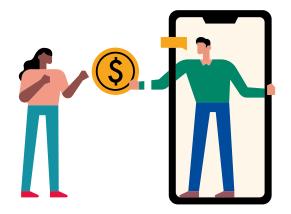
New entrants in Brazilian Fintech: A revolution in competition, and inclusion

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Zetta

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Our message for 2022



T IS NOW CLEAR that the trend to increased competition in Brazil's financial sector will continue, and will continue to have positive effects for the whole of the country's population.

Brazil now has a wide agenda of institutional reforms, introduced both by the Brazilian Central Bank and by the government for the economy as a whole, which we are certain will reduce barriers for the companies of the sector, and as a result reduce barriers between Brazilians and their financial services.

We are greatly encouraged that Zetta, in less than one year of existence, already has 20 member companies. These comprise a faithful portrait of an industry that is increasingly diverse, and dedicated to bringing together experience, efficiency and client-centered services. We have associates operating in a wide range of sectors - from crypto currencies to foreign exchange - and in specific market niches such as, for example, teenagers and micro-entrepreneurs.

This present study - New entrants in Brazilian fintech: A revolution in competition, and inclusion - is the third we have published so far. In it we take a deeper look at the fundamental role of fintechs in the democratization of access to the financial sector in Brazil. In 2020 the number of Brazilian fintechs grew by 34%, while the concentration of assets between the market's leading participants fell to 67%, after being around 70% up to 2015.

The innovative and inclusive nature of these companies' structures has enabled them to reduce charges, and offer more practical mechanisms for contracting of cards, credit and indeed opening of online accounts. All these services are offered directly from a mobile phone to Brazilian citizens who had previously been excluded from the financial system. This was a gain for both users and providers, with more agile, cheaper services.

We hope this study will contribute to public debate, and we once again emphasize our commitment to working with the industry, regulatory bodies and instances of government in favor of competition, simplification of regulations, and financial education of the population.

François Martins Vice-President. Zetta

OUR MESSAGE



HE BRAZILIAN FINANCIAL MARKET

is undergoing a major transformation. On • the one hand, information technology is revolutionizing the connection infrastructure and processing of data on which financial services are based - some are calling this "the invasion of the fintechs". On the other hand, complementary to this 'invasion', there is a wide agenda of legal and regulatory reforms in progress, both within and outside the Brazilian Central Bank's successive agendas known as "BC+" and "BC#", which basically aim to enhance and strengthen the benefits of this invasion, reducing barriers to competition between new and old companies and technologies. These barriers - both traditional entry barriers, such as, for example, 'prudential regulation', and also factors related to information, such as fintechs' less developed access to client data - have been obstacles to competition in the lending market.

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These transformations promise great benefits: lower costs, greater efficiency, and democratization of the sector – not only creating new business opportunities, but also including a major portion of the population who have so far had only limited access to financial services, or to financial services of low quality. But to what extent is this promise being fulfilled? Have we in fact achieved these benefits? How effectively have the reforms by the Central Bank and in regulations been effective? What other effects have these transformations caused? These questions have opened up a significant agenda of research for us, the economists.

Zetta – itself a product of the ongoing fintech revolution – has helped in the task of understanding what is happening by publishing studies that illuminate important aspects of the current transformation, in a language that

These transformations promise inclusion of a major portion of the population who have so far had only limited access to financial services, or to financial services of low quality. is accessible but still scientifically rigorous.



So it is now a pleasure for us to present one more study by Zetta, looking at how the reforms in the rules relating to proportionality in the Central Bank's 'prudential regulation' have made it possible for new players to enter the market, and for payment systems, especially credit cards, to expand in a way that is inclusive. The study uses the Household Budget Survey (*Pesquisa de Orçamento Familiar* – or POF), carried out by the Brazilian Geography and Statistics Institute (IBGE), which provides readers with a detailed x-ray of the progress of inclusion: information on which segments of the population now have access to financial services, and to what extent this inclusion is due to the reduction in prices that has resulted from greater competition.

LEONARDO REZENDE

Dionísio Dias Carneiro Professor of Industrial Organization at the School of Economics of Rio de Janeiro PUC University.

THE CONTEXT

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FIGURE 1 ISTORICALLY, BRAZIL'S FINANCIAL market has had a high concentration of banks, and a low level of competition. The sector is highly regulated, demanding proven technical knowledge on the part of managers and directors, specific requirements for the controlling stockholder, and also robust and proven financial capacity to stand up to any periods of adversity. In practice, these legitimate precautions of regulation had become a barrier to entry of new market participants, thus limiting competition.

But this scenario is changing – due to advances in the use of technology, and development of new business models that seek to reduce costs and bureaucracy, and facilitate the offer of services to the final consumer. These new business models have come to be called "fintechs" – the term is commonly used to describe any company that offers financial services in the digital environment. In the universe of regulated companies, there are several possible licenses as well as those issued for operation as a bank. Examples of their definitions include: payment institutions¹, direct lending companies², interpersonal lending companies³, and credit, financing and investment companies⁴.

Available at: <u>Banco Central do Brasil</u>
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New entrants and the concept of 'proportionality'

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Zetta defines a fintech by the essence of its business model: based on technology and on the user as the central points of its strategy and operation.

The business model inaugurated by fintechs has revolutionized not only the way in which financial services are provided, but also the framework of legislation that regulates the entire market. In 2013, recognizing the importance and the fundamental nature of payment fintechs for economic development, Brazil's Congress defined the activity of payment systems and institutions, by Law 12865 (of October 9, 2013).



Until then, the 'Brazilian Payments System' (*Sistema de Pagamentos Brasileiro* – SPB) included only clearance exchanges and service providers, under legislation of 2001⁵. As the regulator responsible for this area, the Brazilian Central Bank, at the same time, issued a series of regulations on constitution, authorization and functioning of payment institutions and their payment systems.

This legal and regulatory framework was essential to enable a more favorable environment for development and emergence of new businesses. In practice, these new regulatory structures enabled fintechs to incorporate innovation into financial services, and especially payment services. In isolation, though, this law and its related regulations were not enough to stimulate new entrants and ensure a competitive market.

5 Under Law 10214, of March 27, 2001.

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It was with this in mind that the Brazilian Central Bank, in 2016, created an agenda of procompetition efforts, which it called the BC+ Agenda, with four components: (I) the concept of financial citizenship; (II) modernization of the legislation; (III) greater efficiency in the Brazilian financial system; and (IV) cheaper credit.

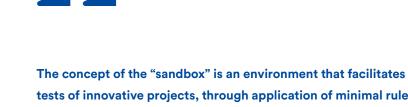
The principle of the agenda was the same as that of the fintechs: to improve services for clients of the financial system, across a range from financial education to simplification of regulations, taking into account the scale and profile of each institution.

