SOCIAL IMPACT THESIS

ON FINANCIAL SERVICES

OPPORTUNITIES FOR SOCIAL IMPACT BUSINESSES IN BRAZIL

ARTEMISIA

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Aspen Network of Development Entrepreneurs  MetLife Foundation

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Social Impact Thesis on Financial Services | Artemisia 2018
GOALS

This study presents opportunities for the development of social impact businesses in the financial services sector in Brazil.
Artemisía is a non-profit organization, a pioneer in the support and promotion of social impact businesses in Brazil. The organization supports businesses aimed at the low-income population that create solutions to social and environmental problems, create positive social impact through their core business, are profitable and have the potential to scale. Its mission is to identify and empower entrepreneurs and businesses that are an example in building a more ethical and fair Brazil. In the past 14 years, it has accelerated more than 100 social impact businesses in Brazil and trained 300 others through its programs. It was founded in 2004 by Potencia Ventures.
The Aspen Network of Development Entrepreneurs (ANDE) is a global network of more than 290 organizations that foster entrepreneurship in emerging countries. ANDE members provide critical financial support, capacity building, and technical assistance services to small & growing businesses (SGBs) based on the belief that they will create jobs, stimulate long-term economic growth, and deliver environmental and social benefits.

At MetLife Foundation, we believe financial health belongs to everyone. We bring together bold solutions, deep financial expertise and meaningful grants to build financial health for people and communities that are underserved and aspire for more. We partner with organizations around the world to create financial health solutions and build stronger communities, engaging MetLife employees to help drive impact. To date, our financial health work has reached more than 6 million low-income individuals in 42 countries. To learn more about MetLife Foundation, visit metlife.org
METHODOLOGY

16 External reports analyzed.

10 Interviews with experts, including academics, regulators, and entrepreneurs.

3 Public databases analyzed: BCB (Brazilian Central Bank), IBGE (Brazilian Institute of Geography & Economics) and SUSEP (Private Insurance Supervisor).

18 Social impact businesses in financial services supported and tracked, generating practical knowledge on the subject.
GLOSSARY

BANCARIZATION (“BANCARIZAÇÃO” IN PORTUGUESE)
Process of increasing the number of people who are part of the financial system with some type of banking relationship. Unlike the concept of financial inclusion, banking refers to access to financial services, but not to usage or quality of use.

BLOCKCHAIN
Technology that increases trust in transactions through an encrypted data network that is shared among everyone participating in the system and checks each new entry, thus ensuring there is no discrepancy or fraud.

PAYROLL LOANS
Type of credit in which the amount due is deducted directly from the client’s salary or social security payment each month.

BANKING CORRESPONDENT
Company contracted by financial institutions and other authorized institutions to provide service to clients and users of these institutions (e.g. betting shops and post offices).

FINTECH
Fintechs are companies that promote innovations in financial markets through the intensive use of technology, with the potential to create new business models.
GLOSSARY

SAVINGS
Portion of income or wealth that is not spent or consumed during the period in which it is received, therefore being saved for use at a later date. For the purposes of this study, it should be differentiated from a savings account.

CREDIT SCORE
The credit score is the result of an individual’s payment habits and relationship with the credit market.

SFN
National Financial System, composed of all institutions that work with financial intermediation in Brazil.

BANKING SPREAD
Refers to the difference between the buying and selling price of a share, bond or monetary transaction. In other words, the difference between the cost of money to the bank (how much it pays on taking out a loan) and how much it charges to the customer being issued the credit.

UNDERSERVED
The term has been widely used in international literature on financial services.
GLOSSARY

DEFAULT
Failure to meet an obligation. Occurs when a previously established commitment, such as payment of a bill or debt, is not met.

LOCK IN MECHANISM
A user of a good finds himself in a lock-in situation when the cost of switching from one supplier of a product to another is very high.

PAYMENT PROCESSING MARKET
Formed by payment processors, also known as merchant processors. Companies responsible for the registration of commercial establishments to accept cards as electronic payment methods for acquiring goods and/or services. Not only do they process information but they are also responsible for capturing, transmitting to the payment networks, processing and liquidating financial transactions with registered establishments.

CREDIT PORTABILITY
According to the Central Bank, "credit portability is the client’s ability to request the transfer of credit operations (loans and financing) and leasing agreements from one financial institution to another, by way of early settlement with the original institution by the new one. The conditions of the new transaction must be negotiated between the client and the institution which will grant the new loan."
BASIS FOR CONDUCTING THIS STUDY

To present the most promising opportunities for development of businesses that can have social impact in financial services.

For this, the following was considered:

- **The real needs** of the low-income population in Brazil: what are the main problems and challenges they face in accessing financial services?

- What actions can create **social impact** and bring improvements to the lives of these people?

- What is the state of play of the **market, public policy and government programs**? What opportunities do they point towards?
# INCOME SEGMENTATION

## BRAZILIAN POPULATION

<table>
<thead>
<tr>
<th>Monthly household income, per capita</th>
<th># OF PEOPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; R$2480</td>
<td>10.5 M people</td>
</tr>
<tr>
<td>R$1,020 – R$2,480</td>
<td>30.7 M people</td>
</tr>
<tr>
<td>R$642 – R$1,019</td>
<td>33.8 M people</td>
</tr>
<tr>
<td>R$442 – R$641</td>
<td>33.6 M people</td>
</tr>
<tr>
<td>R$292 – R$441</td>
<td>30.1 M people</td>
</tr>
<tr>
<td>R$163 – R$291</td>
<td>27.0 M people</td>
</tr>
<tr>
<td>R$182 – R$162</td>
<td>12.5 M people</td>
</tr>
<tr>
<td>Less than R$182</td>
<td>9.2 M people</td>
</tr>
</tbody>
</table>

## SOCIO-ECONOMIC CLASS*

- **Upper Upper Class**
- **Lower Upper Class**
- **Upper Middle Class**
- **Middle Middle Class**
- **Lower Middle Class**
- **Vulnerable**
- **Poor**
- **Extremely poor**

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**112.4 million people living with less than R$ 22 per day**

60% of the Brazilian population

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*Source: Plano CDE*  
Study based on IBGE 2010 Census data  
(* The difference in totals is due to missing values: people who do not have individual income or who refused to respond.)*

*Exchange rate as of 12/21/2018 is US$ 1 = R$ 3.86*  
*In Brazil a common way to distinguish high income from low income population is to divide it into socio-economic classes denominated with letters going from A to E (A being the wealthiest and E being the poorest). This study focused on classes C, D and E.*
SOCIAL IMPACT BUSINESSES

Companies that intentionally provide scalable solutions to social and environmental problems faced by the low-income population.

PRIMARY CHARACTERISTICS

LOW-INCOME FOCUS
Designed according to the needs and characteristics of the low-income population.

INTENTIONALITY
Explicitly committed to social impact, and managed by ethical and responsible entrepreneurs.

