



I-SFB/ FEBRABAN

Financial Health Index
of the Brazilian

The development of the indicator
and the main findings of the
national survey used
in its construction.

I-SFB/ FEBRABAN

Financial Health Index
of the Brazilian

An initiative of



In technical cooperation with



TECHNICAL FILE

GOVERNANCE OF THE THE BRAZILIAN FEDERATION OF BANKS - FEBRABAN

ISAAC SIDNEY

President

AMAURY MARTINS DE OLIVA

Executive Director of Sustainability,
Financial Citizenship, Relations with
Consumer and Self-Regulation

UELTON DOS SANTOS CARVALHO

Head of Financial Citizenship

JOÃO BORGES

Executive Director of Communications and
Events

MONA DORF

Deputy Director of Social Media and Events

GUSTAVO PAUL

Deputy Director of Communications

MADALENA NADER

Executive Marketing Manager

ROSELI RAPOUSO DO AMARAL

Marketing Analyst

LETICIA RODRIGUES

Marketing Analyst

GOVERNANCE OF THE CENTRAL BANK OF BRAZIL - Technical Cooperation Agreement BCB/FEBRABAN for coordinated financial education actions

MAURÍCIO COSTA DE MOURA

Relationship Director,
Citizenship, and Conduct Supervision

LUIS GUSTAVO MANSUR SIQUEIRA

Head of the Promotion Department
of Financial Citizenship (Depef)

MARCELO JUNQUEIRA ANGULO

Head of the Financial Education
Division 2, Depef

FABIO DE ALMEIDA LOPES ARAUJO

Analyst, Depef

STANISLAW ZMITROWICZ

Analyst, Depef

**MEMBERS OF THE
I-SFB DEVELOPMENT AND REVISION****SÉRGIO MIKIO KOYAMA**

Deputy Head of Department
of Studies and Research (Depep)

LUCAS ITEN TEIXEIRA

Full Advisor, Financial Citizenship
Monitoring Division, Depef

BANKING SECTOR REPRESENTATION - FINANCIAL CITIZENSHIP COMMITTEE

BANCO ALFA S.A.
BANCO DO BRASIL S.A.
BANCO SEMEAR S.A.
BANCO VOTORANTIM S.A.
BANCO BRADESCO S.A.
CAIXA ECONÔMICA FEDERAL
BANCO CETELEM S.A.
ITAÚ UNIBANCO S.A.
BANCO SANTANDER (BRASIL) S.A.
BANCO COOPERATIVO SICREDI S.A.
BANCO XP S.A. / XPI INC
CHINA CONSTRUCTION BANK (BRAZIL)
BANCO MÚLTIPLO S.A. - CCB

INVITED MEMBERS OF THE TECHNICAL GROUP FOR DEVELOPMENT AND REVIEW

BRAZILIAN ASSOCIATION OF
CREDIT CARDS AND SERVICES (ABECS)

BRAZILIAN ASSOCIATION OF
LEASING COMPANIES (ABEL)

NATIONAL ASSOCIATION OF
CREDIT BUREAUS (ANBC)

ANBC - QUOD

ANBC - SERASA

ANBC - BOA VISTA

ANBC - SERASA

ANBC - SPC BRASIL

PROJECT DESIGN AND TECHNICAL EXECUTION

FEBRABAN

UELTON DOS SANTOS CARVALHO
Head of Financial Citizenship

NCC_1701

SÉRGIO DE SOUZA E SILVA
Project Leader

PAULO COELHO MENDES BUENO BARBOSA
Chief analyst

SILVIA ALEGRE
Senior Statistician

BRIDGE RESEARCH

FELIPE MENEZES
Research Director

GIULIANA DIAZ
Research Project Manager

ACADEMIC COMMITTEE

FEA USP

PROF. DR. JOSÉ AFONSO MAZZON

FEA USP and ESPM

PROF. DR. EDSON CRESCITELLI

FGV EAESP and ESPM

PROF. DR. MATEUS PONCHIO

FGV EAESP and ESPM

PROF. DR. JÚLIO FIGUEIREDO

Contact FEBRABAN

Av. Brig. Faria Lima, 4.300 - 4th floor
ZIP code: 04538-132 - São Paulo - SP
PABX: 55 11 3244 9800 / 3186 9800
Internet: indice.febraban.org.br

SUMMARY

| | |
|-----------------------|-----------|
| 1 INTRODUCTION | 11 |
|-----------------------|-----------|

| | |
|--|-----------|
| 2. ABOUT THE I-SFB, ITS CONSTRUCTION AND VALIDATION | 13 |
|--|-----------|

| | |
|--|-----------|
| 2.1 Construction and validation | 14 |
|--|-----------|

| | |
|--|----|
| 2.1.1 Selection of measurement protocols | 14 |
|--|----|

| | |
|---|----|
| 2.1.2 Translation and adaptation of international protocols for the Portuguese and adaptation to the Brazilian context. | 15 |
|---|----|

| | |
|-----------------------|----|
| 2.1.3 Pre-test survey | 16 |
|-----------------------|----|

| | |
|---|----|
| 2.1.4 Broad survey to build the indicator | 17 |
|---|----|

| | |
|---|-----------|
| 2.2 I-SFB definition of financial health | 19 |
|---|-----------|

| | |
|---|----|
| 2.2.1 I-SFB concept of financial health | 20 |
|---|----|

| | |
|---|-----------|
| 2.3 Measuring the financial health of Brazilians | 21 |
|---|-----------|

| | |
|---|----|
| 2.3.1 Questions that measure financial health | 21 |
|---|----|

| | |
|---------------------------------------|----|
| 2.3.2 The scoring scale from 0 to 100 | 22 |
|---------------------------------------|----|

| | |
|---|----|
| 2.3.3 Levels of financial health according to score | 22 |
|---|----|

| | |
|-----------------------------------|-----------|
| 3. BRAZIL AS SEEN BY I-SFB | 24 |
|-----------------------------------|-----------|

| | |
|--|-----------|
| 3.1 Patterns of financial health by dimensions of the I-SFB | 25 |
|--|-----------|

| | |
|--|-----------|
| 3.2 The I-SFB and socioeconomic variables | 26 |
|--|-----------|

| | |
|---|-----------|
| 3.3 The I-SFB and geographical variables | 28 |
|---|-----------|

| | |
|---|-----------|
| 3.4 The financial life of Brazilians | 29 |
|---|-----------|

| | |
|-------------------------------------|----|
| 3.4.1 Income and spending situation | 29 |
|-------------------------------------|----|

| | |
|--|----|
| 3.4.2 Ability to handle their finances | 30 |
|--|----|

| | |
|--------------------------------------|----|
| 3.4.3 The perspectives of Brazilians | 32 |
|--------------------------------------|----|

| | |
|--|-----------|
| 3.5 Access to financial products and services | 34 |
|--|-----------|

| | |
|--|-----------|
| 4. POTENTIAL USES AND APPLICATIONS OF I-SFB | 37 |
|--|-----------|

| | |
|--|-----------|
| 4.1 Use in various financial education contexts | 38 |
|--|-----------|

| | |
|--|-----------|
| 4.2 Operational application of the instrument | 40 |
|--|-----------|

| | |
|---------------------------------------|-----------|
| 4.3 Frequently asked questions | 41 |
|---------------------------------------|-----------|

| | |
|----------------------|-----------|
| 5. CONCLUSION | 43 |
|----------------------|-----------|

1. Introduction

In recent years, there has been a lot of talk about financial education. Financial institutions, regulators, the press, publishers, influencers, and entrepreneurs are offering tips and materials in an attempt to help Brazilians take better care of their money. This is undoubtedly an essential subject that can be tackled at any time in a citizen's life.

