

# Recovery Plan

**Banco do Brasil 2018**

**Public Section**



**BANCO DO BRASIL**

## TABLE OF CONTENTS

1.	Introduction	3
2.	Governance	3
2.1.	Recovery Plan Responsibility	3
2.2.	Governance Structure	3
2.2.1.	The Recovery Plan Governance	4
2.3.	Recovery Plan Involved Areas	5
3.	Banco do Brasil	6
3.1.	Entities Linked to Banco do Brasil's (ELBB) Materiality Assessment	7
3.2.	Risks Profile	7
3.2.1.	Relevant Risks	7
3.2.2.	Risks Appetite and Tolerance	8
4.	Critical Functions and Essential Services	8
4.1.	Critical Functions	8
4.1.1.	Critical Functions Definition and Criticality Assessment	8
4.2.	Essential Services	9
4.2.1.	Essential Services Definition and Assessment	9
5.	Monitoring Program	9
5.1.	Indicators Framework	9
5.2.	Deterioration Indicators Definition	10
5.3.	Recovery Indicators Definition	11
6.	Stress Scenarios Development	11
7.	Recovery Strategies	12
7.1.	Recovery Strategies Definition and Analysis Process	13
7.2.	Recovery Strategies	14
7.3.	Recovery Strategies Application under Stress Scenarios	14
8.	Conclusion	15
9.	Bibliographic References	16

## TABLE OF FIGURES

FIGURE 1 – CORPORATE GOVERNANCE STRUCTURE	4
FIGURE 2 – RECOVERY PLAN GOVERNANCE STRUCTURE	5
FIGURE 3 – BB SERVICE STATIONS ABROAD	6
FIGURE 5 – INDICATORS FRAMEWORK	10
FIGURE 6 – STRESS SCENARIOS DEFINITION PROCESS	12
FIGURE 7 – RECOVERY STRATEGIES DEFINITION PROCESS	13

## 1. Introduction

In Brazil, the Recovery Plan regulation was published by the Central Bank of Brazil (Bacen) by means of the Resolution n° 4,502, issued by the National Monetary Council (CMN) on 06/30/2016, which rules on the recovery plan elaboration and operation, aiming to reestablish capital and liquidity adequate levels and preserve the feasibility of financial institutions and others whose functioning was authorized by Bacen, as a response to stress situations, by contributing with the maintenance of the National Financial System (NFS) soundness, stability and regular operation.

The Recovery Plan goal, whose scope covers the Prudential Conglomerate entities, is to evaluate if the Institution's available options to face crises are consistent enough before a series of shocks of different types. In order to be more adequate and timely to eventual crises, the answers must be detected or anticipated by the monitoring of the diverse businesses and risks the Institution may be subject to.

## 2. Governance

### 2.1. Recovery Plan Responsibility

At Banco do Brasil (BB), the Director of Controllershship (Dirco) is responsible for meeting the Recovery Plan requirements, which were established by CMN Resolution n° 4,502/16.

### 2.2. Governance Structure

Banco do Brasil's corporate governance covers:

- a) the Board of Directors (CA), assisted by the Audit Committee (Coaud), by the Remuneration and Eligibility Committee (Corem), by the Risks and Capital Committee (Coris) and by the Internal Audit (Audit);
- b) the Executive Board (Direx), composed by the Board of Officers (CD), consisting of the President and the Vice-Presidents<sup>1</sup>, and Statutory Directors<sup>2</sup>;
- c) the Fiscal Council (CF); and
- d) the Audit Committee (Audit).

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<sup>1</sup> Up to 10, conditional on changes to the Decree Law No. 3.905/2001

<sup>2</sup> Exclusively BB's current employees (Bylaws, Art. 24)

