Risk Management Report
Pillar 3

4Q19

Summary

List of Tables

List of Figures

List of Charts

Abbreviations Glossary

Audit	Internal Audit
Bacen	Central Bank of Brazil
CA	Board of Directors
CD	Board of Officers
CF	Supervisory Boards
CMN	National Monetary Council
Coaud	Audit Committee
Coris	Risks and Capital Committee
Corem	Remuneration and Elegibility Comitee
Coger	Accounting Directorship
Cegov	Linked Entities Governance Executive Committee
CEGRC	Risk Management, Internal Controls, Assets, Liabilities, Liquidity and Capital Management Executive Committee
Dicoi	Internal Controls Directorship
Difin	Finance Directorship
Diris	Risk Management Directorship
Disin	Institutional Security Directorship
DRL	Availability of Free Resources Indicator
ELBB	Banco do Brasil Linked (Related) Entities
Febraban	Brazilian Federation of Banks
FPR	Risk Weighting Factor
Icaap	Internal Capital Adequacy Assessment Process
IHCD	Capital and Debt Hybrid Instruments
MCC	Capital Contingency Measures
PR	Reference Equity
PRMR	Minimum Required Reference Equity to cover Pillar I risks
RWA	Risk-Weighted Assets
RWAACS	Risk Weighted Assets for the Shares Market Risk exposures
RWACAM	Risk Weighted Assets for the Exchange Market Risk exposures
RWACIRB	Risk Weighted Assets for the Credit Risk ascertained by internal models based approach
RWACOM	Risk Weighted Assets for the Commodities Market Risk exposures
RWACPAD	Risk Weighted Assets for the Credit Risk ascertained by standardized approach
RWAJUR	Risk Weighted Assets for the Interest Rate Market Risk exposures
RWAMINT	Risk Weighted Assets for the Market Risk ascertained by internal models
RWAMPAD	Risk Weighted Assets for the Market Risk ascertained by standardized approach
RWAOPAD	Risk Weighted Assets for the Operational Risk ascertained by standardized approach
SARB	Bank-Self Regulation System

Banco do Brasil

Founded in 1808, Banco do Brasil (BB) is a mixed-capital company that is controlled by the Brazilian Government and has been listed in B3 (Brasil, Bolsa, Balcão) *Novo Mercado*, which is a segment that gathers the companies with the best corporative governance practices.

Banco do Brasil is also certified in State-Owned Enterprises (SOE) Governance Program, (*Programa Destaque em Governança de Estatais*), a B3 program for SOE that voluntarily commit themselves to best corporate governance practices.

In October 2019, B3 concluded the annual monitoring of the Program and raised BB's score from 50 to 56 points, from the 60 possible points, remaining 04 points for the complete fulfillment of the Program, which should occur by August 2020.

BB`s performance has improved from 91% in 2017 to 94% in 2018, in the Integrated Governance and Management Index (*Índice Integrado de Governança e Gestão* – IGG) of the Brazilian Federal Court of Accounts (*Tribunal de Contas da União* – TCU). The index is comprised of the following dimensions: public governance; governance and human resources; governance and IT management; governance and contracts management. IGG brings a wide diagnosis about public governance in Brazil, comprehending SOE, mixed-capital corporations, municipalities, ministries, courts, and foundations, among others. In total, 498 entities of the Federal Public Administration were part of the survey.

Banco do Brasil is still certified in Level 1, with score 10 in all dimensions evaluated during the 4rd cycle of the Governance Index (IG-SEST) of the Secretariat of Coordination and Governance of State-owned Companies (*Secretaria de Coordenação e Governança das Empresas Estatais* – SEST). IG-SEST aims to monitor the governance quality of the Federal SOE, in order to comply with the requirements of Law 13,303/2016 (SOE's Law) and its Regulatory Decree, as well as guidelines established in resolutions of the Interministerial Commission on Corporate Governance and of Equity Interests of Directors of the Federal Government (*Comissão Interministerial de Governança Corporativa e de Administração de Participações Societárias da União* – CGPAR).

The Bank materializes its role as one of the main agents of economic and social development in the country by balancing its risk appetite, involving investments in agribusiness, infrastructure, companies, foreign trade and individuals.

Our Purpose: *"To take care of what matters to people".*

Our Vision: *"To be the company that provides the best experience for people and promotes society's development in an innovative, efficient and sustainable way"."*

Our Values: *"Ethics, Customer focus, Innovation, Efficiency, Reliability, Sense of Ownership and Public spirit"*

1. Introduction

Integrated risk and capital management is a fundamental instrument for the sustainability of the banking system. Risk identification, measurement, assessment, monitoring, reporting, control, enhancement and mitigation methods safeguard financial institutions in adverse times and provide support for the generation of positive and recurring results over time.

Banco do Brasil (BB) is committed to fully comply with the risk appetite guidelines, materialized through integrated risk and capital management in the decision-making process, which contributes to the optimization of the risk return ratio in its operations.

The maturity of the regulatory changes arised from financial crisis represents a very relevant contribution of the Regulator in terms of driving risk management practices. Besides that, the complexity of lower interest rates, the path of economic growth and new emerging risks such as cyber, as well as geopolitical changes, drive to a more challenging scenario for building a refined and modern risk management framework.

In line with that perspective, BB has invested in the continuous improvement of his team, its integrated risk and capital management, in line with international market benchmarks of regulation and supervision.

BB remains continuously aligned with the best management practices, among which, the risk management architecture with multidimensional scope whose specificities are described in this report.

1.1 Objective

The current report aims to disclose the information related to risk management, to the measurement of the amount of Risk Weighted Assets (RWA) and to the Reference Equity (PR), in accordance with Circular 3,678, published by the Central Bank of Brazil (Bacen) on 10.31.2013, and it is aligned with the guidelines of Pillar III of Basel II. This report includes information about structures, processes and policies of integrated risk and capital management of Banco do Brasil (BB).

The measurement of PR and RWA considers the consolidation scope of the Prudential Conglomerate[1].

[1] Prudential Regulation Details on the chapter 3.

1.2 Main Regulatory Indicators

BB Prudential Conglomerate main risks and capital indicators are shown below considering the position of the previous three quarters:

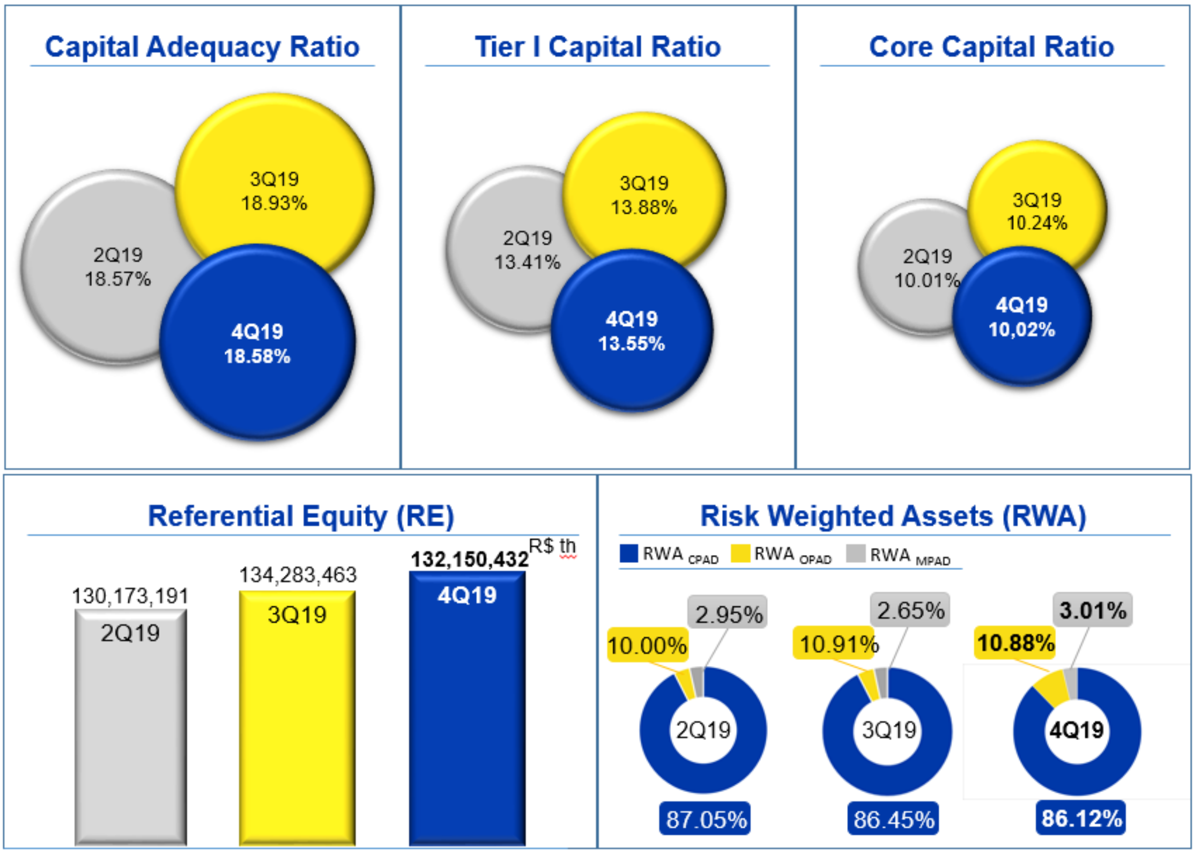


Figure 1 - Regulatory Capital Indicators

2 Integrated Risk and Capital Management

2.1 Risk and Capital Internal Governance

Banco do Brasil`s corporate governance structure has:

a) the Shareholder's General Meeting, the Board of Directors, assisted by the Audit Committee (Coaud), by the Persons, Remuneration and Eligibility Committee (Corem), by the Capital and Risks Committee (Coris) and by the Technology, Strategy and Innovation Committee;
b) the Executive Board, composed by the Board of Officers and by the Statutory Directors;
c) the Supervisoy Board (CF); and
d) the Internal Audit (Audit).

The figure below represents BB`s structure of corporate governance:

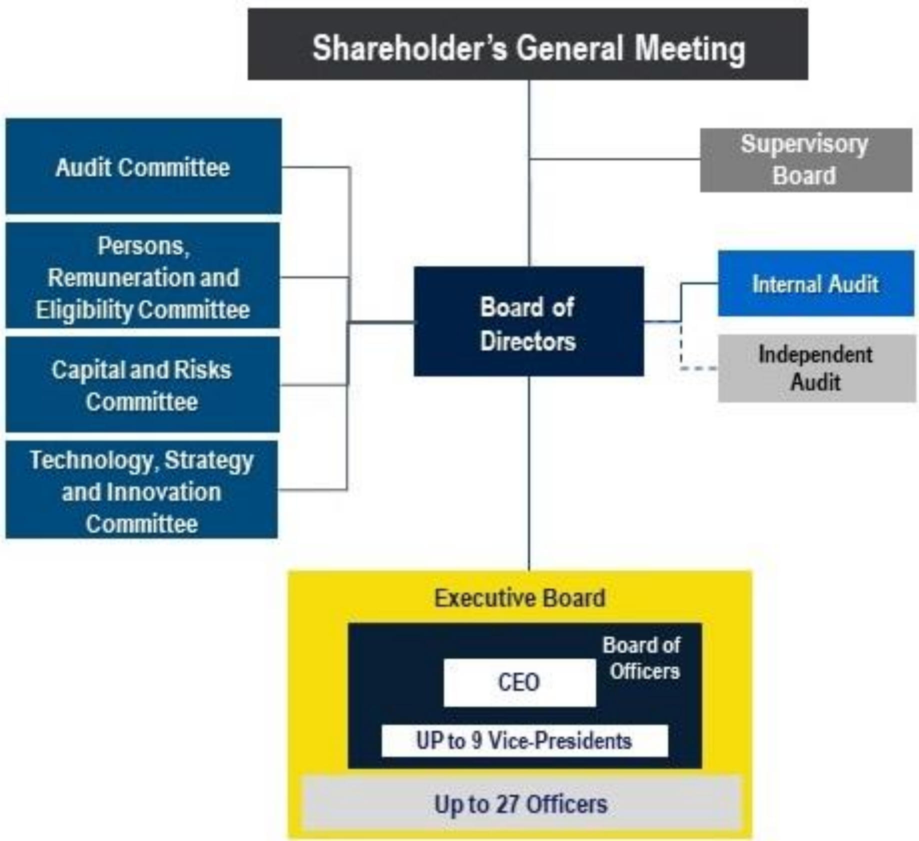


Figure 2 - Corporate Governance Structure

The decisions, in any level of the Company, are made in a collegiate way, except for the situations in which a minimum organizational structure does not allow it. Aiming to involve all officers with the definition of strategies and the appreciation of proposals for Banco do Brasil`s different businesses, the Management uses strategic level committee, which warrant speed, quality and safety to decision making.

Decisions are reported to participating units through documents that objectively express the position taken by the Senior Management, guaranteeing application throughout the Bank.

2.2 Integrated Risk and Capital Management Structure

The Board of Directors (CA), pursuant to the provisions of article 56, paragraph 1, of CMN Resolution 4,557/2017, and to the competencies stated on its Internal Regulations, is responsible for the information regarding the risk and capital management structure of Banco do Brasil, available in this report.

The risk and capital governance model adopted by BB involves an executive committee structure, comprised by Vice Presidents, addressing the following issues:

a) segregation of duties: business versus risk;

b) specific structure for risk management;

c) defined management process;

d) clear rules and levels of authority structure; and

e) reference to the best management practices.

The figure below represents BB`s structure of risk and capital governance:

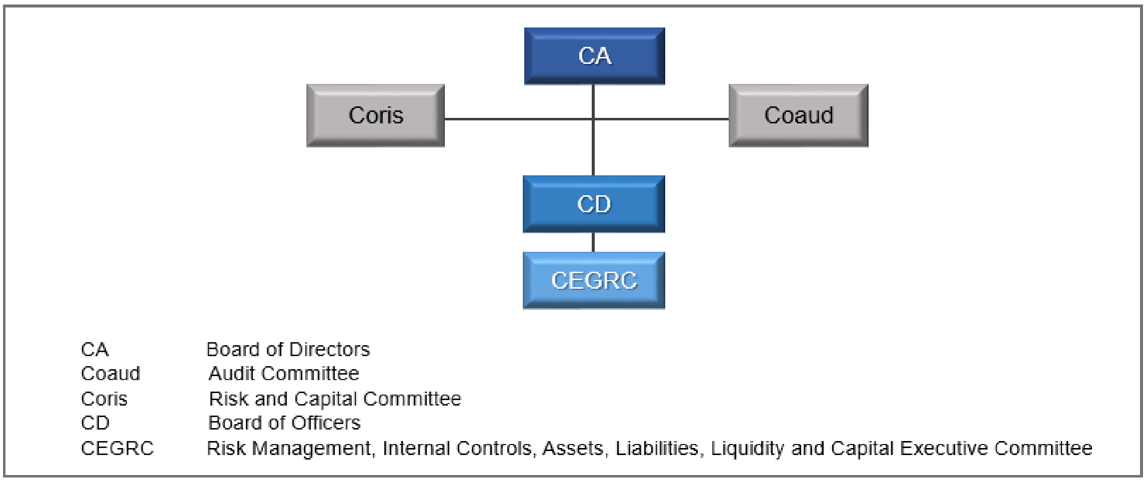


Figure 3 - Organizational Structure involved in the capital and risk management

The Committees involved with BB`s risk and capital management, as well as their main purposes are described in the following charts:

Chart 1 - Main Purposes of the Advisory committees to the Board of Directors

Advisory committees to the Board of Directors	Main Purposes
Audit Committee (CoAud)	• evaluate the effectiveness of the internal control systems of Banco do Brasil; • evaluate the effectiveness of the independent and internal audits; • evaluate and monitor Banco do Brasil's exposures to risk, pursuant to Law 13,303/2016; • evaluate the reports on the activities carried out by the integrity area, according to the Decree 8.945 / 2016; • evaluate the reports about the indications of illegality related to the Bank's activities, to be presented to the Board of Directors; • evaluate the reports about compliance and internal control systems, to be presented to the Board of Directors; • evaluate and monitor, along with the management and the internal audit area, the adequacy of transactions with related parties; • inform the Board of Directors and Bacen, about the evidence of error or fraud represented by incompliance with the legal rules and regulations that put in risk the institution's continuity.
Capital and Risks Committee (Coris)	• advise the Board of Directors regarding management of risks and capital; • supervise the compliance by the Bank's Executive Board with the terms of the Risk Appetite Statement; • evaluate the proposals on creation and review of policies and strategies related to the management of risks and capital; • supervise the compliance with policies and strategies related to management of risks and capital; • evaluate the degree of compliance of the risks management structure's processes with the policies related to management of risks and capital; • evaluate and submit to the Board of Directors reports dealing with processes of management of risks and capital;