In order to make a real and effective impact, educators, public managers, journalists, economists, and other opinion leaders need to have reliable instruments and databases to assess the situation of each individual and of Brazil as a whole. This is why the Brazilian Federation of Banks (FEBRABAN), in technical cooperation with the Central Bank of Brazil (BCB), developed the Brazilian Financial Health Index (I-SFB). This index offers Brazilian society a tool capable of capturing the specificities of our national context while making a diagnosis of the citizen's financial health. With this diagnosis, individuals can assess what they can do to improve their personal finances and increase their financial health. They can also measure their financial health over time and compare it with the Brazilian average.

In addition to the I-SFB and its application methodology, this work generated another product: a broad national survey of more than 5,000 people, the results of which are presented in this report. The survey explored attributes such as individual and socioeconomic characteristics, and the ownership or use of financial products. With this report, we hope to provide readers and decision-makers with information to help create and implement public policies and private actions in favor of financial education and the financial well-being of citizens.

The following sections summarize the construction and validation of the I-SFB, as well as the main information collected in the survey.

2. About the I-SFB, its construction and validation

The indicator was conceived from the identification of a need: to understand the financial health of Brazilians in order to develop a new educational approach. With a diagnosis encompassing different aspects of financial life, it is possible to create personalized education actions that help citizens take control of their finances and improve their financial health.

The I-SFB is one of the projects under the technical cooperation agreement made between the Brazilian Federation of Banks (FEBRABAN) and the Central Bank of Brazil with the aim of developing coordinated financial education actions. A group of more than 70 experts was set up, including representatives from both institutions, various financial institutions, members of the national financial system, and academia. The group studied international and Brazilian benchmarks to design an indicator that would integrate different dimensions of citizens' financial lives: decision-making skills, financial behavior, and perception of financial well-being.

Why create a specific index for the financial health of Brazilians and not simply apply one of the existing international protocols? Firstly, because we couldn't find an international index with the desired characteristics¹ that had been validated for application in Brazil. There are local initiatives, mainly in the United States, which have specific and validated methodologies for those populations. The I-SFB was based on international protocols but only kept in the methodology the questions that had been validated in the field research carried out in Brazil, i.e. those that had good power to classify individuals and were properly understood.

Furthermore, although the index used all the accumulated knowledge of international protocols in its construction, it evolved throughout the process to become more suitable for the Brazilian reality.

Some of the conceptual models of international benchmarks are based on linear premises for financial journeys. They assume that financial knowledge leads to good behavior, which in turn results in objective prosperity. The latter would generate a feeling of freedom anchored in the perception of positive prospects.

The development of the Brazilian I-SFB model has enabled an evolution in relation to the benchmarks. When considering the socioeconomic variable, we can see some nuances in the citizen's financial journey. For example:

¹ A truly comprehensive method was needed to measure a complex concept such as financial health. Among the international protocols studied, there was no single instrument that covered the various dimensions of financial health in a single model - connecting and measuring the cognitive, behavioral, and perceived financial well-being aspects.

In this socioeconomic reality, an individual who has control of their bills, knowledge, and willingness to save, might not have enough income for their essential expenses and consequently not be able to save. This means that, due to the context, those who have the necessary information and attitude are not always able to engage in financially healthy behaviors.

2.1 CONSTRUCTION AND VALIDATION

The indicator was developed with a dual function. Firstly, to enable citizens to understand their financial health and subsequently measure the effects of financial education on it. Secondly, to provide an aggregate diagnosis of the financial health of the Brazilian population.

The development of the I-SFB took a year of work by a group of experts and was built in four stages, as shown in Table 1.

■ **TABLE 1 - Stages of construction and validation of the I-SFB**

| |
|--|
| 1. PROTOCOL SELECTION |
| 2. TRANSLATION OF INTERNATIONAL PROTOCOLS |
| 3. QUANTITATIVE PRE-TESTING AND MODELING |
| 4. EXTENSIVE RESEARCH AND MODELING |

Each stage is detailed below.

2.1.1 Selection of measurement protocols

The index was built in one year, but the work leading up to the construction of the indicator began in 2017. That year, FEBRABAN's Financial Education Working Group held a series of *workshops* on existing indicators and benchmarks *in* the world related to financial health. In 2018 and 2019, summits were held with the participation of various financial education stakeholders, such as financial planners, educators, educational program managers, policymakers, funders, and supporters of the subject. From these summits, four benchmarks were selected for further study (table 2), as they allow an individual diagnosis to be made with declared data and because they cover different aspects of financial life such as (A) decision-making skills, (B) measurement of financial behaviors and (C) financial well-being.

■ **TABLE 2 - International benchmark protocols**

| INSTITUTION ² | PROTOCOL |
|--|----------------------------|
| CFPB - Consumer Financial Protection Bureau | Financial Well-Being Scale |
| CFPB - Consumer Financial Protection Bureau | Financial Skill Scale |
| CFSI - Center for Financial Services Innovation | Financial Health Score |
| Wisconsin University - Financial Security Center | Financial Capability Score |

2.1.2 Translation and adaptation of international protocols into Portuguese and adaptation for the Brazilian context.

This phase aimed to ensure that the translation captured the essence of the original question and scales and was able to communicate them accurately to Brazilians. For this reason, the translation followed the following criteria:

- It kept the structure of the propositions as close as possible to the original;
- It kept the "valence" of the terms - for example, terms like *struggle*³ were translated into Portuguese equivalents with the same negative connotation;
- It favored common, rooted vocabulary and colloquial language when necessary - for example: instead of "domicile" he used the formulation "in your house"/"at home"; or "I'm worried" instead of "I'm apprehensive"; when necessary, he favored understanding and clarity over style;
- It always used the same terms in different questions, avoiding interchangeable words between one question and another;
- It avoided words that, although correct, have different connotations in Brazil and the United States, where the selected international protocols originated.
- It was a meticulous process of analysis, consolidating feedback from the experts in the technical group and assessing alternatives. The process followed the following flow: (A) technical reading of the original protocols by all members of the work team; (B) translation of the questions and scales into Portuguese, adapting them to the Brazilian context; (C) rounds of review and adjustments with the technical group; and (D) in-depth interviews for cognitive tests with men and women of different financial, demographic and socioeconomic profiles from various regions of the country. These interviews were conducted in February and March 2020.

² All the institutions are located in the United States.

³ In this example, the phrase "I struggle to understand financial information", from the CFPB Skill Scale protocol, was translated as "I have difficulty understanding financial information".

The objectives of these tests were, firstly, to check that the questions and scales in the questionnaire were being understood; and, secondly, to check that the respondent's perception and opinion were being correctly represented by the scales. A protocol was followed for this test (table 3): to explore each translated item, the interviewer would ask a cycle of questions to gauge understanding, language appropriateness, critical points of comprehension, and scale adherence.

■ **TABLE 3 - Protocol used to investigate the interviewees' comprehension of each translated item.**

| |
|--|
| A. WHAT DO YOU UNDERSTAND FROM THIS QUESTION? |
| B. DO YOU THINK YOU NEED TO CHANGE THE WAY YOU ASK THIS QUESTION? IF YOU WERE TO DO IT WITH YOUR WORDS, HOW WOULD YOU DO IT? |
| C. WAS IT DIFFICULT TO ANSWER THIS QUESTION? IF YES: WHY YES? |
| D. ARE THESE ANSWER OPTIONS CLEAR TO YOU? IF NOT: WHAT WOULD YOU CHANGE? WHAT ANSWER OPTIONS WOULD YOU GIVE TO MAKE IT CLEARER/EASIER? |

The translations and adaptations of the questions from English into Portuguese were well evaluated in the cognitive tests. With that, we moved on to the next stage: carrying out the pre-test survey.