SCALE POTENTIAL
Can expand their reach by expanding their own business, by being replicated in other regions by other actors, or by disseminating elements inherent to the business through other entrepreneurs, organizations or public policy.

PROFITABILITY
Have a robust model that guarantees profitability and does not depend on donations or subsidies.

SOCIAL IMPACT RELATED TO MAIN ACTIVITY
The product or service offered directly generates social impact. It is not a project or initiative separate from the business, but its main activity.

OPTION TO DISTRIBUTE DIVIDENDS
May or may not distribute dividends to shareholders, thus is not being a criterion for defining social impact businesses.
HOW BUSINESSES CREATE SOCIAL IMPACT

"Poverty is the deprivation of an individual's basic capacities, not just the fact of having income below a pre-established threshold. Amartya Sen, Nobel Memorial Prize in Economic Sciences"

Based on Amartya Sen’s perspective, in Artemisia’s view, businesses can generate social impact in five main dimensions:

- Reducing transaction costs
- Promoting development opportunities
- Enabling increased income
- Reducing vulnerability
- Strengthening citizenship and individual rights
CONSIDERATIONS

DATA

There is a great deal of data on the subject, despite the limited focus on the low-income population. Many are focused on specific regions and cities, with few consolidated national data sources, so there is no single, absolute dataset.

SOLUTIONS

Effective solutions are those that are simple in solving the problem, reliable, accessible, and appropriate to the user's language, reality and needs.

UNDER CONSTRUCTION

The thesis is a living document and can be updated according to changes in the market and the needs of the target audience. It is not an academic work.
FINANCIAL INCLUSION
WHAT IS FINANCIAL INCLUSION?

It is the process of effective access and usage of financial services by the population, adapted to their needs and contributing to their quality of life.

It is related to access, usage and quality of use of financial services.

Since 2013, the Central Bank has referred to financial inclusion with access, usage and quality of use as Financial Citizenship - a name that indicates how inclusion policies are associated with the exercising of rights.
Financial citizenship is the exercising of rights and duties that enable financially sustainable behavior and conscious participation in the financial system, contributing to its solidity, efficiency and to people's financial well-being.

Financial Citizenship Report, Brazilian Central Bank (2017)
ACCESS

Access represents the availability of banking (having a bank account) and of financial services and products offered (credit, savings, etc).

However, having access to an account or financial service does not necessarily means the use of these products. The lack of use denotes the inadequacy of existing services when applied to the real needs of the low-income population.

Financial inclusion only occurs when financial products and services meet the needs of the low-income population.
Usage of financial instruments relates to the intensity, extent and depth of use of financial services and products.

The use of these instruments can already be considered an advance of Financial Citizenship, since it implies that the products are minimally adapted to the needs of the consumer/citizen.

However, inappropriate products can generate problems - high indebtedness, difficulty in saving, etc. - if not accompanied by financial education on healthy use.
QUALITY OF USE

In addition to the use per se, quality of use can be understood as use that does not lead to indebtedness, but rather an increase in savings, according to the needs of the low-income population being served.

This element is the most difficult to be measured empirically, as it indirectly involves making judgments on the ways in which financial products should be used.

However, based on qualitative studies and examples of increased indebtedness in banking initiatives, we can find opportunities to improve the provision of services that lead to better use by people currently excluded from the formal financial system.
THE UNDERSERVED

An individual that has a bank account is often considered to be “included”.

However simply having a bank account, especially if there is poor quality of use, results in citizens and consumers that are poorly served by the financial system and left worse off.

This is a group that has access to expensive and yet poor quality products and services with often very high interest rates.

In this report, financial inclusion will also take into account those who are banked but poorly served.
THE ROLE OF FINTECHS
THE TIME FOR FINTECHS

According to the Brazilian Central Bank, Fintechs are companies that promote innovation in the financial markets through the intense use of technology, with the potential to create new business models. Researchers believe that now is the ideal time for Fintechs seeking to address bottlenecks in the financial system.

FUNDRAISING

Being at the center of the debate on the evolution of the relationship between the population and their finances, there has never been so much money available for fundraising.

TECHNOLOGICAL EVOLUTION

Evolution of simple digital solutions and more complex topics, such as blockchain, opens doors to new solutions that have not yet been imagined.

MODERN REGULATION

With the implementation of the BC+ Agenda, regulators are open to listening to Fintechs to update regulation in favor of increasing competition on several fronts.
FUNDRAISING

Some characteristics of the Brazilian banking system create opportunities for Fintechs.

The fintech market in Brazil has been increasingly attracting investors. In 2017, investments in these companies totaled R$ 457.4 million, according to a survey by “Conexão Fintech”, showing greater availability of capital for fundraising.

Total Raised by Fintechs in the World (R$ Bi)

Source: The Future of Fintech. BI Intelligence (2018)
FUNDRAISING

Some characteristics of the Brazilian banking system create opportunities for Fintechs.

BANKING CONCENTRATION

Since the 2008 merger of two large banks, the banking system has been a lot more concentrated.

The top four banks today account for approximately 80% of loans and more than 70% of assets under management.

Market Share of the Four Largest Banks

Fonte: Banco Central do Brasil
Source: Brazilian Central Bank

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FUNDRAISING

Some characteristics of the Brazilian banking system create opportunities for Fintechs.

BANKING SPREAD

Since the end of 2014 the economic crisis has affected the risk of default, which is the largest component of the net interest rate spread:

Source: Banking Spread Project Panel (2017). Central Bank

Monthly average spread
FUNDRAISING

Some characteristics of the Brazilian banking system create opportunities for Fintechs.

BANK FEES

Between 2015 and 2017, bank revenues derived from fees rose by 22%, with a higher proportion coming from individuals.

Source: Banking Economy Report 2017 (Central Bank). Retrieved from Fintech Deep Dive Research, 2018
MODERN REGULATION: AGENDA BC+

In 2017 the Central Bank launched the “BC+ Agenda”, a set of programs to reduce the bureaucracy of the financial system and increase competitiveness, with incentives for fintechs and cheaper credit.

Divided into 4 stages, the BC+ Agenda brings regulatory innovations that can improve the business environment for new entrants into the financial system:

- More Financial Citizenship
- More Modern Legislation
- More Efficient SFN
- Cheaper Credit

The opportunities associated with each of these elements will be presented in the ‘Opportunities for Fintechs’ chapter.
LEVELS
OF ACCESS
LEVELS OF ACCESS

1. Accounts and Payment Methods
2. Credit
3. Savings
Banking has increased over time

The proportion of adults with a banking relationship in the overall Brazilian population already exceeds 80%.

Over time, banking has grown at a faster rate than the population itself, which is good news.

Source: BCB/CCS and IBGE
1 | ACCOUNTS AND PAYMENT METHODS

Increased access for low-income population

Between 2011 and 2014, checking account ownership grew more for the poorest 40% than for the general Brazilian population. Despite this, the reality in Brazil is still very different from the OECD countries, where 94% of the population over 15 has a checking account.