Chart 2 - Main Purposes of the Committees involved with risks and capital management

Strategic Committee	Main Purposes
Risk, Internal Controls, Assets, Liabilities, Liquidity and Capital Management Executive Committee - CEGRC	• approve strategies for risks management; • approve global risk exposure limits; • approve strategies for management of asset, liabilities and liquidity and capital management; • approve guidelines for treasury operations, observing the global risk limits; • approve guidelines for the management of funding and liabilities; • approve strategies guidelines measures intended at correction the deficiencies identified in the system of internal controls; • speak out about the Risk Appetite Statement.

Chart 3 - Main Purposes of the Forums involved with risk and capital management

Forums	Main Purposes
Capital Forum	• assist the Risk, Internal Controls, Asset, Liability, Liquidity and Capital Management Executive Committee - CEGRC with technical analyses on topics related to capital management, the Internal Capital Adequacy Assessment Process (Icaap) and the Capital Plan; • to analyze the behavior of the capital requirement based on the consolidation regime established by the Bacen; • analyze the stress tests applied to capital indicators.
Scenarios Forum	• analyses the corporate scenarios and their integration with the strategy, the budget and relevant risks incurred by the Conglomerate; • promote the unicity and synergy in the usage of macroeconomic scenarios, including in relation to stress tests; • assist the Risk, Internal Controls, Asset, Liability, Liquidity and Capital Management Executive Committee (CEGRC)– with the deliberations that require an analysis of the assumptions and variables from the macroeconomic scenarios.
PCLD Forum	• identify incorrections in the operations risk classification; • propose proactive actions that can prevent improper variations in the Allowance for Loan Losses (PCLD) and correct inconsistencies in the operations risk classification; • identify the origin, evolution and tendency of PCLD and the usage of provisions (losses);
Liquidity Risk Forum	• promote, whenever required, the assessment of the Liquidity situation and recommendation to either adopt or not the Liquidity Risk Prudential Measures (MPRL) if necessary.
Technical Forum for Evaluation, Monitoring and Validation of Models Applied to Risk Management (FTMGR)	• analyze proposals for defining or changing models, methodologies, techniques, indicators, metrics, criteria and parameters applied to risk management; • advise the deliberations of the Risk, Internal Controls, Asset, Liability, Liquidity and Capital Management Executive Committee (CEGRC) regarding the models, methodologies, techniques, indicators, metrics, criteria and parameters applied to risk management; • To promote the integration and alignment of the actions developed by the member areas of the Forum, regarding the technical aspects and the impacts of the analyzed models.
Internal Controls and Risk Management in ELBB and External Network Forum (FCIGRE)	• promote discussions on models and methodologies of internal controls, in Banco do Brasil Linked Entities (ELBB) and in the External Network; • to promote discussions on identified significant risks and on internal controls Banco do Brasil Linked Entities (ELBB) and in the External Network; • integrate the actions developed by the internal control and risk management areas related to ELBB and External Network.
Stress Test Forum	• analyze the influence of systemic and idiosyncratic scenarios on simulations of individual risk stress tests and on the integrated stress test (TEI); • to analyze the stress tests results applied to business, risks and capital indicators; • to advise the Risk Management, Internal Controls, Assets, Liabilities, Liquidity and Capital (CEGRC) Executive Committee in deliberations involving stress test results in the capital management process, Internal Capital Adequacy Assessment Process (ICAAP), Capital • Plan and Recovery Plan.
Permanent Loss Assessment for TVM Portfolio Forum	• evaluate assets classified or qualified as problematic assets, as well as the expected loss calculated for the assets; • evaluate the impact of Permanent Loss within the scope of the Prudential Conglomerate regarding the aspects of income, capital requirement of assets, capital availability, solvency indicators and other impacts generated by Permanent Loss; • assist the Risk Management, Internal Controls, Assets, Liabilities, Liquidity and Capital Executive Committee – CEGRC with technical analyses on topics related the permanent loss accounting for the assets.

The integrated risk and capital management process is done based on the risk appetite, capital plan and policies and strategies of BB's senior management and permeates several areas at different levels of governance of the Institution, including the Board of Directors (CA) and its Advisory Committees, Board of Officers (CD), Strategic Committee, Directorships and the Forums.

Risk management at Banco do Brasil aims to identify, measure, evaluate, monitor, report, control and mitigate the risks of the Prudential Conglomerate aggregate positions, as well as identify and monitor the risks associated with other companies controlled by members of the Prudential Conglomerate, even when creating new products and services.

The Risk Management Directorship (Diris) is the Bank's area responsible for overall risk management, except Compliance Risk, which is under the management of the Internal Controls Directorship (Dicoi). Dicoi is also responsible for the assessment and certification of controls, validation of risk management models, evaluation of the internal control system, identification, assessment and mitigation of operational risk in BB’s processes, products and services.

The Internal Audit (Audit) carries out periodic assessments in the risk management processes in order to verify if they are in agreement with the strategic guidelines, the specific policies and the internal and regulatory norms.

Considering the requirements associated with the risk management structure standardized in CMN Resolution 4,557, the Board of Directors indicated the Vice President of Internal Controls and Risk Management as the Chief Risk Officer (CRO) of the Conglomerate.

Banco do Brasil`s capital management consists of a continuous process of planning, assessment, control and monitoring of the capital that is necessary to cover the company relevant risks, to support the capital requirements required by the regulator, and achieve the internally defined strategic and budget objectives, aiming to optimize its capital allocation.

The Bank's capital management permeates several areas, at different levels of governance, including the Board of Directors (CA); the Board of Officers (CD); the Risk and Capital Committee (Coris); the Executive Committee on Risk Management, Internal Controls, Assets, Liabilities, Liquidity and Capital (CEGRC); the Capital Forum; the Scenarios Forum and the Strategic Units (Controllership Executive Office - Dirco, Risk Management Directorship - Diris, Finance Directorship - Difin and Accounting Directorship - Coger).

In order to improve the Bank's organizational architecture, the Board of Directors (CA) approved on December 10, 2019 the revision of the macrostructure, which led to the reorganization of the attributions between Strategic Units, among them the migration of the capital management of the Controlling Directorship (Dirco) to the Risk Management Directorship (Diris). This restructuring process is being implemented. Until its effective conclusion, capital management will remain under the responsibility of the Controlling Directorship (Dirco).

The areas defined in the capital management structure account collective or individually for:

a) identification and assesment of relevant risks;
b) assessment of the capital required to support the risks;
c) projection of risk and capital indicators;
d) calculation of Main Capital, Tier Capital 1 and the Referential Equity (PR);
e) elaboration of the capital plan and contingency plan;
f) evaluating capital sources and recomposition of capital;
g) elaboration of the recovery plan;
h) Icaap (Internal Capital Adequacy Assessment Process);
i) Stress Tests;
j) Managerial Reports;

k) Proposition of Capital Management Specific Policy; and

l) Proposition of Shareholders Remuneration Specific Policy.

Banco do Brasil's capital management structure allows the monitoring and control of the capital held by the Institution, the assessment of capital needs to face the risks to which the Institution is exposed and the planning of goals and capital needs, considering the Institution`s strategic objectives. That way, BB adopts a prospective stance, anticipating the capital needs derived from the possible changes in market conditions.

2.3 Strategic Definitions

2.3.1 Relevant Risks

BB has a process of risk identification that results in the risk inventory and in the definition of the corporate set of relevant risks. That process is quite important for the risk and capital management, as well as for the business management, because it has internal and external inputs that address the prospective form of incorrect risks.