2.1.3 Pre-test survey

Here, we sought to understand how each protocol, each question, and how the combination of them worked in the Brazilian context, something even more critical considering the challenge of talking to Brazilians from economic classes A to E. In addition, this phase was used to filter and reduce the number of questions to make up the final questionnaire, eliminating those that overlapped and those that did not work to adequately measure the phenomena of financial health in Brazil. In other words: at this point, the ability of the questions to distinguish and classify respondents in our country was assessed.

The survey was carried out between July and August 2020 by telephone, with more than 500 respondents, in a national sample that included the adult Brazilian population aged 18 or over.

Survey results

Analysis of the survey revealed a high level of understanding of the questions, as shown in Table 4. Of all those interviewed, 9.3 out of 10 people had no problems understanding. This figure rises to 9.6 out of 10, considering the people who had doubts on a maximum of 1 item. Only 21 people had doubts about 2 items or more. It can therefore be concluded that the questionnaire was practically universally understood.

■ TABLE 4 - Understanding the questions in the questionnaire

| | |
|--------------------------|-------|
| None of the 34 questions | 92,9% |
| In 1 of 34 questions | 3,7% |
| In 2 out of 34 questions | 1,9% |
| In 3 out of 34 questions | 0,5% |
| In 4 out of 34 questions | 0,3% |
| In 5 out of 34 questions | 0,3% |
| In 6 out of 34 questions | 0% |
| In 7 out of 34 questions | 0,3% |

Through a series of statistical analyses⁴ and modeling, the best items were identified among the questions tested to make up the questionnaire for the next stage: the broad survey to build the database, generate the final model, and build the I-SFB.

2.1.4 Broad survey to build the indicator

The sample⁵ was designed to include the Brazilian population aged 18 or over. A filter of relationship with the National Financial System⁶ was also considered to enable analysis of access to and use of financial products and services. As this group tends to have higher socioeconomic levels, we also sought to include individuals in the lower income brackets, in economic classes⁷ D-E, and from more vulnerable regions (for example, the inland cities of the N/NE).

To ensure that Brazilians from all classes, age groups, and localities were represented, sample quotas were defined taking into account the region of residence, type of city of residence, age, economic classification, and gender of the respondent. The adjustment weight for each quota was also controlled. The quotas have small adjustment levels and minimal impact, indicating a healthy sample. Table 5 shows the profile of the sample interviewed at this stage of the study.

⁴ The normality and central tendency tests for each of the protocols validated their viability for the construction of the Brazilian instrument.

⁵ The sample was designed in such a manner in order to cover the various socio-demographic strata and to guarantee a limit on the sampling error for the results of interest.

⁶ According to the Central Bank of Brazil, in its 2018 Financial Citizenship Report, 86.5% of adult Brazilians have a relationship with the National Financial System. The filter used considered the possession of a checking account, salary account, savings account, or savings.

⁷ To identify the interviewee's economic class, the Brazilian Economic Classification Criterion (CCEB) of the Brazilian Association of Research Companies (ABEP) was used, based on the IBGE's Family Budget Survey (POF).

■ **TABLE 5 - Sample by quota**

| SEX | % | TYPE OF CITY | % |
|----------------------------|------------|---|------------|
| Female | 50,5 | Outside the capital / metropolitan region | 56.7 |
| Male | 49,5 | Capital / metropolitan region | 43.3 |
| TOTAL (5,220 cases) | 100 | TOTAL (5,220 cases) | 100 |

| AGE GROUP | % | REGION | % |
|----------------------------|------------|----------------------------|------------|
| 18 to 24 years old | 15,0 | Southeast | 39,5 |
| 25 to 29 years old | 14,9 | NorthEast | 16,8 |
| 30 to 34 years | 15,0 | South | 19,6 |
| 35 to 39 years old | 15,1 | North | 7,8 |
| 40 to 59 years old | 19,7 | Center West | 16,3 |
| 60 years or older | 20,3 | TOTAL (5,220 cases) | 100 |
| TOTAL (5,220 cases) | 100 | | |

| ECONOMIC CLASS | % | HOUSEHOLD INCOME BRACKET | % |
|----------------------------|------------|---------------------------------|------------|
| A | 16 | (S.M. = R\$ 1.045,00) | |
| B1 | 16,9 | Up to 1 S.M. | 12,5 |
| B2 | 16,6 | From 1 S.M. to 2 S.M. | 19,9 |
| C1 | 19,0 | From 2 S.M. to 3 S.M. | 17,0 |
| C2 | 24,1 | From 3 S.M. to 5 S.M. | 17,9 |
| D-E | 7,5 | From 5 S.M. to 10 S.M. | 16,5 |
| TOTAL (5,220 cases) | 100 | From 10 S.M. to 20 S.M. | 9,4 |
| | | More than 20 S.M. | 4,1 |
| | | Refusal | 2.7 |
| | | TOTAL (5,220 cases) | 100 |

Information was collected from 5,220 individuals. After further validations⁸, a dataset of 5,011 cases was used for statistical modeling. Out of those, 4,875 contained information on household income (a non-mandatory question) and were classified using the I-SFB. They were then weighted resulting in a total sample equivalent to 4,863 individuals (margin of error of 1.4 percentage points). This last sample number was used for the analysis in this report.

⁸ Elimination of questionnaires with any inconsistencies or gaps.

2.2 I-SFB DEFINITION OF FINANCIAL HEALTH

From the modeling and analysis work, 5 main dimensions emerged that directly define financial health. Table 6 shows how these dimensions are related and make up the I-SFB financial health model.

■ **TABLE 6 - Simplified model of the main financial health dimensions of the I-SFB**

FINANCIAL SKILL
 FINANCIAL BEHAVIOR
 FINANCIAL SECURITY
 FINANCIAL FREEDOM
 BRAZILIAN FINANCIAL HEALTH INDEX
 FINANCIAL PROFICIENCY

Note: the main dimensions are those that build financial health directly: freedom, security, and proficiency. The latter, in turn, is made up of skill and behavior.

Below is a description of each of the main dimensions:

Security: represents the citizen's perception of their financial situation and whether it is a source of worry and stress in their life.

Freedom: measures whether the way the individual handles their money allows them to have options in life; the perception of not feeling constricted, limited.

Proficiency: combines the measures of skill and behavior.

Skill: measures the individual's ability to search for and understand important information for their financial life.

Behavior: measures attitudes, especially with regard to discipline and control.

The I-SFB also has two secondary dimensions that help to contextualize the main dimensions:

Financial Foundation: this is the environment in which each individual is inserted. It consists of the financial foundation, which captures the ability to access opportunities and withstand unforeseen financial events. This dimension views current income as salary and permanent wealth as assets. This dimension includes the level of education and access to financial products and services.

Self-perception: shows whether the individual is aware of their level of knowledge when it comes to handling their finances. Whether they can see when they lack the information to make financial decisions, when bills are getting out of control, and when they are not taking good care of their money.

2.2.1 I-SFB concept of financial health

The I-SFB's concept of financial health is the result of an analysis of the theoretical models selected - especially the CFPB's theories of financial well-being and financial ability⁹ and the CFSI's theories of financial health – and the dimensions that emerged in the second survey. After a discussion with the academic committee, the project team arrived at the definition shown in Table 7.