### CHECKING ACCOUNT ACCESS

<table>
<thead>
<tr>
<th>YEARS</th>
<th>2011</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil: General population</td>
<td>56%</td>
<td>58%</td>
</tr>
<tr>
<td>Brazil: Poorest 40%</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Difference between general population and poorest 40%</td>
<td>26%</td>
<td>8%</td>
</tr>
<tr>
<td>High-income countries (OECD)</td>
<td>90%</td>
<td>94%</td>
</tr>
</tbody>
</table>

Source: World Bank

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1 | ACCOUNTS AND PAYMENT METHODS

Availability of branches and banking correspondents over time

The availability of banking correspondents (lotteries, post offices and other places offering the services of a financial institution alongside their main activity) is of extreme importance for the increase of access to financial services in the country.

The number of financial system service points has grown in recent years, targeting regions that have more limited access to financial services.

65% of Brazilians access the financial system mainly through betting shops

Source: Financial Citizenship Series 2016 (Central Bank)
1 | ACCOUNTS AND PAYMENT METHODS

Banking correspondents have become the main point of contact with the financial system

- From 2009 to 2017, the total number of payments via banking correspondents increased by 69%.
- Bill payments at bank branches have been falling since 2009.

Bill Payments by Service Channel

Source: Brazilian Central Bank

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Use of banking correspondents is still restricted to bill payments

From 2009 to 2017, the number of bill payments via banking correspondents grew by 46%, from 1,928,516 to 2,820,039.

Additionally, access to deposits, withdrawals and balance statement inquiries via banking correspondents has also increased.

Source: Brazilian Central Bank
1 | ACCOUNTS AND PAYMENT METHODS

The payment processing market has grown, focusing on small businesses

Until a few years ago, the payment processing market was dominated by just two big companies.

New payment companies have increased supply, cheapening costs for small businesses, especially with POS machines.

Debit and credit card payments have grown by more than 60% since 2010.

VOLUME OF PAYMENTS WITH INSTRUMENTS OTHER THAN MONEY

<table>
<thead>
<tr>
<th>Payment</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Evolution 2010-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Cards</td>
<td>3,314</td>
<td>3,836</td>
<td>4,473</td>
<td>5,020</td>
<td>5,367</td>
<td>61.9%</td>
</tr>
<tr>
<td>Debit Cards</td>
<td>2,948</td>
<td>3,508</td>
<td>4,129</td>
<td>4,908</td>
<td>5,627</td>
<td>90.8%</td>
</tr>
<tr>
<td>Checks</td>
<td>1,675</td>
<td>1,590</td>
<td>1,439</td>
<td>1,304</td>
<td>1,171</td>
<td>-30.1%</td>
</tr>
<tr>
<td>Direct Debits</td>
<td>3,585</td>
<td>4,135</td>
<td>4,358</td>
<td>5,083</td>
<td>5,686</td>
<td>58.6%</td>
</tr>
<tr>
<td>Transfers</td>
<td>7,711</td>
<td>8,443</td>
<td>9,074</td>
<td>9,623</td>
<td>10,749</td>
<td>39.4%</td>
</tr>
</tbody>
</table>

Notes:
1. Checks: includes interbank and intra bank checks
2. Transfers: includes interbank and intra-bank transfers

Source: Deban
Growth in debit card use can be attributed to lower income population.

In addition to bank accounts, the most used financial product among the low-income population is the debit card.

Only 19% of low-income individuals have credit cards.

Possession of Banking Products Among CDE Classes

- Debit Card: 48%
- Credit Card: 19%
- Payroll loan: 10%
- Personal credit: 8%
- Vehicle Financing: 7%
- Real estate financing: 4%

Source: *Segmentation in Financial Inclusion in Brazil* 2016 (Plano CDE)
Credit growth

The total amount of credit granted in Brazil in 2017 reached a value corresponding to 47% of GDP. That was double the level in 1998 (23.5%).

The poorest part of the population was included in this growth, mainly due to real estate loans, payroll loans and microcredit, aimed specifically at this section of the population.

Source: Brazilian Central Bank
Credit growth through housing and payroll loans

These two types of credit have structural benefits that facilitate access by low-income people:

- Credit linked to the construction of assets (real estate)
- Obtaining guarantees (real estate and formal salary)

In addition to housing and payroll loans, there has also been an increase in access to credit cards since 2007.

Source: Brazilian Central Bank
But growing credit card access has not been matched by good quality of use

With low rates of formalization, and being distant from formal financial institutions, low-income workers have not built credit history that can be analyzed by banks’ traditional scoring mechanisms.

Without credit history, these consumers rely on credit cards to obtain financing.

The lower the income, the poorer usage quality seen, with a greater proportion of the balance due being financed by making minimal payments on the credit card or through installments.
2 | CREDIT

One credit option that has shown steady growth is credit cooperatives.

For both individuals and companies, credit unions have shown significant growth since 2012.

Their market share reached 1.7% of GDP in 2017.

Source: Central Bank
In the last three years, there has been an increase in the number of requests for credit transfers.

Regulatory changes have increased the number of requests for credit transfers - fostering competition and giving the client control over the institution with which to build a financial relationship.
3 | SAVINGS

Even with increased access to financial products, the household savings rate has fallen between 2000 and 2014, there was a decrease in the weight of household savings as a share of GDP.

The total number of households that saved declined in Brazil between 2003 and 2009 - driven by the lowest income brackets (less than 4 minimum wages).

Source: Household Savings Rate: A regional analysis 2013 (Central Bank)

*SM = minimum wage
3 | SAVINGS

Long-term planning lower among Brazilians than the rest of the continent - especially among the poorest.

Not only do few Brazilians save for old age, there is also a big difference between the richest 60% and the rest.

Only 5.9% of Brazilians among the poorest 40% say they save money thinking about old age.

Source: Global Findex2014 (World Bank)
CHALLENGES FOR FINANCIAL INCLUSION
CHALLENGES FOR FINANCIAL INCLUSION

A  Accounts and Payment Methods
B  Access to quality credit
C  Savings and Planning
D  More Complex Financial Products (insurance)
A | Accounts and Payment Methods

Receipts and payments in cash are a reality among low-income Brazilians.

Despite the growth in banking, existing products do not offer incentives for the use of electronic methods and account deposits.

Despite the digitalization seen in recent years, there is little use of online financial solutions.
A | ACCOUNTS AND PAYMENT METHODS

Even with relative bancarization, there is low usage of banking services among low-income people.

57% of people in classes CDE claim to have a bank account.

7% use the account more than once a month.

The remainder does not use the account, or just withdraws the money all at once.

Source: Plano CDE: “Segmentation in Financial Inclusion in Brazil” (2016)
A | ACCOUNTS AND PAYMENT METHODS

Receipts in cash aggravate low usage of bank accounts

The proportion of workers receiving remuneration in cash is still 34%.

Although the percentage of informal sector workers receiving cash income is high, it is in the formal sector that the largest absolute number of people receive payments in cash.

46% of the people who receive cash are in a registered occupation.

