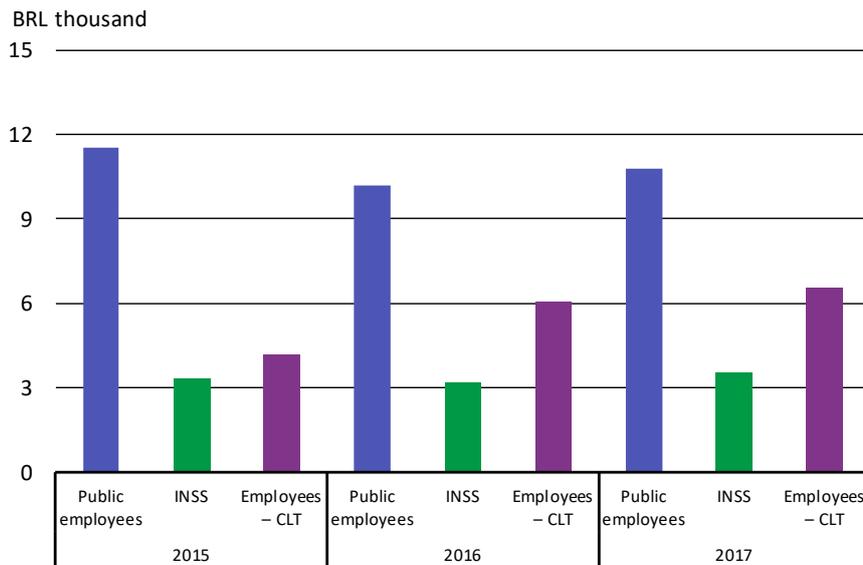
Graph 3 shows payroll loan costs. The costs for vehicle financing were included for comparison, which is historically one of the credit facilities with the lowest interest rates. The curve of loans to public employees is lower, followed by the curve of retirees and beneficiaries of the INSS and the highest for the employees governed by the CLT, due to the greater risk they pose to financial institutions, as they may lose their jobs.[8] Note that, in some months, payroll loan costs for public employees was lower than vehicle financing, showing how the payroll loan of part of the salary is able to reduce the cost of credit.

Graph 3 – Average interest rate – payroll loan and vehicle financing – Individuals – % p.y.

% p.y.

_____
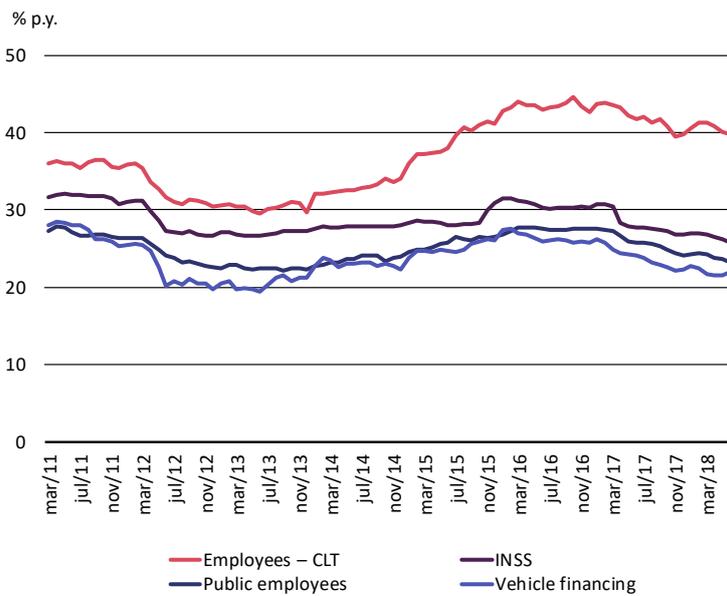
8   Note than CLT employees are also included in public employees.

The fact that INSS interests are higher than public employees' rates is not connected to the default rate of operations. Unlike one might expect, default is higher for public employees than INSS, as shown in Graph 4, which shows average default rates (darker bars) and delays of 15 to 90 days (lighter bars) of the three payroll loans sectors, in December of each year.[9] The decrease in the sum of these two percentages for CLT employees, which dropped from 10.16% in 2015 to 7.21% in 2017, calls the attention. This movement may be related to the same downward trend in the number of borrowers in the same period, from 3.6 million to 2.2 million, as it will be seen in Graph 9.

One possible explanation for INSS interest rates being higher would be the fact that public employees, as mentioned earlier, contract higher loans than INSS retirees in average. As the fixed cost of a loan contracting is diluted in larger operation, the interest charges consequently drop. Another possible explanation for retirees and social security beneficiaries to pay higher interests than public employees may be the difference in terms of financial education in both groups, which may lead to a group of public employees to search and negotiate better rates in different banks.

Graph 4 – Past due payment and delinquency – Payroll loan – Per Sector
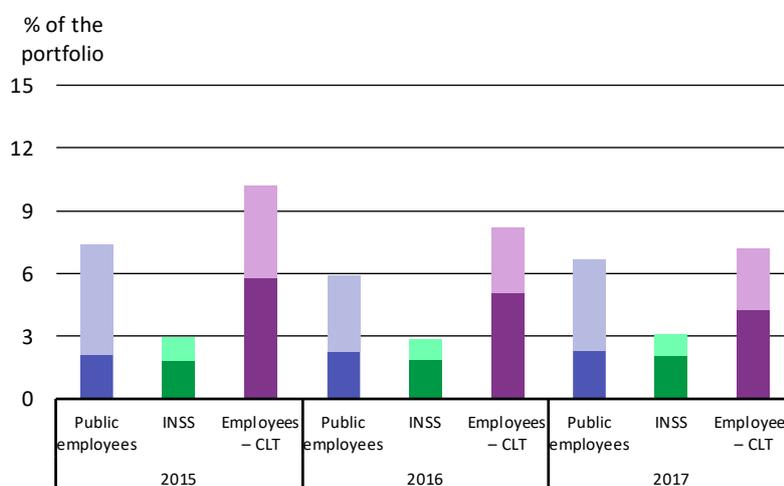
From the outset, payroll loans, given their low cost and greater ease of access for retirees and public employees, have expanded greatly. Graph 5 shows the notable progress of this credit, from BRL 53.7 billion to BRL 323.8 billion in a period slightly over 11 years . The annual average growth was 17.2%, calculating using historical values, or 10.7% p.y., in real terms. As comparison, the total balance of credit portfolios raised in the same period in Brazil, from BRL 762.4 billion to BRL 3,130.1 billion, growth at a 19.4% rate p.y., in historical amounts, and 5.7% p.y. in real terms. The higher resilience of this credit type to the economic cycle should be noted. Even in a period of fragility in the Brazilian economy, payroll loans continued to expand, in contrast to the decline in the total credit portfolio.

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9   Despite the payroll discount, for example, for loss of commission or salary discounts and death; CLT employees may be in default for job loss.

Graph 5 – Total credit and payroll loan portfolio

BRL billion   BRL billion

← Credit portfolio   Payroll loan →
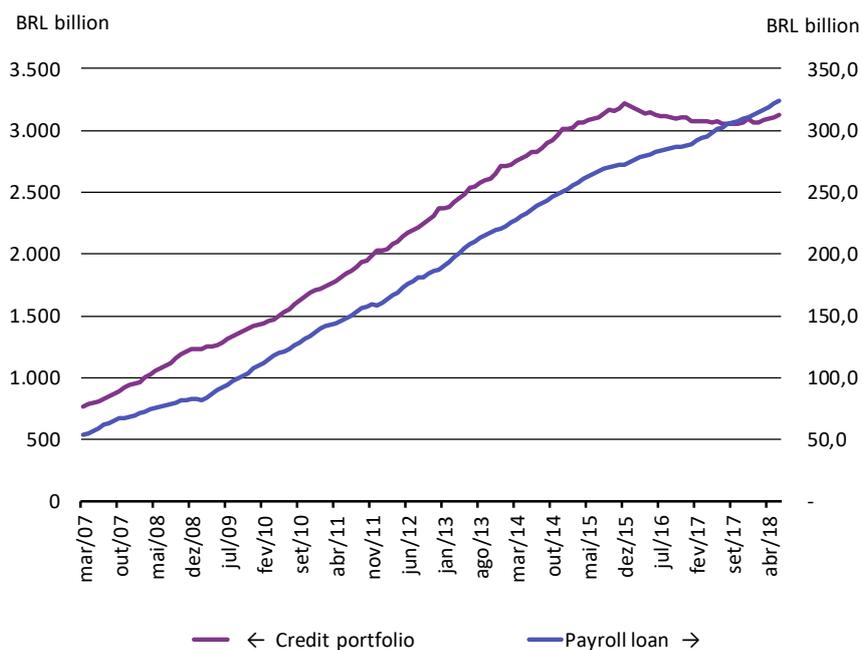
Analyzing only personal credit, Graph 6 shows that the balance of payroll loans accounted for 75% of the total in June 2018. The public employee's share reached 42%, the INSS beneficiaries' - 29% and CLT employee's 4%. Since the beginning of the historical series, in March 2007, payroll loans always represented at least 60% of the personal credit balance.

Graph 6 – Non-earmarked personal loan
June 2018

■ No Payroll loan – SGS 20574

■ Payroll loan – Privat – SGS 20576

■ Payroll loan – Public – SGS 20577

■ Payroll loan – INSS – SGS 20578
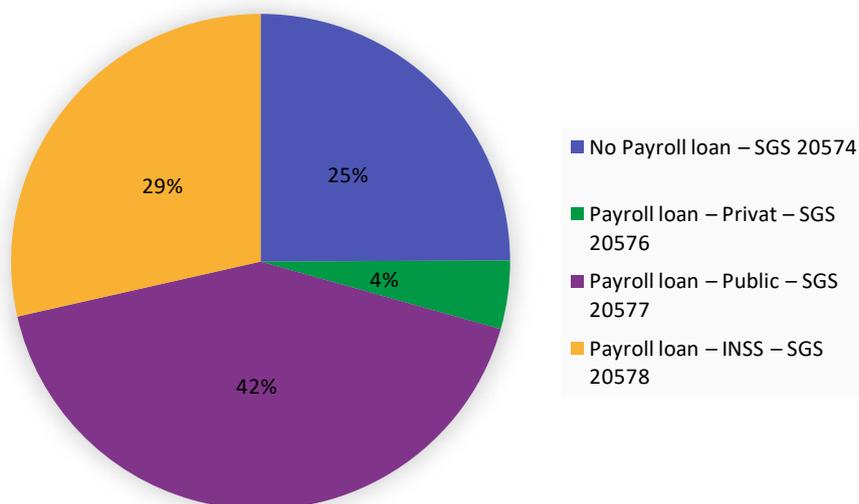
Graph 7 – Personal credit progress – Non- earmarked