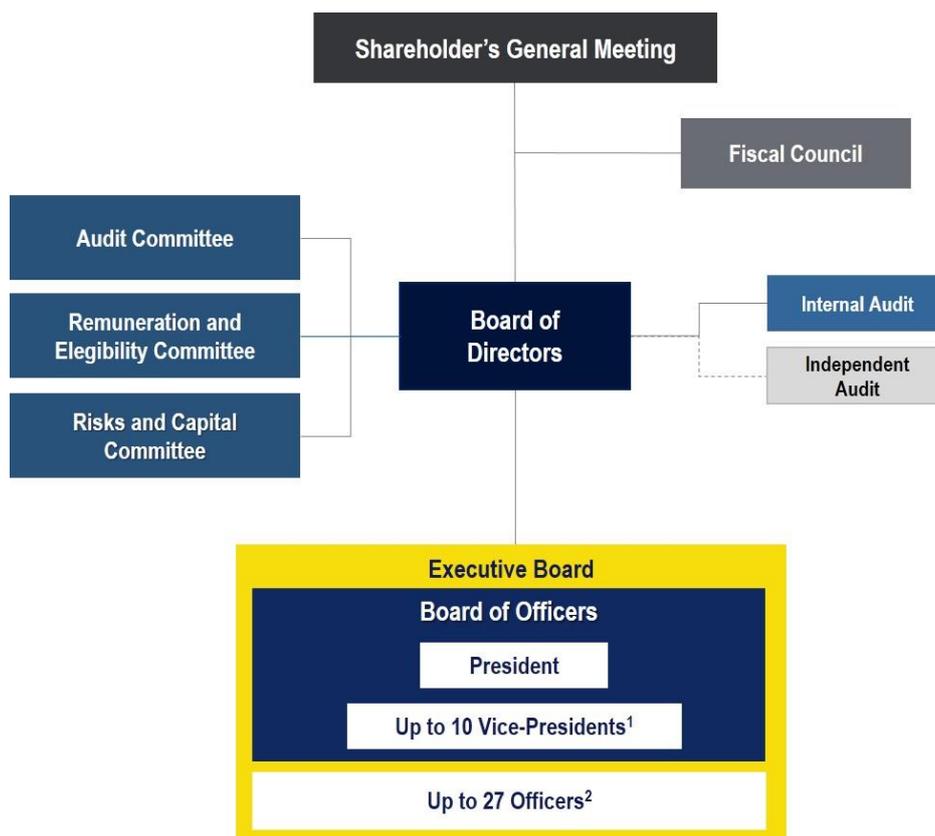


Figure 1 – Corporate Governance Structure

The decisions are communicated to the intervening areas by means of documents that objectively express the position taken by Management, ensuring its applicability in all of the Bank's levels.

### 2.2.1. The Recovery Plan Governance

The Recovery Plan governance model covers a superior and executive committees structure, which is integrated by several areas of the Bank and which the Bank's president, vice-presidents and key executive managers take part in.

CMN Resolution nº 4,502/16, Art. 21 establishes that the directorship and the CA should:

- a) ensure the timely identification of the personnel who is responsible for the operation of the recovery plan;
- b) have a broad and integrated comprehension on the critical functions and the essential services, indicators and other pieces of information that are part of the monitoring program, stress scenarios, recovery strategies, barriers and risks associated to the plan, by ensuring its consistency with the institution's strategic planning; and
- c) ensure the elaboration of feasible and efficient recovery strategies, including the ones that refer to other companies that integrate the economic group.

The previously mentioned Resolution, in its Art. 22, quotes that the directorship and the CA are responsible for using the strategies that are set in the recovery plan.

The Recovery Plan governance structure role is to keep the corporate and transparency responsibility in operating the plan, being related to the decision making processes of using, or not, the recovery strategies set in it.

The following figure presents the governance structure that is defined for the Recovery Plan.