■ **TABLE 7 - Conceptual definition of financial health**

Financial health can be determined as the extent to which an individual:

| |
|--|
| EVALUATES BEING ABLE TO MEET ITS CURRENT FINANCIAL OBLIGATIONS; |
| UNDERSTANDS HOW TO MAKE GOOD FINANCIAL DECISIONS; |
| HAS THE DISCIPLINE AND SELF-CONTROL TO MEET OBJECTIVES; |
| FEELS SECURE ABOUT THEIR FINANCIAL FUTURE; |
| HAVE THE FREEDOM TO MAKE CHOICES THAT ALLOW THEM TO ENJOY LIFE. |

It is therefore a broad concept, encompassing both cognitive and behavioral issues of financial proficiency, as well as perceptions of one's financial security and freedom.

⁹ Consumer Financial Protection Bureau: Government agency for consumer financial protection in the United States. Publications: "Getting started with measuring financial well-being: A toolkit for financial educators - 2019" and "Measuring financial skill: A guide to using the Bureau of Consumer Financial Protection's Financial Skill Scale - 2018".

¹⁰ Center for Financial Services Innovation: a non-profit financial services consultancy based in the United States. Publication: The CFSI Financial Health Score Toolkit, 2017.

2.3 MEASURING THE FINANCIAL HEALTH OF BRAZILIANS

2.3.1 Questions that measure financial health

The financial health of Brazilians was measured using a questionnaire containing 15 mandatory questions¹¹ (table 8): 12 were used to directly calculate the individual's score on the main dimensions; and 3 were designed to calculate the financial foundation.

■ **TABLE 8 - Questions¹² that measure the mandatory dimensions for calculating the I-SFB**

| | |
|-----------------------------|--|
| FINANCIAL SKILLS | <i>P. How well does this sentence describe you or your situation?</i> |
| Financial Proficiency | <ul style="list-style-type: none"> - I know how to make complicated financial decisions. - I can recognize a good investment. - I know how to make financial decisions. |
| FINANCIAL BEHAVIOR | <i>P. How well does this sentence describe you or your situation?</i> |
| | <ul style="list-style-type: none"> - I know how to force myself to meet my financial goals. - I know how to control myself so I don't spend too much. - I know how to make myself save. |
| FINANCIAL SECURITY | <i>P. How well does this sentence describe you or your situation?</i> |
| | <ul style="list-style-type: none"> - Concerns over expenses and financial liabilities are a source of stress in my home. - Due to the financial liabilities made, the standard of living in my home has been greatly reduced. - I'm tight financially. |
| | <i>P. In the last 12 months, which sentence best describes the comparison between the total income and expenses in your home?</i> |
| FINANCIAL FREEDOM | <i>P. How well does this sentence describe you or your situation?</i> |
| | <ul style="list-style-type: none"> - I'm securing my financial future. - The way I handle my money allows me to enjoy life. |
| FINANCIAL FOUNDATION | <p><i>Today, which of the products and services I'm about to read about do you (or someone in your household) have?</i></p> <p><i>Could you please tell me approximately what your TOTAL INCOME is per month, including all the members of your family?</i></p> <p><i>What is your level of education?</i></p> |

¹¹ In addition to the mandatory questions, 3 optional questions measure the self-perception dimension that is not included in the I-SFB calculation. This dimension provides additional information about the respondent, whether they can tell when they lack the information to make financial decisions, when bills are getting out of hand, and when they are not taking good care of their money.

¹² The full questionnaire can be found at indice.febraban.org.br

2.3.2 The scoring scale from 0 to 100

To ensure that the questions were representative of the dimensions and capable of detecting the level of individuals in each of them, Item Response Theory (IRT) was used. The IRT was used to analyze the degree of discriminance of the question and the difficulty of each response scale. Discriminance refers to how useful a question is in detecting differences between people. Difficulty captures how difficult it is to answer each item on the response scale.

In addition to the general I-SFB, it is also possible to calculate the citizen's score in the dimensions of freedom, security, ability and financial behavior. Thus, it can be said that the overall and dimension scores reflect the citizens' cognitive and attitudinal constructs.

A scale of scores from 0 to 100 was created for the financial health of Brazilians.¹³ Once the questionnaire has been completed, the individual or the survey taker accesses a template to record how many points have been scored.

2.3.3 Levels of financial health according to score


All these procedures made it possible to identify the typical situation in each of the financial health brackets and to understand what this classification portrays about people's experience in that bracket. Table 9 shows each of the 7 levels of financial health and their corresponding score.

TABLE 9 - Financial health brackets by I-SFB score


| Level | Score INDEX | Description |
|------------------|------------------|--|
| Excellent | 83 to 100 | Financial life without financial stress. Finances provide security and freedom. |
| Very good | 69 to 82 | Mastery of day-to-day life, but need to build assets for greater security and access to financial opportunities. |
| Good | 61 to 68 | Stabilized finances, but often no surplus at end of the month. |
| Ok | 57 to 60 | Balanced finances, but on the edge - there's little room for error. |
| Low | 50 to 56 | First signs of imbalance and risk of high financial stress. |
| Very low | 37 to 49 | In a negative spiral. Risk of reaching an unsustainable situation. |
| Bad | 0 to 36 | Great fragility, stress, and financial distress. |

Each of the financial health brackets is detailed below.


¹³ For more details on calculating the I-SFB, go to indice.febraban.org.br and access the methodology user manual.




GREAT: finances provide security and choice. At this level, a combination of knowledge and good habits allows people to make better use of the present and plan for the future. More than the average person, they fully honor their commitments, are more likely to have money left over at the end of the month, and have an emergency reserve.




VERY GOOD: These are people who have great control over their financial lives. Money is not a source of concern and there is no sense of threat to the family's standard of living. Here, individuals manage their finances with autonomy and confidence thanks to their good knowledge and ability to apply it. They are more likely to know how to organize their accounts and, as a result, are unlikely to face setbacks. They may seek to build wealth seeking to rise to the top.




GOOD: have a comfortable financial life, but are unable to cope with unforeseen events. They feel they have options for the present and the future, despite some uncertainties and occasional worries. They have knowledge of the principles of financial life, which translates into a smooth day-to-day life. This knowledge, however, is not enough to take them further. At the end of the month, almost half of them have money left over, but less than a quarter say they can cope with a large unexpected expense.




OK: a balanced financial life, but no room for error. Although moderate, insecurities about their financial life and maintaining their standard of living are frequent and overshadow their positive outlook. Your financial knowledge and attitudes are sufficient for a smooth day-to-day life, but not for more complex financial decisions. There is rarely any money left over at the end of the month. Only one in six would be able to cope with a large unexpected expense.



LOW: signs of imbalance in financial life, with great insecurity about prospects. Knowledge and attitudes about finances are basic for day-to-day life, but not for more complex decisions. Very difficult to make ends meet: little chance of having money left over at the end of the month or being able to withstand an unforeseen event. They are more likely to be late with most bills than the average person.



VERY LOW: high-risk bracket. Unbalanced, financial life affects living standards and the stress it generates contaminates the home environment. Few prospects. They find it difficult to search for, understand, and apply financial information. With limited knowledge, they are less able to organize their accounts and discipline themselves (they think less before spending). More than half spend more than their income, often causing them to fall behind on their bills. Education, organizational tools, and financial literacy would be essential to prevent the deterioration of their finances.