The definition of the risk and relevant risk inventory is based on:

a) Risks that may impact the achievement of the objectives contained in the Corporate Strategy;
b) Risks inherent in the activities of Banco do Brasil Related Entities;
c) Risk factors considered most relevant and that may impact the business and results of operations of the Bank;
d) Regulatory guidelines in Brazil and abroad;
e) Concerns of the banking industry; and
f) Benchmark of financial institutions in Brazil and abroad.

BB`s risk inventory and the corporate set of relevant risks are annually revised, considering the risks incurred by the several business segments explored by the Bank or by its subsidiaries, which can affect Banco do Brasil`s Prudential Conglomerate Reference Equity (PR).

The classification of the relevant risks is based on quantitative and qualitative criteria.

The risks below are part of Banco do Brasil`s Prudential Conglomerate Relevant Risks Corporate Range:

Chart 4 - Banco do Brasil`s Prudential Conglomerate Relevant Risks

Risk	Concepts
Credit Risk	Possibility of losses associated with the non-fulfillment by a borrower or a counterparty of their corresponding financial obligations according to negotiated terms, the devaluation of a loan agreement due to a drop in the borrower's risk rating, a decline in gains or earnings, benefits granted in renegotiation, and recovery costs.
Market Risk	Possibility of financial or economic losses resulting from the fluctuation of market values of positions held by the financial institution.
Interest Rate Risk in the Banking Book	Possibility of losses arising from the fluctuation in market values of instruments held by the institution.
Liquidity Risk	Risk of the institution not having the ability to honor its financial commitments at maturity without incurring unacceptable losses.
Operational Risk	Possibility of losses due to failures, deficiencies, or improper internal processes, people and systems or external events. That includes the possibility of losses arising from legal risk.
Complementary Pension Fund Entities and Private Health Insurance Plan Operators for Employees Risk	Possibility of negative impact derived from the mismatching between actuarial liabilities and assets in the entities sponsored by complementary pension fund and private health insurance plan operators for employees.

Legal Risk	Possibility of losses derived from the inadequacy of deficiency in contracts signed by the institution, the penalties due to the infringement of legal mechanisms and the compensation for losses to third parties derived from the activities done by the institution, as well as the ongoing proposals in the legislative and regulatory processes, including by monitoring the legal environment and the legal interpretation of applicable rules and jurisprudence.
Cyber Risk	Possibility of financial losses or reputation damage due to cyber-attacks against people, IT infrastructure or corporate systems, affecting integrity, confidentiality, and availability.
Strategy Risk	Possibility of losses arising from adverse changes in the business environment, or use of inappropriate assumptions in decision-making.
Reputational Risk	Possibility losses associated with the negative perception about the Institution by its customers, counterparties, shareholders, investors, government agencies, community or supervisors, which can adversely affect the sustainability of the business.
Environmental Risk	Possibility of losses arising from social and environmental impacts resulting from administrative and business practices of BB.
Climate Risk	Possibility of losses derived from the business's transition to a low carbon economy, from the triggering of extreme weather events or that will bring about long term consequences, and may affect the generation of value by companies.
Contagion Risk	Possibility of negative impact on the capital, liquidity or reputation of the Prudential Conglomerate due to adverse events in the relevant Banco do Brasil Linked Entities (ELBB), which are not part of the Prudential Conglomerate.
Model Risk	Possibility of losses derived from the inadequate development or use of models, as a result of the inaccuracy or insufficiency of data or the incorrect formulation in its construction.
Conduct risk	Possibility of losses arising from inappropriate behavior in compliance with external laws and regulations, internal norms, code of ethics, standards of conduct and other corporate principles of governance by the Company or its internal agents in conducting their activities with customers, users and other interested parts.
Compliance Risk	Possibility of financial or reputational losses derived from the failure to comply with laws, regulations, internal standards, codes of conduct and guidelines established for the business and activities of the organization.
IT Risk	Possibility of losses due to inadequacies or failures in delivery and support of technology solutions and services, involving infrastructure, construction, operation.
Business Discontinuity	Possibility of losses arising from the interruption of the Bank's activities due to the goods and services supply discontinuity.
Concentration risk	Possibility of losses derived from significant exposures in risk events with common characteristics.
Border risk	Possibility of losses arising from significant exposures of risk events that are a border among risk management categories.
Residual risk	Possibility of losses derived from negative impacts due to the non-effectiveness of the mitigators used to control risks.

2.3.2 Risk Appetite and Tolerance

The Risk Appetite Statement is the main instrument that guides risk and business management considering relevant assumptions such as: macroeconomic and sectoral perspectives, capital goals, strategic objectives, market conditions, performance of similar competitors, controller guidelines, expected results, corporate scenarios (including stress), interrelationship between the relevant risks of Banco do Brasil and the risk-return ratio of the portfolios.

The Risk Appetite and Tolerance Statement covers the capital adequacy indicators: Core Capital Ratio (ICP), Tier I Capital Ratio (ICNI) and the Capital Adequacy Ratio (IB), among others, is available for access by all strategic units as a way to induce and strategically align the behavior of business areas.

2.3.3 Risk and Capital Management Policies

The policies that are specific for capital and risk management, approved by the Board of Directors, aim to lead the development of functions or behaviors, by means of strategic directives that guide the Risk and Capital Management actions.

Those specific policies are applied to all the businesses that involve risks and capital in the Bank, are avaliable to be checked by all the Bank`s employees. The contents are revised, at least, yearly.

Banco do Brasil`s Risk and Capital Management Specific Policies are quoted as follows:

a) Capital Management Specific Policy;

b) Credit Specific Policy;

c) Market Risks Specific Policy;

d) Liquidity Risk Specific Policy;

e) Derivative Financial Instruments Usage Specific Policy;

f) Specific Policy for the Management of the Securities and Derivatives Portfolio

g) Specific Strategy Risk Policy;

h) Specific Reputation Risk Policy;

i) Specific Risk Policy for Closed Entities of Complementary Pension Plans and Private Pension Plans for Employees (EFPPS);

j) Specific Interest Rate Risk Policy of the Banking Portfolio;

k) Model Risk Policy;

l) Banco do Brasil`s Specific Policies associated to the Operational Risk Management:

  i. Operational Risk Specific Policy;

  ii. Anti Money-Laundering, Corruption and Terrorism Financing Specific Policy;

  iii. Business Continuity Management Specific Policy;

  iv. Relationship Between the Bank and Suppliers Specific Policy;

  v. Information Security and Cibernetic Specific Policy;

  vi. Legal Risk Specific Policy;

m) Socio-environmental Responsibility Specific Policy;

n) Risk and Capital Management Information Disclosure Specific Policy;

o) Contagion Risk Specific Policy;

p) Specific Customer Identification Policy;

q) Specific Policy for Shareholdings; and

r) Specific Policy on Internal Controls and Compliance.

2.4 Reports

Risk and capital management reports support the risk and capital decision-making process and are presented to:

a) Risk, Internal Controls, Asset, Liability, Liquidity and Capital Management Executive Committee (CEGRC);

b) Board of Officers (CD);

c) Capital and Risks Committee (Coris);

d) Audit Committee; and

e) Board of Directors (CA).

The reports are periodically elaborated and have managerial qualitative and quantitative information, such as the monitoring of risk exposure and the capital planning, the consumption of global and specific limits, mitigating actions, projection of indicators and the necessity or not to recompose capital, whenever necessary. Among the internal reports, the following ones are quoted:

a) Risk Dashboard; and

b) Capital Adequacy Managerial Report.

The information destined to the external public is available in a public access location and can easily be found on the Bank`s website. Information about risks are published in the following documents:

a) Management Discussion & Analysis;

b) Risk Management Report - Pillar III;

c) Reference Sheet;

d) Explanatory Notes to Financial Statements; and

e) Annual Report.

3 Prudential Conglomerate

The CMN Resolution 4,192, published on March 01, 2013, in its 3rd article, item II, establishes that the calculation of Reference Equity (PR) must be performed in consolidated bases for institutions that belong to the Prudential Conglomerate.

The CMN Resolution 4,280, published on October 31st, 2013, governs the preparation, disclosure and submission requirements of Prudential Conglomerate's consolidated financial statements. This Resolution was amended by the CMN Resolution 4,517, on August 24th, 2016.