Source: Financial Citizenship Series n.3. 2016. (Central Bank)
A | ACCOUNTS AND PAYMENT METHODS

The formalization of payments encourages the use of different modalities besides cash.

Between 2013 and 2018, the number of Brazilians receiving salary in deposits increased.

However, the most widely used means of payment is still cash.

Still, it is remarkable how the formalization of payments leads to a decrease in the use of cash as the main form of payment.

Source: Brazilians and their relationship with money 2018–Central Bank
A | ACCOUNTS AND PAYMENT METHODS

Despite the increase in banking over the years, there has been a drop in the number of access points

Until 2013 there was a long period of continuous growth in the number of banking correspondents throughout the country. The last 4 years have been marked by a reduction in the number of access points.

Analysis by the Central Bank, however, shows that the increase in the supply of banking correspondents had the effect of replace banking branches. Despite being positive, this trend creates new challenges for inclusion:

1 Banks are reducing the number of branches in lower income regions;
2 The population of these regions has access to more limited services made available at banking correspondent establishments.

"The cost differences between the two types of establishment allow financial institutions to optimize the distribution of their services. Thus, regions where there was insufficient demand for financial services, in the amount or level of complexity that a branch can offer, can be served by banking correspondents."

A | ACCOUNTS AND PAYMENT METHODS

While correspondents have replaced branches, providing services beyond payments is still incipient.

The financial inclusion resulting from the existence of correspondent banks is only partial.

As the chart on the right shows, access to credit and transfers has not grown representatively over the years. This is because they are rarely offered, or non-existent, by banking correspondents.

Number of Loans and Financing Operations per Channel

Source: Central Bank
A | ACCOUNTS AND PAYMENT METHODS

The fall in access points has not been replaced by digital solutions

The increase in access to the internet and smartphones in all social classes has created great potential for financial inclusion of the low income population.

World Bank data show that the number of mobile phones exceeds the number of adults who are banked. Developing economies are highlighted.

As of 2006, we have seen a decrease in the mobile penetration gap between social classes. Today, more than 80% of the population of classes CDE have access to mobile technology.

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Source: PNAD
Cellphone usage has not resulted in use for financial purposes among low-income population.

Even with the increase in smartphone penetration, there is resistance to performing electronic banking transactions. Checking for statements and e-commerce are potential entry points for financial instruments into digital channels for the low-income population.

The mistrust with digital methods is revealed in qualitative research with banked smartphone users among families from classes CDE.

"I pay bills by debit using the app. I usually use my home computer, I do not do it on my cell phone. I use the cell phone to see if money has arrived in the account and to see the balance. I am not in the habit of making transfers (...), I prefer to use the home computer, which I think is safer. (Male, 36 years, class C)"

Source: Plano CDE “Financial Inclusion Segmentation in Brazil” (2016)
A | ACCOUNTS AND PAYMENT METHODS

Mistrust, besides the preference for cash payments, generates little use of the traditional banks.

Payments are mostly made in banking correspondents (betting shops), which do not offer more complex services.

But with a decrease in the total number of correspondents, the distribution challenge is not being solved by digital solutions for the time being.
B | Credit

The supply of credit for the low-income faces three obstacles:

1 | Asymmetry of information: little is known about this audience.
2 | Lack of guarantees: public with few assets built-up.
3 | Operating cost vs. low average ticket: scale challenge.
## B | CREDIT

Among the low-income population, credit is scarce and dependent on informal sources.

Among the population with household income of up to one minimum wage per capita, informal access to credit reaches 9%.

More than 85% has no access to any form of credit, according to a 2016 survey.

### Credit Taken by Classes CDE

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends/ Relatives</td>
<td>5.9%</td>
</tr>
<tr>
<td>Money-lender</td>
<td>2.8%</td>
</tr>
<tr>
<td>Bank</td>
<td>4.2%</td>
</tr>
<tr>
<td>Financial institution</td>
<td>1.5%</td>
</tr>
<tr>
<td>Other Formal</td>
<td>4.0%</td>
</tr>
<tr>
<td>None of these</td>
<td>85.1%</td>
</tr>
</tbody>
</table>

Source: Plan CDE “Financial Inclusion Segmentation in Brazil” (2016)
Among formal options, credit card formats are the most commonly used.

Cards, in the form of store-cards and in-store financing of purchases, are a source of bank credit.

In reported data, many consumers do not see these forms of buying as a form of credit.

Credits taken in the last year (% of respondents)

- Direct financing: 15%
- Installments with card in-store: 16%
- Credit Card (without paying full balance): 11%

Source: Financial Citizenship Series 3, Central Bank
Among the most vulnerable, credit penetration is even more restricted

Between 2012 and 2014, there was an increase in the credit portfolio directed at families registered in social welfare programs.

Since then, the number of credit concessions to families receiving income support has fallen below 2012 levels.

Penetration among the registered low-income population (%)

Source: Banco Central
B | CREDIT

With difficulty in accessing low-income clients, little credit history is generated.

Since low-income people have less access to bank accounts and credit, financial institutions do not build a credit history of these consumers.

The effect is a focus on "impersonal" credit schemes or those linked to institutions with some form of history:

1 | Shops / Retailers
2 | Card machine / Card Issuers

Currently, the only public information regarding credit history is the national default list ("cadastro negativo").
B | CREDIT

A negative credit rating is a barrier to credit for low-income people.

41% of adults in the country have a negative rating, according to the SPC.

Out of approximately 60 million people with negative rating, 65% have incomes of less than 3 minimum wages.

The lack of payment history coupled with negative ratings has negative effects on the ability of institutions to provide loans to low-income customers.

Source: “Default declines for the third consecutive month, but the number of negative ratings in the country breaks the 60 million mark, according to SPC Brazil and CNDL.” SPC (2017)
With lower asset accumulation, low-income consumers have a reduced supply of credit

In low-income families, variable income from informal jobs and the lack of accumulated assets negatively affect the supply and cost of formal credit.

With the lack of guarantees, the alternatives for the CDE borrower are the most expensive ones: loan sharks, credit cards and overdrafts.

It is for this reason that housing credit and advancement of receivables are so valuable – these mechanisms include the guarantee in the nature of the credit (real estate and steady predictable income).

"I have to save. For me to get a loan is very rare."
(Male, 32 years old, resident of a favela and with informal variable income)

Source: Plan CDE “Segmentation in Financial Inclusion in Brazil” (2016)
B | CREDIT

Operational cost vs. Low average ticket

The granting of more credit depends on 2 factors:

1 | Collection and analysis of new information on potential borrowers;
2 | Construction of new forms of credit assessment.

Both cases involve investments that may make small-loan loans infeasible.

The challenge for low-income credit is to lower operating and evaluation costs in order to compensate for the small amounts borrowed.

Without granting of credit, there is no accumulation of information or assets by clients - generating a vicious cycle of financial exclusion.
B | CREDIT

Entrepreneurs rely on savings or informal credit to make investments

The difficult access to credit is a factor that hinders entrepreneurship in the country.