BAD: this is the most critical bracket. They feel they have no options in the present and see financial stress putting pressure on their standard of living and their home environment. Few people understand financial information and it is difficult to stay in control of their financial life. They are more likely to fall behind on bills and have more loans than they can repay. They don't believe they can cope with unexpected expenses. Education, organizational tools, and financial literacy would be essential to start rescuing the health of these people's finances.

3. Brazil as seen by the I-SFB

In addition to serving as the grounds for modeling the I-SFB, the dataset generated by the field research is also a great source of data on the financial lives of the Brazilians surveyed. In other words: on the one hand, the I-SFB provides an individualized diagnostic tool and, on the other, it allows us to carry out an aggregate analysis and see a portrait of these people from a new angle.

As can be seen in Table 10, the scores of the population surveyed follow a normal distribution.

■ **TABLE 10 - Distribution of Brazilians surveyed by level of I-SFB**

Average: 57 **Bad: 26** **Very Low: 43** **Low: 53** **Ok: 58** **Good: 64** **Very Good: 75** **Great: 90**

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 68 70 72
74 76 78 80 82 84 86 88 90 92 94 96 98 - Score

The average Brazilian score is 57 points. When you look at the averages for each of the levels of financial health, however, you can see the distance between them. At one extreme, with an average I-SFB of 26, are the Brazilians in the worst bracket - classified as having bad financial health. At the other, those with the best financial health have an average I-SFB of 90.

Table 11 shows how those surveyed are distributed by level of financial health. In general, 3 out of 10 people are in the lowest brackets of financial health (bad or very bad). In the bracket of people with low financial health, 1 out of 6 are starting to become unbalanced. Individuals in the OK bracket (1 out of 10) live in a balanced situation, but with little room for error when managing their finances. In the good financial health bracket lies 1 out of 8 people - they manage to have some breathing space in their daily financial life, albeit with ample opportunity to improve. Then there are the brackets with the respondents with the best financial health. They are more likely to have money left over at the end of the month and the ability to deal with unforeseen events. This allows them to experience greater financial security and multiply their prospects. 3 out of 10 people are in this situation.

■ **TABLE 11 - Distribution of Brazilians surveyed by level of I-SFB**

Dist. of those surveyed

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% / **11,6% 21,1% 15,6% 10,1% 14,3% 19,2% 8,1%**
Total

Financial health brackets

| | |
|------------------|--|
| GREAT | Stress-free financial life. Finances provide security and financial freedom. |
| VERY GOOD | Day-to-day control, but you need to make the leap into equity. |
| GOOD | Basic well done. |
| OK | Financial balance on the edge - with little room for error. |
| LOW | First signs of imbalance and risk of high financial stress. |
| VERY LOW | Risk of reaching a critical situation. |
| BAD | A circle of fragility, stress and financial disorganization. |

3.1 FINANCIAL HEALTH STANDARDS BY I-SFB DIMENSIONS

Individually, the scores in each dimension of financial health can vary from citizen to citizen. The aggregate analysis of those surveyed, however, shows that, in general, the I-SFB scores and the scores for the main dimensions go hand in hand (table 12). As a whole, it can be said that the higher the score in each of the dimensions, the higher the level of financial health - and vice versa.

■ **Table 12 - Average score for the main dimensions for each I-SFB classification bracket**

Freedom Ability Security Behavior

0,0 01,0 20,0 30,0 40,0 50,0 60,0 70,0 80,0 90,0 100,0

Great Very Good Good Ok Low Very Low Bad Average

3.2 I-SFB AND SOCIOECONOMIC VARIABLES

One of the great contributions of the I-SFB lies in the way financial health is conceived. The high degree of diversity in the index scores within the socioeconomic variables indicates that none of them determines the I-SFB on its own. On the contrary, there are individuals with different socioeconomic characteristics at each of the levels.

As can be seen in Tables 13 and 14, although there is a significant presence of upper classes in the highest levels of financial health, all of them, even the lowest ones, include representatives from all economic classes. Therefore, it is not possible to say that low levels of financial health correspond to lower socioeconomic levels and vice versa. It can be concluded that there are opportunities and benefits in promoting financial education for everyone - regardless of social class, age group, or any other socioeconomic variable.

■ **TABLE 13 - Levels of financial health by socioeconomic class**

| | Financial Health Brackets | | | | | | |
|--------|---------------------------|-----------|------|------|-----|----------|-----|
| | Good | Very good | Good | Good | Low | Very Low | Bad |
| Sample | 8.1% | 19,2% | 14% | 10% | 16% | 21% | 12% |
| A | 14,6% | 29% | 15% | 10% | 12% | 15% | 5% |
| B1 | 12% | 23,6% | 15% | 10% | 13% | 18% | 9% |
| B2 | 7,5% | 21,2% | 14% | 11% | 15% | 20% | 11% |
| C1 | 6,4% | 18,6% | 15% | 10% | 14% | 21% | 15% |
| C2 | 4,7% | 12,1% | 13% | 11% | 22% | 25% | 13% |
| D-E | 2,1% | 9,9% | 12% | 8% | 15% | 32% | 21% |

■ **TABLE 14 - Levels of financial health by socioeconomic variables**

| | | | | | | | |
|--------------------------|-------|-----------|-------|-------|-------|----------|-------|
| Sample | 8,1% | 19,2% | 14,3% | 10,1% | 15,6% | 21,1% | 11,6% |
| Men | 10,1% | 21,3% | 15,2% | 10,2% | 16,1% | 18,8% | 8,3% |
| Women | 5,9% | 17,2% | 13,4% | 9,9% | 15,1% | 23,4% | 15,1% |
| 18 to 24 years old | 6,6% | 18,2% | 18,4% | 11,7% | 20,8% | 16,9% | 7,4% |
| 25 to 29 years old | 6,9% | 17,8% | 13,5% | 11,1% | 16,7% | 21% | 12,9% |
| 30 to 34 years old | 7,7% | 18,3% | 14,5% | 10,8% | 14,6% | 21,6% | 12,5% |
| 35 to 39 years old | 8,3% | 19,5% | 12,3% | 8,8% | 15,8% | 22,1% | 13,2% |
| 40 to 59 years old | 8,5% | 19,2% | 13,9% | 9,3% | 13,1% | 22,8% | 13,2% |
| 60 or more | 9,7% | 21,7% | 13,6% | 9,2% | 13,9% | 21,5% | 10,4% |
| White | 9,8% | 21% | 14,6% | 9,8% | 14% | 19,5% | 11,3% |
| Brown | 6,2% | 18,4% | 14% | 10,2% | 17% | 21,8% | 12,4% |
| Black | 6,2% | 14% | 10,9% | 10,9% | 19,3% | 16% | 9,5% |
| Single | 8,7% | 20,2% | 14,7% | 10,3% | 14,9% | 21,1% | 10,2% |
| Married / Cohabiting | 6,1% | 19,6% | 14% | 8,3% | 14,2% | 22,5% | 15,2% |
| Separated/divorced | 7,6% | 17,7% | 14,1% | 10,2% | 16,8% | 20,7% | 12,8% |
| Widowed | 7,7% | 22,5% | 12,5% | 8,8% | 15,5% | 22,2% | 10,8% |
| Main provider | 6,4% | 17,9% | 16% | 9,2% | 18,5% | 19,5% | 12,4% |
| Part. Important | 9,4% | 21,5% | 12,6% | 9,2% | 14,2% | 20,5% | 12,7% |
| Does not contribute | 7,4% | 17,7% | 15,3% | 11% | 16,1% | 22% | 10,5% |
| I live alone | 9,9% | 22,1% | 14,1% | 8,5% | 13,1% | 20,3% | 11,9% |
| 2 people | 10,3% | 22,2% | 14,4% | 8,9% | 12% | 21% | 11,2% |
| 3 people | 7,4% | 18,4% | 14% | 10,9% | 18,3% | 20,9% | 10,2% |
| 4 people | 6,9% | 17,2% | 14,7% | 10,3% | 17,1% | 22% | 11,9% |
| 5 or more people | 5,7% | 16,2% | 14,3% | 11,2% | 16,7% | 20,8% | 15% |
| Financial Health Bracket | Good | Very Good | Good | OK | Low | Very Low | Bad |

3.3 I-SFB AND GEOGRAPHICAL VARIABLES

There are regional fluctuations. The Northeast and Southeast have a slightly higher than average share of people with low, very low, and bad financial health (table 15). These fluctuations, however, are not robust or systematic enough to affirm that the regional factor is a determining factor in an individual's financial health.