One year after it created the BC+ Agenda, the Central Bank decided to reformulate the rules, categorizing institutions according to their scale and the importance of the activities – this initially received the technical name of "prudential segmentation". Companies were divided into five segments – S1 to S5. The S1 segment comprised the more complex and larger institutions and conglomerates (i.e. those with the potential for higher systemic risk) – while S5 comprised the simplest and smallest institutions and conglomerates, or those with the lowest potential for systemic risk. As a result each institution was subject to a balanced group of rules, compatible with its scale, its potential for risk, and its complexity.



In 2019 the Central Bank updated and modernized the *BC+ Agenda*, relaunching it as the *'BC# Agenda'*. This new agenda was initially structured in 4 parts – **inclusion**, **transparency, competitiveness, and education** – to which **"sustainability**" was added in 2020.

Among the actions in the *BC# Agenda*, we highlight adoption of a "regulatory sandbox" by the Central Bank. Similar "sandboxes" were implemented in the insurance and investments markets – by the Private Insurance Oversight Board (*Susep*), and by the Brazilian Securities Commission (*CVM*).



tests of innovative projects, through application of minimal rules. It was created to facilitate faster evaluation of innovations in favor of competition. This model originated in the United Kingdom, and is now common in Asia and Europe, among other regions.

It enables innovative projects to be tested in a controlled environment and for a limited period of time. This shows an activist stance by the regulator of not only permitting innovation, but also including it in the system, creating a regulatory framework that is 'proportional' and compatible with the risks offered by these projects – thus also, by this controlled environment, ensuring solidity of the market.

Further to this, the Brazilian Central Bank, with the Central Bank Employees' Association (*Fenasbac*), runs the Financial and Technological Innovations Laboratory (*Laboratório de Inovações Financeiras e Tecnológicas* – LIFT), which since 2018 has been working to foster innovation in the Brazilian financial system. Another important measure taken in Brazil is the implementation of Open Banking. This system aims to enable relevant information on clients and the products they have contracted to be shared, subject to consent by the user.

This recognizes the importance of standardizing the level of information available about a client to ensure that there is a competitive environment.

We, the tech companies that operate in the financial sector, are constantly changing. Thus it is important that the regulators should be willing to review their rules, accompanying development and innovation. These rules need to be continually reviewed in the light of new realities and new business models, enabling new actors to be admitted into a market which the public is demanding should be increasingly competitive and balanced. Thus it is necessary to weigh the proportionality of the rules vis-à-vis the solidity of the financial system, aiming to transfer the advantages of innovation to the market as a whole, especially to consumers.

And it is with the point of view of consumers in mind that, in the next section, we look at the impact of fintechs on access to financial services.



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Fintechs and access to financial services

CCORDING TO the Brazilian Central Bank's *Banking Economics Report*⁶, in 2020 the banking sector's 5 largest participants held 67% of the sector's total assets⁷, a timid fall of 2 percentage points (pp) from 2015, when this percentage was 69% (**Chart 1**).

The picture is similar for lending transactions⁸ where the 5 largest had 69% of the total market in 2020 (down from 73% in 2015).

The concentration of lending transactions with individuals⁹ is even greater: in 2020 the 5 biggest institutions had 78% of the total (compared to 81% in 2015). There has been a reduction in the indicators of concentration over these 5 years, but, as shown, it was very modest.

6 Available at: Banco Central do Brasil

7 For its statistical series on total assets, the Central Bank uses the concept of Adjusted Total Assets, which excludes: interbank cash investments, interbank balances, and investments in other authorized banking institutions. The figure includes assets of some sectors not formally defined as banking institutions. The full list is: Commercial banks, multiple banks, savings banks ('*caixas econômicas*'), development banks, and non-banking lending institutions.

8 For lending transactions, the total is of the asset balances of lending transactions of all institutions defined as included in the banking and non-banking sectors.

9 The stock of lending transactions receivable includes the banking and non-banking segments.

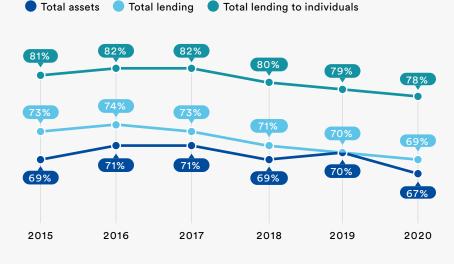
Over the same period, though, there was a significant growth in the number of fintechs in Brazil, as shown in Chart 2; but **in spite of all the advances made by the fintechs so far, there is still a large space for increased competition, since the banking sector's assets, and the lending market, continue to be highly concentrated.**

The effects of a low level of competitiveness are wellknown. A recent study on Brazil by researchers of MIT and the Brazilian Central Bank evaluated the impacts of reduced banking competitiveness on spreads (the difference between rates for loans and for deposits) and volume of loans to companies¹⁰. The study found evidence that lower competition increases spreads and reduces the volume of loans. They examined the effects of mergers and acquisitions of banks as an external source of variation in local competition (at municipality level). Their article also shows that reduction of banking competition has effects in the real economy: in the greater part of the sectors analyzed, its corollary is reduction of employment, salaries and output.

10 Available at: <u>Banco Central do Brasil</u>
11 Distrito: A financial market telecoms/technology supplier.

Chart 1

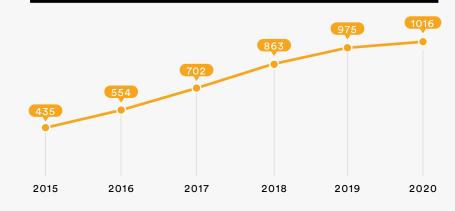
Concentration (%) of Brazil's 5 largest financial market participants – by assets



Source: Brazilian Central Bank Banking Economics report. Data are for December of each year.

Chart 2

Number of Brazilian fintechs



Source: 2020 Inside Fintech Report by Distrito¹¹.

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From these data we can see that low competition in the banking sector leads to worse credit conditions for consumers, and a low commitment to improve the offer of banking products and services – for example digitization of financial transactions, essential for the new trends in relationship with the client. It can also be seen clearly how much financial inclusion has progressed for Brazilians in recent years, in parallel with the reduction of banking concentration (even though this has been gradual) and the increase in competition. Reaching the unserved population usually calls for greater effort by the institutions, and this effort is stimulated by competition. A considerable part of this population is located far from the major urban centers – which means higher costs for the traditional banks to reach them – and traditionally, physical bank branches have been this population's most familiar 'points of entry' to the financial system. Also, members of this unserved population do not have a credit history, and/ or they have little understanding of financial products.