According to the mentioned Resolutions, financial institutions and other institutions authorized by Bacen shall prepare financial statements in a consolidated basis, including data relative to the following entities, either located in Brazil or abroad, over which the institution has direct or indirect control:

a) financial institutions;

b) other institutions authorized by Bacen;

c) consortium administrators;

d) payment institutions;

e) companies that perform the acquisition of credit operations, including real estate, or credit rights, like factoring companies, securitization companies and exclusive purpose societies; and

f) other legal entities domiciled in Brazil that have, as an exclusive objective, an equity interest in the entities mentioned in items a through e.

The CMN Resolution 4,280/13 also determines that investment funds in which the entities that compose the Prudential Conglomerate, under any form, take or retain substantial risks and benefits, shall be consolidated.

According to the CMN Resolution 4,517/16, investments in joint ventures must be accounted by the equity method from January 2017 on. They were previously proportionally consolidated.

3.1 Balance Sheets

The table below shows the composition of the Prudential Balance Sheet compared to the Consolidated Balance Sheet prepared in accordance with the Bank's accounting policies, as well as references to the figures presented in the "Attachment 1 - Composition of the Reference Equity".

Table 1 - Prudential Balance Sheet x Disclosed Balance Sheet

In thousands of Reais	Reference in Attachment 1	4Q19 Prudential Conglomerate	4Q19 Disclosed Financial Statements
ASSETS			
CURRENT ASSETS AND LONG-TERM-RECEIVABLES		**1,440,426,429**	**1,442,251,757**
Cash and Cash Equivalents		**14,709,248**	**14,187,865**
Short-term Interbank Investments		**425,463,234**	**425,477,358**
Securities and Derivative Financial Instruments		**198,592,446**	**202,941,703**
Own portfolio		143,061,567	158,507,466
Funding instruments issued by institution authorized by Banco Central do Brasil	**(r)**	26,090	--
Other		143,035,477	--
Subject to repurchase agreements		49,898,027	38,801,385
Pledged in guarantee		4,811,917	4,811,917
Derivative financial instruments		820,935	820,935
Interbank accounts		74,920,182	74,920,182
Interdepartmental Accounts		**286,943**	**286,943**
Loan Operations		528,896,558	528,881,558
Leasing Transactions		**32,584**	**187,529**
Other Receivables		**196,484,658**	**194,456,386**
Receivables from guarantees honored		446,862	446,862
Foreign exchange portfolio		16,245,614	16,245,614
Accrued Income		5,064,989	3,674,305
Securities trading		1,009,229	1,009,229
Specific credits		392,908	392,908
Sundry		177,548,134	176,927,373
Tax credits		58,889,456	--
Resulting from tax losses carry forward and excess of depreciation		3,136,069	--
Tax credits deducted from RE	**(g_1)**	1,776,019	
Tax credits not deducted from RE (CMN Resolution 4,680/2018)		1,360,050	
Resulting from temporary differences		55,753,387	--
Excess of 10% from Common Equity Tier 1 Capital	**(k_1)**	17,443,526	--
Excess of 15% from Common Equity Tier 1 Capital	**(m)**	5,298,561	--
Tax credits resulting from temporary differences not deducted from RE	**(t)**	4,607,415	--
Tax credits resulting from temporary differences for loan losses		28,403,885	--
Actuarial assets related to defined benefit pension funds	**(h_1)**	160,728	--
Other		118,497,950	--
(Allowance for other losses)		(4,223,078)	(4,239,905)
Other Assets		**1,040,576**	**912,233**
PERMANENT ASSETS		**32,058,063**	**28,762,693**
Investments		**18,132,646**	**14,959,449**
Investments in subsidiaries and associates		17,863,598	14,690,382
Domestic		17,529,878	14,356,662
Investments		17,529,878	--
Investments in insurance companies		7,936,382	--
Excess of 10% from Common Equity Tier 1 Capital	**(j)**	--	--
Excess of 15% from Common Equity Tier 1 Capital	**(l_1)**	4,245,054	--
Investments not deducted from RE	**(s)**	3,691,328	--
Other Investments		9,593,496	--
Funding instruments issued by institution authorized for Banco Central do Brasil deducted from PR	**(l_2)**	2,753,833	--
Other		6,839,663	--
Abroad		333,720	333,720
Goodwill	**(e)**	43,068	--
Other		290,652	--
Other investments		307,337	307,356
(Accumulated impairment)		(38,289)	(38,289)
Property and equipment		**7,784,806**	**7,882,695**
Property and equipment by leases [1]		**226,649**	**--**
Intangible	**(f)**	**5,913,962**	**5,920,549**
TOTAL ASSETS		**1,472,484,492**	**1,471,014,450**

[1] Leasing transactions were considered based on the financial method, and the amounts were reclassified from the heading of leased assets to the heading of leasing transactions, after deduction of residual amounts received in advance.

In thousands of Reais	Reference in Attachment 1	4Q19 Prudential Conglomerate	4Q19 Disclosed Financial Statements
LIABILITIES			
CURRENT LIABILITIES AND LONG-TERM LIABILITIES		**1,365,370,548**	**1,362,357,059**
Deposits		**514,204,936**	**514,130,779**
Securities Sold Under Repurchase Agreements		**415,451,969**	**404,355,327**
Funds from Acceptance and Issuance of Securities		**124,713,385**	**129,650,920**
Interbank Accounts		1,001	1,001
Interdepartmental Accounts		**2,971,845**	**2,971,845**
Borrowings		**18,488,763**	**17,966,873**
Domestic Onlending - Official Institutions		**60,908,742**	**60,908,742**
Derivative Financial Instruments		961,612	961,612
Other Liabilities		**227,668,295**	**231,409,960**
Billing and collection of taxes and contributions		449,068	449,068
Foreign exchange portfolio		19,924,916	19,924,916
Shareholders and statutory distributions		2,603,869	6,582,047
Taxes and social security		11,793,354	12,571,121
Deferred tax liabilities associated to defined benefit pension funds assets	**(h_2)**	27,632	--
Deferred tax liabilities deducted of the deferred tax assets value	**(k_2)**	1,970,313	--
Deferred tax liabilities deducted of tax assets resulting from tax losses carry forward	**(g_2)**	2,357	
Other		9,793,052	--
Securities trading		2,814,443	1,199,660
Financial and development funds		17,012,893	17,012,893
Special operations		2,181	2,181
Subordinated debts		41,626,846	41,626,846
In accordance with regulations preceding the CMN Resolution No.4,192/2013 as Tier II (FCO)	**(v_1)**	29,336,898	--
In accordance with regulations preceding the CMN Resolution No.4,192/2013 as Tier II	**(q) (v_2)**	11,939,217	--
Other Subordinated debts		350,731	--
Equity and debt hybrid securities		4,527,220	4,527,220
In accordance with regulations preceding the CMN Resolution No.4,192/2013 as Additional Tier 1 Capital	**(o) (u)**	3,426,095	--
Other		1,101,125	--
Debt instruments eligible as capital		30,525,540	30,525,540
Instruments eligible as Additional Tier 1 Capital	**(n)**	21,665,013	--
Instruments eligible as Tier II		8,860,527	--
Instruments considered in RE after applying reducer	**(p)**	1,743,504	--
Value of REdisregarded due to application of the reducer		7,117,023	--
Other liabilities		96,387,965	96,988,468
DEFERRED INCOME		**92,497**	**92,497**
Shareholder's Equity		**107,021,447**	**108,564,894**
Capital	**(a_1)**	**67,000,000**	**67,000,000**
Local residents		50,064,736	50,064,736
Domiciled abroad		16,935,264	16,935,264
Instrument Qualifying as Common Equity Tier 1 Capital	**(a_2)**	**8,100,000**	**8,100,000**
Capital Reserves	**(c_1)**	1,366,444	1,366,444
Revaluation Reserves	**(c_2)**	**2,169**	**2,169**
Profit Reserves	**(b_1)**	**53,814,656**	**53,814,656**
Accumulated Other Comprehensive Income	**(c_3)**	**(23,282,395)**	**(23,282,395)**
(Treasury Shares)	**(i)**	**(339,636)**	**(339,636)**
Noncontrolling Interests	**(d)**	**360,209**	**1,903,656**
TOTAL LIABILITIES		**1,472,484,492**	**1,471,014,450**