Only 7% of those opening a business claim to have taken out a loan.

Of these 7%, only 9% took credit from financial institutions.

The dependence on family loans and employment income to start a business stand out.

Adults who were able to raise funds (%), 2017

Source: Global Findex2018 (World Bank)
B | CREDIT

Microcredit still loses out to more expensive alternatives among microentrepreneurs

Although it is an important means, access to microcredit is still very limited.

Looking at the forms of credit with the greatest number of operations shows the inefficiency in the use of credit: overdrafts and accounts receivable financing.

Median Annual Interest Rate for Microentrepreneurs with Free Resources, Per Credit Type (2017)

Source: BC/SCR and MEI/SEMPE register
B | CREDIT

Microcredit still loses out to more expensive alternatives among microentrepreneurs.

The type of credit transaction most used by entrepreneurs (in number of transactions) is accounts receivable financing.

This format uses the accounts receivable as guarantees and assumes the entrepreneurs’ need for working capital.

Median Annual Interest Rate for Microentrepreneurs with Free Resources, Per Credit Type (2017)

Source: BC/SCR and MEI/SEMPE register
Since 2015 the withholding of microcredit has grown, exposing the difficulty of finding the small entrepreneurs that need it most.

The Brazilian Central Bank mandates that 2% of all compulsory deposits be made available as microcredit. Until 2012, the large banks had difficulty converting this amount into microcredit, as you can see on the graph.

Between 2012 and 2014, the amount of bank deposits not directed to microcredit fell sharply.

Since the beginning of the recession, however, there has been an increase in this value, indicating a bottleneck in the granting of microcredit.

Fonte: Banco Central
B | CREDIT

Despite changes in the outstanding microcredit balance, the number of new loans has been stable.

Changes in the microcredit balance therefore reflect changes in the loan amounts.

The number of concessions has been relatively stable since 2014 - indicating a potential to find and offer credit to entrepreneurs that have not yet been contemplated.

Source: Central Bank
B | CREDIT

Operational cost vs. Low average ticket

Observing a small retailer in Sao Paulo shows the distortions in the formal financial market for small business owners.

The entrepreneur interviewed uses microcredit only as working capital, due to the payment deadline of his main supplier. By not trusting bank fees, he builds his savings in the form of stock - without insurance. To guarantee the cashflow, he use accounts receivable financing from credit card payments.
THE POTENTIAL FOR SMALL BUSINESS

The case of the retailer demonstrates four major challenges for the small business owners - formalized or not.

PAYMENT METHOD
Low-income customers make little use of cards, making the retailer reliant on cash. When receiving a card payment, he/she lacks sufficient cash flow to manage the 30-day term.

CREDIT
In addition to the low supply of credit, small entrepreneurs rarely have grace periods that enable long-term investments.

BUSINESS MANAGEMENT
Little financial knowledge leads to entrepreneurs making bad decisions - like concentrating profit in stock to avoid bank fees (in this case, bottles of beer and other liquor).

RELATIONSHIP WITH SUPPLIERS
In general, the small business owner depends on large retailers or wholesalers. Without scale, they can not negotiate better terms of payment.
The granting of credit to low-income individuals faces several challenges:

1. Lack of history and collateral

2. High client acquisition costs and lower payment potential

With this scenario there is a strong reliance on credit cards and informal credit opportunities.
C | Planning and saving

Low-income families have difficulties in financial management and savings for two main reasons:

1 | Variations in income (a result of informality)

2 | Mismanagement of access to credit
C | PLANNING AND SAVINGS

Variation of income prevents financial planning. Let’s take this example:

<table>
<thead>
<tr>
<th>Family Breadwinner</th>
<th>Fixed costs divided among all</th>
<th>Variable individual expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary income (fixed)</td>
<td>Debit card / internet banking / cash</td>
<td></td>
</tr>
<tr>
<td>Secondary income (variable)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary income (variable)</td>
<td>Rent</td>
<td></td>
</tr>
<tr>
<td>Secondary income (variable)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary income (variable)</td>
<td>TV / Internet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water bill</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electricity bill</td>
<td></td>
</tr>
</tbody>
</table>

"I pay the internet and my wife pays the electricity. I pay the shopping and my wife pays for the swimming, you know? It is not confusing. For example, my wife pays for the water and I pay the electricity, but if she can not afford the water, then I’ll have to pay, so I’ll have to changed my plan, you understand?"

Source: Plano CDE “Financial Diaries 2.0” 2018
C | PLANNING AND SAVINGS

Capacity for saving among the individuals from CDE classes is low.

Analyzing the CDE families, only 27% saved some value in the last year.

The volume of these savings is also worrying. Only 17% have reserves equal or above one month’s income.

Source: Plano CDE *Segmentation and Financial Inclusion in Brazil* (2016)
When there are savings, half of the time the funds are saved at home.

When they save money, most CDE families choose to keep money at home, in the same proportion as savings accounts.

This option is inversely proportional to income and decreases significantly in families with higher income levels.

Source: Plano CDE "Segmentation and Financial Inclusion in Brazil" (2016)
Only 11% of Brazilian families say they always save.

43% of Brazilian families usually save only when there is money left over.

Added to those who rely on extra income to save, the number reaches 51%.

C | PLANNING AND SAVINGS

Lack of money and knowledge as causes

In addition to the lack of money, Brazilians cite lack of knowledge about how to save.

There is lack of understanding from the opening of savings accounts up to ways to save.

Perception of bureaucracy and fees also serves as an incentive for saving at home.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of money</td>
<td>91%</td>
</tr>
<tr>
<td>Think that return is not worth it</td>
<td>19%</td>
</tr>
<tr>
<td>Not interested in saving</td>
<td>15%</td>
</tr>
<tr>
<td>No account to save</td>
<td>15%</td>
</tr>
<tr>
<td>High taxes</td>
<td>15%</td>
</tr>
<tr>
<td>Too much bureaucracy</td>
<td>13%</td>
</tr>
<tr>
<td>Do not know where / how to save</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: Series citizenship financial n.3, 2016. (Central Bank).
Leftover funds are directed to consumption

A look at the allocation of residual income shows a tendency, in all social classes, to prioritize consumption versus saving.

The main allocation of extra household income to savings does not increase according to the increase in income.

Among low-income individuals, more than 10% use extra income to lend to others—a process of building networks of informal credit relationships that will be addressed later.

Source: Series citizenship financial n.3. 2016. (Central Bank)
C | PLANNING AND SAVINGS

Instalment payments compromise household budgets

The increase in access to credit – particularly through loan-free instalments – without financial education, has led Brazilian families to commit a considerable portion of their income to paying off loans.

Figure 8: Consumer spending patterns in Brazil are dramatically different than they are among households with similar income levels in South Africa.