Overcoming these difficulties calls for more technology, more de-bureaucratization of processes, and evolution from the traditional models of lending. Fintechs, which have technology in their DNA, have emerged precisely to overcome these difficulties. Their innovative structure makes possible advantages such as: absence of charges, practicality in contracting debit or credit cards and lending, and creation of digital accounts directly by mobile phone – these factors are enabling many citizens previously excluded from the traditional financial system to have access to a varied offer of products.



In lending, digital transformation technologies such as those of Big Data techniques and artificial intelligence systems have been allies in the improvement of processes. The use of some personal data, subject to the applicable legislation and regulations, enables fintechs to make the necessary and adequate assessments of their consumers' profiles, offering a service based on their clients' expectations and needs. Considering the challenge of low understanding of financial services by the underserved population, fintechs not only facilitate the use of these services but also make direct efforts for financial education of potential clients. Financial education is essential for consumers to manage their finances as well as possible, and have less risk of getting into debt beyond their means.

Differentiated methods of education that fintechs use to expand consumers' knowledge about financial services include: educative content offered in simple and accessible language, through blogs^{12 13 14}; publications on social networks; and informative emails to customers.

12 Available at: <u>Mercado Pago</u>
13 Available at: <u>Banco Inter</u>
14 Available at: <u>Blog Nubank</u>



It is clear that the impact of the dissemination of fintechs in the Brazilian market is being felt in various segments of the population that previously did not have access to financial services.

For an understanding of how fintechs have impacted access to financial products, we compared the micro data of the *Household Budget Surveys* (POFs) taken in 2008-2009 and in 2017-2018 – which give data that can be extrapolated for the whole of Brazil. These are the most recent POFs available, and their dates make it possible to trace an initial picture for the periods before and after the introduction of fintechs in the country, since most of the financial services technology companies were created after 2010. With this in mind, the main variable we examined was **access to credit cards**, since this is the only relevant financial product that is present in both these Household Surveys. The analysis, thus, is limited to financial inclusion expressed as holding of a credit card – and our expectation is that with this we are capturing an initial movement of financial inclusion associated with fintechs.

According to a survey by *Distrito*, for the years up to 2019, just under half (49.6%) of Brazilian fintechs were created in 2016 through 2019¹⁵. This means that in 2017-18 – the second of the Household Budget Survey analyses that we compare – many fintechs were still at the stage of startup or consolidation of their position.

Thus we would expect that with the increasing presence of fintechs in the country, accelerated by further digitization of the economy, encouraged by the Covid-19 pandemic, there is likely to be a more complete impact of the fintechs on statistics for access to the financial system in the next forthcoming Household Surveys.

BOX 1.

What is the Brazilian Household Budget Survey (POF)?

The POF is a survey carried out by the *Brazilian* Geography and Statistics Institute (IBGE). One of its main purposes is to measure the structures of families' spending and income. As well as information related to the household budget, it also investigates several other characteristics of families, including access to financial services – the subject of our particular interest in this study.

It operates a sampling based on the individual household as the survey unit. In the 2008-09 survey 55,970 households were interviewed, and in the 2017-18 survey a total of 57,920. Each household is associated with a sample weighting, enabling the data from the survey to be used for population estimates. The weighting is calculated for each household, and attributed to each household and each person in that household. In our analysis of access to credit cards, we defined access as one or more people in a household having access to a credit card¹⁶. We examine breakdowns by region and by type of household (urban or rural), by per capita income, and by characteristics of the 'Key Member' of each household (race, gender and, in the 2017-18 POF, whether or not the person had employment formally registered under the employment laws). The Key Member of the household is defined as the person responsible for one of the following expenses: rent, installment payment on the property, or other habitation expense such as payment of the condominium contribution.

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Note on method

I) Our study used data only for people aged 10 or over.

(II) It also excludes people employed as domestic servants or their relatives – since possession of a credit card by a family member does not imply that the domestic employee or his/her relative has access to the card.

(III) The figure for people having formally registered employment is a subgroup of the sample, since it excludes people who are, for example, employers, self-employed and people outside the workforce.

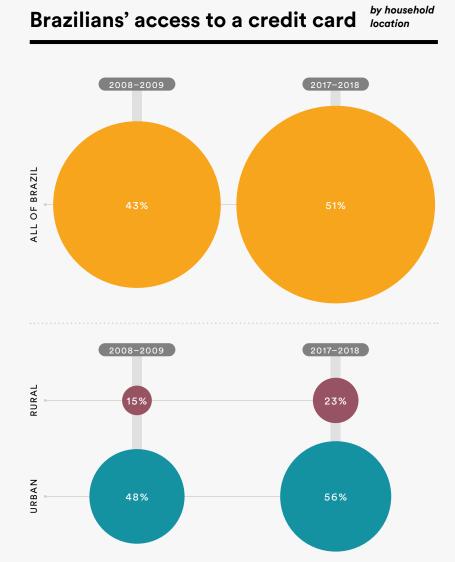
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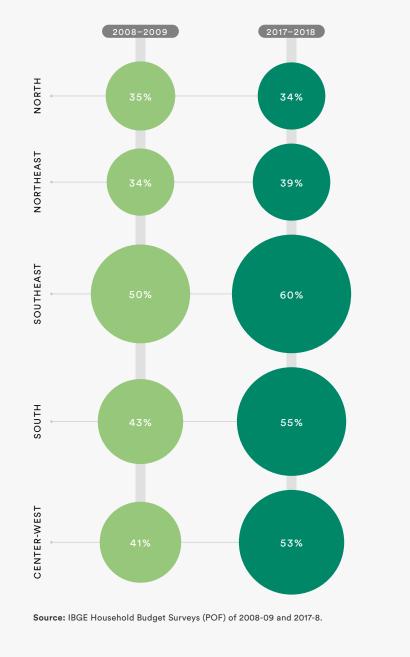
Source: Brazilian Geography and Statistics Institute (IBGE) Household Budget Surveys (POF) of 2008-09 and 2017-18.

CHAPTER 2

Tables 1, 2, 3 and 4 show the percentages of people in Brazilwith access to a credit card according to the HouseholdBudget Surveys (POFs) of 2008-09 and 2017-18.