3.2 Composition of the Prudential Conglomerate

The following table shows the institutions that comprise the Prudential Balance Sheet:

Table 2 - Composition of the Prudential Conglomerate

R$ Thousand		Activity	4Q19 Total Assets	4Q19 Equity	3Q19 Total Assets	3Q19 Equity	2Q19 Total Assets	2Q19 Equity	1Q19 Total Assets	1Q19 Equity	4Q18 Total Assets	4Q18 Equity
Financial Institutions												
Banco do Brasil S.A. - Agências no País e no Exterior	(1)	Banking	1,610,336,642	111,031,532	1,644,216,699	106,342,832	1,674,561,405	102,185,715	1,657,424,536	104,434,861	1,545,112,808	101,227,056
Banco do Brasil - AG	(2)	Banking	81,020,204	921,263	84,567,581	928,488	76,308,505	886,355	78,768,989	874,574	76,655,138	890,236
BB Leasing S.A. - Arrendamento Mercantil	(2)	Leasing	6,934,549	4,731,770	7,885,005	4,770,013	7,806,341	4,728,016	8,704,572	4,706,281	8,689,856	4,664,961
BB Securities Asia Pte. Ltd.	(2)	Broker	36,359	34,506	36,785	35,715	30,928	30,569	31,329	30,868	31,753	30,816
Banco do Brasil Securities LLC.	(2)	Broker	332,566	321,961	341,297	329,558	301,296	293,449	304,467	296,001	298,871	293,340
BB Securities Ltd.	(2)	Broker	730,016	291,395	759,261	293,837	785,058	262,561	750,110	260,352	569,035	252,602
BB USA Holding Company, Inc.	(2)	Holding	737	737	778	778	716	716	748	748	724	724
BB Cayman Islands Holding	(2)	Holding	1,828,576	1,819,193	1,854,976	1,852,882	1,683,617	1,678,428	1,691,125	1,678,464	1,676,446	1,663,734
Banco do Brasil Americas	(2)	Banking	2,652,729	257,227	2,688,723	259,799	2,446,830	234,114	2,545,956	231,340	2,621,355	223,596
Besc Distribuidora de Títulos e Valores Mobiliários S.A.	(2)	Asset Management	6,521	6,471	6,629	6,590	6,707	6,663	6,815	6,769	6,891	6,844
Banco Patagonia S.A.	(2)	Banking	12,745,155	1,836,681	13,085,793	1,613,346	15,960,109	1,795,126	15,695,727	1,636,952	15,922,503	1,573,620
BB Banco de Investimento S.A.	(2)	Investment Bank	2,878,123	468,953	3,376,540	601,726	4,292,101	456,142	7,570,584	3,410,319	7,682,173	3,169,918
BB Gestão de Recursos-Distribuidora de Títulos e Valores Mobiliários S.A.	(2)	Asset Management	2,137,119	133,174	1,324,182	499,461	1,557,166	132,588	1,018,560	448,664	1,808,021	131,792
Consortium Manager												
BB Administradora de Consórcios S.A.	(2)	Consortium	890,414	280,583	756,559	435,454	760,117	280,583	522,071	366,502	708,144	230,583
Payment Institutions												
BB Administradora de Cartões de Crédito S.A.	(2)	Service Rendering	122,341	24,333	109,545	44,374	99,596	36,651	93,258	29,029	119,205	24,333
Securitization Companies												
Ativos S.A. Securitizadora de Créditos Financeiros	(2)	Credits Acquisition	1,195,185	912,597	1,157,971	1,044,598	1,061,914	984,473	1,130,492	942,783	1,075,565	902,093
BB Asset Management Ireland Limited	(2)	Credits Acquisition	3,305	2,747	3,871	2,845	3,590	2,678	3,513	2,668	3,595	2,695
Other Institutions												
Fundo Compesa	(3)	Investment Fund	80,788	80,689	86,357	86,264	91,862	91,784	96,776	96,707	100,425	100,342

(1) Leader Institution.
(2) Subsidiaries.
(3) The investment funds in which the entities that compose a prudential conglomerate, under any form, take or retain substantial risks and benefits must be included in the financial statements of the Prudential Conglomerate.

3.3 Composition of the Disclosed Balance Sheet

As follows, the institutions included in the scope of consolidation of the disclosed balance sheet, segregated by business segments:

Table 3 - Composition of the Disclosed Balance Sheet

R$ Thousand		Activity	4Q19 Total Assets	4Q19 Equity	3Q19 Total Assets	3Q19 Equity	2Q19 Total Assets	2Q19 Equity	1Q19 Total Assets	1Q19 Equity	4Q18 Total Assets	4Q18 Equity
Banking Segment												
Banco do Brasil S.A. - Agências no País e no Exterior	(1)	Banking	1,610,336,642	111,031,532	1,644,216,699	106,342,832	1,674,561,405	102,185,715	1,657,424,536	104,434,861	1,545,112,808	101,227,056
Banco do Brasil - AG	(2)	Banking	81,020,204	921,263	84,567,581	928,488	76,308,505	886,355	78,768,989	874,574	76,655,138	890,236
BB Leasing S.A. - Arrendamento Mercantil	(2)	Leasing	6,934,549	4,731,770	7,885,005	4,770,013	7,806,341	4,728,016	8,704,572	4,706,281	8,689,856	4,664,961
BB Securities Asia Pte. Ltd.	(2)	Broker	36,359	34,506	36,785	35,715	30,928	30,569	31,329	30,868	31,753	30,816
Banco do Brasil Securities LLC.	(2)	Broker	332,566	321,961	341,297	329,558	301,296	293,449	304,467	296,001	298,871	293,340
BB Securities Ltd.	(2)	Broker	730,016	291,395	759,261	293,837	785,058	262,561	750,110	260,352	569,035	252,602
BB USA Holding Company, Inc.	(2)	Holding	737	737	778	778	716	716	748	748	724	724
BB Cayman Islands Holding	(2)	Holding	1,828,576	1,819,193	1,854,976	1,852,882	1,683,617	1,678,428	1,691,125	1,678,464	1,676,446	1,663,734
Banco do Brasil Americas	(2)	Banking	2,652,729	257,227	2,688,723	259,799	2,446,830	234,114	2,545,956	231,340	2,621,355	223,596
Banco Patagonia S.A.	(2)	Banking	12,745,155	1,836,681	13,085,793	1,613,346	15,960,109	1,795,126	15,695,727	1,636,952	15,922,503	1,573,620
Investment Segment												
BB Banco de Investimento S.A.	(2)	Investment Bank	2,878,123	468,953	3,376,540	601,726	4,292,101	456,142	7,570,584	3,410,319	7,682,173	3,169,918
Fund Management Segment												
BB Gestão de Recursos-Distribuidora de Títulos e Valores Mobiliários S.A.	(2)	Asset Management	2,137,119	133,174	1,324,182	499,461	1,557,166	132,588	1,018,560	448,664	1,808,021	131,792
Besc Distribuidora de Títulos e Valores Mobiliários S.A.	(2)	Asset Management	6,521	6,471	6,629	6,590	6,707	6,663	6,815	6,769	6,891	6,844
Insurance, Private Pension Fund and Capitalization Segment												
BB Seguridade Participações S.A.	(2)	Holding	11,091,520	4,588,389	9,936,894	9,908,182	8,220,462	6,456,683	7,115,754	7,104,867	10,418,958	6,352,153
BB Corretora de Seguros e Administradora de Bens S.A.	(2)	Broker	4,034,461	46,908	3,475,129	536,007	2,992,089	46,908	2,630,565	462,531	3,079,196	46,908
BB Seguros Participações S.A.	(2)	Holding	5,728,437	4,771,029	6,335,759	5,103,114	5,292,018	5,195,507	4,983,284	4,966,677	5,207,859	5,166,759
Payment Methods Segment												
BB Administradora de Cartões de Crédito S.A.	(2)	Service Rendering	122,341	24,333	109,545	44,374	99,596	36,651	93,258	29,029	119,205	24,333
BB Elo Cartões Participações S.A.	(2)	Holding	10,666,243	10,179,694	10,449,054	10,371,563	10,119,864	10,076,559	6,594,298	6,527,917	6,998,656	6,372,439
Other Segments												
Ativos S.A. Securitizadora de Créditos Financeiros	(2)	Credits Acquisition	1,195,185	912,597	1,157,971	1,044,598	1,061,914	984,473	1,130,492	942,783	1,075,565	902,093
Ativos S.A. Gestão de Cobrança e Recuperação de Crédito	(2)	Credits Acquisition	4,677	6	3,181	2.782	2,483	2.000	4,645	472	4,143	6
BB Administradora de Consórcios S.A.	(2)	Consortium	890,414	280,583	756,559	435,454	760,117	280,583	522,071	366,502	708,144	230,583
BB Tur Viagens e Turismo Ltda.	(2) (3)	Tourism	36,632	14,961	40,422	13,610	48,901	17,259	59,638	47,972	47,548	29,544
BB Asset Management Ireland Limited	(2)	Credits Acquisition	3,305	2,747	3,871	2,845	3,590	2,678	3,513	2,668	3,595	2,695
BB Tecnologia e Serviços	(2)	IT	557,217	310,255	541,484	314,606	536,147	296,764	518,920	286,788	556,334	273,130