■ **TABLE 15 - Levels of financial health by geographical variables**

| | | | | | | | | |
|--------------------------|-------|-----------|-------|-------|-------|-------|----------|-------|
| Sample | 8,1% | 19,2% | 10,1% | 12,3% | 15,6% | 21,1% | 11,6% | |
| Capital and RM | 8,1% | 19,1% | 14,9% | 9,6% | 14,9% | 20,3% | 13,2% | |
| Interiors | 19,4% | 13,9% | 10,4% | 16,2% | 21,7% | 10,4% | | |
| South | 13,1% | 22,2% | 14,2% | 9,4% | 14,4% | 18,2% | 8,4% | |
| Southeast | | 6,8% | 19,4% | 14,1% | 9,8% | 14% | 21,8% | 14,1% |
| Midwest | 7,6% | 21,9% | 14,2% | 9,6% | 16,6% | 19,2% | 10,9% | |
| North East | 6% | 15,4% | 12% | 16% | 20,3% | 21,3% | 9,1% | |
| North | 6,7% | 18,5% | 17% | 9,8% | 15,7% | 22,2% | 10,2% | |
| Financial Health Bracket | Good | Very Good | | Good | Good | Low | Very Low | Bad |

As with socioeconomic variables, the different characteristics of regions and types of cities are less important than individual attitudes and skills, which either optimize or cancel out the initial advantages and disadvantages conferred by the geographical context. It follows that the promotion of financial education is a national necessity since all of Brazil can benefit from it.

3.4 THE FINANCIAL LIFE OF BRAZILIANS

The study addressed several¹⁴ aspects of Brazilians' financial lives: their income and spending situation, their ability to deal with financial issues, and their prospects. The pattern of responses reveals the daily battle it is to close the month's accounts and the difficult mission it is to have a reserve fund for emergencies.

3.4.1 Income and spending situation

The reality of financial life involves aspects of access to and management of resources.

Expenses are equivalent to income for 4 out of 10 families (table 16). In a more comfortable situation, 3 out of 10 say they have more income than expenses. On the other hand, 29% say their expenses are higher than their income.

■ TABLE 16 - Capacity to pay current expenses

In the last 12 months, which sentence best describes the comparison between your total income and your household spending?

Regarding income, the expenses were:

Much higher than income Higher than income More or less equal to income Less than the rent Much lower than income (%)

11 18 40 23 8 30 40 25 4 4 6 35 40 14 7 28 47 13 4 Ok 5 19 45 26 5 3 16 49 24 8 17 26 44 11 1 1 6 27 32 35

Total Brazil Good Very Good Good Low Very Low Bad

Level of Financial Health

Bottom 2 box / Top 2 box

One of the biggest challenges for the Brazilian families studied is having an emergency reserve to protect them from unforeseen events. Between the reality of having just enough money for the month and the volatility of income, only 22% have the security to deal with an unforeseen financial event (table 17). Even more worryingly, nearly half of them (49%) say they have little or no means of coping with a large unexpected expense.

¹⁴ This section includes questions that make up the I-SFB and other questions that were part of this extensive survey of more than 5,000 interviews.

■ TABLE 17 - Ability to absorb unforeseen financial events

How well does this phrase describe you or your situation?

I could handle a large unexpected expense.

Totally A lot More or less Little Nothing

29 20 29 10 12 49 12 20 7 13 14 36 19 19 8 15 38 22 17 24 20 36 9 11 6 7 33 26 29 42 24 24 5 5 22 20 13 63 12

Total Brazil Good Very Good Good Bad Bad Good Very Low

Level of Financial Health

Bottom 2 box Top 2 box (%)

3.4.2 Ability to handle your finances

The portrait that emerged from the study is of a Brazilian who, as far as possible, tries to take care of their financial life. In total, 62% say they know how to organize their accounts (table 18) and only 13% say the opposite.

■ TABLE 18 - Organization of accounts

How well does this phrase describe you or your situation?

I know how to organize my accounts.

Totally A lot More or less Little Nothing

3 25 10 26 36 87 10 8 2 29 60 41 38 16 4 5 31 33 30 24 31 35 9 40 16 3 22 19 8 34 14 29 14 2

Total Brazil Good Very Good Good Low Very Low Bad

Level of Financial Health

Bottom 2 box Top 2 box (%)

The majority of Brazilians interviewed have no problems organizing their daily finances. But when it comes to saving, the difficulties increase, as shown in the table below.

■ TABLE 19 - Discipline and self-control for saving

How well does this phrase describe you or your situation?

I know how to make myself save.

Totally A lot More or less Little Nothing

9 16 27 22 25 86 4 15 35 19 25 34 28 10 3 12 3 38 27 20 12 21 42 19 7 28 15 36 13 9 3 7 33 21 35 11 2

Total Brazil Good Very Good Good Good Low Very Low Bad

Level of Financial Health

Bottom 2 box Top 2 box (%)

The ability to interpret and understand information is fundamental to financial planning. If, on the one hand, the survey revealed that people perceive themselves as organized, on the other hand, the issue of knowledge is one of the great challenges Brazilians face (table 20). Only 34% are able to recognize a good investment.

■ TABLE 20 - Ability to recognize a good investment

How well does this phrase describe you or your situation?

I can recognize a good investment

Totally A lot More or less Little Nothing

13 19 34 18 16 65 9 3 32 30 26 16 37 26 16 6 9 15 48 9 19 8 16 48 21 9 29 20 34 11 5 24 31 21 41 20 12 2

Total Brazil Good Very Good Good Good Low Very Low Bad

Level of Financial Health

Bottom 2 box Top 2 box (%)

3.4.3 The Prospects for Brazilians

The third block of research was about prospects, that is, the weight that finances have within the home and the choices they provide or limit.

Financial life is a considerable source of stress (table 21) in the family environment for 3 out of 10 Brazilians. For another 30%, expenses and commitments are a moderate but ever-present concern.

■ **TABLE 21 - Perceived financial stress**
How well does this phrase describe you or your situation?

| Worrying about expenses and financial commitments is a source of stress in my household. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----|-------|----|--------------|---|--------|----|---------|---|-----|---|----------|----|-----|----|----|----|----|---|----|----|----|----|----|---|----|---|----|----|----|----|----|---|----|---|----|----|
| Totally | | A lot | | More or less | | Little | | Nothing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | 24 | 30 | 15 | 13 | 2 | 32 | 32 | 27 | 4 | 5 | 8 | 35 | 10 | 29 | 18 | 11 | 31 | 39 | 8 | 11 | 12 | 18 | 38 | 23 | 9 | 18 | 7 | 33 | 23 | 18 | 39 | 32 | 7 | 19 | 3 | 12 | 29 |
| 56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Brazil | | Good | | Very Good | | Good | | Good | | Low | | Very Low | | Bad | | | | | | | | | | | | | | | | | | | | | | | |
| Level of Financial Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom 2 box Top 2 box (%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Note: pay attention to the response scale in this table. It is a reverse intensity scale. The valence is negative for those who agree "very much" or "totally" with the sentence in the question; the valence is positive for those who answered "not much" or "not at all".