Table 1



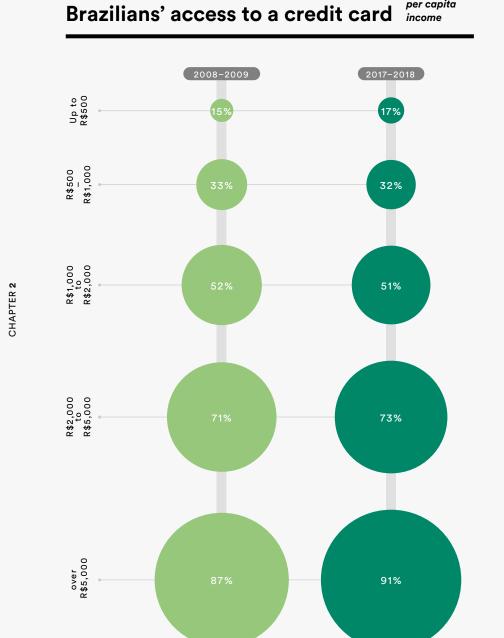


Brazilians' access to a credit card

Table 2

by Brazilian

Region

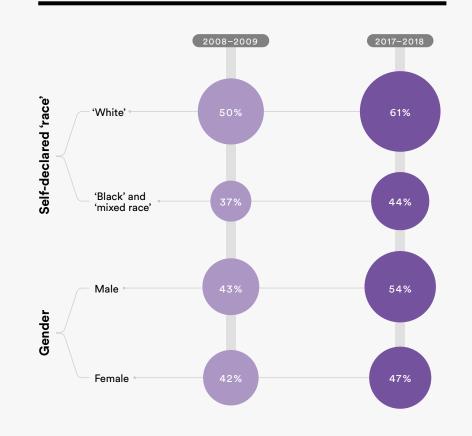


by household

per capita



Table 4 by type of Key Household Brazilians' access to a credit card Member



Formally registered 2017-2018 employment Has 62% Does not have 37%

Source: IBGE POF Surveys, 2008-09 and 2017-18.

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Table 3

The figures show that the probability of a Brazilian having access to a credit card in 2008-09 was 43%, and increased by 8 percentage

points (pp) in 9 years, to 51% in 2017-18.

For comparison, according to the Zetta study *The Pix Transformation in Brazilian payments*¹⁷, 52% of the population had a credit card in 2021. The increase in access to credit cards appears to coincide with the growth of penetration of fintechs in the Brazilian market, as shown in **Chart 2**.

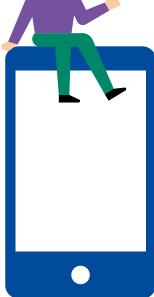
17 Available at: Zetta

Among Key Household Members, the POF survey data show that in 2008-09, 37% of those reporting themselves as 'black or mixed-race' held a credit card, while this percentage for people self-reporting as 'white' was 50%. In 2017-18, these percentages had increased to 44% and 61%, respectively.

> Thus there was an increase in access to credit cards in both these self-reported groups. It can also be seen that the speed of inclusion was unequal in the two groups.

The differences in access to credit cards between men and women, especially in 2017-8, provide further interesting statistics. In 2008-09, 44% of Brazilians in households where the Key Member was male had access to a credit card – while this percentage was 43% where the Key Member was female. In 2017-2018, these estimated proportions were 54% where the Key Household Member was male (an increase of 11 pp), and 47% where the Key Member was female (an increase of 4 pp). Overall, **the proportion of people with access to credit cards increased in households led by both men and women between 2008-09 and 2017-18.**

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Laws and those who were not registered. In 2017-18 – the only POF with this data available – 62% of

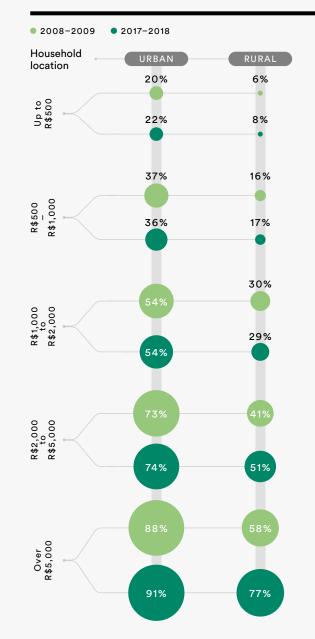
Finally, there is another difference, between those with

employment formally registered under the Employment

people had access to a credit card in households where the Key Member had formally registered employment, but this figure was 32% in households where the Key Member did not have formally registered employment. This information is important since there is a high level of informal employment in the Brazilian population: According to data collected by the *Continuous National Sample Households Survey*¹⁸, the percentage of employed Brazilians without formal employment registry increased from 38% in the survey for the first 5 months of 2020 to 40% in the same period of 2021¹⁹.

Tables 5, 6, 7 and 8 look more closely at the data ofTable 1, showing the differences in access to creditcards between the two POF surveys, by income group.Taking income into consideration is important,because frequently income is the most importantfactor causing low access to a financial product.

Table 5 Brazilians' access to a credit card



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by urban/rural households

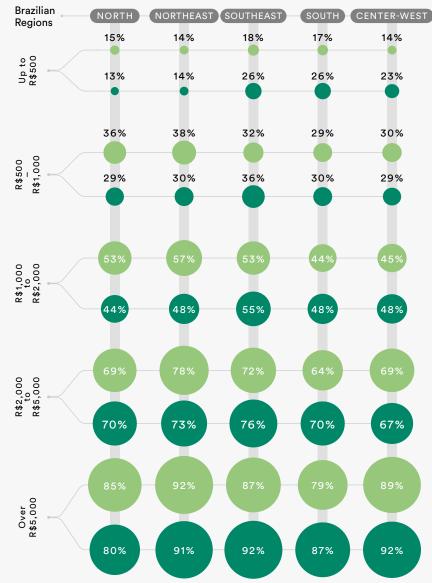
and income

¹⁸ Pesquisa Nacional por Amostra de Domicílios Contínua – the 'PNAD Contínua'.
19 Available at: <u>Agência Brasil</u>

Table 6

Brazilians' access to a credit card by Region and income

• 2008-2009 • 2017-2018



Source: IBGE POF Surveys, 2008-09 and 2017-18.

Brazilians' access to a credit card by ethnic group and income

Table 7

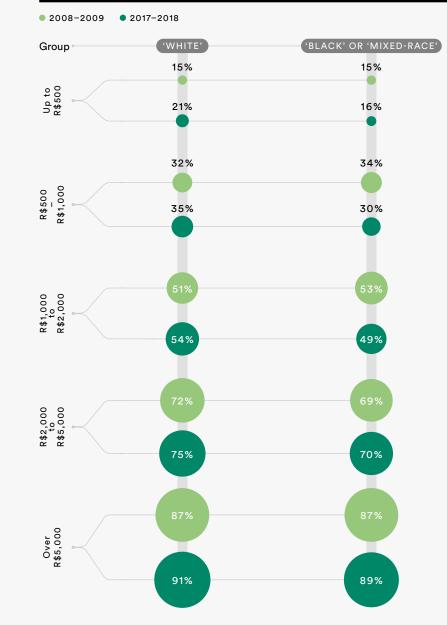
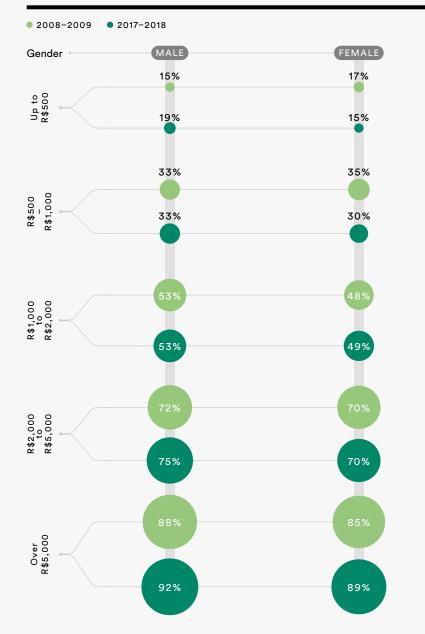