Source: Plano CDE 2012 "Financial Management among Low Income Classes in Brazil: Comprehensive, Diversified, Engaged"
C | PLANNING AND SAVINGS

Credit as an impediment to saving

A study carried out in Mexico showed unexpected results from increasing the supply of microcredit supply. Recent studies with beneficiaries of social or microfinance programs show similar effects:

Without financial education, access to the formal financial market has created a new dependency network.

Instead of replacing informal finances, formal products are simply incorporated into the family strategy, which becomes dependent on numerous sources of credit (both formal and informal) to achieve levels of consumption that are not feasible (or realistic) given the family’s income.

With easier access to credit, households were able to distribute consumption over time and accumulate more durable goods. At the same time, the proportion of households that saved declined by 61 percent in these communities, suggesting that households began to depend less on savings as a buffer against income fluctuation when formal credit became available.

(Central Bank, Financial Citizenship 3, 2015)
C | PLANNING AND SAVINGS

Credit is seen as a complement to income

Looking at financial journals with beneficiaries of government support programs, we can find the case of Silvana.

She has 4 credit cards, used in a very peculiar way: the first pays the second, which pays the third, etc. Month by month she does not know how big her budget and spending are - her concern is how to multiply her debts to increase her consumption without defaulting.

When you need to make a larger purchase, your first strategy is to create a new card in a store that you do not already have.¹

In cases such as that of Silvana, identified in economic anthropology studies, it is possible to observe how access to credit without due financial education is interpreted as an part of the available domestic budget.

This availability leads to families increasing spending by considering a non-existent income (the available credit limits), leading to a cycle of dependency on family members, loan sharks and more expensive credit products available to clients with negative credit scores (such as new cards).

¹ Description available in BADUE and RIBEIRO, 2018. Gendered redistribution and family debt: The ambiguities of a cash transfer program in Brazil

"People combine multiple financial tools to support ongoing borrowing, repayment and re-borrowing (one borrows from one place to repay elsewhere). Individuals swap roles between debtor and creditor, and even the poorest people are also likely to be creditors."²

Credit is seen as a complement to income

The difficulties in saving are also tied to the continued use of credit, which substantially helps consumption but makes saving almost impossible, since households are always tied to debit and credit card debts.

Additionally, spending is often directed to day-to-day purchases, which take precedence over savings.

These expenses are referred to as "besteirinhas" - sweets or an unplanned trip to a mall, toys or anything that pleases the children. They could be a treat for a child, which costs more than the family can afford, but are also not so expensive.

“I couldn’t clear my name. It was my sister who got me on the blacklist. Now I don’t have the courage to try and pay with a card. Instead, I split payments and pay with the installment booklet.” Recife, D class income

“The money is gone, my motorbike broke down, I hit a car, the repairs were R$300. I didn’t have money, my card was maxed out, full of debts. I went to my mother, and she lent me her card. I divided the payment in three installments. Her bill came, and I wasn’t able to pay. So she paid, and I’m paying her back slowly.” São Paulo, C class income

1 Description available in BADUE and Ribeiro, 2018. Gendered redistribution and family debt: The ambiguities of a cash transfer program in Brazil
C | PLANNING AND SAVINGS

Psychology of Scarcity

The most vulnerable population lives in a situation of scarcity that creates obstacles to financial decision making.

When people are preoccupied with resolving emergencies, it becomes more difficult to plan long-term decisions.

Economic psychology studies measure the impact of scarcity on the ability of low-income families to make decisions.

One challenge is to build a decision architecture that directs the user of financial services to attitudes that lead to greater economic well-being.

In their book “Scarcity: Why Having Too Little Means So Much”, sociologists Sendhil Mullainathan and Eldar Shafir demonstrate how scarcity leads to greater difficulty in making decisions: there is no slack, all decisions are urgent, which pressures the most vulnerable into bad decisions.

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

C | PLANNING AND SAVINGS

There are two main challenges for increasing savings among the low-income population:

1. Incentive structures in the use of credit - especially credit cards. There is an incentive to substitute savings for interest-free financing.

2. Lack of planning, aggravated by income variation from informal jobs, besides directing extra income to consumption.
D | More Complex Financial Products (Insurance)

Other financial products are not part of the repertoire for underserved groups.

The challenge is to communicate product benefits and adapt to the needs of the profile.
The insurance market has grown 70% in terms of the share of GDP since 2001

Access to insurance can have the same effect as building savings, acting as a form of protection against emergencies.

The insurance market has a share of more than 3% of the Brazilian GDP.

Evolution of Direct Insurance Premiums, Amount and Share of GDP

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DIRECT REWARDS (VALUES IN THOUSAND REAIS)</th>
<th>SHARE OF GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>24,211,622</td>
<td>1.84%</td>
</tr>
<tr>
<td>2002</td>
<td>23,910,777</td>
<td>1.61%</td>
</tr>
<tr>
<td>2003</td>
<td>30,717,421</td>
<td>1.79%</td>
</tr>
<tr>
<td>2004</td>
<td>37,546,345</td>
<td>1.92%</td>
</tr>
<tr>
<td>2005</td>
<td>42,561,865</td>
<td>1.96%</td>
</tr>
<tr>
<td>2006</td>
<td>49,587,528</td>
<td>2.06%</td>
</tr>
<tr>
<td>2007</td>
<td>58,443,093</td>
<td>2.15%</td>
</tr>
<tr>
<td>2008</td>
<td>67,816,374</td>
<td>2.18%</td>
</tr>
<tr>
<td>2009</td>
<td>76,611,206</td>
<td>2.30%</td>
</tr>
<tr>
<td>2010</td>
<td>90,088,893</td>
<td>2.32%</td>
</tr>
<tr>
<td>2011</td>
<td>105,031,660</td>
<td>2.40%</td>
</tr>
<tr>
<td>2012</td>
<td>129,340,524</td>
<td>2.69%</td>
</tr>
<tr>
<td>2013</td>
<td>145,348,303</td>
<td>2.73%</td>
</tr>
<tr>
<td>2014</td>
<td>164,360,612</td>
<td>2.89%</td>
</tr>
<tr>
<td>2015</td>
<td>184,448,494</td>
<td>3.12%</td>
</tr>
</tbody>
</table>

Source: Susep (2014) and CNSEG (Collection Reports)
But among the low-income, use of insurance is still very low, regardless of access to other financial products.

Access to insurance runs into barriers such as trust, cost and product knowledge among a population that is still distant from the formal financial market.

### Use of credit and own-account insurance with income of up to R$ 1,000 in 2003

<table>
<thead>
<tr>
<th>Used Credit?</th>
<th>Had Insurance?</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>(80.6%)</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>(79.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>(19.4%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>(20.5%)</td>
</tr>
</tbody>
</table>

Source: ECINF, 2003
D | FINANCIAL PRODUCTS (INSURANCE)

Little proximity to financial institutions prevents greater use of other instruments, such as insurance.