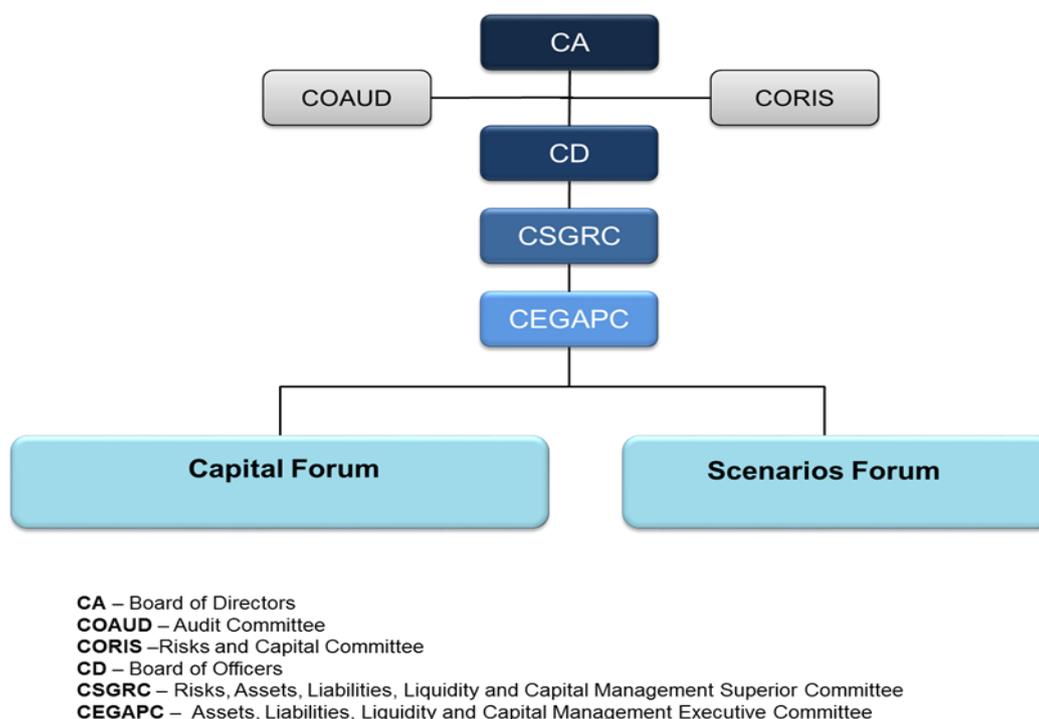


Figure 2 – Recovery Plan Governance Structure

As soon as issues and processes concerning the Plan permeate the Bank's Strategic Committees essence and purposes, mainly the ones associated to the relevant risks and assets and liabilities management (ALM). The simplifying of governance aims to promote promptness and better flow to deliberations concerning the Plan and the areas bearing institutional responsibilities linked to the Plan must take part, in such committees, even as non-permanent members, ensuring alignment to the model adopted by the Bank and the corporate governance fundamental principles.

### 2.3. Recovery Plan Involved Areas

The areas that are involved in Banco do Brasil's Recovery Plan are divided into signatory (proponent), intervening and reviser.

The Recovery Plan signatory areas main roles are to prospect, articulate with intervening areas, develop and propose adequate definitions to the Recovery Plan and they are responsible for the sufficiency and accuracy of the information that is presented.

The Recovery Plan intervening areas are related to the definitions of the Critical Functions and Essential Services, Monitoring Program and Stress Scenarios, Recovery Strategies and the Communication Plan. They are areas that manage products or services that are defined as Critical Functions or areas that manage indicators that are defined in the Monitoring Program or even managers of businesses that are defined as strategic options for recovery. Thus, the identification of such areas depend on the definitions made during Banco do Brasil's Recovery Plan elaboration and review.

The revising area, Internal Controls Directorship (Dicoi), was defined in compliance with CMN Resolution n° 4,502/16, Art. 19.

### 3. Banco do Brasil

Banco do Brasil S.A. is among the biggest financial institutions in Latin America and it is a reference of trust and soundness, by having a highlighted position in its operation field.

Banco do Brasil has been operating for over 200 years and in-line with the the purpose to care for what is valuable to people, it is one of the main economic and social development agents in the country. By operating in a responsible way to promote social inclusion by means of work and income generation, it supports agribusiness, micro and small companies and foreign trade.

BB is a mixed-capital company, controlled by the Brazilian Government, and it integrates the New Market, a B3 segment that gathers companies with the best corporate governance practices. The social-environmental performance is certified by its presence in B3 Entrepreneurial Sustainability Index (ESI) and in New York Stock Exchange Sustainability Dow Jones Index.

The Bank's operations are basically divided into five segments: a) Banking; b) Investments; c) Asset Management; d) Security (insurances, pension and capitalization); and d); Means of Payment.

In June/18, with over 97,6 thousand employees and 66 million clients, Banco do Brasil has a participation of 19,3% in the credit market, R\$ 1,450 billion assets, R\$ 930 billion in resources from third parties under management and R\$ 597 billion in commercial funding.

Being present in 99,8% of municipalities, in December/17, Banco do Brasil had the biggest servicing network among Brazilian institutions, with 64,5 thousand service stations in Brazil and abroad. Its 4,770 offices stand for a participation of 21, 8% in the National Financial System (NFS) total physical network.

Besides the physical network, the Bank has digital platforms that have become more and more relevant and play an important role in making the access to a broad variety of products and services easier and faster. With the latest behavior trends, mobile and internet banking stood for 77% of total transactions in June/18.

The Bank's external network consists of 26 offices located in 16 countries. Complementing this structure, Banco do Brasil maintains agreement with other financial institution abroad to serve its clients. At the end of June/18, 874 banks operate as representatives for BB in 104 countries



Available on: <http://www.bb.com.br/pbb/pagina-inicial/atendimento/bb-no-mundo#/>

Figure 3 – BB service stations abroad

### 3.1. Entities Linked to Banco do Brasil's (ELBB) Materiality Assessment

Banco do Brasil S.A. has a diversity of businesses, products, services and clients. Due to the organizational nature, strategic option or legal and regulatory requirements, the operationalization of its businesses and processes is made by the Multiple Bank and its ELBB, located in Brazil and abroad, under several organizational and legal forms.

The range of ELBB is composed by 206 equity investments, which are classified in controlled, affiliated, simple equity investments, sponsored, administered and a foundation.

The ELBB performance systematical follow-up seeks to evaluate if the invested capital return is consistent with the risks taken or the acquisition of costs reduction in equity investments.