(1) Leader Institution.
(2) Subsidiaries.
(3) The Financial Statements refers to November, 2019.

The Bank’s Consolidated Financial Statements also include the results of the special purpose entities (Dollar Diversified Payment Rights Finance Company and Loans Finance Company Limited) and of the investment financial fund - Fundo de Investimento em Direitos Creditórios da Companhia Pernambucana de Saneamento – Compesa, which the Bank controls directly or indirectly.

4 Capital

4.1 Referential Equity (PR) Details

Tier 1

Common Equity Tier 1 Capital

The Bank's Common Equity Tier 1 Capital is composed by Shareholders' Equity and income accounts and it is deducted from Regulatory Adjustments.

On August 28th, 2014, the Hybrid Instrument in the amount of R$ 8,100,000 thousand, was authorized by Bacen to compose the Bank's Common Equity Tier 1 Capital.

Regulatory Adjustments

The Regulatory Adjustments are deductions from the Common Equity Tier 1 Capital of elements that can degrade its quality due to their low liquidity, difficulty to evaluate or reliance on future profits to be realized.

Regulatory adjustments listed below are considered for calculating CET1 ratio:

a) goodwill;

b) intangible assets;

c) actuarial assets related to defined benefit pension funds net of deferred tax liabilities;

d) non-controlling interest;

e) investments, directly or indirectly, greater than 10% of the capital of unconsolidated entities similar to financial institutions, and insurance companies, reinsurance companies, capitalization companies and open pension entities (superior investments);

f) tax credits resulting from temporary differences that rely on the generation of future taxable profits or revenues for its realization;

g) tax credits resulting from tax loss of excess depreciation;

h) tax credits resulting from tax losses and negative basis of social contribution on net income.

i) investments of greater than 10% in capital instruments issued by non-consolidated financial institutions;

j) the difference between the provisioned amount and the amount of the adjustments resulting from the evaluation provided by CMN Resolution No. 4,277/2013.

In accordance with CMN Resolution No. 4,192/2013, the deductions related to capital instruments issued by financial institutions and the shortfall of the value between the provisioned amount and the amount of the adjustments resulting from the evaluation provided by CMN Resolution 4,277/13 were not subject to phase-in.

Table 4 - Hybrid Capital and Debt Instruments

					4Q19	3Q19	2Q19	1Q19	4Q18
R$ thousand		Issued Value [1]	Remuneration p.a.	Date of Funding	Book Value	Book Value	Book Value	Book Value	Book Value
Perpetual Bonds	USD	898,512	8.50%	10/2009	3,676,546	3,872,391	3,489,140	3,620,888	3,528,099
	USD	1,298,727	9.25%	01 and 03/2012	5,426,440	5,734,094	5,162,277	5,363,352	5,221,040
	USD	1,988,000	6.25%	01/2013	8,101,231	8,495,471	7,686,449	7,944,607	7,783,964
	USD	2,169,700	9.00%	06/2014	8,753,398	9,246,109	8,312,422	8,643,475	8,394,977
Total					**25,957,615**	**27,348,065**	**24,650,288**	**25,572,322**	**24,928,080**

[1] It refers, in funding in US dollars, the outstanding value, as occurred partial repurchases of these instruments.

Table 5 - Hybrid Capital and Debt Instruments authorized to compose RE

R$ Thousand		Issued Value (1)	Value authorized to compose RE	Remuneration p.a.	Issue Date	4Q19 Value considered in RE	3Q19 Value considered in RE	2Q19 Value considered in RE	1Q19 Value considered in RE	4Q18 Value considered in RE
Perpetual Bonds	USD	898,512	850,000	8.50%	10/2009	3,426,095	3,469,497	3,257,370	3,312,195	3,293,580
	USD	1,298,727	1,275,000	9.25%	01 and 03/2012	5,139,143	5,309,610	4,886,055	4,968,292	4,940,370
	USD	1,988,000	1,950,000	6.25%	01/2013	7,859,865	8,120,580	7,472,790	7,598,565	7,555,860
	USD	2,169,700	2,150,000	9.00%	06/2014	8,666,005	8,953,460	8,239,230	8,377,905	8,330,820
Total						**25,091,108**	**25,853,147**	**23,855,445**	**24,256,957**	**24,120,630**

(1) It refers, in funding in US dollars, the outstanding value, as occurred partial repurchases of these instruments.

Of the amount of R$ 25,957,615 thousand[2] of Perpetual Bonds, R$ 25,091,108 thousand makes up the PR on December 31th, 2019, being the amount of R$ 21,665,013 thousand in accordance with CMN Resolution No, 4,192/13.

The amount of R$ 3,426,095 thousand, which makes up the PR on December 31th, 2019, does not meet the requirements of CMN Resolution No, 4,192/13, so that it should meet the requirements specified in the article 28 of this Resolution.

To learn more about the composition of Additional Tier 1 Capital consult the “Attachment 2 – Referential Equity’s Participant Instruments".

Tier 2

Subordinated Debt Instruments that meet the CMN Resolution 4,192/13 requirements can make up Tier 2, as long as they are authorized by Bacen.