The challenge is in creating entry-level products that help break down the barrier of mistrust with the bank and with digital channels that would allow for greater penetration of more complex products.
SUMMARY OF FINANCIAL INCLUSION CHALLENGES

A ACCOUNTS AND PAYMENT MECHANISMS
- Low usage of existing accounts
- Low usage of digital solutions
- Drop in access points

B ACCESS TO QUALITY CREDIT
- Few guarantees
- Little or no credit history

C SAVINGS AND PLANNING
- Little culture of planning
- Incentives to use credit

D MORE COMPLEX FINANCIAL PRODUCTS (INSURANCE)
- Low penetration among the low-income
- Little knowledge about benefits
OPPORTUNITIES FOR IMPACT FINTECHS
The changes in the regulatory scenario and the challenges of the vulnerable population in access to and quality use of financial services point to 5 great opportunities for businesses to create impact:

#1 Increased digitalization

#2 Building credit history

#3 Products that build trust

#4 Products that empower the user for conscious choices

#5 Changes in the regulatory environment
OPPORTUNITIES FOR IMPACT FINTECHS IN THE CONTEXT OF FINANCIAL INCLUSION CHALLENGES

Based on the challenges faced by the low-income population, listed on the previous pages, we highlight the opportunities that can address these challenges in a scalable way to generate high social impact in the sector.
#1 INCREASED DIGITALIZATION

The low use of digital solutions and the fall in the number of correspondent banks - main access point for the low-income population – leads to this first opportunity. The scalability afforded by digitalization has the potential to reduce customer acquisition costs and transaction costs, making fintech services more accessible and attractive to low-income users.

EXAMPLES

- Digital accounts that use technology to provide transparency and services at no cost to the user.
- Partnerships with credit unions that serve low-income entrepreneurs for reach and lower acquisition costs.

Increased digitalization also has the potential to improve access to adequate credit for groups poorly served by the current financial system (underserved).

EXAMPLES

- Adaptation of credit services to the specificities of the consumer.
- Facilitating microcredit resource allocation.

NUBANK
Digital account (NuConta) that offers transfers with no monthly fees or charges between NuConta or other banks.

JEITTO
Application that provides small credit limits to help meet the month’s bills, as well as offering a prepaid digital wallet for building credit history, in a “pay per use” model.

AVANTE
Developed a "one-stop-shop" solution for the microentrepreneur to increase the reach of microcredit. Facilitates access for a client group that is not served by large banks (33% of customers have a negative rating).
#2 CONSTRUCTION OF HISTORY FOR CREDIT

The low-income population that is unbanked, or makes little use of financial services, cannot access credit due to having no history built with financial institutions. This challenge creates the second opportunity: the use of unstructured data to build credit history for this portion of the population.

EXAMPLES

- Use of unstructured data to build credit history to support analysis of credit applications.
- Startups that do not see themselves as fintechs, but have a payment mechanism among their services, generating a history of receipts and defaults (e.g. private driver service apps).

DATAHOLICS
Uses big data to predict the user profile and generate a credit score for financial institutions.

QUICKCHECK
With its own intelligence it analyzes the payment capacity of patients through the cross-referencing of information, and suggests adequate payment conditions for each client in order to increase the flow of patients in dental clinics.
#3 PRODUCTS THAT BUILD CONFIDENCE

Lack of trust, together with the preference for cash payments, generates little use of financial services. Opportunity #3 proposes building trust by simplifying entry-level financial products that break down the barriers between low-income users and financial services from deep public knowledge.

EXAMPLES

- Entry-level, easy-to-use financial services with simple and transparent communication, breaking down barriers to adoption of other financial services. (E.g.: checking account, insurance, investments, credit card, prepaid card).

- Services with locally focused communication and solutions, which generate feelings of identification and belonging among low-income communities.

- Hybrid services (on- + offline), which create trust with the user via face-to-face contact for support in the use of the digital solution.

MARÉ BANK
App for low-income communities that allows users to pay bills, transfer funds and buy in local markets using the a digital currency created by the community. It also offers face-to-face assistance to support the user.

MEI FÁCIL
Supports individual micro-entrepreneurs to overcome bureaucratic barriers in day-to-day issues, such as registering a company and calculating taxes. It also offers some simplified and low-cost financial services.

CARTÃO MAIS FÁCIL
Acts as a retail credit card manager and manages community cards, reinvesting some of the revenue into community benefits. Launched in Paraisópolis (São Paulo), it is the first Community Card in the world.

SMART MEI
Offers free accounting and financial management services for individual micro-entrepreneurs, allowing for greater take-up and use of products such as payment machines and business accounts, transfers and debit card purchases.
#4 PRODUCTS THAT EMPOWER USERS TO MAKE CONSCIOUS CHOICES

Many of the financial problems faced by the population are caused by a lack of understanding about services offered, and unclear information, resulting in uninformed or unhealthy choices. The fourth opportunity proposes the use of choice architecture (nudges, behavioral economics), which supports healthy use of services and more conscious decisions, improving aspects of savings, planning, credit use, etc.

EXAMPLES

- On-demand solutions for low-income people with product and language adaptations that facilitate better choices.
- Services that support organization, savings and financial planning.
- Stimulus-based services for more correct decisions for the user profile.

BLU 365
Provides financial guidance and debt negotiation services for people with negative credit rating. Seeks to help people keep their accounts "in the blue" all year round.

MGOV
SMS-messaging service with relevant information and suggestions for day to day activities to support better financial planning, conscious consumption decisions and responsible credit use. The aim is to lower the risk of excessive indebtedness among the low income.

KONKERO
Free financial education portal. Compares financial products and offers information about personal finances.

QUERO QUITAR
Marketplace that acts as an online negotiation platform between debtors and creditors. It is a web platform for credit recovery where debtors negotiate their debts practically, in the best conditions, and can thus get out of the red.
OPPORTUNITIES FOR IMPACT FINTECHS IN THE CONTEXT OF REGULATORY CHANGES

Breaking the myth that regulations are barriers to fintechs, we highlight here changes in the regulatory landscape and public policy that provide opportunities for new business models that want to generate social impact in the sector.
#5.1 OPENING OF SIMPLIFIED ACCOUNTS

RESOLUTION 3104/2003
Requirement to offer simplified accounts, without tariffs and with limited services.

IMPACT OF THE RESOLUTION
Easier for correspondent banks to open accounts for the unbanked population.

OPPORTUNITIES

BANKING
Free access to the financial system for the unbanked segment.

CREDIT
N/A

SAVINGS
Possibility of opening a simplified savings account, with incentives to diversify the use the checking account.
#5.2 BANKING CORRESPONDENTS

**RESOLUTION 3110/2003**
Allows for contracting and sub-contracting of non-financial institutions for the provision of services and products on behalf of financial institutions.

**IMPACT OF THE RESOLUTION**
Multiplication of service channels, mainly for *Caixa Econômica Federal*, through betting shops.

**OPPORTUNITIES**

**BANKING**
Increasing reach of service points, which can transform the clients of financial institutions (shopkeepers, for example) into financial providers (opening accounts, cards, accreditation).