### 3.2. Risks Profile

Risks and capital management are fundamental instruments to the banking system sustainability. The methods for identifying, measuring, assessing, controlling, mitigating monitoring and reporting risks safeguard financial institutions in adverse moments and provide a support for the generation of positive and recurrent results in the long run. Banco do Brasil considers capital and risk management to be fundamental for the decision making process, which contributes with risk *versus* return relation optimization in its operations.

Changes in the world financial environment, such as the integration among markets, the emergence of new transactions and products, the increase in technological sophistication and new regulations have made financial activities and their risks more and more complex.

The Brazilian participation in the Basel Committee on Banking Supervision (BCBS) stimulates the timely implementation of international prudential rules in the Brazilian regulatory framework. The lessons learnt from financial disasters reinforce the relevance of capital and risk management in the banking industry. Such factors influence regulatory bodies and financial institutions on investing in risk management, aiming to strengthen their financial health.

Aligned to such an outlook, Banco do Brasil invests in capital and risk management practices and processes ongoing improvement, in compliance with the market, regulation and supervision international references. The risk management structure covers specific policies, the Risk Appetite and Tolerance Statement, the strategies and the processes, by observing each risk specificities.

#### 3.2.1. Relevant Risks

Banco do Brasil has processes to identify and review relevant risks in its activities, by even considering its ELBB. As of the moment when a risk is considered relevant, the structuring of its management model becomes necessary, by taking the following activities into account:

- a) identification (recognition and classification of the risks the Institution is subject to, by specifying their origin and way of occurrence);
- b) assessment and measurement (quantitative or qualitative dimensioning of the institution's risk exposure potential effect, by making it possible to determine the risk tolerance level);

- c) control (behavior register and the assurance of keeping risks exposure in compliance with the established tolerance level);
- d) mitigation (risks reduction, sharing or transference);
- e) monitoring (checking the risk management model adequacy and efficiency); and
- f) report (communication to areas of concern about risk exposure behavior or the monitoring result).

### **3.2.2. Risks Appetite and Tolerance**

Banco do Brasil's risks appetite and tolerance indicators, as well as the corresponding limits consider, in their definition, the risks exposure, the business strategies and the capital requirement projections that subsidize the Capital Plan.

The risks appetite and tolerance indicators and limits, as well as global, specific and operational limits are monitored, controlled and reported, by means of a Risks Dashboard, monthly, to the Risk Management and Internal Controls Executive Committee (CEGRC) and to the Risks, Assets, Liabilities, Liquidity and Capital Management Superior Committee (CSGRC) and, quarterly, to the Board of Directors (CA).

## **4. Critical Functions and Essential Services**

### **4.1. Critical Functions**

According to CMN Resolution n° 4,502/16, Art. 4, Critical Functions are activities operations or services whose discontinuity can undermine the financial stability and functioning of real economy.

Therefore, in order to verify the products and services that need to be preserved, by considering their relevance to the Institution, the National Financial System (NFS) and the economy, it was preliminarily necessary to develop a set of strategic analyses for the Conglomerate.

The strategic analysis was necessary for providing:

- a) inputs that will be considered in the creation of idiosyncratic scenarios;
- b) inputs for the assessment of recovery options applicability, by including the critical functions impact assessment; and
- c) the Institution's structure and business mapping in a legal and financial point of view.

#### **4.1.1. Critical Functions Definition and Criticality Assessment**

Aiming to get a higher degree of reliability in Banco do Brasil's Critical Functions definition, methodologies for the assessment of each potential function criticality were used, under quantitative and qualitative aspects.

As for the qualitative aspects, the Bank's businesses were assessed, by considering their impacts on the outlook: Economy, National Financial System (NFS) and Banco do Brasil.

As for the qualitative assessment, the guidelines and strategic goals from the Bank's strategy were observed, by identifying the core business, the events and strategic trends.

According to Law n° 4,595/64 Section II and signed contracts, Banco do Brasil provides the whole National Financial System (NFS) with services, which are considered in the

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potential Critical Functions analysis and identification and they were categorized as “specialized” or “exclusively provided/offered by Banco do Brasil”.

The qualitative and quantitative analyses results showed the products or services assessed as Critical Functions, which aim to keep the Institution's feasibility, stability and regular functioning.

## **4.2. Essential Services**

According to CMN Resolution n° 4,502/16, Art. 4, Essential Services are activities, operations or services that are not included in the Critical Functions, whose discontinuity can undermine entities' feasibility.

The international literature defines Essential Services as the ones that are necessary for the Institution to be able to perform its Critical Functions. Such services failure or sudden and disorderly malfunctioning can lead to the Critical Functions and the own Institution's collapse or severe constraint.