BRL million

— Payroll loan Public — No Payroll loan
— Payroll loan INSS — Payroll loan Privat
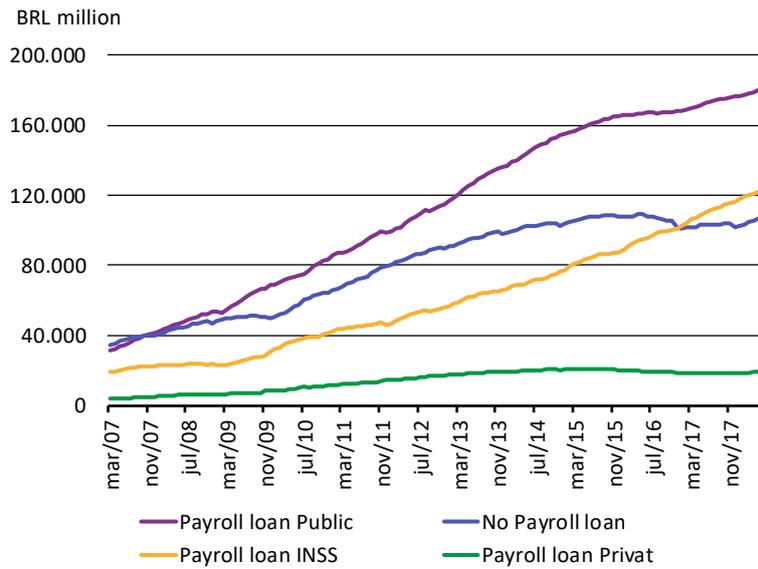
While the volume of credit contracted by public sector employees, and retirees and INSS beneficiaries shows a growth rate throughout the analyzed period, it can be seen from Graph 7 that the volume of payroll loan contracted by CLT employees presented a slight contraction between May 2015 and May 2017. This was a period of economic activity retraction, as the balance of the credit portfolio declined from BRL 20.5 billion, higher value of the historical series, to BRL 18.1 billion. Since then, it started to raise again reaching BRL 18.3 billion in June 2018.

As discussed so far on payroll loans, there is a clear distinction between the groups of public employees and INSS beneficiaries and those of the CLT employees. According to IBGE, there were 33.3 million CLT employees in December 2017, a number close to the retirees (34.5 million) and well above the number of public employees, which summed 11.5 million in the three administration levels. Observing the percentage of people in each sector with access to payroll loans - public employees, 54.5%; INSS, 32.6% and CLT employees, 6.7% - the lower offer of this type of credit to CLT employees since, due to the possibility of losing their jobs, they pose a greater risk of default.

Graph 8 – Number of borrowers – Payroll loan – Per Sector

million
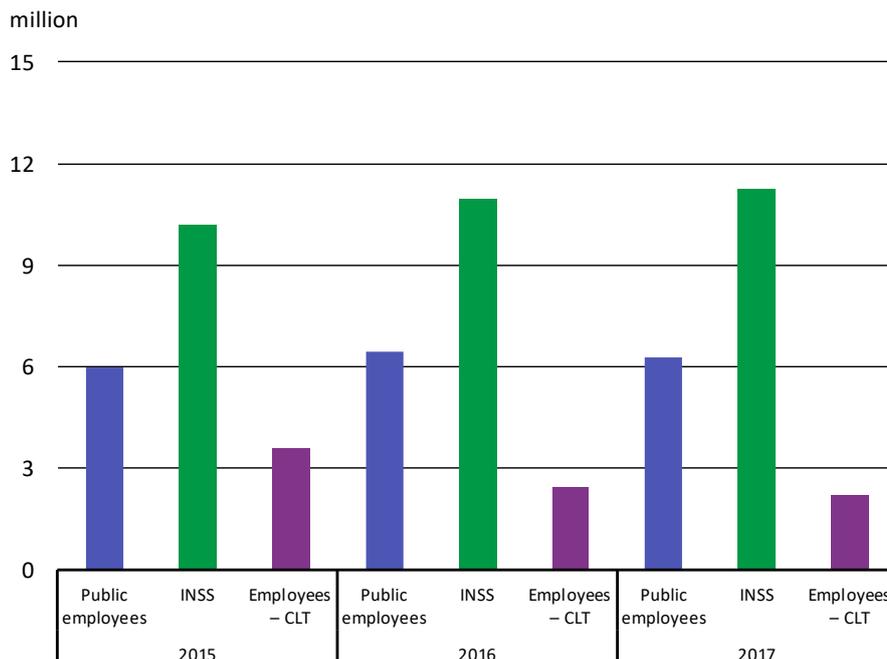
To change this scenario and facilitate CLT workers access to this credit modality, the Government authorized using the Government Severance Indemnity Fund (FGTS) under Law 13.313 to ensure payroll loans to CLT employees in July 2016. In April 2017, the Caixa Econômica Federal, administrator of FGTS, released the use of this guarantee. The purpose was to increase creditworthiness of this type by allowing up to 10% of the FGTS balance to be used as a backing for the loan. The law also provided that in the of the borrower were to be dismissed without legal justification, up to 100% of the fine- equivalent to 40% of the debtor's balance in the FGTS- could be passed on to the financial institution for debt settlement.

Even with the reinforcement of the loan guarantee, until June 2018, a large increase in the number of outstanding borrowers of this type of credit has not yet been observed. This suggests that there are other factors linked to the lower offer of this credit with FGTS guarantee by financial institutions. One hypothesis is that the cost of operating this credit is not low and does not compensate financial institutions, since it is necessary to make individual agreements with each company10. In addition, the intensification of uncertainties in the labor market in the period of approval of the law, when the economy faced a GDP reduction and tightening labor market conditions, may also have played a role in this outcome.

CPF NOT ALWAYS TELLS THE ENTIRE STORY...

One data that draws attention in payroll loan is its penetration among the elderly: 61% of borrowers are above 55 years old, accounting for 57% of this modality's portfolio. This indicator contradicts the economic theory of smoothing consumption, in which individuals try to stabilize the consumption pattern in old age, generally having less need for credit.

It is possible that, in order to assess this picture, some factors need to be considered in the analysis of credit and debt data. Numbers regard individuals and contracts they have entered into with financial institutions. However, they do not show very relevant dimensions of the transactions involving credit and debt.

Qualitative surveys* show that people usually contract loans in their own name, but for the benefit of other people, especially family members. Payroll loans, with lower interest rates compared to other credit modalities, are especially attractive for this type of family financial arrangement.

Formal contracts and their data are a visible part of the credit and the debt; however, sometimes, only these records do not allow us to access more complex phenomena - which logic needs to be investigated in order to develop a broader understanding of the uses of credit or of debt processes. The strategies, expectations, and even monetary incomes in which borrowers support their decisions and choices do not only concern them as individuals but rather collectivities: commonly to their families and even more strongly to the households that share the domestic spaces.

Considering demographic changes and population aging, the issue of resource management and the use of financial services by older people is gaining relevance around the world and it is as a priority by the G20 Global Partnership for Financial Inclusion (GPFI) for the 2019 work agenda. In the context of Brazil, the use of payroll loans and their implications in terms of indebtedness for the elderly is one of the points that merit better study.

* FERNANDES, Viviane. 2015, "Jovens universitários e cartões de crédito: uma pesquisa sobre os usos". In: Hilaine Yaccoub (Org). Consumo Popular. Rio de Janeiro, Editora Mundo do Marketing, pp. 269-291.
JAMES, Deborah. 2014, Money from nothing: indebtedness and aspiration in South Africa. Stanford, Stanford University Press; MOTTA, Eugênia. 2014, "Houses and economy in the favela". Vibrant – Virtual Brazilian Anthropology, v. 11, n. 1. pp.118-158.

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10 The legislation governing the contracts of payroll loans for CLT employees provides that the employer has to enter into a contract with one or more financial institutions so that the employee can apply for a payroll loan with the institution.

» Conclusion

In short, payroll loans have played an important role in credit growth in recent years, and this modality is one of the most used by borrowers, given the ease of obtaining it and the reduced costs.

The penetration of this type of credit, even among INSS beneficiaries with relatively lower average incomes shows the importance of establishing guarantees, such as payroll income deduction, to ensure a lower-cost credit offer, especially for lower income borrowers.

On the other hand, the facility to contract payroll loans may pose risks. The guarantee represented by the direct discount of the salary, or the benefit, and relatively low interest rates may lead to irresponsible credit practices, both on the side of financial institutions, which may adopt improper credit offer and renewal practices, and of consumers, by taking credit without proper planning, which can lead to excessive indebtedness.

In a scenario of greater economic uncertainty, both credit offer and demand conditions may be adversely affected. On the offer side, financial institutions, in an environment of increased unemployment, have more difficulty in pricing the risk of default, which creates disincentives for loans in this modality for private sector workers. On the demand side, these workers can become more averse to debt due to fear of losing their jobs. Therefore, increasing the access of other workers to this type of credit, as well as reducing the risks involved, remains a challenge. This implies a greater responsibility in offering and taking credit, including through the development of solutions to reduce information asymmetry between creditors and borrowers.

"Financial education should begin as early as possible and be taught in schools". The passage extracted from the Organization for Economic Cooperation and Development (OECD)[2] dates from 2005 and shows that the importance of including the theme in classrooms is not new.

Since the 2008 financial crisis - which further emphasized the relevance of the subject - several studies on the impact of financial education in schools are being conducted in several countries. In Spain, for example a study on the impact of the financial education program in schools showed statistically significant increase in students' awareness of the current value of resources and the future consequences of present choices[3]. In the United Kingdom, a longitudinal study showed that cognitive skills related to reading and mathematics, and behavioral skills as extroversion and collaboration, are strong predictors of good financial results in the adult life[4]. Teaching financial education in schools seems one of the most efficient ways of having a generation culturally aware of the conscious use of money; although further impact assessments are necessary to pinpoint the short- and long-term effects.

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[1] This text was prepared by the Department for Promotion of Financial Citizenship (Depef) of the Central Bank.

[2] OECD. **Recommendation on Principles and Good Practices for Financial Education and Awareness**: Recommendation of the Council. 2005. Available at: <http://www.oecd.org/daf/fin/financial-education/46193218.pdf>. Visited on: 07/26/2018.

[3] BOVER, O., et al. **The Impact of High School Financial Education on Financial Knowledge and Choices**: Evidence from a Randomized Trial in Spain, Documentos de Trabajo, Banco de España, nº 1801, 2018.

[4] MONEY ADVICE SERVICE. **The journey from childhood skills to adult financial capability** – analysis of the 1970 British Cohort Study, London Economics, 2017.

This debate has been gaining strength in Brazil[5], especially after including financial education as a transversal theme in the Common Core Curriculum (BNCC)[6] for early childhood and elementary education, approved in December 2017.

The purpose of this article is to discuss ideas to help identifying challenges and opportunities to advance the teaching of financial education in schools countrywide, based on the Brazilian basic education data and successful cases. Therefore, this work intends to be a starting point for the debate on this topic with involved players, in order to deepen the understanding and to subsidize future publication in the Financial Citizenship Series.