**CREDIT**
Working with partners with a more detailed history of groups excluded from the financial system to improve segmented credit analysis.

**SAVINGS**
Building guidelines on the use of products and forms of planning, linked to the provision of services together with partner organizations.
#5.3 PROCESSING NETWORKS

**RESOLUTION 3815/2016**
Removal of the lock-in between card payment networks and merchant processors.

**IMPACT OF THE RESOLUTION**
Made it easier for traders working with only one processor, as well as opening up the market for the entry of new payment machines, especially through regulation 12.865 / 2013.

**OPPORTUNITIES**

**BANKING**
Allows the unbanked to have access to electronic means of payment. Circular 3885/2018 exempts institutions that earn less than R$ 500 million per year to request authorization from the BCB.

**CREDIT**
Expansion of payment options improves the ability of retailers to advance receivables.

**SAVINGS**
N/A
#5.4 CREDIT COOPERATIVES

**RESOLUTION 3106/2003**
Authorization for credit unions to carry out other banking services, and facilitation of the admission of new members.

**IMPACT OF THE RESOLUTION**
Increased credit supply with reach into territories with low banking access. In general, cooperatives offer low-ticket loans to the low-income.

**OPPORTUNITIES**

**BANKING**
Allow members to create deposit accounts and provide payment service

**CREDIT**
Increase in credit supply capacity

**SAVINGS**
Option of better profitability for members, incentive to formal savings.
# 5.5 CREDIT PORTABILITY

**RESOLUTION 4292/2013**
Facilitating the process of transferring credit operations between institutions.

**IMPACT OF THE RESOLUTION**
It allows consumers to exchange more expensive credits for cheaper products at other financial institutions.

### OPORTUNIDADES

<table>
<thead>
<tr>
<th>BANKING</th>
<th>CREDIT</th>
<th>SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Opportunity for smaller institutions to attract customers from large banks with cheaper credit offers.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
#5.6 REGULATION OF INSURTECHS

RESOLUTION CNSP 359/2017
Allows the issuance of contracts and insurance policies by remote means.

IMPACT OF THE RESOLUTION
Enables the negotiation and contracting of insurance by digital companies.

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>BANKING</th>
<th>CREDIT</th>
<th>INSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>It has the potential to simplify insurance contracting, reducing cost pressure.</td>
</tr>
</tbody>
</table>
#5.7 SALARY ACCOUNT PORTABILITY

RESOLUTION 4639/2018
Simplification of the transfer process, allowing employees to choose in which bank to receive salary.

RESOLUTION IMPACT
Encouraging competition and reducing bureaucracy. Banks need to prospect clients individually rather than enter into agreements with companies.

OPORTUNITIES

BANKING
Opportunity to create accounts in smaller banks or Fintechs, without costs for the end consumer.

CREDIT
N/A

SAVINGS
N/A
#5.8 CREDIT FINTECHS (SCD)

**RESOLUTION 4656/2018**
Regulates the performance of companies that use technology intensively in the offer of financial products and services in the credit market, creating Direct Credit Societies.

**IMPACT OF THE RESOLUTION**
Allows existing lending institutions to use digital channels (Fintechs). Authorizes SCDs to perform credit analysis, collection, distribution of insurance and loans in electronic currency.

**OPPORTUNITIES**

**BANKING**
Enables growth in the total credit supply, in formats capable of increasing options for the unbanked.

**CREDIT**
By allowing the creation of a digital credit society, the entry costs for new players in the credit market decrease.

**SAVINGS**
N/A
#5.9 CREDIT FINTECHS (SEP)

RESOLUTION 4656/2018
Regulates the performance of companies that use technology intensively in the offer of financial products and services in the credit market, creating Loan Companies between individuals (peer-to-peer).

RESOLUTION IMPACT
Authorizes the creation of a digital loan platform between individuals. SEPs may perform credit analysis, collection, distribution of insurance and loans in electronic currency. The main innovation is to allow individuals to be creditors and distribute credit through a digital platform.

OPPORTUNITIES

BANKING
Enables growth in the total credit supply, in formats capable of increasing options for the unbanked.

CREDIT
By allowing the creation of a digital credit society, the entry cost of new players in the credit market decreases. In the case of SEPs, it relieves fintechs from guaranteeing loans, with an impact on costs. Each creditor can contract with the same debtor up to R $ 15,000.00 - currently at the same limit as productive microcredit.

SAVINGS
N/A
#5.10 POSITIVE REGISTRATION

**DRAFT FOLLOW-UP LAW 441/2017**
Alters the regulations for the positive credit register, allowing for opt-out. Inclusion of payment information relating to public services.

**RESOLUTION IMPACT**
By including information on payment compliance in the registers, helps to reduce the effects of the negative register for credit analysis. By making the public access register, it makes it easier for new entrants to access the payment history of potential customers - customers that would be denied if based solely on past defaults.

## OPPORTUNITIES

<table>
<thead>
<tr>
<th>BANKING</th>
<th>CREDIT</th>
<th>SAVINGS</th>
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<tbody>
<tr>
<td>N/A</td>
<td>It makes it possible to access richer history of potential customers. Facilitates access to positive history for more institutions, even if they have not built their own database (fintechs).</td>
<td>N/A</td>
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</tbody>
</table>
The financial sector in Brazil is quite sophisticated. At the same time, we are a country with a huge contingent of people who are poorly served or lack access to financial services. **How can this sector get closer to people?** Some themes to prioritize when creating or developing social impact products in financial services:

- **Multi-disciplinary and diverse teams:** Fintechs, in general, have more ‘techy’ teams and there is little economic, racial, gender and social diversity in teams. For better impact products, we need more diverse teams with know-how in economics and behavioral psychology, data science, design, and also people who can understand the pain of the customer.

- **Choice architecture** in products and services that favor more conscious and financially healthy choices. Only diverse teams, focused on users and their reality will be able to develop the most effective solutions.

- **Use of data or artificial intelligence:** how to avoid unconscious biases and biases in data usage and application of machine intelligence in solutions?

- **Gender perspective and intersectionality:** in most cases, women are the main customers of fintechs. How do you ensure that they can thrive even more in the family? And what about black women?

- **The question of ethics and transparency** in the operation of companies has to be transversal and more discussed in the business ecosystem of financial services with social impact.
HOW CAN THE SPECIFIC UNDERSTANDING ON THE LOW-INCOME CREATE GREATER INCLUSION?
FINTECHS HAVE THE CAPACITY TO CUSTOMIZE PRODUCTS FOR SPECIFIC GROUPS

CUSTOMIZATION FOR SEGMENT NEEDS

Ability to adapt existing products to specific low income difficulties

SIMPLIFICATION OF ENTRY PRODUCTS

Opportunity to redesign products to improve architecture of choice, from an in-depth knowledge of the audience

SIMPLIFICATION OF LANGUAGE

Client understanding of targeted products increases confidence in the system
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ARTEMISIA NETWORK

Impact business, accelerated by Artemisia, that work for financial inclusion in Brazil.

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