### **4.2.1. Essential Services Definition and Assessment**

The services that support each of Banco do Brasil's Critical Functions were directly identified and the sharing and interconnectivity among Functions were assessed. Services with an indirect impact on the Critical Functions were also mapped; their discontinuity can undermine the Bank's feasibility.

Banco do Brasil's Businesses Continuity Management process (BCM)<sup>3</sup> is one of the components of the Functions protection and recovery set of mechanisms.

Critical Functions and Essential Services are defined by the Bank, focusing on the continuity of activities, operations, and services, in a way it does not undermine its feasibility.

## **5. Monitoring Program**

### **5.1. Indicators Framework**

After studies on the banking industry international requirements and best practices, we have noticed the indicators framework that was adopted by Institutions includes recovery indicators (RI) and deterioration indicators (DI – Early Warning Indicators – EWI).

DI main purpose is to identify business deterioration or risks materialization, as well as to support the decision process on the most appropriate management action. A DI robust structure enables monitoring and providing signs that a recovery indicator (RI) may be breached in the future.

RI establishes the moment when we start considering a situation as severe and deciding on the best recovery option available to overcome some crisis. Due to the several types of crises, recovery indicators do not automatically activate a specific recovery option, but they enable early identification of the best way of operating the Recovery Plan.

The reaching of RI triggers (levels) starts the decision process in Senior Management about the Recovery Plan operation.

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<sup>3</sup> Banco do Brasil's Business Continuity Management (BCM) aims to prepare the Institution for eventual operational interruption situations in its more critical processes.

The conceptual division of indicators in these two sets demand the seven categories of indicators required by the National Monetary Council (CMN), in its Resolution n° 4,502/16, Art.7, to be classified as RI, DI or even in both groups.

Banco do Brasil has defined its indicators framework based upon such a concept, as it is shown in following figure:

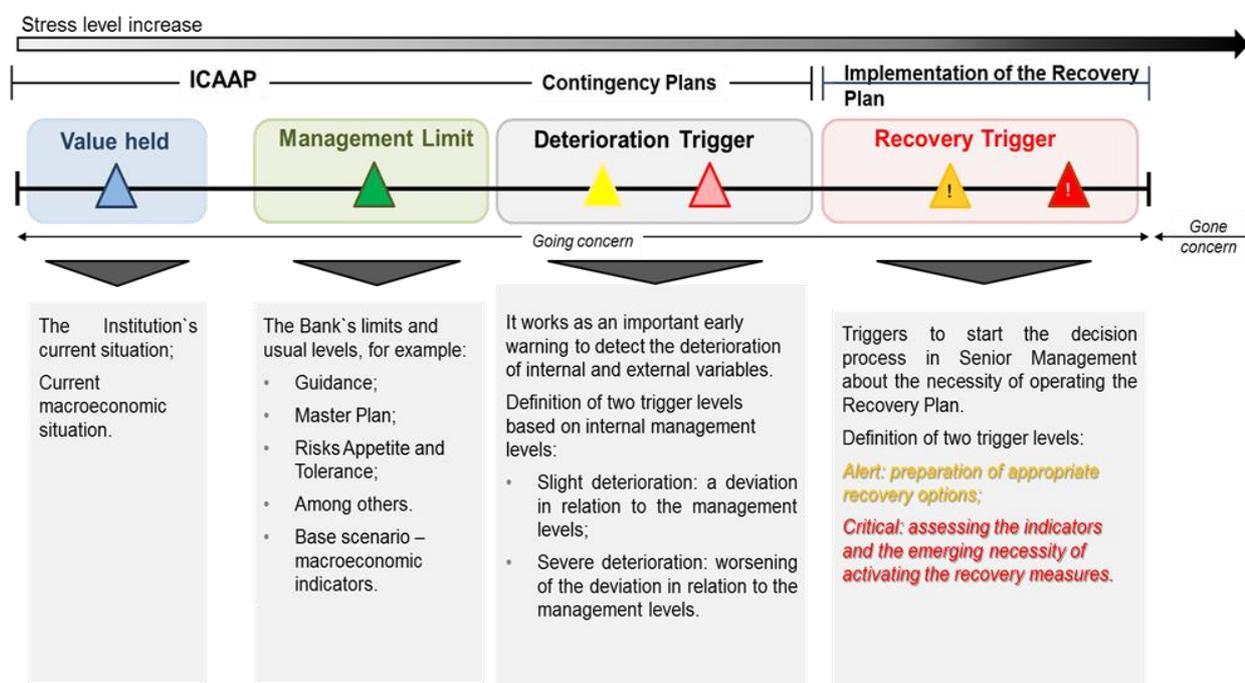


Figure 4 – Indicators Framework

In order to subsidize the mapping of indicators, we have preliminarily identified the ones that are already used in Banco do Brasil's management, by using the categories established by the Regulator as a reference.