The state of one's financial life is a determining factor in the options that individuals have both now and in the future. Currently, only 38% of respondents say that they enjoy life thanks to the way they handle their money today (table 22).

■ TABLE 22 - Perceived financial freedom (present moment)

How well does this phrase describe you or your situation?

The way I handle my money allows me to enjoy life.

Totally A lot More or less Little Nothing

11 18 33 19 19 81 5 23 35 35 19 38 29 12 2 4 14 43 12 27 7 16 46 24 8 31 19 38 8 4 23 32 22 41 11 6

Total Brazil Good Very Good Good Good Low Very Low Bad

Level of Financial Health

Bottom 2 box Top 2 box (%)

When asked about their prospects (table 23), only 35% believe that they are securing their jobs. financial future.

■ TABLE 23 - Perceived financial freedom (prospect on the future)

How well does this phrase describe you or your situation?

I'm securing my financial future.

Totally A lot More or less Little Nothing

19 18 28 17 18 78 7 3 21 31 39 15 36 27 14 8 10 16 42 9 23 4 14 44 21 17 30 31 29 7 3 22 26 13 57 12 2 7

Total Brazil Good Very Good Good Good Low Very Low Bad

Level of Financial Health

Bottom 2 box Top 2 box (%)

3.5 ACCESS TO FINANCIAL PRODUCTS AND SERVICES

Another area of research was access to financial products and services. Its importance can be summed up in the fact that the number of financial products owned is an important item in the "Financial Foundation" dimension of the I-SFB.

Financial products

Table 24 shows that the most common products are checking accounts, debit cards, credit cards, and savings accounts: out of every 10 Brazilians surveyed, between 7 and 8 have such products - and this varies little according to the level of financial health. Financing, consortia, and life insurance are less common; other types of insurance and investments are at intermediate levels - between 20% and 40%.

Not all products have equivalent penetration at all levels. Car and home insurance, investments, and private pension plans have higher penetration among those in the best financial health brackets. The presence of investments among those with an "Excellent" level of financial health is 46%. On average, only 24% of those surveyed have an investment portfolio, 21% home insurance and 21% private pension plans.

■ **TABLE 24 - Ownership of financial products by level of financial health**

Population Share

Financial Health bracket

| Bad | Very Low | Low | OK | Good | Very good | Excellent | Total | |
|----------------|------------------|-------------------|-------------------|---------------------|---------------|------------|-------|------|
| 0,0 | 10,0 | 20,0 | 30,0 | 40,0 | 50,0 | 60,0 | 70,0 | 80,0 |
| 90,0 | 100,0 | | | | | | | |
| Debit card | Checking account | Savings | Credit card | Health insurance | Car insurance | Investment | | |
| Home insurance | Private pension | Vehicle financing | Housing financing | Capitalization bond | | | | |
| Consortium | Student Loan | | | | | | | |

Types of credit

The study also revealed lessons about the use of different types of credit (table 25). It is possible to observe marked differences in the use of revolving credit cards, overdrafts, and personal loans and the score on the index. There is a clear trend towards greater use of these products by those in the lowest financial health bracket, the "Bad" bracket. The use of revolving credit cards, for example, is over 42% at this level. This is almost double the average for the population, which stands at 24%. The pattern is repeated for personal loans (37% among those with a bad rating and 19% on average for the population), overdrafts (33% among those with a bad rating, 22% on average for the population), and payroll loans (24% among those with a bad rating, 14% on average for the population).

■ **TABLE 25 - Use of financial services by level of financial health**

(Someone in the household has used it in the last 12 months)

Population Share

Financial Health Bracket

0,0 10,0 20,0 30,0 40,0 50,0 60,0 70,0 80,0 90,0 100,0

Store credit card Revolving credit card Overdraft Personal loan at a bank Loan at a financial institution Payroll loan Secured loan Other loans None

Bad Very Low Low Ok Good Very Good Great Total

It should be remembered that the "Bad" bracket of financial health is characterized by a spiral of financial lack of control, with most bills falling into arrears. This highlights the importance of education on the proper use of these services and of additional guidance for individuals at this level who have taken out similar loans.

4. Potential uses and applications of the I-SFB

The I-SFB can be used by anyone who wants to diagnose and improve their own or others' financial health. Therefore, it is useful for those who have an active financial life; for individuals, companies, and organizations that support and invest in financial education in Brazil; educators and financial planners who need a tool to diagnose, compare, and monitor the evolution of those they serve; academics; public policy makers; private organizations.

By being able to identify the dimensions that make up financial health and integrate them into a single measurable model, the indicator provides a foundation for the development of solutions by the various *stakeholders* that make up the financial citizenship ecosystem. Potential uses and applications of the I-SFB include items such as those described below.

- Initial assessment.** The index can be used to assess an individual's situation when they enter an educational program, draw up a financial plan, or sign up for a service provided by a specialist. The questions in the questionnaire act as prompts to guide conversations about the current situation, strengths and weaknesses, needs, and opportunities for improvement in a citizen's financial life. *Potential users of this application: #Citizens #FinancialEducators #FinancialPlanners #FinancialEducationSupporters #FinancialEducationEntrepreneurs #Academics #Researchers #FinancialInstitutions #PublicInstitutions*
- Tracking individual progress.** The I-SFB score acts as a tool for monitoring the evolution of an individual's financial health. Changes in the answers to the questionnaire provide indications of how he or she has been experiencing his or her financial situation, showing possible progress on issues such as controlling finances or building reserves for unforeseen events. *Potential users of this application: #Citizens #FinancialEducators #FinancialPlanners #FinancialEducationSupporters #FinancialEducationEntrepreneurs #Academics #Researchers #FinancialInstitutions #PublicInstitutions*
- Evaluating the results of programs to improve personal finances.** The I-SFB can help measure the impact of financial education programs. Moreover, it can be used to compare different populations in a program, check how a particular intervention affects different groups, or compare the effectiveness of different programs. *Potential users of this application: #FinancialEducators #FinancialPlanners #FinancialEducationSupporters #FinancialEducationEntrepreneurs #Academics #Researchers #FinancialInstitutions #PublicInstitutions*

- **Comparative analysis and risk modeling.** The items in the questionnaire, the dimensions of financial health and the overall I-SFB score itself, which come from self-declaration by the citizen, can be compared with verified transactional behaviors. Hence, I-SFB items can be studied as a variable in credit risk modeling. *Potential users of this application: #FinancialInstitutions #PublicInstitutions #Academics #Researchers*
- **Suitability and the development of new financial products.** The financial industry can use the I-SFB in suitability studies and modeling to offer products and services that are better suited to the user. It can also use the indicator as an input in the development of new products. *Potential users of this application: #FinancialInstitutions #PublicInstitutions #Academics #Researchers*
- With the I-SFB, **academia** will have access to a model validated for use in Brazil and will have datasets derived from the field research carried out, both in the analysis of each question in the international benchmarks evaluated, and the data collected in the survey of more than 5,000 citizens. *Potential users of this application: #Academics #Researchers*

4.1 USE IN VARIOUS FINANCIAL EDUCATION CONTEXTS

The I-SFB is a public instrument, free of charge and validated for the Brazilian socioeconomic context. Financial educators and their research partners can use it to assess and monitor changes in financial health and to measure how different programmatic approaches contribute to the financial health of the various audiences they serve.