» Basic education in Brazil

The table below provides data on basic education[7] in Brazil. According to the Scholar Census 2017[8], Brazil has at least 184,145 schools spread throughout 5,570 municipalities. Out of which, 78% are public schools and 22% private schools. Overall, 131,606 are elementary schools and 28,558 high schools. There are more than 2 million teachers and 48 million students. Numbers by themselves show the complexity of introducing financial education in Brazilian schools without considering factors as different social and economic realities, and investment level per student, among others.

However, one of the main current challenges in Brazilian basic education- related to teaching the theme- is to ensure students reach the proper learning levels in each education step[9].

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5 As in news available at http://porvir.org/educacao-financeira-na-sala-de-aula-e-investir-na-vida-fora-da-escola/; https://novaescola.org.br/conteudo/9798/bncc-inclui-educacao-financeira-em-matematica; https://revistapegn.globo.com/Empreendedorismo/noticia/2018/04/pegn-educacao-financeira-se-aprende-no-colegio.html; https://istoe.com.br/educacao-financeira-se-aprende-no-colegio/; http://infograficos.estadao.com.br/focas/por-minha-conta/materia/educacao-financeira-ainda-nao-e-realidade-nas-salas-de-aula-brasileiras.

6 For more information on BNCC, please visit: http://basenacionalcomum.mec.gov.br/abase/

7 Basic education comprises Early Childhood Education, Elementary Education, High School, Special Education, and Young and Adult Education.

8 Until the completion of the text, the School Census 2018 data had not been finalized. Statistics Summary, INEP, 2017.

9 According to INEP's proficiency scale, students' proficiency scores range from 0 to 10. From 0 to 3 the learning level is considered insufficient; from 4 to 6 basic and above 7 it is considered appropriate.

According to data from the Basic Education Assessment System (SAEB) of 2017[10] conducted by the Anísio Teixeira National Institute for Educational Studies and Research (Inep)[11], 11.9% of students in the 5th grade with an average age of 10 years reached the proper learning levels in Portuguese and 15.5% in mathematics. Approximately 50 in every 100 students in the 5th grade are probably not capable of "converting a given amount of 5, 25 and 50 cents coins and 1 real into Brazilian Real bills,"[12] as shown below. According to Inep, although results are not satisfactory yet, 5th grade students in all Brazilian states are making progress in math compared to the last edition conducted in 2015.

Maria, cleaning her purse, found the following bills and coins:

How many reals did she have in her purse?
(A) BRL 9.00; (B) BRL 9.90; (C) BRL 10.10; (D) BRL 10.15

As we move toward the final grades of basic education, the percentage of students with adequate learning decreases. Approximately 4.5% of 9th grade students with an average age of 14 assessed showed proper learning of math. For Inep, Brazil made little progress compared to the last edition of the assessment in 2015 and presented significant learning inequality among the states. The following map shows the difference between proficiency levels in math among 9th grade students per municipality. High school students show similar levels: 4.5% of students assessed showed proper learning of math with significant differences among the states.

This scenario reflects on the performance of Brazilian students in the Program for International Student Assessment (PISA) of the Organization for Economic Cooperation and Development (OECD). Brazil presented the worst math performance and third worst reading performance among the 45 countries that participated in the assessment in 2015. The performance of Brazilian students was worse than that of students from countries with lower cost per student, including Colombia, Mexico, and Uruguay.

In 2015, PISA assessed students in financial literacy to gauge the extent to which 15-year-old students have the knowledge and skills necessary to make a successful transition from compulsory schooling to higher education, employment or entrepreneurship. Brazil's performance in financial literacy was well below the average of countries[13] and OECD economies that participated in the assessment[14].

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[10] Through tests and questionnaires, Saeb reflects the learning levels demonstrated by the group of students assessed. More than 5.4 million students from 5th to 9th grade of Elementary Education and 3rd grade of High School participated in Saeb in 2017.

[11] Inep is a self-administered federal entity bond to the Ministry of Education (MEC) focused on subsidizing the formulation of educational policies for different government levels in order to contribute to the country's economic and social development. It is responsible for conducting important teaching assessments and examinations, including SAEB, ENEM and PISA.

[12] This skill corresponds to level 5 of the Mathematics Proficiency Scale of the 5th grade of Elementary School. According to Saeb 2017 Press Kit, 51.14% of students assessed are below this level thus showing that they are probably not capable of solving operations as the ones described.

[13] China, Belgium, Canada, Russia, The Netherlands, Australia, USA, Poland, Italy, Spain, Lithuania, Slovakia, Chile, Peru, Brazil, respectively in the ranking. The average performance of Brazil was not significantly different than that of Peru.

[14] According to PISA, financial literacy comprises knowledge and understanding of financial concepts and risks, and skills, motivation and confidence to apply such concepts and understanding to make effective choices in a series of different financial contexts, improve the well-being of individuals and the society, and make participation in the economic life possible.

**Average math proficiency of 9th grade
students per municipality**

Below the national average
Equal to or above the national average
No result disclosed

Source – Inep/DAEB
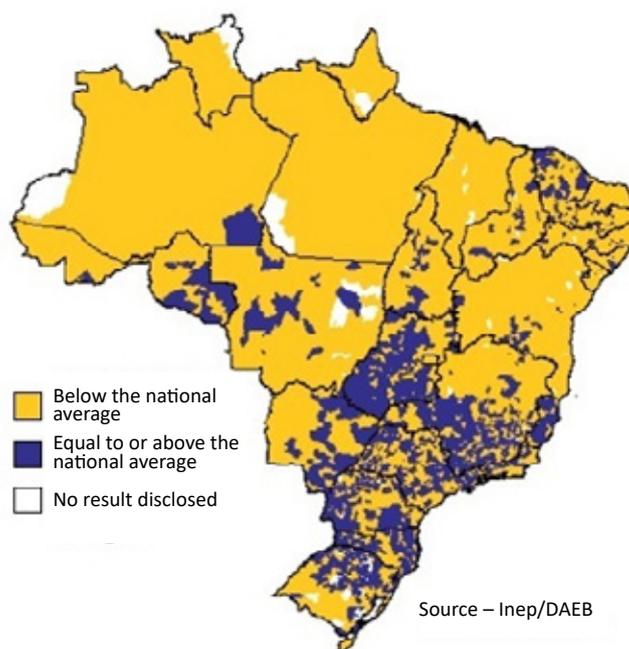
In Brazil, more than half of students (53.3%) perform below the basic level of proficiency in financial literacy (OECD average is 22.3%). These students are able, at best, to recognize the purpose of an everyday financial document, such as an invoice, when asked in a question.

The size of the education system in Brazil, student learning levels, as well as the difference between states, and Brazil's performance in financial literacy compared to other countries are important inputs to be considered for the expansion of financial education in schools.

» Financial education in schools – current status

From its implementation in 2010, the National Financial Education Strategy (ENEF)[15] develops the Financial Education Program in Schools[16]. The High School Financial Education Pilot Program focused on training 1,200 teachers, developing teaching books and teaching the theme for 27,000 students over three semesters was the first action in this direction. The initiative was assessed by the World Bank and showed an improve in students financial proficiency and savings behavior, as well as positive intergenerational effects on parents, which improved their knowledge and financial behaviors, including increased levels of savings. On the other hand, the study showed cautious results regarding students consumption behavior associated with the use of credit cards.

As of 2014, ENEF conducted another pilot with 400 teachers and 14,886 Elementary Education students. The work was also assessed by the World Bank and results suggest a positive impact in financial knowledge and attitudes related to consumption and savings decisions. According to the evaluators, data show that the Program effectiveness depends on a more rigorous implementation and that the way of teaching financial education for students in the early years may need to be rethought[17].

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[15]   Decree no. 7.397/2010 provided for the National Financial Education Strategy (ENEF).

[16]   The Program is implemented by the Financial Education Association of Brazil (AEF - Brazil), a Brazilian Civil Society of Public Interest (Oscip) created in 2011 by ANBIMA, B3, CNSEG and FEBRABAN to coordinate and execute ENEF's transversal actions.

[17]   According to the Final Technical Report of the **Pilot Project Financial Education Program in Schools**: Elementary School. 2016. Available at: <http://www.aefbrasil.org.br/wp-content/uploads/RELATORIO-FINAL-ENSINO-FUNDAMENTAL.pdf>.

In 2016, the ENEF Financial Education Program in Schools inaugurated a new phase in which the teacher is the protagonist. In addition to creating a virtual learning environment, the current strategy includes the pilot project to implement Teacher Training Centers in partnership with Public Universities and State and Municipal Education Secretariats. The purpose of these centers is to create and provide different extension courses on financial education for teachers of every state. The first center was implemented in Tocantins and new centers are under development in Minas Gerais, Paraíba, and Rio Grande do Sul.

According to the coordination of the ENEF Financial Education Program in Schools, 275,000 students have been impacted, 9,000 teachers involved, and 3,000 public schools engaged until 2017[18]. Considering the universe to be reached, it is noticeable that financial education remains a major challenge for our country.

Since its implementation, one of the main ENEF accomplishments is the inclusion of financial education in BNCC, approved in December 2017. The inclusion was the result of the articulation carried out by the members of the ENEF National Committee (CONEF), including the Ministry of Education (MEC), the Securities and Exchange Commission (CVM) and the Central Bank of Brazil (BC). BNCC "clearly establishes the set of essential and indispensable learning that all students, children, young and adults are entitled to. With it, public and private schools have a mandatory national reference for the elaboration or adaptation of their curriculum and pedagogical proposals."[19]

According to BNCC, schools are responsible for including contemporary themes affecting human life locally, regionally and globally, preferable in a transversal and inclusive way. BNCC highlights teaching financial education and consumption education. In this context, when addressing the teaching of Mathematics- more specifically concerning "Numbers"- for elementary school, the BNCC recommends:

> "Another aspect to be considered in this "Numbers" topic is the study of basic economy and finance concepts to provide students with financial education. Thus, themes as interest rates, inflation, financial investments (profitability and liquidity of investments), and taxes can be discussed. This themed unit favors an interdisciplinary study involving the cultural, social, political, and psychological, as well as economic dimensions, on the issues of consumption, labor and money. A history project can be developed for instance to study money and its role in the society, the relation between money and time, taxes in different societies, consumption in different historical times, including current marketing strategies. In addition to promoting the development of students' personal and social skills, these matters can be excellent contexts to apply the concepts of Financial Mathematics and to expand and deepen such concepts."[20]

In addition to being explicitly stated in Mathematics and as a learning context in other areas such as Languages, History and Geography, financial education is essential for the development of the sixth general competence envisaged by the BNCC. This competence, known as Life Project, involves organization, planning, goals, dreams and aspirations, all in the scope of teaching financial education. The table below provides examples from BNCC on how to address financial education in an integrated way to several areas of knowledge.

Schools have until the beginning of the school year of 2020 to adapt their curricula and pedagogical proposals to the BNCC. This period represents an opportunity for the inclusion of financial education in schools and implies urgency in the performance of the players within the scope of ENEF. Therefore, the present moment is favorable to assess the results achieved by the Financial Education Program in Schools so far and, if necessary, to define new strategies to expand the inclusion of the theme in schools countrywide.