Table 8by Key HouseholdBrazilians' access to a credit cardMember's gender,
and income



Tables 5, 6, 7 and 8 confirm the expectation: income level has a very significant weighting in access to a credit card.

Among individuals in households with per capita income below R\$ 500, the proportion of people with access to a credit card is very similar in households where the Key Member self-reports as 'white, or as 'black' or 'of mixed race', and between men and women. On average, the proportions are 15% in the 2008-09 survey, and 17% in 2017-18. At the other end of the scale, among people with per capita income above R\$ 5,000, access to a credit card is much higher: 87% in 2008-09 and 91% in 2017-18. Thus, lower access to a credit card in households where the Key Member is a woman or black or of mixed race has a direct relationship with the lower per capita income of this public.

Also in **Table 5**, we note that individuals' access to a credit card, controlling for income, is substantially lower for those living in rural areas than for those living in urban areas. In the 2017-18 survey, 22% of those with per capita income of up to R\$ 500 living in urban areas had access to a credit card, but only 8% of those living in rural areas. At the other end of the scale, 91% of those with per capita income above R\$ 5,000 living in urban areas had access to a credit card, and only 77% of those living in rural areas. In both cases, **access is 14 pp lower for those living in rural areas than those living in urban areas.**

Another way of slicing the survey data – shown in **Tables 9, 10, 11 and 12** – is to understand which people had access to a credit card in 2008-09, and in 2017-18. Was there any change in their profile?

Table 9

Brazilians' access to a credit card by household location



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Table 10Brazilians' access to a credit cardby Region

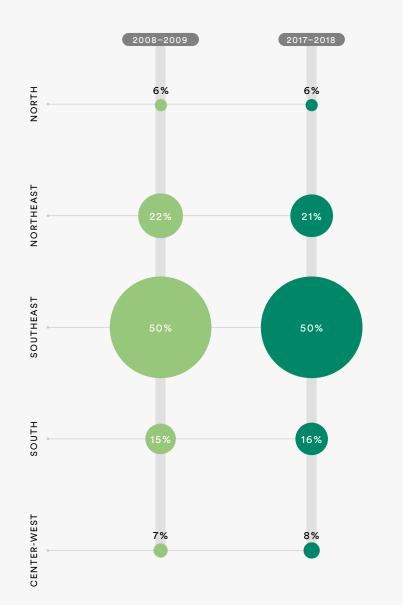




Table 12by typeBrazilians' access to a credit cardMembraMembraMembra

by type of Key Household Member

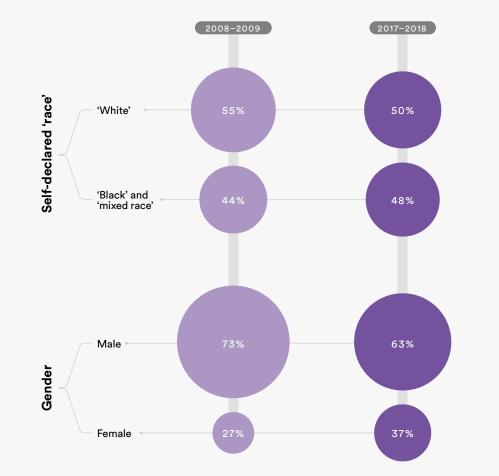




Table 10 shows that both in 2008-09 and in 2017-18, 50% of the people with access to a credit card in Brazil were in the country's Southeast Region.

Although this is Brazil's most highly populated region, it appears to be over-represented, since the population profile of Brazil, according to the POF, indicates that 43% of the population was in the Southeast, both in 2008-09 and 2017-18. Ζ.



(I) In terms of self-reported **'race'**: In 2008-09 55% of people with access to a credit card lived in households where the Key Member self-reported as white, while the percentage of the whole population living in families where the Key Member was white was 47%.

An analysis of Key Household Members

also shows differentials.

In 2017-8, there is a similar differentiation: **50% of people with access to a credit card were in families in which the Key Member was white**, while the percentage of the whole population living in households where the Key Member was white was 42%. **(II)** In relation to the self-declared **gender** of the Key Household Member, the percentages as reported by the POF are more in line with the profile of the population:

In 2008-09, 73% of people with access to a credit card were in households in which the Key Member was male, while in the whole population 72% lived in this type of household.

In the 2017-18 survey, these figures had changed: **63% of those** with access to a credit card were in households in which the Key Member was male – and 60% of the population lived in households in which the Key Member was male.

(III) Finally, in terms of per capita income:

There was a higher percentage of credit card holders in the three highest per capita income brackets in the later (2017-18) survey than in the earlier one (2008-09). At the same time the percentage of Brazilians with per capita income higher than R\$ 1,000 increased – from 30% in 2008-09 to 34% in 2017-18.

We thus have these conclusions: The greater part of people with access to a credit card in Brazil are in the Southeast; they have per capita income between R\$ 1,000 and R\$ 5,000; and are in households where the Key Member is male, and white.

BOX 2. Global Findex

The Global Findex database is a World Bank continuing survey on how adults aged 15 or over, in more than 140 countries, save, borrow, make payments and manage risk. In this box we compare some of its data for 2011 and 2017²⁰.

Table 13 shows the percentages of Brazilians having an account with a financial institution²¹ in 2011 and 2017. In 2011, 56% of Brazilians had at least one account with a bank, micro-credit institution or other type of regulated financial institution. This percentage increased – by 14pp – to 70% in 2017: **That is to say, the probability of a Brazilian having an account with a financial institution increased from 56% in 2011 to 70% in 2017.**

20 Available at: Global Findex

21 Holding of an account is defined as a person having an individual or jointly-held account with a financial institution (including banks and other types of formal financial institution such as, for example, a credit cooperative).