## 5.2. Deterioration Indicators Definition

According to the mapping of the indicators and the criteria that were considered, a set of prospective and retrospective indicators were established. The defined DI were grouped together into eight categories, quoted as follows, and they are monitored, by observing management minimum levels, light and severe deterioration:

- a) Capital;
- b) Liquidity;
- c) Result;
- d) Reputation;
- e) Credit Quality;
- f) Fund Raising Sources;
- g) Legal and Contagion Risks and Internal Controls; and
- h) Macroeconomy.

### 5.3. Recovery Indicators Definition

Considering Banco do Brasil's legal structure, nature of operations, business complexity and risk profile, Recovery Indicators (RI) were defined and classified into the following four categories, whose monitoring shows the alert and critical minimum management levels:

- a) Capital;
- b) Liquidity;
- c) Profitability; and
- d) Credit Quality.

### 6. Stress Scenarios Development

CMN Resolution n° 4,502/16, Art. 9, establishes that stress scenarios must be broad and cover events that can threaten the institution's businesses continuity and feasibility, by considering the following hypotheses:

- a) assets depreciation;
- b) fund raising capability reduction;
- c) results generation capability deterioration;
- d) deterioration of the liquidity situation, or derived from systemic or idiosyncratic nature turmoil in Brazil or abroad; and
- e) the institution's business model infeasibility.

The Recovery Plan stress scenarios detailed description plays an important role, therefore it contributes with its relevance determination and its severity assessment, making it possible to prove the Institution's and the recovery strategies credibility and feasibility.

Stress scenarios detailing implies identifying broad second-round effects. It means the scenario initial design must consider the most probable and unavoidable consequences, potential chain reactions, which might cause an increase in the scenario severity.

Scenarios development is an interactive process to define credible and possible narrations that connect relevant risks that are faced by the institution's businesses in a coherent way. Stress scenarios definition must be based upon the event severity for the institution.

For the Recovery Plan, systemic and idiosyncratic stress scenarios, or their combination, must be considered. On one hand, systemic stress scenarios are associated to the economy or the financial system deterioration, which can severely affect the Institution. On the other hand, idiosyncratic scenarios are associated to the Institution's specific events that can affect its feasibility, as for example: internal fraud, reputational crises and rating downgrade.

Taking the previously mentioned reference into account, a Stress Scenarios definition process was designed, according to the following figure:

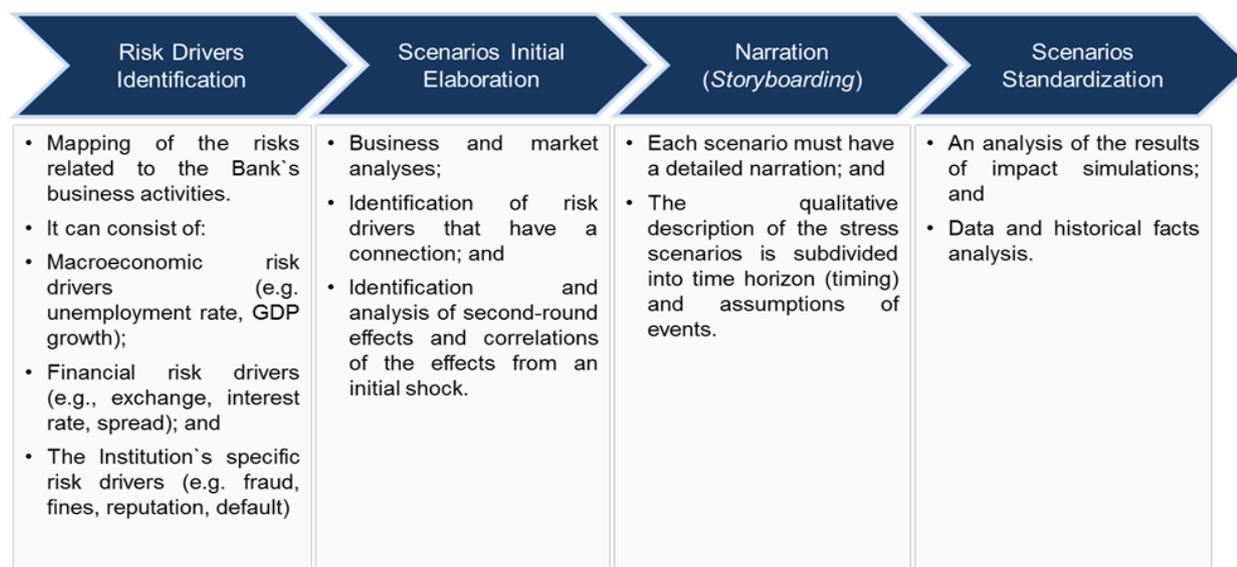


Figure 5 – Stress Scenarios Definition Process

In order to subsidize the mapping of the risks related to Banco do Brasil's businesses, the stress scenarios risk drivers identification was based upon the risks and activities operated by the institution, by considering:

- a) Banco do Brasil's Prudential Conglomerate Risks Inventory and Corporate Set of Relevant Risks;
- b) risks historical events; and
- c) risks inherent to the businesses performed by the Bank.