Lastly, emphasizing that other actions are being conducted, as well as those developed within the scope of ENEF is important. According to the mapping of initiatives conducted in 2018, 323 schools have already worked on financial education with students, 7% of which in private schools[21].

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[18] According to the **Annual Report - 2017**. Available at: <http://www.vidaedinheiro.gov.br/wp-content/uploads/2018/08/RA-AEF-Brasil_07082018_Vers%C3%A3oFinal.pdf>.

[19] **BNCC**. Available at: http://basenacionalcomum.mec.gov.br/abase/

[20] Same.

[21] Available at <http://www.vidaedinheiro.gov.br/wp-content/uploads/2018/05/Mapeamento_2018.pdf>.

» Financial education in schools – How to move forward?

Brazil has already given the first steps towards financial education in schools- and has one Program within ENEF; the theme is included in BNCC and it has already been addressed by some schools. This section addresses some ideas that underlie the strategies to move forward on the theme: focus on the user- students and teachers-, scalability, and the need for adequate monitoring and assessment.

FIELD OF KNOWLEDGE	GRADE	THEMED UNITS	OBJECTS OF KNOWLEDGE	SKILLS
Math	1st	Quantities and Measures	Brazilian monetary system: recognizing bills and coins	(EF01MA19) To recognize and relate the value of coins and bills from the Brazilian monetary system to solve simple questions in students' daily lives.
Math	4th	Quantities and Measures	Problems using the Brazilian monetary system	(EF04MA25) To solve and prepare questions involving situations of purchase and sale and payment methods using terms as change and discount, emphasizing ethical, conscious and responsible consumption.
Portuguese	6th to 9th grade	Reading	Sense effects	(EF69LP04) To identify and analyze sense effects that strengthen the persuasion in advertising texts and call for consumption using linguistic-discursive resources as images, verb tense, word games, figures of speech, etc. in order to promote conscious consumption practices.
Sciences	7th	Matter and Energy	Simple machine Forms of heat transfer Thermodynamic balance and life on Earth History of fuels and thermal machines	(EF07CI06) To discuss and assess economic, cultural and social changes both in daily life and in the labor world, arising from the development of new materials and technologies (as automation and informatization).
Geography	4th	Labor world	Production, circulation and consumption	(EF04GE08) To describe and discuss the production process (transformation of raw materials), circulation and consumption of different products.

Students

In order to be effectively implemented in schools, the teaching method must be adapted to the needs, interests and aspirations of students, one of OECD's guidelines.

One of the main needs of students is to improve reading and math levels, as shown by PISA data. There is evidence of strong correlation between these skills in children and good financial results in adult life[22], demonstrating that improving reading and math levels is not a concern of general education only but also of financial education. In the case of math, Lusardi and Wallace (2013)[23] emphasize that:

> "To students without an understanding of the role that interest compounding plays in building wealth, it is impossible to explain why making a high-return investment is better than using a low-interest savings account. To students without an understanding of the actual mathematics underlying interest compounding, it is very difficult to explain the importance of starting to save early or how quickly debt grows when borrowing at the interest rates charged by credit card companies or by payday lenders or other purveyors of high-cost methods of borrowing."

According to a study conducted with young students in Junior High School, "the more the formal education connects with development challenges and relevant life themes, the more the teenager tends to learn and take an interest in it."[24] In this scenario, teenagers' search for jobs and money in association with their autonomy and desire of consumption open the opportunity for teaching financial education in schools[25].

A pilot project conducted from a research developed by Paulo Costa, economist and doctoral student at Harvard, and BM&F Bovespa, assessed the relationship between Mathematics and financial education teaching. Conducted in partnership with the Rio de Janeiro Municipal Secretariat of Education in public schools, the pilot consisted in 2 weekly hours of Mathematics class with financial concepts over 12 weeks. At the end of this period, it was noted that students not only learned Mathematics better, but they also learned financial education and their behavior with money also changed. According to the economist, this approach increases students´ engagement because it encompasses practical life examples to teach mathematics theory. The project is currently being implemented in public schools in the State of Goiás and will be taken to the States of Pernambuco and São Paulo in 2019.

Teachers

According to OECD guidelines, teachers should be at the center of financial education programs in schools and be involved in all stages of the process, from conception to implementation, because of their technical knowledge and proximity to students. For financial education to be a reality within the classroom, teachers need to be convinced of the importance of teaching the subject, as well as receive appropriate training and materials.

Special attention should be given to the cost the commitment to teaching financial education will represent for teachers. According to a research[26] conducted by Ibope Institute with teachers countrywide, 42% of teachers do not have paid time to carry out extracurricular activities and 29% of teachers do some extra activity to supplement income. This data shows that time is a scarce resource, so training in financial

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[22] MONEY ADVICE SERVICE. **The journey from childhood skills to adult financial capability** – analysis of the 1970 British Cohort Study, London Economics, 2017.

[23] LUSARDI, Annamaria; WALLACE, Dorothy. **Financial Literacy and Quantitative Reasoning in the High School and College Classroom**. Numeracy, v. 6, no. 2, art. 1, 2013.

[24] Available at <http://fazsentido.org.br/comeca_com/?escolha=estudos&etapa=fundamental>.

[25] Same.

[26] Available at: <https://www.todospelaeducacao.org.br/_uploads/_posts/23.pdf?750034822>.

education must be compatible with the available time of teachers, and the teaching materials should be ready for immediate application in classroom, thus requiring minimum time for the teacher to get prepared.

The partnership between Lemann Foundation, Google.org and the Nova Escola Association for the provision of updated digital lesson plans according to the BNCC is an example of initiative focused on the teacher. From data on teachers' behaviors - using cellphone to prepare classes and search for internet class plans - the project made over 600 Mathematics lesson plans available with high quality pedagogical resources in an online platform[27]. Created by a team with 185 experts, including 150 teachers, lesson plans are ready to provide teachers with support in classrooms of public elementary schools.

Teachers and financial educators could work together to create modular training courses in financial education and teaching materials, such as financial literacy classes integrated with Mathematics and other areas of knowledge in accordance with the skills advocated by BNCC. By involving teachers in programs design, the tendency is to build solutions that are more aligned with the needs and realities of students, the teachers themselves and the schools, which can lead to increased engagement in the theme[28].

 Another way of encouraging teachers and students is through financial education competitions. In Spain, a Financial Knowledge Competition is held annually with students and teachers, in the form of a quiz game. In addition to expenses paid to participate in the final round in Madrid, the top two teams receive certificates for each participant, guided tour to the Banco de España and Palacio de la Bolsa de Madrid and a cash prize to acquire pedagogical material for the school. The initiative, already in its 6th edition, is considered an effective tool to generate students and teachers engagement on financial education and may serve as inspiration for Brazil[29].

Scale

Gaining scale is one of the main challenges to include financial education in Brazilian schools. Because it is a country of continental dimensions, the possibility of scale is a goal to be pursued by financial education programs in schools. Factors such as cost and time for implementation, distribution channels, forms of financing, among others, play a central role to turn the policy effective.

Flexibility in the implementation is another factor to be considered, since Brazil has different realities and learning levels between states and even between municipalities in the same state. For financial education programs to penetrate schools throughout the country, thinking about different strategies and a set of solutions to be chosen according to the social, economic, educational, and cultural reality of each municipality, school or teaching network is important. The premise "*one size does not fit all"* should permeate the process.

Digital technologies seems to be a way to expand the reach of programs for insertion of financial education in schools, with emphasis on distance education. However, 32% of schools do not have any access to internet[30]. In this context, classes given by a group of experts directly for students in schools, in parallel with on-site educators training, such as the project developed by the Math Circle in Brazil[31] provide positive results, especially in places without full infrastructure. Such initiative may serve as reference to provide financial education solutions tailored to the local reality.

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[27] Available at http://porvir.org/google-lemann-se-unem-para-entregar-planos-de-aula-direto-celular-professor/ and http://www.consed.org.br/central-de-conteudos/nova-escola-com-apoio-da-fundacao-lemann-e-do-google-org-lanca-primeiros-planos-de-aula-alinhados-a-bncc.

[28] According to a research conducted by Ibope Institute with teachers in 2018, qualification ("to give more qualification opportunities for teachers already working in schools") and listening to teachers ("to involve and listen to teachers in public debates and decisions about educational policies") are among the most effective measures to value this profession.

[29] Premios Programa Educación Financiera. **Finanzas para todos**. Available at: <http://www.diadelaeducacionfinanciera.es/premios-programa-educacion-financiera>. Visited on: 08/22/2018.

[30] According to QEDU portal technology data available at < https://www.qedu.org.br/brasil/censo-escolar?year=2017&dependence=0&localization=0&item=>. Visited on 09/10/2018.

[31] **The Math Circle in Brazil**. TIM Institute. Available at: <https://institutotim.org.br/project/o-circulo-da-matematica-do-brasil/>. Visited on: 09/03/2018.

Establishing strategic partnerships is another point that can expand the reach of financial education in schools. In this context, identifying players with high level of penetration between teachers and schools and establishing partnerships with them to create and implement joint programs is necessary. Players include State and Municipal Education Secretariats, whose support is essential to increase the introduction of the theme in schools and enable teachers training.[32]

Monitoring and Assessment

In addition to focus on users and scalability, impact monitoring and assessment are also essential to effectively introduce financial education in schools, including quantitative and qualitative aspects.[33]

Questions can be included in surveys conducted by official bodies in order to properly monitor financial education, such as the Scholar Census conducted annually by Inep, linked to MEC, with mandatory participation of schools. This would enable the annual monitoring of the introduction of the theme in schools and define the best strategies to expand reach, especially in areas with lower penetration.

Brazil already took an important step in long-term impact assessment by participating in PISA financial literacy model- and the country must continue participating in the next editions[34]. OECD also recommends to include financial education in examinations held at the end of formal education. In Brazil, this could happen through a more significant presence of financial education questions in assessments and exams as Saeb and the National High School Exam (ENEM). In addition to allowing long-term assessment, these measurements could increase demand for teaching financial education in schools.

» Conclusion

In a country with continental dimensions and reading and math learning deficits like Brazil, including financial education in schools is a complex challenge. Financial education inclusion strategies in schools must take several aspects of basic education into account in order to build effective solutions.

Brazil already has a Financial Education Program in Schools within the National Strategy, included financial education as a transversal theme in the Common Core Curriculum. To move forward, schools must be mobilized in order to effectively teach the theme in classrooms countrywide using scalable strategies and programs focused on students and teachers, which can be monitored and assessed.

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[32] According to the 2nd Mapping of Financial Education Initiatives. 2018. Available at: <http://www.vidaedinheiro.gov.br/wp-content/uploads/2018/05/Mapeamento_2018.pdf>.

[33] OECD. **Financial Education for Youth and in Schools**: OECD/INFE Policy Guidance, Challenges And Case Studies.

[34] According to INEP's portal, PISA 2018 tests were applied in May 2018 and results will be disclosed nationally in the second semester of 2019.