For comparison, in the whole of Latin America and the Caribbean, 39% of the population had an account with a financial institution in 2011, and 54% in 2017. For the whole world, the averages for those years were 51% for 2011, and 67% for 2017. Thus the statistics show that Brazil offers better conditions for access to a bank account than its neighbors. Ζ.



The survey also shows that in 2011, 61% of male Brazilians had an account, and 73% in 2017 – an increase of 12 percentage points. For female respondents, the percentages for the two periods were 51% and 68%, indicating a higher growth, of 16 percentage points. As well as more people overall having an account with a financial institution, the gender gap narrowed: In the 2011 survey the percentage of men with an account was 11 pp higher than for women, but this difference fell to 5 pp in 2017. The discrepancies are larger in the data for income. In 2011, 38% of the poorest 40% in the population had an account, but this increased – by 19 pp – to 57%, in 2017. For the richest 60% of the population, this percentage was 68% in 2011, and increased by 11 pp to 79% in 2017. The differences between the percentages for the 60% richest and the 40% poorest people were: 31 pp in 2011, and 22 pp in 2017.

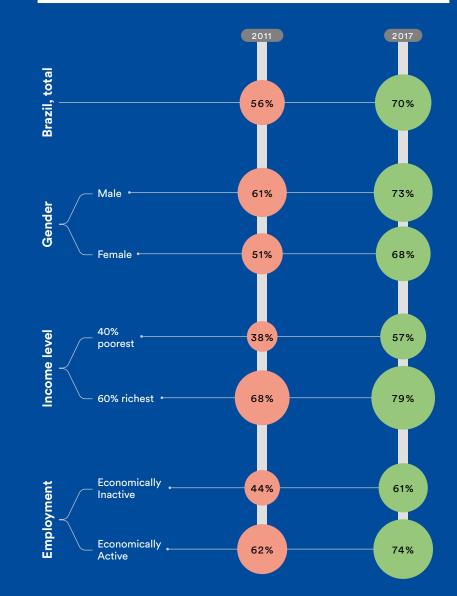
When we separate the economically active and economically inactive segments of the population²², we find that the percentage of economically inactive people with an account increased – by 17 pp – from 44%, in 2011, to 61% in 2017. Among those employed, the percentages were 62% in 2011 and 74% in 2017 – an increase of 12 pp.

22 Those classified as economically active are people who are either employed or seeking employment; economically inactive people are defined as people outside the workforce.

Thus we see that there was an overall generalized increase in Brazilians holding an account with a financial institution between the two periods, and also a reduction in the inequalities between groups classified by gender and by income – but even so with important differences remaining between individuals of different categories.

The 2017 survey also looked for the reasons why people did not have an account with a financial institution: for 58% of those who did not have an account, the main reason was lack of funds; for 47%, it was the perception that financial services are very expensive; and for 51%, the fact that another person in the household already had an account.

How many Brazilians have accounts with a financial institution?



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BOX 2

Table 14 shows the percentages of people who heldsavings accounts with a financial institution in the surveysof 2011 and 2017. According to the surveys, in 2011,10% of Brazilians saved, and in 2017, 14%. This was inline with the trend reported for Latin America and theCaribbean (10% in 2011, rising to 13% in 2017), but waslower than the world trend (22% in 2011, 27% in 2017).

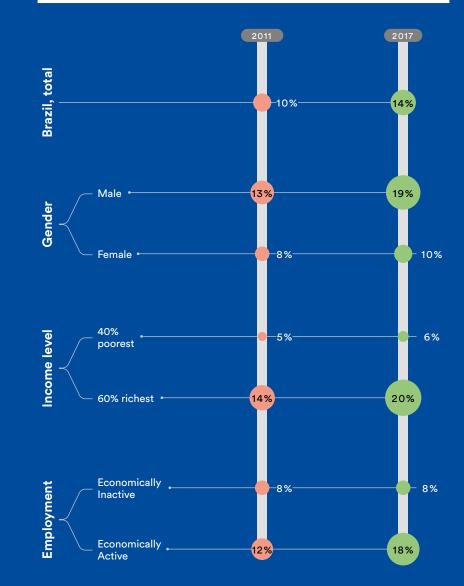
In Brazil, the percentage of men saving was 13% in 2011, rising to 19% in 2017. For women, these figures were 8% in 2011, and 10% in 2017. By income levels, people were divided into 2 groups: the 40% poorest, and the 60% richest.

Among the poorest, 5% reported they had saved with a financial institution in 2011, with a timid increase, to 6%, in 2017. Among the richest, a significantly higher proportion reported saving: 14% in 2011, rising to 20% in 2017.

Finally, in terms of employment status, 8% of the economically inactive population reported saving, in both 2011 and 2017. Of the economically active respondents, 12% saved with a financial institution in 2011, rising to 18% in 2017.

Table 14

How many Brazilians save with a financial institution?



Source: Global Findex.

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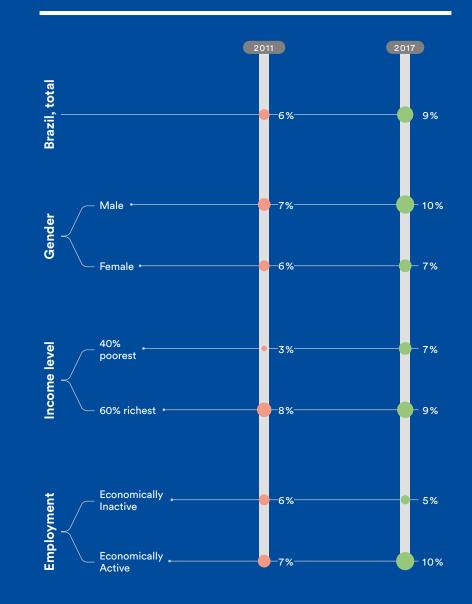
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Summing up, one can see that the percentage of Brazilians who save money through financial institutions is very low compared with the world average. Also, the increase in people saving from 2011 to 2017 was modest, indicating that there is a lot of space for improvement of this percentage.

Finally, in **Table 15**, we looked at the proportion of Brazilians that contracted loans with financial institutions. In 2011, the data indicate that 6% of Brazilians contracted loans, this percentage rising to 9% in 2017 – an increase of 3 pp. These figures are lower than for Latin America and the Caribbean (8% in 2011, and 10% in 2017) and lower than the world average (9% in 2011, and 11% in 2017).

How many Brazilians have loans with financial institutions?



BOX

men and women: In 2011, 7% of Brazilian men contracted loans with financial institutions, and this percentage increased – by 3 pp – to 10% in 2017. Among women, 6% contracted loans in 2011, rising to 7% in 2017 – an increase of 1 pp.