At Banco do Brasil's Scenarios Forum, the Institution's risks and risk drivers are discussed, with the participation of areas involved with business, risks, macroeconomy, finances, capital, among others. In order to elaborate scenarios, the Bank's businesses and position in the industry and market are assessed, and the risks interrelations are considered, aiming to enable scenarios to be used in a consistent way.

For Banco do Brasil's Recovery Plan in 2017, stress scenarios were defined, by considering events in the following cases:

- a) historical and hypothetical;
- b) short, medium and long terms; and
- c) idiosyncratic and systemic.

The stress tests were performed in an integrated way, by covering the several risks the Bank is exposed to, hypotheses of assets depreciation, funds raising capability limitation, the deterioration of its results and liquidity situation, by threatening the Bank's business continuity and feasibility.

## 7. Recovery Strategies

According to CMN Resolution nº 4,502/16, Art. 12, at least the following Recovery Strategies must be considered:

- a) capital and liquidity situation strengthening;

- b) assets sale;
- c) debts refinancing;
- d) liabilities restructuring;
- e) access to the financial support of entities that integrate the same economic group, if any;
- f) access to liquidity financial assistance, if any, regardless of source nature;
- g) changes in the Institution's societal or organizational structures, operating strategy or business model; and
- h) supply maintenance of services provided by third parties, which are necessary to the institution's operational continuity.

Moreover, the Recovery Plan must contain feasibility foundation and expected impact analysis of each Recovery Strategy individually adopted and, whenever it is the case, the joint adoption of more than one strategy.

Eventual barriers to the recovery strategies effectiveness and the risks associated to their operation, as well as actions to eliminate or mitigate them.

**7.1. Recovery Strategies Definition and Analysis Process**

In order to subsidize Banco do Brasil's Recovery Strategies definition, a process was designed as it is shown in the following figure:

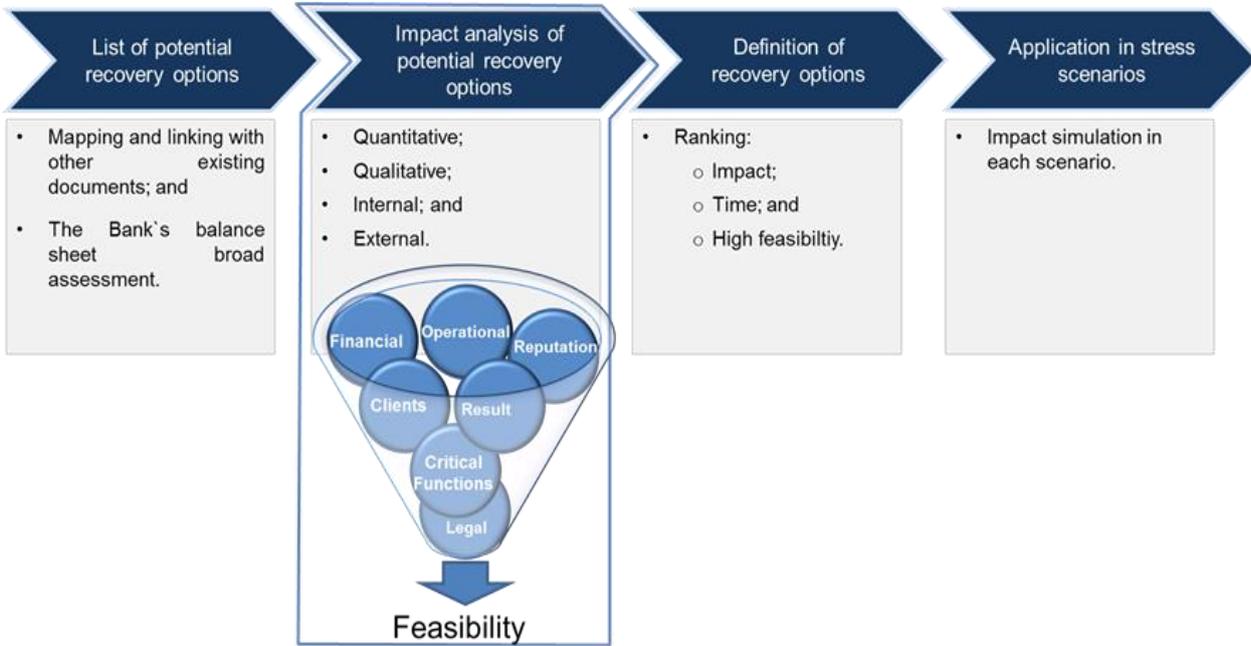


Figure 6 – Recovery Strategies definition process

Other potential Recovery Strategies were identified by means of a broad assessment of the Bank's Balance Sheet, studies on international regulatory requirements and the industry best practices.