In 2018, Sebrae conducted a survey with Individual Microentrepreneurs (IM) for the first time, in order to identify the characteristics of this population regarding the business financial management.[2] One thousand interviews were conducted via telephone. Questions included control of expenses, revenues, cash balance and financial projections.

Table 1 – Main Results of Sebrae Survey

Interviewees:

• 80% usually make several price quotes before buying

• 77% have never taken courses or training on financial management

• 69% usually ask for discount when buying

• 66% are able to make all business payments on the due date

• 61% keep, daily, all payment registry

• 50% register all payments in one notebook

• 50%, sometimes, don't know how they will pay the business bills

• 42% informally sell in installments (on the cuff)

• 34% don't usually check the cash balance or only do it once a month

Fonte: Pesquisa Sebrae (2018)

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1   This text was prepared by Sebrae with contributions from the Department for Promotion of Financial Citizenship (Depef) of the Central Bank.

2   SEBRAE (2018), "IM Financial Education". Sebrae survey report, May/2018. <http://datasebrae.com.br/wp-content/uploads/2018/08/Educa%C3%A7%C3%A3o_Financeira_MEI_2018_FINAL_FINAL-1.pdf>

On average, these ventures have deficiencies in their controls and management. However, in spite of individuals' heterogeneity in this group, it is possible to identify characteristics, in some variables, that compensate, at least partially, some of these deficiencies.

In terms of current expenses, the survey identified that 69% of these microentrepreneurs usually ask their products and services suppliers for discounts. 80% of interviewees declared that they make several price quotes before deciding a supplier. Although these are not classic financial management items, it shows the concern to reduce costs in order to make the business more competitive. Also in terms of expenses, 61% of interviewees daily keep payment registry and another 22% do it only sometimes. Likewise, 83% of interviewees control payment receipts quite often. However, the record of this information is precarious. Out of all interviewees, 71% register this data in some control instrument; however, this control instruments used is still predominantly analog. Half of interviewees (50%) handwrite registries in a notebook, and only 21% of interviewees make electronic records. Almost half of interviewees declared to make wage compensation withdrawals without any type of record, thus evidencing the fragility of the financial control.

Two thirds of interviewees stated to be able to keep their business payments without delays; however, one third admitted to make late payments sometimes, thus incurring fines and interests. Note that, part of these delays reflect a lack of payment and cash flow controls. Due to these fragilities, half of the interviewed IM stated sometimes to be surprised by unforeseen events and do not know how they will be able to pay for their business current expenses. In a way, this shows a minimum lack of habit to work with payment controls and financial reserves, fundamental instruments for the proper financial management of the business.

Revenue controls are also fragile, since 64% of interviewees declared to daily register all revenues in order to have a detailed control of the cash flow. However, almost half of them do it in handwritten notes in a notebook and only 17% use a computer. Note that a significant share of IM does not control revenues on a daily basis (39%) or does not control expenses (33%) on a daily basis, which again shows deficiencies in the financial control for this segment of entrepreneurs.

Graph 1 – Bookkeeping of financial transactions by MEI
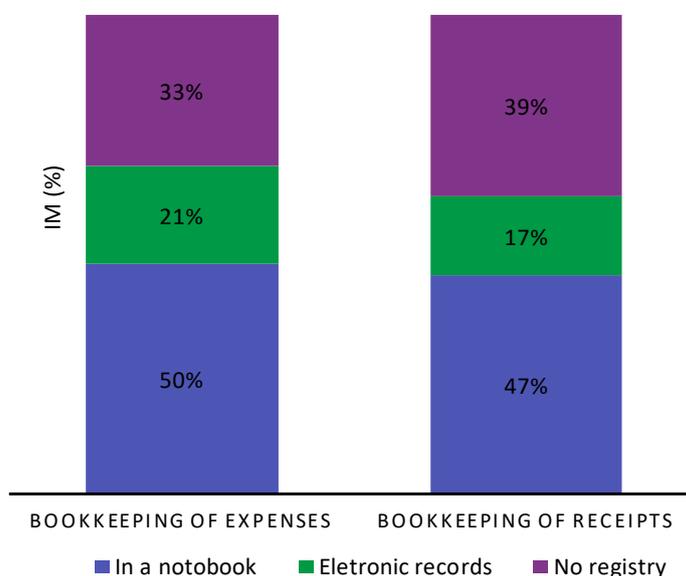
Source: Sebrae Survey (2018)

Note: the sum of the response options exceeds 100% because the questions allowed more than one answer option (some interviewees said they use both notebook and computer to control revenues and expenses).

Individual Microentrepreneurs also sell on the cuff, 42% only sell on the cuff although 86% of those allowing this practice declared to have had some kind of problem to receive payments. This practice usually happens in simpler, smaller businesses closer to the end consumer.

Considering cash balance control, 52% of interviewees declared to make "at least once a week," 12% make "at least once every two weeks," 16% make "once a month" and 18% "don't usually keep track". The combination of these two last options ("don't usually keep track" or "once a month") shows the share of the universe of microentrepreneurs most vulnerable to the risks arising from the lack of cash balance control: approximately 1/3 of the segment. In addition, 3 in 10 interviewees said they don't know if they will have all the resources they need to cover next month's expenses, which not only shows the lack of predictability of the business, but also a fragility in the financial management process.

Therefore, it is noticeable that at least 1/3 of all IM lack fundamentals of financial management and presents need of actions in financial education. In addition, the survey shows the greater concentration of older people with lower level of formal schooling as the most significant characteristic of this segment.

Notwithstanding, the total number of individuals working as IM who needs to improve their mastery on financial management tends to be much higher, since, according to the survey, approximately 80% never took any course or training in financial management. In spite of the enormous difficulty of most individuals running a business as IM, with regard to financial management, it should be emphasized that, even so, becoming an IM seems to have changed for the better the social and economic condition of these individuals. According to Sebrae's survey, 82% of individuals working as IM declared that becoming an IM improved their lives, and 9 out of 10 of interviewees agreed with the statement that "the creation of the IM was a good government policy."

The survey results show that, in fact, this population still lacks better training in financial management. Therefore, initiatives as: more subjects on financial management in schools, development of specific apps and greater awareness of the need to promote financial education in the society tend to generate positive results in terms of longevity of these businesses.

Lastly, as an initial study on the theme, others studies should follow it in order to deepen the addressed issues, as well as to better delineate possible solutions.

» Consumer complaints is a key element for conduct supervision

Usually, a consumer complains to seek redress for a loss due to a financial service provider misconduct. However, beyond this individual objective, complaints bring information of extreme relevance to improve financial products and services, preventing consumers to have similar issues in the future. To reach this prevention goal, all consumer complaints received at the Banco Central do Brasil (BCB) are analyzed and used as a relevant input for the oversight of financial service providers by the Central Bank of Brazil. This oversight is performed in the context of conduct supervision.

Even unregulated consumer complaint, which concerns matters not under the jurisdiction of the Central Bank of Brazil, such as queueing time at branches, may be of interest to other regulators and governmental bodies. For this reason, the Central Bank maintains Memoranda of Understanding with the National Consumer Secretariat – Senacon – and with other regulators.

Consumer complaints and replies given by the financial service providers are qualitatively and statistically analyzed.

The qualitative analysis is relevant because it allows, from a specific case or a set of cases, to perceive institutional practices not complying with regulation. For this analysis to be useful, it is key that consumers reports the issue as detailed as possible. When identified a non-compliant practice, the Conduct Supervision Department is promptly reported to take proper measures, which may range from a letter determining the correction of some deviation until the institution of an administrative sanctioning process.

Statistical analysis is an additional input for conduct supervision. Many times, an individual complaint does not configure evidence of an institutional issue, but its recurrence may point to the need of improvements. Even complaints classified as "unfounded" – when no misconduct of the financial service provider is

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[1] This text was prepared by the Citizen Services Department (Deati) and Conduct Supervision (Decon), both from the Central Bank of Brazil.

found – may indicate an opportunity for disclosure and transparency enhancement concerning financial products and services. High volumes, sharp growth or other specific statistical behaviors serve as guides for conduct supervision.

Conduct supervision not only monitors complaints brought to the Central Bank of Brazil, but also checks how financial service providers themselves handle consumer complaints. Financial service provider should keep a proper, complete and detailed record of each complaint.

These complaints should be classified in a way to allow the financial service providers to identify their main problems and opportunities to improve their relationship with their customers and users. Conduct supervisors act in order to ensure that there is institutional capacity to identify the opportunities of improvement in their processes and their effective implementation, resulting in better financial services and products. This is one of the basic principles of CMN Resolution No. 4539, enacted in 2016, which sets forth principles and institutional policy for relationship with customers and users of financial products and services.

The commitment of the financial service provider high-level management and robust governance systems are crucial, so that all these providers can work smoothly and properly.

Although the BCB may sanction financial service providers whenever necessary, its main goal is not to punish, but to ensure the proper conduct of the National Financial System. Even though complaint data analysis may seem like a reactive action, it has strong preventive potential. Listening to what consumers say is healthy for financial service providers. Part of the BCB supervisory effort is to induce providers to approach consumers, in order to improve their services using the information brought by the client's complaints and demands.

» Each channel, a profile

Besides the BCB, financial service customers also has others public consumer complaint channels.

SAC (CUSTOMER SERVICE)

Customer service (SAC) – an obligation established by Decree 6523 dated July 31st, 2008 – is one of the first-instance channels destined to help the citizen in issues that may come up in the use of the services. The deadline for the solution is five business days as of the registration of the request.

OMBUDSMAN'S OFFICE

The Ombudsman's Office – established by the Resolution 3477 dated July 26th, 2007 and currently ruled by the Resolution 4433, dated July 25th, 2015 – is the second-instance channel. The customer shall contact the Ombudsman's Office whenever he is not satisfied with the proposed solution, after seeking help from the branch, applications, SAC or any other first-instance channels.

The Ombudsman's Office must solve issues detected by the consumer within 10 business days, exceptionally extendable for an equal period when necessary. In addition, the Ombudsman's Office contributes with a survey of the main causes of the reported issues and acts in order to monitor the implementation of solutions in conjunction with the high-level management of financial service providers.

CENTRAL BANK OF BRAZIL

The BCB offers consumer complaint registration via Internet, at the telephone number 145 and through face-to-face service at its headquarters (Brasília, Belém, Belo Horizonte, Curitiba, Fortaleza, Porto Alegre, Recife, Rio de Janeiro, Salvador and São Paulo). After the registration, the institutions have 10 business days to answer the financial service costumer request, which may be extended, in exceptional cases, for an equal period.

The BCB does not intervenes in consumer issues and has no legal competence to impose compensation or refunds of amounts to consumers. The purpose of the consumer complaint system is to listen to financial service consumers about the quality of the financial services provided and to use the information collected for the improvement of the regulation and the planning conduct supervision – based on CMN and the BCB's standards – and financial education policies. Consumer complaint s also comprise the Consumer complaint Ranking, a useful tool to help the citizen when it comes to choose a financial institution.