These figures show differences between

Among the poorest 40%, only 3% contracted loans in 2011, but 7% in 2017. Among the 60% richest, these percentages were 8% in 2011 and 9% in 2017. In both income categories, there was an increase in the percentage of people contracting loans. And we also see a narrowing of the gap between the income groups.

By employment status, 6% of the economically inactive population contracted loans in 2011, and 5% in 2017 (a reduction of 1 pp). Among the economically active, people contracting loans rose by 3 percentage points, from 7% in 2011 to 10% in 2017. Thus we see that the proportion of people contracting loans with a financial institution increased across almost all the categories surveyed, from 2011 to 2017. On the other hand, the percentages for Brazilians are still lower than those in neighboring countries, and the worldwide average.



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Why financial inclusion is important – and the role of fintechs **CCESS TO FINANCIAL SERVICES** has several positive implications for society as a whole. For example: for a family, having a bank account provides security in accumulating money, and the possibility of having credit available can be a signal of hope at moments of uncertainty, such as loss of employment or even extreme, unexpected situations such as the Covid-19 pandemic.

These services also help people realize their ambitions in the medium and long term, through investment instruments for formation of savings. For companies, access to financial services can mean the difference between whether or not they get a sale via credit card, or a loan that is needed to enable them to expand, or secure their situation if their revenue falls. All of this contributes to the accumulation of wealth and to maintaining and generating levels of employment²³.

23 The Brazilian Central Bank's *Financial Citizenship Report (Relatório de Cidadania Financeira)* for 2018 shows how financial inclusion is associated with the objectives of sustainable development. Available at: **Brazilian Central Bank**

A recent study by the International Monetary Fund (IMF), on data from 52 countries, provides evidence that financial inclusion by digital means is associated with higher GDP growth²⁴. In other words, ensuring that individuals and companies have adequate access to financial services is a basic necessity for ensuring the conditions for sustainable growth of the Brazilian economy.

The percentage of the Brazilian population without access to a bank account or facilities is not extremely high compared to other developing countries, but there is a lot of room for progress. In the Zetta study on Brazil's recently-implemented *Pix* system (which provides instant, free of charge transfer between bank accounts), 21% of those interviewed said they do not have a bank account, and 13% said they do not have any financial product²⁵.

24 Available at: <u>FMI</u>

25 Available at: Zetta

26 Available at: Valor Econômico

27 Available at: Folha de S. Paulo

28 Available at: <u>LABS</u>

Thus a first challenge is to include this part of the population, to enable them to benefit from the products of the financial system.

Access to these products is an important indicator, but financial inclusion as a concept is wider, including other components such as degree of utilization of a service, and the quality and appropriateness of the product to the profile of each client²⁶.

It is in this context that fintechs have emerged, and seen the opportunity for them to contribute to improvement of the existing system. A survey by the credit reference agency *Serasa* and *Opinion-Box*²⁷ asked consumers expecting to seek credit with digital banks in the post-pandemic period what their reasons were. Their main responses were: (i) speed in the process; and (ii) the possibility of encountering better payment conditions than those offered by other institutions. Among those who are planning to seek online institutions, 57% said they were motivated by the low degree of bureaucracy in the process.

Another survey supporting the hypothesis that fintechs have achieved great success due to their service quality is the 2021 annual *Forbes* survey²⁸ ranking the best banks in the world.



The results of the Forbes survey indicate that the best banks in Brazil are the fintechs – those using advanced digital technology. In this survey, consumers assessed banks on the basis of criteria such as reliability, client service, digital services, financial consultancy and education, terms and conditions, and general level of satisfaction.

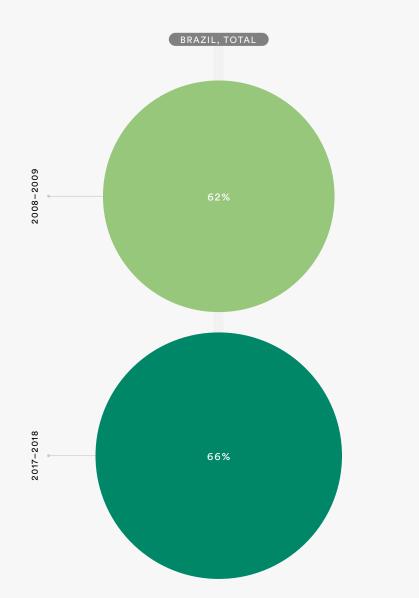
Fintechs also stand out in terms of countrywide penetration in Brazil. Currently, 44% of Brazil's 5,570 municipalities do not have a branch of any traditional bank²⁹ – but **today many fintechs are present in 100% of Brazil's municipalities**. And it is precisely because they have a lean and efficient structure, enabling them to provide most of their services free of charge, that they are able to serve the lower-income population. For a portion of the population, paying a monthly fee of R\$ 20 or R\$ 34 to hold an account or a credit card, and charges of R\$ 10 or R\$ 15 for bank transfers, is expensive.

The annual fee charged for a credit card is one key item in this motivation. This is an area in which the practices of institutions offering credit and debit cards have progressed: for people with access to a credit card, the percentage of people in households in which no member reported spending on an annual credit card fee was 61.7% in the POF of 2008-9, and increased to 66.4% in the POF of 2017-18. (**Table 16**).

29 Available at: Estadão

People who pay no annual credit card fee

% of Brazilians in households where credit card holders reported paying no annual fee



That is an increase of 4.7 pp of Brazilians with access to a credit card in households where no member reported being charged any annual fee. In other words **an increasing number of Brazilians are now not paying an annual credit card fee.**

This would appear to validate the hypothesis that fintechs have had a decisive influence in this process, since fintechs were the pioneers in abolishing annual charges to clients for a basic credit card. Previously, some banks offered credit cards with no annual payment, but these were specific cases linked, for example, to promotional campaigns or to requirements for a minimum level of spending on the card.

This changed when various fintechs entered the market. As well as the benefit to their own clients from not being charged an annual fee, fintechs increased competition in the banking sector, generating benefits for the whole of society, and especially Brazil's consumers. A survey by *Valor Econômico* newspaper also concluded that Brazil's banks are focusing on credit cards with no annual fee, to compete with fintechs³⁰. That is to say, the well-being that is generated is not only for the clients of the fintechs, but also for clients of traditional banks who are able to enjoy the benefits of greater competition in the sector.

30 Available at: Valor Investe

CHAPTER 3

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Source: POF 2008-2009 e POF 2017-2018, IBGE.

Complementing the evidence that fintechs have produced benefits for Brazilians, Box

3 shows how Zetta generates gains for the general public.

BOX 3. Zetta in numbers

Zetta is an association created by companies that use technology to promote financial competitiveness and inclusion. Its members have an objective in common: to provide freedom of choice, so that people and companies have more control and power of decision over their money. But is Zetta doing justice to its mission? We offer this section ('Zetta in Numbers') to answer this question.