Each potential Recovery Strategy was quantitative and qualitatively analyzed, by considering the financial effects on the Bank's result, capital and liquidity, with the implementation of each recovery option, by always taking internal and external environments into account.

Such analyses contributed with the identification of eventual barriers to the Recovery Strategies effectiveness and the risks associated to its operation, as well as to the final assessment of the feasibility implementation.

## **7.2. Recovery Strategies**

We have identified a set of Recovery Strategies that aim to reestablish the Bank's condition in different types of situations derived from systemic or idiosyncratic events, which might lead to severe impacts on capital and liquidity, as well as on the Bank's performance and take the Institution to insolvency.

The Recovery Strategies are classified into the following categories:

- a) Assets Sale;
- b) Equity Investments Sale;
- c) Liquidity Financial Assistance;
- d) Capital Strengthening;
- e) Liquidity Strengthening; and
- f) Administrative Expenses Reduction.

In the category "Assets Sale", we have grouped the strategies related to the Bank's partial or complete termination of a certain business line portfolio.

The "Equity Investments Sale" is related to the total or partial sale of equity investments held by the Bank in some ELBB. If that ELBB performs a Critical Function or an Essential Service in Banco do Brasil's Conglomerate, its sale will have to join the Bank's recovery to the preservation of its interest in such investments.

The category "Liquidity Financial Assistance" joins strategies that are consistent with the liquidity financial support that is provided by institutions that integrate the financial system.

"Capital and liquidity strengthening" are categories that gather, respectively, the specific strategies regarding capital and liquidity increase.

Finally, the category "Administrative Expenses Reduction" covers strategies that are inherent to the improvement of operational effectiveness, by considering the administrative personnel and operational expenses.

The effectiveness of some of the categories depend upon the financial system and market conditions. Others depend upon the Bank's discretion for their implementation.

## **7.3. Recovery Strategies Application under Stress Scenarios**

The goal of the recovery strategies application under stress scenarios is to assess the feasibility and the individual and combined impact analysis of more than one strategy, by aiming to restore the Institution's feasibility. The suggestions for each stress scenario consider the relevance of the impact the strategy would cause to the liquidity or capital

and, the prioritization, which means, whether it would produce the expected effects, by considering the term (short, medium, long) and its value (market appetite).

## **8. Conclusion**

With the publishing of CMN Resolution n° 4,502/16, Banco do Brasil's skills and capabilities to face adverse and critical situations, materialized in the several existing contingency and business continuity plans underwent some improvements.

Such improvements strengthen the Bank's financial, operational and structural soundness, by providing adherence to regulatory guidelines and supporting the Recovery Plan effective operation. As a result, there is risk management culture deepening, which has already been broadly spread out through the company.

Banco do Brasil is aware of the role it plays and its representativeness in the National Financial System (NFS) and, that is the reason why the Recovery Plan 2018 depicts the Senior Management's and its collaborators' commitment to the management of the risks that are inherent to its activities.

BB's Recovery Plan 2018 is a result of the Bank's best efforts, combined with its historical experience in the elaboration of plans to face crises and the market best practices. Consequently, the Bank considers the recovery strategies that were developed for the plan to be feasible. It shows that, in case of some stress event, the Bank would be prepared for a timely and ordered recovery process, with the least impact on the National Financial System (NFS).

That understanding is based upon the results of simulations that were performed in relation to the application of Recovery Strategies in stress scenarios. In each one of those systemic or idiosyncratic stress scenarios, the relation of Recovery Strategies has proved to be able to timely bring the Bank to a normality situation.

Nevertheless, the positive results of those simulations, while recognizing the challenges of forecasting the accurate circumstances to which Banco do Brasil could get, at an almost default point, we have chosen to vest the Recovery Plan with a higher degree of flexibility. Thus, as real conditions move away from predetermined ones, actions are taken to keep the feasibility and the effectiveness of several recovery strategies.

The governance mechanisms that are incorporated in BB's Recovery Plan 2018 and the actions taken to broadly cover CMN Resolution n° 4,502/16 provisions reinforce the belief that the Plan can be successfully operated and that Banco do Brasil can recover from some crisis in an orderly and timely way, without harming the Financial System or requiring further public resources.

In conclusion, it is important to underscore that this material is about Banco do Brasil's Recovery Plan 2018 public section, in compliance with established in CMN Resolution n° 4,502/16, Art. 28.

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