SNDC

Brazilian Consumer Defense System (SNDC), comprised by public and private consumer protection agencies – Procons (State Department of Consumer Protection and Defense), Public Legal Defense and civil defense consumer entities, among others – present in over 900 cities, offering face-to-face services.

CONSUMIDOR.GOV

It is a public service of consumer conflicts solutions via Internet, monitored by the National Consumer Secretariat – Senacon, Procons, Public Legal Defense and Prosecution Offices, among other bodies. This service promotes direct communication between consumers and product and service providers. The tool, conceived by principles of transparency and social control, aims resolution of consumer conflicts in a fast and unbureaucratized way.

Currently, 80% of consumer complaints registered at Consumidor.gov.br are solved by companies, which reply to consumer requests in an average term of 7 days. The majority of financial service providers accepted the channel.

CNJ

The National Council of Justice (CNJ) provides the Digital Mediation platform, accepted by some financial service providers in order to reduce the number of lawsuits and reach amicable solutions with consumers.

JUSTICE AGENCIES

Although the ideal situation is the amicable solution of the problem, which is faster and less costly, every consumer can file a contested lawsuit. When the demanded amount does not exceed 20 minimum wages, the consumer complaint may be solved at conciliation courts without the need of a lawyer. If the amount of the case is between 20 and 40 minimum wages, and the consumer is not able to pay a lawyer to assist him, he can seek the help of a Public Legal Defender, who offers this type of pro bono service.

The reform of the legislation regulating positive credit data sharing focuses on reducing the asymmetry of information in the credit market; therefore, improving the quality of the credit concession in the country. By enhancing credit performance information sharing, this new credit data sharing legislation has great potential to allow institutions to offer credit in greater volume and lower cost to consumers. In addition, it may also enable new financial institutions to engage in this market, such as fintechs. Consequently, the new positive credit data sharing legislation may contribute to the increment of competition within the financial system and credit offer, and credit cost (spread) reduction.

» Current model (Law 12,414 of 2011)

The positive credit data sharing is currently regulated by Law 12,414, of 2011, by Decree 7,829, of 2012, and by Resolution 4,172, of 2012, with the purpose of subsidizing credit concession, sales in installments or other commercial and business transactions implying financial risk to the potential creditor (like banks and shop owners), allowing a better evaluation of the risk involved in the operation.

Accordingly to this regulation, individuals or businesses must opt-in to allow their positive credit data to be shared, through a specific authorization. With the debtors' information, credit bureaus can make it available to the potential creditors for purposes of carrying out credit risk analysis, subsidize credit concession or extension, and sales in installments or other business transactions involving financial risk.

» Proposed main changes to the current model

The Supplementary Law Bill 441, of 2017, under discussion in the National Congress, aims at aligning the incentives of all parties involved (credit bureaus, sources, creditors and debtors) in order to overcome the main pain points to credit data sharing enhancement.

The main proposal concerns the opt-in model adopted by the current legislation. The need for specific authorization to allow positive credit data sharing and excessive bureaucracy for the creation and inclusion of the information of debtors have led to a low adherence of debtors to the system, reaching a little over 5 million registered debtors about 6 years from the validity of the Law, compared to more than 100 million potential debtors that could have registered.

In general terms, the Bill adopt an opt-out model in which debtors' positive credit data can be automatically shared without previous authorization, but requiring prior communication and allowing the debtors' positive credit information to be erased at any time upon their request. To reach this goal, the Bill aims at an amendment to Supplementary Law 105 which governs banking secrecy, in order to make clear that sharing positive credit data to build credit history does not constitute a secrecy breach. In this way, positive credit databases tend to be constituted more quickly, in addition to becoming much more complete, without hurting the right of those who decide not to have their information shared. Thus, consumers' choice will continue to be respected.

Note that the change proposed does not intend to make positive credit data available for the general public, but only to allow the collection of this information by the credit bureaux, without any specific authorization.

For creditors to have access to the detailed information, with all the credit history of a debtor, an express authorization will be required for each query, and only a credit score elaborated by credit bureaux from the positive credit data shared would be free for creditors and other consultants, which makes the new model safer than the current one. In the current model, after granting authorization to share positive credit, detailed informed of the registrant remain permanently available for consultation without the need for prior authorization.

The Bill under discussion in the National Congress establishes utilities payment information sharing, which may contribute to financial inclusion by adding payment data of financially excluded population, either because of the low level of income or lack of prior history with financial institutions.

The Bill establishes series of mechanisms safeguarding the individual consumer choice of not having their positive credit information shared:

I. consumers have the right to request, at any moment, the withdrawal of their information from the database;

II. inclusion of a new consumer in the database should be communicated in writing, by physical or electronic means, within 30 days; and

III. information about a new consumer may be shared with creditors only after 60 days from the first set of data received by credit bureaux.

The Bill preserves consumers' right to require corrections of any information erroneously registered about them. Correction or cancellation of inaccurate information should take up to 10 days.

In addition, the Bill establishes that credit bureaux must be registered at the Central Bank to receive positive credit data shared from other institutions authorized by the Central Bank, such as banks and credit unions will be able to establish additional requirements to support proper handling of positive credit data, which will indirectly contribute to consumer protection.

Another relevant issue tackled by the Bill is the liability for the information provided. The article 16 of Law 12,414, of 2011 currently imposes joint liability on all participants in the positive credit data sharing chain, regardless of the existence of guilt or fraud. The proposal of amendment to this article maintains the joint liability of the data sources, credit bureaux and the creditors, accordingly to the Consumer Protection Code. The application of the consumerist rule will be a more efficient and reasonable mechanism for protection of debtors, establishing an incentive structure to prevent damages through the liability of the positive credit data chain which contributed to the to the harmful event in some way. The liability for eventual losses will not be borne by any participant in the chain, unless it has directly or indirectly contributed to the damage.

Lastly, several duties of data sources, creditors and credit bureaux remain in the legislation to ensure data confidentiality and accordingly to Brazilian Constitutional principles.

» Expected main benefits

The main benefits of the new positive credit registry include:

I – Lower spreads with reduced default and responsible use of credit: the full effectiveness of the positive credit data sharing represents a real opportunity to reduce the asymmetry of information in the credit market, improving the quality of credit concession in Brazil. In addition, it induces on-time repayment by rewarding on-time payers, contributing to over-indebtedness prevention, with possible reduction in interest rates marketed.

A study by the International Finance Corporation shows that the introduction of positive credit data sharing in other countries has resulted in a significant improvement in the availability of credit at more affordable interest rates.

II – Greater competition in the credit market: the positive credit data sharing has potential to catalyze greater competition in the financial system, by fostering the credit concession at smaller institutions and enable the entry of new institutions into this market.

III – Inclusion of population without credit access: collecting information on utilities payments, positive credit data sharing promotes financial inclusion. In a scenario in which only formal credit information is used to score consumers, a significant portion of the population - which, for various reasons, does not yet have access to formal financial market – is excluded.

We present below the changes to the regulation issued by the National Monetary Council and the Central Bank of Brazil between 2015 and 2018 over topics of more direct concern of citizens.[1]

» Ombudsman's Office in Financial Institutions

In order to improve the regulation of the operation of ombudsman's offices, providing better understanding of its role in view of the existence of other communication channels throughout the institution, such as the Customer Service (governed by the Decree 6,523, dated July 31st, 2008), the Resolution No. 3849, dated March 25th, 2010 was replaced by the Resolution 4,433, dated July 23rd, 2015, amended by the National Monetary Council (CMN) (the first rule on ombudsman's office was the Resolution 3,477, dated July 26th, 2007). The purpose of those amendments is to improve the concept of ombudsman's office, giving more transparency to its work, and establishing mechanisms that would provide greater rationality and more adequate conditions for the fulfillment of its duties.

The ombudsman's office is an organizational component of the financial institution itself, with the attribution of acting as a communication channel between the entity and the customers and users of its products and services, including the mediation of conflicts. The ombudsman's office is responsible for providing last-resort service to the demands of the public that have not been solved in its primary communication channels, including correspondent and Customer Service (SAC).

In addition to improving the concept and definition of the ombudsman's duties, the main changes made by the Resolution 4,433/2015, include:

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[1] All the regulations mentioned in this article can be found on the BC (Central Bank of Brazil) website at https://www.bcb.gov.br/pre/normativos/busca/buscaNormativo.asp

I. the change in deadline to forward the customer's response, from 15 calendar days to 10 business days. This deadline is exceptionally extendable by substantial justification, for the same period, only once;

II. the obligation to provide information about the telephone number of the institution's ombudsman's office at the home page of its website;

III. mandatory recording of the ombudsman's office's telephone conversations;

IV. redefinition of cases in which exclusivity requirements of the ombudsman's function are required;

V. improvement of the rules on the certification of professionals that work at the ombudsman's office;

VI. mandatory disclosure at the institution's website of half-yearly information regarding the activities carried out by the ombudsman's office;

VII. new regulation regarding the elaboration, submission to the audit and forwarding of reports to the Central Bank of Brazil.

The regulation has provided significant improvement in the management of customer service and in the relationship process with customers and users. In addition, it is also an important instrument for the evaluation and institutional management of its activities.

» Institutional Policy for Relationship with Customers and Users of Financial Products and Services

Over the last few years, CMN has approved several rules related to the relationship between financial institutions and their customers and users, such as the rules for ombudsman's office (Resolutions 3,477/2007, 3,849/2010, 4,433/2015), fees (Resolutions 3,518/2007, 3,693/2009, 3,919/2010, 4,021/2011 and 4,196/2013), total effective cost for credit operations- CET (Resolutions 3,517/2007 and 4,197/2013), early settlement of credit operations (Resolutions 3,516/2007 and 4,320/2014), data portability (Resolution 2,835/2001), wage portability (Resolutions 3,402/2006, 3,424/2006 and 4,639/2018), credit portability (Resolutions 3,401/2006 and 4,292/2013), transparency and suitability procedures (Resolutions 3,694/2009 and 4,283, dated 11.4.2013), credit card (Resolutions 3,919/2010 and 4,021/2011), branches and retail locations (Resolution 4,072/2012) and correspondents (Resolution 3,954/2011 and several amendments).

In order to set up a general regulation, the Resolution No. 4539 dated November 24th, 2016 was issued by CMN, establishing the mandatory approval of an Institutional Policy for Relationship with Customers and Users of Financial Products and Services. The regulation determines that financial institutions shall be guided by principles of ethics, responsibility, transparency and due diligence in the relationship with customers and users, in order to promote the convergence of interests and consolidate an institutional image of credibility, security and competence. Therefore, the institutions shall promote an organizational culture that encourages a cooperative and balanced relationship with customers and users, among other aspects, providing fair and equitable treatment, as well as ensuring the compliance and legitimacy of products and services.

Fair and equitable treatment of customers and users shall include, among other aspects, the provision of information in a clear, accurate and timely manner and it shall ensure there are no unreasonable barriers, criteria or procedures for terminating a contractual relationship with respect to products and services and for the transfer of relationship to another institution, upon the customer's request.