Table 17 shows the average fees charged by Zettamembers³¹ for various routine financial operations,such as opening an account, maintaining anaccount, or for example a TED bank transfer³².

31 Average fees of Zetta members that issue credit cards or offer digital accounts.
32 A TED is an 'Electronic transfer' which reaches the destination account on the same business day if made before 5 p.m.

Table 17

Brazil: Average fees charged by Zetta's three largest members

Opening an account	R\$ 0
Closing an account	R\$ 0
Maintaining an account	R\$ 0
Holding a basic credit card •	R\$ 0
TED transaction	R\$ 0
Bank statement	R\$ 0
Withdrawal •	^{R\$} 4.10
Pix transfer (legal entities)	R\$ 0

Source: Zetta.

Table 17 shows how Zetta members arecontributing to financial inclusion, especiallyfor the population with lower incomes or lowerpurchasing power – the people most affectedby charging of fees – for whom fees havehistorically been an entry barrier for access tofinancial services. By making a zero charge foropening an account and providing a basic creditcard, Zetta member companies are facilitatingBrazilians' access to the financial sector.

BOX 3

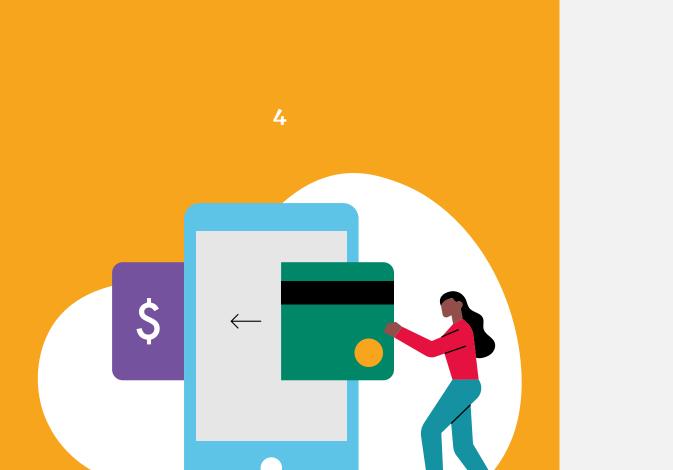
Making no charge for closing an account also has the positive effect of reducing the cost to the consumer of changing their supplier (the 'switching cost'), by removing an additional cost if the consumer is not satisfied – since charging for closing an account tends to prevent a dissatisfied consumer from switching providers. In other words a charge for closing an account is a way of impeding the client from changing banks.

> By not making this charge, Zetta members enhance consumers' choice, giving them unimpeded freedom to switch providers, thus creating an environment of more competition between companies.

Table 17 also shows that the largerZetta members do not charge amonthly fee for keeping an accountopen. This functions as an advantageencouraging consumers with lowfunds or savings to enter, and remainin, the financial system. And a zero feefor transactions such as transfers orstatements stimulates consumers touse financial products more frequently.

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Conclusion

N THIS STUDY we have looked at the business model of fintechs, and how they have contributed to financial inclusion, and improvement of the business environment, in Brazil. Their offer of financial services is based on technology, with focus on the client's experience and satisfaction.

The emergence and growth of fintechs in Brazil has been accompanied by improvements in regulations, which recognize the positive effects these companies have brought to the market. This regulatory framework is based on proportionality – the concept that each institution is subject to rules compatible with its scale, potential degree of risk, and complexity – to ensure a balance between solidity of the market and, at the same time, more competition and innovation. To assess the role of fintechs in financial inclusion for Brazilians, we looked at data from the *Household Budget Surveys* made by the Brazilian Geography and Statistics Institute, IBGE. This showed us a significant increase in the Brazilian population's access to credit cards between its two most recent surveys – of 2008-09 and 2017-8 – the period in which many fintechs were emerging. Over this period, charging of fees moved in the opposite direction, with a higher proportion of households not being charged at all.

> These data support the hypothesis that fintechs have been important in enabling millions of Brazilians to enter the financial system in recent years.



We expect to see a much more significant effect in the coming years, with increasing digitization of the economy and the growing presence of fintechs in the Brazilian market.

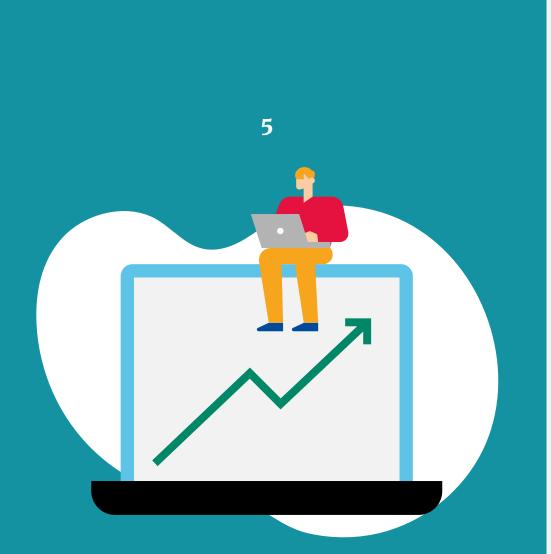
One major challenge for these companies is increasing the inclusion of the population with lower levels of income, especially those in which the head of the household is a woman or black or mixed-race.

Similarly, at present, people with only informal employment have less access to financial services, and merit special attention.

We expect the business model of fintechs and their lean, efficient structure to be an ally in this process, since they are able to offer services without charges, and also give people access to financial services without the need for the client to visit a bricks-and-mortar structure.

Finally, we have seen that the increase in the sector's competitiveness caused by the entry of fintechs has positive impacts not only for their clients, but for all consumers of financial products. This is because the greater competition has led to the creation of new products, and reduction of fees charged by the financial industry as a whole – a trend in which we expect to make further progress in the coming years.

CONCLUSION



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Zetta is a non-profit association that represents technology companies offering digital financial services, and sharing the same values: that technology should give people and companies freedom of choice in taking care of their money, and in making the best decisions for themselves, for their data and for their clients. Zetta was founded by Nubank and Mercado Pago; its members now include Banco Inter, Creditas, Grupo Movile, Zoop, Hash, Iugu, Bexs Banco, Modal, Fitbank, RecargaPay, Conpay, Donus, Dock.tech, XP, Acesso, Transfero and Mercado Bitcoin. Our aim is to ensure a competitive economic environment that results in greater financial inclusion, innovation, and satisfaction for clients.

Zetta also advocates for digitization of financial services, and works to make sure that there are no barriers to innovation and competition.

Thus Zetta seeks to collaborate with regulators and the public to strengthen the impact of technology in the financial sector and in means of payment.

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