The indicator was created to complement the existing theoretical, pedagogical, and practical framework for financial education, especially with regard to diagnosing the individual's situation. In this sense, the I-SFB offers two potentially useful diagnostic perspectives in financial education, which are described below.

- The first perspective relates to the different **financial health brackets** identified through the overall I-SFB score. According to the classification of individuals in these brackets, certain issues can be addressed educationally:
 - **"Bad" and "very low" levels** - the characteristics of people in these brackets suggest that one of the main financial issues is getting **out of debt** and stabilizing financially (thus getting out of a risky debt situation or even defaulting);
 - **"Low", "OK" and "good" levels** - one of the main focuses here is to help individuals **organize themselves to save** (creating a reserve to deal with unforeseen events), as well as helping them deal with issues such as discipline and self-control;

- **Very good" and "excellent" levels** - if the issues of budget control, planning, and saving are overcome, the focus is on **building and preserving assets**.
- b. The second diagnostic perspective of the I-SFB is even more granular, as it takes into account **scores in the dimensions** that make up financial health: ability, behavior, security, and freedom. Scores close to or below the national average for each dimension (as shown in Table 26) suggest gaps that need to be addressed in order to improve the individual's financial health.

■ **TABLE 26- Average scores of those surveyed in the I-SFB dimensions**

| I-SFB DIMENSION | AVERAGE SCORE OF BRAZILIANS IN THE DIMENSION |
|-----------------|--|
| Skills | 55 |
| Behavior | 64 |
| Security | 56 |
| Freedom | 52 |

Finally, cross-referencing the overall I-SFB score with the individual's score on the dimensions allows for an even more detailed diagnosis. For example: two individuals in the same I-SFB bracket, at the OK level, may experience different problems when checking their scores in the I-SFB dimensions. One of them may be weak in the "ability" dimension (which suggests difficulties in making decisions, searching for, and understanding financial information), while the other has a gap in the "behavior" dimension (which involves behavioral issues linked to discipline and self-control). Combining the I-SFB classification brackets with the dimension scores provides opportunities for greater personalization in the diagnosis and also for greater detail to help with educational recommendations.

4.2 OPERATIONAL APPLICATION OF THE TOOL

In order to facilitate its application and the adherence of respondents, the I-SFB is lean and non-exhaustive. An important part of the efforts to build the indicator was precisely the process of selecting and validating the questions: among the dozens of questions that came from the original protocols, the I-SFB model is made up of the most robust set of questions that emerged from the statistical analysis. The patterns of respondents - and the best combination of questions - were meticulously studied to achieve results with a high degree of reliability.

Along with this report, the instruction manual for using the I-SFB was made publicly¹⁵ available. This guide provides an overview of the instrument - questionnaire, scoring template, and classifier - and explains its application step by step. The first module of the instrument is the **questionnaire** with the questions to be asked of the respondents for the diagnosis. Overall financial health is determined by the totals of all the questions in this instrument. The specific diagnosis of the dimensions (ability, behavior, security, and freedom) is based on the corresponding subtotals. The questions can either be read out to the respondent or answered via self-application (e.g. online form).

The second module of the instrument is the **template**. It gives the value of each alternative for each question. The respondent should not have prior access to the templates, which should only be known to the administrators. In the case of self-administration, the templates should only be checked once the questionnaire has been completed.

The third module of the instrument is the **classifier**, which contains correspondence tables between the summed values of the questionnaire and their corresponding index (which brackets from 0 to 100). In addition to the score, the classifier indicates the respondent's bracket of financial health (which varies from "bad" to "excellent"). There is also a template and a classifier for each of the main dimensions.

¹⁵ The manual for using the I-SFB methodology can be downloaded at indice.febraban.org.br, available since 17/07/2021.

4.3 FREQUENTLY ASKED QUESTIONS

Can you calculate the score of a questionnaire if the respondent doesn't answer all the items?

No. The respondent must tick all the items in the questionnaire, otherwise the score calculated will not allow a correct classification.

Can changes or adjustments be made to the questions in the questionnaire?

No. Changes to the wording of the questions or the response items prevent the I-SFB score from being calculated accurately, as all the items in the questionnaire have been thoroughly tested to ensure their correct understanding. Furthermore, keeping the items standard ensures that the results are comparable between citizens and over time.

How often should the index be calculated?

Changes in behavior do not usually happen so quickly. In personal finance, this is no different. We therefore recommend a minimum of six to nine months for a new I-SFB diagnosis to be made. However, if events occur that drastically impact the individual's finances, a new round of diagnostics can be carried out.

Do I need permission to use the I-SFB on the website, printed materials, social media, YouTube, educational programs, and financial planning services?

The use of the I-SFB scale and the entire scoring process is free and publicly available for free use by society. Simply go to indice.febraban.org.br, and access the questionnaire and the methodology guide.

In the case of the use of the I-SFB in printed and electronic materials, it is only required that the source "I-SFB/FEBRABAN" be mentioned; and that the source link be indicated with the description "Available at indice.febraban.org.br"; that the indicator be used in good faith and in compliance with the legislation, in particular the General Data Protection Law (LGPD); and, finally, that no remuneration be required by simply applying the I-SFB.

Can the I-SFB only be calculated electronically? What if it has to be applied in regions where there is no good internet access?

The index can also be used without the aid of electronic instruments, as it has simple calculation mechanics. If you need to apply the I-SFB in a place where it is difficult to access the internet, you can first access the website indice.febraban.org.br, print out the quick application guide, and use it later.

5. Conclusion

The Brazilian Financial Health Index emerges from a process that, in its construction, started from the accumulated knowledge of international benchmarks and evolved to become more appropriate to the Brazilian reality and socioeconomic context. It is a robust instrument that assesses financial health in a multidimensional way, since it integrates the different dimensions of financial health into the same model, mapping the relationship between them.

Not only does it assess an individual's ability to make financial decisions, but it also allows us to understand how they act based on this ability, the weight of their financial situation, the context in which they live, and the effects of these elements on their perception of security and freedom. The result is an indicator capable of capturing the nuances of the Brazilian reality and the dynamics of individuals' finances.

Another contribution of the study is the notion that financial health is a *situation*, not a *label*. The I-SFB data invites us to rethink the conception of financial health *profiles* - that people *are in* debt, *are* saving, etc. - and to look at their *moment* - *are they in* debt, *are they* saving, etc.

Although the socioeconomic characteristics of the respondent influence the I-SFB score, each of the levels of financial health includes all profiles: from classes A to E, from the North to the South of Brazil, young and old, and all types of families. In other words: although financial health is affected by objective reality, individuals can modify and improve it through attitudes and actions based on knowledge, skills, and behaviors.

By capturing the specifics of individuals' financial health - both through the indicator's overall score and through the scores for each of the dimensions - the I-SFB provides opportunities for personalization in applications ranging from educational programs that are more suited to citizens' needs to *suitability* solutions and the development of financial products and services and can also contribute to measuring the impact of financial education programs. Hence, several financial education *stakeholders* can benefit from this new instrument. For this reason, and in line with the Technical Cooperation Agreement signed between FEBRABAN and the BCB, the I-SFB, and its methodology are available free of charge to Brazilian society. As the ecosystem of solutions based on the instrument develops, it is hoped that more and more individuals will be able to measure their diagnoses, monitor and evaluate their evolution over time, and have access to more specific guidance for their situation.

An Initiative of



In Technical Cooperation with