In addition, the institutions shall ensure the adequacy and consistency of the routines and procedures adopted with the implemented institutional policy. Such policy shall be approved by the institution's top management, formalized in a specific document and shall be submitted to monitoring, control and risk mitigation systems, in order to ensure its consistency and effectiveness.

A number of aspects need to be addressed in the established policy, including matters related to the product and service design and modeling; to the offering, recommendation, hiring, distribution, disclosure and marketing of products and services; safety requirements; processing customer's information in databases; management of the service provided to customers and users, including handling claims and complaints; conflict mediation; fee collection; debt collection in the event of breach of contractual obligations; termination of contractual relationship with respect to products and services; early settlement of debts or obligations; transfer of relationship to another institution, upon the customer's request; eventual goal system and incentives associated with the performance of employees and third parties acting on their behalf.

In addition, among other specific operational procedures, the rule determines that institutions shall define the profile of the customers that compose the target audience for the products and services available, taking into account their characteristics and complexity; establish training programs for employees and service providers that perform activities related to the relationship with customers and users; and, for the purposes of the established control system, they shall monitor compliance with the policy, based on appropriate metrics and indexes.

» New Credit Card Financing Rules

The postpaid payment instrument for credit cards is notable for its ease of use and broad acceptance by merchants and, in general, it has a dual role as a payment method and a credit instrument. When the bill is not fully paid on the respective due date, taking into account the expected minimum payment, the remaining balance is financed by the financial institution as a revolving line of credit. Alternatively, some issuers offer payment in installments as an option to refinance the credit card's outstanding balance.

Since revolving credit is an eventual and emergent credit facility, and it is not appropriate to use it as a means of medium or long-term financing, its current use in an unreasonable manner may lead to customer indebtedness and operational risks for the financial institutions.

The National Monetary Council issued the Resolution 4,549, dated January 26th, 2017, in order to improve the regulation and promote more proper ways of financing the balance of credit card and other postpaid payment instruments bills, stating that the amount not fully paid on the due date may only be financed in the form of revolving credit until the due date of the subsequent bill (usually thirty days).

Therefore, on the next due date, the remaining balance of the revolving credit for the previous period, plus interest for the period, must be fully paid by the customer. Customers may use their own funds to settle the debt or use another credit facility offered by the institution, usually through the credit paid in installments. The customer can also seek credit in another institution for the payment of the obligation.

If customers choose to refinance the bill at the very same institution, they are able to accept the automatic financing options proposed by the institution or negotiate with the institution specific terms and conditions of the new operation, and, therefore, they shall pay attention to the instructions stated in the monthly bill or contact the institution in the communication channels made available. The regulation states that any new contracted operation shall be carried out under conditions that are more favorable to the customer in comparison to the revolving credit conditions.

In order to explain specific points about the regulation, the Circular Letter 3,816, dated April 20th, 2017, was issued. The Circular Letter states that the institution issuing the postpaid payment instrument shall provide customers, in the contracts and in the respective statements or monthly bills, with information deemed necessary to understand the rules and processes established by Resolution 4,549/2017 and the options available for the payment of financial obligations, showing the possibility of financing the invoice at any time, as well as its settlement through other types of credit, among other issues. It also explains that the provisions of Resolution 4,549/2017 apply to cards issued by stores (known as private label) when a financial institution is involved on its financing.

» Collection of Charges in Events of Late Payment of Credit Transactions

For the purpose of establishing an updated regulation and in accordance with the case law of the Superior Court of Justice (STJ), mitigating operational risks within the financial system, CMN issued Resolution 4,558, dated February 23rd, 2017, which regulates the collection of charges by financial institutions and leasing companies in events of late payment of obligations by the customers.

In this sense, in events of late payment or late settlement of obligations, in addition to penalties and other charges for late payment under the terms of current law, institutions may only collect from their customers remuneratory interest on the installment overdue, per day of late payment, corresponding to the rate agreed in the contract for the period of compliance of the transaction.

On the other hand, due to the peculiarities of credit card transactions, CMN has issued a specific rule for such transactions, through the Resolution 4,655, dated April 26th, 2018.

It was defined that, in events of late payment or late settlement of obligations related to credit card bills and other postpaid payment instruments, in addition to penalties and other charges for late payment under the terms of current law, remuneratory interest collected per day of late payment on the installment overdue or unpaid debit balance shall result from the application:

I.   of the interest rate for the installment based credit operations, in the event of overdue installments of credit operations contracted to pay the revolving credit used for thirty days; and

II. of the interest rate of the revolving credit facility, for the other amounts in arrears.

In addition to the measure, aiming the contribution to assist credit risk mitigation of institutions, with positive effects in terms of reducing borrowers' default levels, it was established that, for credit granting purposes associated with credit cards and other post-paid instruments, credit limits compatible with the customers' profile shall be taken into account. In addition, it was also defined as a general rule that the change in credit card limits, if not carried out at the customer's initiative, shall be preceded by a notice sent by the institution to the interested party at least 30 days in advance, in case of decrease. When it comes to the increase, this change is subject to his prior consent.

» Opening and Maintaining Deposit Accounts

For the purpose of adapting the regulation to the likelihood of adopting new technologies and expanding the provision of financial products and services by electronic means, especially for the public that uses electronic devices more intensively in the relationship process with financial institutions, the National Monetary Council has issued Resolution 4,480, dated April 25th, 2016, allowing institutions to open and close deposit accounts based on requests presented by natural persons through electronic means.

Subsequently, through Resolution 4,630, dated January 25th, 2018, the use of electronic means was also allowed for the opening and closing of deposit accounts for individual micro entrepreneurs (MEI), taking into account the similarity of this audience with individuals, which would not require significant changes in the procedures adopted by financial institutions. In addition, this measure aimed to align with the integrated efforts of several federal agencies that intend to provide more favorable conditions to micro entrepreneurs for the development of their activities.

More recently, through Resolution 4,697, dated November 27th, 2018, institutions were also allowed to open and close deposit account based on requests presented by business persons through electronic means.

For security purposes in the process, the aforementioned rules establish that institutions that decide opening deposit accounts through electronic means shall adopt adequate and consistent procedures, safeguards and controls to confirm and ensure the applicant's identity, the authenticity of the information required and compliance with the rules for the prevention of money laundering and terrorist financing, including by comparing information with those available in public or private databases.

» Wage Portability

As a result of the technological evolution of the banking industry, which enables the implementation of new services and the adoption of new processes by financial institutions, in order to improve and streamline wage portability mechanisms, expanding options and providing greater convenience to salary-account holders, Resolution 4,639, dated February 22nd, 2018 was issued by CMN, amending the provisions of Resolution 3,402, dated September 6th, 2006, which addresses the payment of wages, earnings, remunerations, salaries, retirement pensions, pensions and the like.

Wage portability is the ability the beneficiary/employee, salary-account holder at the institution chosen by the employer or payroll service company, has to transfer the funds held in this account to an account freely chosen by him, in the same institution or to another one, automatically and free of charges on the day his wage or earnings is credited.

The new regulations have enabled the transfer of funds through wage portability not only to a deposit account, but also to a payment account. The new standard has also enabled the request for wage portability to be delivered not only to the institution engaged to provide the wage payment service, chosen by the employer, but also to the institution that receives the funds, whether it is a financial institution or a payment institution, the operation of which is authorized by the Central Bank of Brazil.

Principles, deadlines and operational procedures have also been defined for the exchange of information among the institutions involved in the wage portability process, in order to give effectiveness, consistency and security to the system.

On the other hand, the Circular 3,900, dated May 17th, 2018, provides details on some operational procedures to be observed for compliance with the Resolution 4,639, dated 2018.

Glossary

Access Channels: access channels to financial services are the means provided by financial institutions that allow their users to access their financial services. These access channels can be physical or remote. Physical access channels are traditionally referred to as service points. Remote access channels include call centers, internet banking, and applications for cellular phones and tablets.

Adults with a banking relationship: information from the Brazilian General Registry of the National Financial System (CCS*) and from the Internal Revenue Service database - Receita Federal (used to stablish the age bracket). Considers individuals aged 15 years or more that have the ownership of checking accounts or financial assets under the guise of goods, rights and values, kept or managed by commercial, multiple or investment banks and by federal banks. It considers only one individual taxpayers' registry (CPF), even if the client has more than one banking relationship. It does not take into account clients that have solely credit operations. The CCS considers all active relationship (any that has not been closed), even if the amounts held are very low and no cash withdrawal, deposits and transferences are verified for long periods.

* The data coming from the CCS can be updated retroactively both by the Financial Institutions and by cadastral updates of the Internal Revenue Service. For the "adults with banking relationship" indicator, the suspended CPFs are not considered. Specifically for the year 2016, the variation in the number of adults with banking relationship was due to the updating of the cadastral record made by the Internal Revenue Service and consequent suspension of some CPFs.

Agroindustrial financing: financing granted for costing and pre-costing, both agricultural and livestock operations.

Average interest rate: average pre-fixed interest rates on loans, weighted by the corresponding disbursed amounts. The average rates of the aggregated segments (total, non-financial corporations and households, non-earmarked and earmarked) are determined by the average rate of each type, weighted by the corresponding credit outstanding.

Bank payment slip (collection order): a standard document that may be used to charge for a product or service or to offer such products or services upon payment of that slip. The first is used to bill and provide a form to collect debts arising from obligations of any nature, while the second is used to offer products and services, to enable their acceptance and payment of the obligation resulting from this willful decision in the banking network. Up until the expiration date, the bank slip can be paid at several establishments such as banks, Credit Unions, ATMs, and correspondent banks.

Central Bank of Brazil's Credit Information System (SCR*): The Central Bank of Brazil's Credit Information System is a tool for recording and consulting information about credit operations, endorsements and sureties provided and credit limits granted by financial institutions to individuals and legal entities in Brazil. The system is updated monthly by the financial institutions, through the collection of information on the operations that have been made. Gradually, this value is being reduced. Initially, to the level of BRL 20,000.00 (twenty thousand reais), then to BRL 5,000.00 (five thousand reais), later to BRL 1,000.00 (thousand reais). Currently stored in the SCR database, the operations of clients with total liability equal to or greater than BRL 200.00 (two hundred reais), due and past due operations, and amounts related to sureties and guarantees provided by financial institutions to their clients, in addition to credits to be released recorded in the monthly balance sheets. Financial institutions are responsible for systematically reporting data on credit operations.

* All credit information in this report is based on the Central Bank's Credit Information System (SCR). Foreign loans and operations without information on the region are not considered.

Check: a document ordering a bank to pay a specific amount of cash, which establishes an obligation to

pay this amount to whomever the order is directed to by signature of the issuer, or "payee". In Brazil, only demand accounts are used for check transactions.

Client's holders of accounts: Information from the Brazilian Credit Guarantee Fund (FGC), presenting the number of clients for the different types of products that are object of guarantee. Taking into account the financial inclusion perspective, data regarding checking accounts and savings accounts are presented. Data from the FGC consider both individuals and legal entities. Note that the same client may have a checking account and a savings account, or have accounts in more than one financial institution, resulting in double counting in the aggregate.

Consumer Complaints Ranking: The "complaints index" is the ratio of the number of regulated complaints to the total number of clients of each financial institution or conglomerate for the reference period.

To enable a better comparison, the banks and credit, loans and investment company's complaints *ranking* (including commercial banks, multiple banks with commercial portfolios, savings banks, credit societies, financing and investment) is segmented into two groups according to the number of clients of the institution or conglomerate: smaller and larger than four million clients. There is also a specific complaints *ranking* against consortium administrators, due to the peculiar market of these institutions, which has a semi-annual publication periodicity.

Credit card: an electronic mean of payment that allows goods and services to be purchased on credit according to predetermined conditions, such as a credit limit, validity and coverage. The payment of the value corresponding to the purchased good or service will be made to the credit card administrator on a previously agreed date. In Brazil, credit card holders do not incur charges when the value spent on goods and services is paid on the first subsequent credit card bill due date. The client has the option to pay a set minimum value and finance the remaining balance.

Credit card - non-migrated: operations previously reported in revolving credit card modality not fully settled at the expiration date of the revolving credit and there has been no financing of the debit balance within the terms set forth in Resolution 4,549 of January 26, 2017.

Credit card – purchase, invoice payment or withdrawal financed by the issuer: credit financed by the issuer of the card, with collection of financial charges, and repaid in monthly installments. These operations may be linked to withdrawals, purchases or credit card invoices with repayment in monthly installments.

Credit card purchase (non-financing): purchases made through credit card witch are either paid in full or financed by the seller (rather than the card issuer), with no interest added to scheduled payments.

Credit card - revolving credit: balance due after the invoice expires, equivalent to the difference between the total amount of the invoice and the amount paid by the borrower, including interest calculated up to the end of the month.

Credit for acquisition of vehicles: loans to finance the purchase of motor vehicles.

Credit operations outstanding: sum of the outstanding balance of the credit operations due and past due, excluding those written off. The active portfolio refers not only to the concessions made on the reference date, but also to the credit stock on that month, regardless of the grant date.

Debit card: a financial device mainly used in ATMs to withdraw cash money or use at retail outlets that have appropriate machines to electronically transfer funds to pay for goods and services from a point of sale. Debit cards are also an electronic mean of payment, which allows goods or services to be purchased by directly debiting the value of the goods or service purchased from the buyer's current account. The cardholder's account is usually debited at the time of payment, while the credit on the account of the commercial establishment is done within a given deadline, more or less, according to the contract established with the card administrator.

Debt to borrower's income ratio: it is the ratio between the current value of the debts of credit borrowers in the SFN and the accumulated income in the last twelve months. Just as in the case of household debt

service ratio, it is considered the income of individuals with indebtedness. The individualized calculation is performed, from borrower to borrower, and then the median is used for aggregate calculations

Delinquency loans: sum of outstanding credit operations with at least one payment past due 90 days, divided by the total outstanding credit operations balance of that kind. This index disregards operations classified as losses.

Delinquency rate it is the result of the division of the sum of operations with installments past due over ninety days by the sum of all credit operations. The entire operation – due and past due installments - is considered delinquency if there are installments that are past due for more than ninety days (a so-called trawling process, the assumption being that the debtor in this situation will not pay the installments to be due while they are past due installments for more than ninety days).

Demand account (checking account): an account for depositing funds into financial institutions by individuals or legal entities, which is performed by check, magnetic card or electronic transfer, among others. Deposited funds are not remunerated nor adjusted for inflation. These funds are, however, up to a limit, guaranteed against bankruptcy or liquidation of the financial institution by the Brazilian Credit Guarantee Fund (FGC).

Direct Debit: also known as Automatic Payment, it is a payment instrument in which the payer has previously authorized (at their bank or the payment beneficiary's bank) funds to be debited from their demand account to pay for recurring or periodic bills such as utility bills (water, electricity, telephone, etc.), school fees, insurance etc.

Household debt service ratio: the ratio between monthly debt service and disposable income. The monthly debt service corresponds to the portfolio's values informed to the SCR maturing in up to 30 days, except for the housing financing and the revolving credit modalities, estimated by the constant amortization system and Price, respectively. It covers all types of personal credit, except rural credit, credit card – payment in one lump sum and store's installment and those that characteristics are business financing, although contracted with individuals. For the income calculation, with the exception of the brackets "up to 1 minimum wage" and "above 20 minimum wages", it is considered the average point of the wage intervals, discounted the estimative of social security contributions and income tax.

Individual Microentrepreneur (MEI): the Individual Microentrepreneur is the person who works independently and is legally registered as a small business owner. The MEI must have an anual gross income up to BRL 81,000 per year (according to Complementary Law 139/2011 and Complementary Law 155/2016) and cannot participate in another company as partner or holder. The MEI may have a hired employee who earns the minimum wage.

MEI registration is provided to the Central Bank by the Special Secretariat for Micro and Small Enterprises (SEMPE).

Informative Register of unpaid credits of the federal public sector (Cadin): it is a database containing the names of: a) individuals and legal entities with past due and unpaid obligations to organizations and entities of the Federal Public Administration, direct and indirect; and b) individuals who are registered in the Individual Taxpayer's Registry (CPF) and legal entities that are declared unfit to the National Registry of Legal Entities (CNPJ). Inclusions of debtors (individuals and legal entities) in Cadin are carried out by organizations and entities of the Federal Public Administration, directly and indirectly, according to their own rules and under their sole responsibility.

Microenterprise: Enterprise which has an annual gross revenue equal to or less than BRL 360,000.00 (three hundred and sixty thousand Reais), as established in article 3, subsection I, of Complementary Law 123/2006.

New credit operations: sum of the balance of new credit operations contracted in the reference period. This means that concession equals the amount, which was contracted during the period, even if it was not effectively released.

Non-payroll deducted personal credit: loans to individuals not bound to any specific destination and without withholding wages for the payment of loan installments (i.e., no payroll-deducted).

Number of credit operations: credit contracted and effectively carried out, with open installments on the reference date, due or overdue. Credit operations can be identified, with individual information on customer and transaction (for customers whose operations at the institution are equal to or greater than BRL 200[1]) or unidentified, with aggregation of information (when the client's operations are below BRL 200). These indicators consider only the identified operations.

Number of borrowers: number of clients with outstanding credit operations. Not considered the legal entities/ individuals: i) abroad; or ii) without information of CNPJ or CPF (whose values, however, are not very expressive).

Overdraft: revolving credit line related to checking accounts, in which limited funds are made available for customers to use discretionarily and for short periods, through withdrawals, checks, payments or bank transfers. In such transactions, the outstanding debt balance must be promptly amortized whenever there is any deposit to the checking account.

Payroll-deducted personal loans: credit operations to individuals in which part of their salaries or wages is withheld by the employer in order to pay the loan installments to the lending institutions, in accordance with the legislation. These operations must not be tied to the acquisition of goods or services.

Real estate financing - except SFH: financing for the acquisition or construction of housing units with freely agreed interest rates between the financial institution and the borrower.

Real estate financing - SFH: financing for the acquisition or construction of housing units within the Sistema Financeiro de Habitação- SFH.

Register of Insufficient Funded Checks (CCF): the registry, operated by Banco do Brasil, is a database containing information on check issuers that have been returned for the following reasons - 12 ("Check without Funds- 2nd Attempt"), 13 ("Account Closed") and 14 ("Spurious Practice").

Regulated and unregulated complaints: each complaint registered at the BCB file is analyzed and classified as:

- **regulated claims considered pertinent:** number of occurrences (irregularities), associated with complaints concluded during the reference period, where there was evidence of non-compliance by the institution with a law or regulation whose supervisory powers are vested in the BCB;

- **regulated complaints - others:** number of occurrences, associated with complaints concluded during the reference period, in which there was no evidence of non-compliance by the institution with a law or regulation whose supervisory powers are vested in the BCB; or

- **unregulated claims:** number of occurrences, associated with claims concluded in the reference period, not related to law or regulation whose supervisory powers are vested in the BCB.

Savings account: an account used for depositing funds, by individuals or legal entities, in an investment which remuneration is not taxed. Transactions in this account are usually performed by means of magnetic card or electronic transfer. Financial institutions are required to direct part of the resources raised in this model towards housing finance. In the event of the institution becoming bankrupt or going into liquidation, these funds are guaranteed, up to a limit, by the FGC. There is no minimum value for investment. The basic remuneration is given by the Brazilian Reference Rate (TR) plus 0.5% per month (if the SELIC rate is less than 8.5% per year, the remuneration is different). The remuneration is the same independent of the amount deposited. The day one opens the savings account is considered the 'birthday' of the account, and the remuneration takes place on this specific date. The client may withdraw the money at any time, but if the amount is withdrawn before the 'birthday' of the account, there will be no remuneration in that month.

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[1] According to Circular nº 3.567 of December 12, 2011 and Circular nº 3.786 of March 10, 2016.

Small-sized enterprise: Enterprise which has an annual gross revenue above BRL 360,000.00 (three hundred and sixty thousand Reais) and equal to or less than BRL 3,600,000.00 (three million and six hundred thousand Reais, as established in article 3, subsection II, of Complementary Law 123/2006.

The Brazilian General Registry of the National Financial System (CCS): it is a system used to record information on financial institutions´ clients and account holders and their legal representatives or attorneys. The register contains data of individuals and legal entities with assets, rights and values in place as of January 1st 2001, and information regarding the relationships that began from this date onwards. The CCS reports the starting date and, when applicable, the termination date of a relationship with an institution, but it does not contain data on values, money transfers, or outstanding balance of accounts or investments. The main objective of the system is to provide assistance in financial investigations conducted by competent authorities, which is done upon request for information by the judicial branch of the government, through electronic means, or through other justly empowered authorities.

Time deposits: bank deposit certificates (CDB), bank deposit receipts (RDB), time deposits with special guarantee from the Credit Guarantee Fund (DPGE).

Transferences: transferences can be made by an order of funds transfer (DOC) or an electronic funds transfer (TED).

- **DOC (Credit Transfer Document):** is an interbank order of funds transfer for or on behalf of individuals or corporations, clients of financial or payment institutions that can only be sent and received by commercial banks, multiple banks with commercial portfolio, savings banks, and payment institutions authorized to operate by the BCB. A DOC can only be issued up to a value of BRL 4,999.99 with the funds clearing the working day following the date of its emission.

- **TED (Electronic Funds Transfer):** it is an interbank funds transfer order, performed via a fund transfer settlement system, which is available to the recipient within 1 hour and thirty minutes following the transfer. The holders of accounts at the BCB, except clearing houses and providers of clearing and settlement services, may offer TEDs to their customers, but it is not mandatory. Currently, there is no minimum or maximum operating limit for transferring values via TED.