2 Exchange rate: R$ 4.0307 (offer – December 30,2019).

Table 6 - Total Subordinated Debts

R$ Thousand	Issued Value	Date of Funding	Maturity	Subordinated Debts on 12.31.2012	Subordinated Debts on 12.31.2012 with the limit of 30%	4Q19 Book Value	4Q19 Current value and with the dacay factor	3Q19 Book Value	3Q19 Current value and with the dacay factor	2Q19 Book Value	2Q19 Current value and with the dacay factor	1Q19 Book Value	1Q19 Current value and with the dacay factor	4Q18 Book Value	4Q18 Current value and with the dacay factor
Subordinated Debts issued before Resolution 4,192/2013															
FCO – Fundo Constitucional do Centro-Oeste						**29,336,898**	**29,336,898**	**29,336,898**	**29,336,898**	**29,336,898**	**29,336,898**	**29,336,898**	**29,336,898**	**29,336,898**	**29,336,898**
Subordinated CDs issued in the Country				**1,615,432**	**484,630**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
R$	900,000	2009	2014	268,989	80,697	--	--	--	--	--	--	--	--	--	--
R$	1,335,000	2009	2015	800,309	240,093	--	--	--	--	--	--	--	--	--	--
R$	1,000,000	2009	2015	546,134	163,840	--	--	--	--	--	--	--	--	--	--
Subordinated Financial Bills				**8,181,144**	**2,454,343**	**330,801**	**--**	**326,147**	**--**	**320,665**	**--**	**759,677**	**62,838**	**9,747,415**	**61,795**
R$	1,000,000	2010	2016	798,803	239,640	--	--	--	--	--	--	--	--	--	--
R$	700,000	2011	2017	1,933,246	579,974	--	--	--	--	--	--	--	--	--	--
R$	4,844,900	2012	2018	5,065,127	1,519,538	--	--	--	--	--	--	--	--	--	--
R$	215,000	2012	2019	225,565	67,670	--	--	--	--	--	--	445,489	--	437,979	--
R$	150,500	2012	2020	158,403	47,521	330,801	--	326,147	--	320,665	--	314,188	62,838	308,977	61,795
R$	4,680,900	2013	2019	--	--	--	--	--	--	--	--	--	--	9,000,459	--
Subordinated Debt Abroad				**6,001,027**	**1,800,308**	**11,959,147**	**4,715,919**	**12,180,366**	**4,872,347**	**11,368,135**	**4,483,674**	**11,386,563**	**4,559,139**	**11,485,837**	**6,765,401**
USD	300,000	2004	2014	117,476	35,242	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
USD	660,000	2010	2021	1,327,885	398,366	2,722,676	523,991	2,776,073	541,372	2,588,508	498,186	2,595,967	506,571	2,615,479	1,007,448
USD	1,500,000	2011	2022	3,043,921	913,176	6,165,148	2,402,297	6,278,228	2,481,982	5,861,021	2,283,991	5,865,958	2,322,433	5,919,907	3,464,071
USD	750,000	2012	2023	1,511,745	453,524	3,071,323	1,789,631	3,126,065	1,848,993	2,918,606	1,701,497	2,924,638	1,730,135	2,950,451	2,293,882
Subordinated Debts issued in accordance to Resolution 4,192/2013															
Subordinated Financial Bills				**--**	**--**	**8,860,528**	**1,743,504**	**8,727,063**	**1,728,602**	**8,572,646**	**2,362,423**	**8,411,579**	**2,975,671**	**8,258,634**	**3,270,036**
R$	540,623	2014	2020	--	--	972,139	--	958,586	--	942,206	130,381	926,006	185,201	910,169	182,034
R$	3,868,384	2014	2021	--	--	7,059,258	1,411,852	6,959,967	1,405,198	6,839,993	1,915,863	6,721,351	2,331,937	6,605,387	2,642,155
R$	400,000	2014	2022	--	--	829,131	331,652	808,510	323,404	790,447	316,179	764,222	458,533	743,078	445,847
Total Subordinated Debts				**15,797,603**	**4,739,281**	**50,487,374**	**35,796,321**	**50,570,474**	**35,937,847**	**49,598,344**	**36,182,995**	**49,894,717**	**36,934,546**	**58,828,784**	**39,434,130**
Subordinated Debts issued before December 31, 2012, applying on it the decay factor due to maturity date (current value)							4,715,919		4,872,347		4,483,674		4,621,977		6,827,196
Subordinated Debts issued after December 31, 2012, applying on it the decay factor due to maturity date (Basel III)							**1,743,504**		**1,728,602**		**2,362,423**		**2,975,671**		**3,270,036**

On December 31th, 2019, Subordinated Debt totalized R$ 50,487,374 thousand[3]. Of this amount, R$ 35,796,321 thousand makes up the Reference Equity, of which:

1 - R$ 29,336,898 thousand are related to the resources of the Fundo Constitucional do Centro Oeste – FCO. According to CMN Resolution No. 4,679/2018, on December 31th, 2019, the balance of the FCO is limited to 100% of the amount that composed the Tier II of the RE on June 30, 2018.

2 - R$ 1,743,504 thousand are related to the Subordinated Debt authorized in accordance with CMN Resolution 4,192/13 - Financial Bills, and integrally compose the PR (applied the reduction by maturity, according to article 27 of the Resolution 4,192/13).

3 - According to article 29 of the Resolution 4,192/13, for the subordinated debt instruments, authorized according to the rules previously to the CMN Resolution n° 4,192/2013, the lowest value between what is described as follows will be considered:

a) the value of the subordinated debts with the reducers, totalizing R$ 4,715,919 thousand, on December 31th, 2019;
b) the value that composed the PR on December 31st, 2012 (R$ 15,797,603 thousand) by applying the limiting factor from the article 28, which means 10% a year, from 2013 through 2022, resulting in R$ 4,739,281 thousand, on December 31th, 2019.

To learn more about the composition of Tier 2 (Subordinated Debt Instruments), check the “Attachment 2 – Referential Equity Participant Instruments ".

Table 7 - Reference Equity (PR) Details

In thousands of Reais	4Q19	3Q19	2Q19	1Q19	4Q18
RE - Referential Equity	**132,150,432**	**134,283,463**	**130,173,191**	**134,936,789**	**134,178,484**
Tier I	**96,380,201**	**98,497,837**	**94,031,977**	**98,038,655**	**95,289,701**
Common Equity Tier 1 Capital	**71,289,093**	**72,644,690**	**70,176,532**	**73,781,698**	**71,169,071**
Shareholders' Equity	98,921,447	94,464,003	91,658,605	94,580,125	92,016,168
Instrument Qualifying as Common Equity Tier 1 Capital	8,100,000	8,100,000	8,100,000	8,100,000	8,100,000
Regulatory adjustments	(35,732,354)	(29,919,313)	(29,582,073)	(28,898,427)	(28,947,097)
Additional Tier 1 Capital	**25,091,108**	**25,853,147**	**23,855,445**	**24,256,957**	**24,120,630**
Hybrid instruments authorized in accordance with CMN Resolution No. 4,192/2013	21,665,013	22,383,650	20,598,075	20,944,762	20,827,050
Hybrid instruments authorized in accordance with regulations preceding the CMN Resolution No. 4,192/2013 (1)	3,426,095	3,469,497	3,257,370	3,312,195	3,293,580
Tier II	**35,770,231**	**35,785,626**	**36,141,214**	**36,898,134**	**38,888,783**
Subordinated Debt Qualifying as Capital	35,796,321	35,804,781	36,182,995	36,934,546	38,925,975
Subordinated Debt authorized in accordance with CMN Resolution No. 4,192/2013 - Financial Bills	1,743,504	1,728,602	2,362,423	2,975,671	3,270,036
Subordinated Debt authorized in accordance with regulations preceding the CMN Resolution No. 4,192/2013	34,052,817	34,076,179	33,820,572	33,958,875	35,655,939
Funds obtained from the FCO (2)	29,336,898	29,336,898	29,336,898	29,336,898	29,336,898
Funds raised in Financial Bills and CD (3)	4,715,919	4,739,281	4,483,674	4,621,977	6,319,041
Deduction from Tier II	(26,090)	(19,155)	(41,781)	(36,412)	(37,192)
Funding instruments issued by financial institution	(26,090)	(19,155)	(41,781)	(36,412)	(37,192)

(1) On December 31, 2019, based on Bacen's guidance, the balance of the hybrid capital and the debt instrument authorized by Bacen to compose Tier 1 Capital of Reference Equity was considered in accordance with CMN Resolution 3,444 /2007 and does not meet the relevant entry criteria , also related to the orientation established in article 28, sections I to X of CMN Resolution 4,192/2013.
(2) According to CMN Resolution No. 4,679/2018, the balance of the FCO is limited to 100% of the amount that composed the Tier II of the RE on June 30, 2018.
(3) On December 31, 2019 it was considered the current balance of subordinated debt instruments, applying on it the factor due to maturity date as determined by CMN Resolution No. 4,192/2013, in its 29th article.

[3] Exchange rate: R$ 4.0307 (offer – December 30,2019).

Table 8 - Regulatory Adjustments

In thousands of Reais	4Q19	3Q19	2Q19	1Q19	4Q18
Tax assets resulting from temporary differences that rely on the generation of future taxable profits or revenues for its realization (amount above 10% threshold)	(15,473,213)	(7,587,341)	(7,961,893)	(3,799,717)	(4,631,170)
Significant investments and tax assets resulting from temporary differences that rely on the generation of future taxable profits or revenues for their realization (amount exceeding the 15% threshold)	(12,297,448)	(13,603,428)	(12,817,075)	(12,166,027)	(11,895,016)
Intangible assets	(5,913,962)	(4,297,099)	(5,530,760)	(5,472,656)	(5,777,411)
Tax assets resulting from tax losses carry forward (1)	(1,732,650)	(1,824,036)	(2,612,109)	(2,344,645)	(1,878,196)
Actuarial assets related to defined benefit pension funds net of deferred tax liabilities	(133,096)	(116,570)	(115,021)	(3,927,025)	(3,731,833)
Non-controlling interests (2)	(90,223)	(24,967)	(35,763)	(2,515)	(26)
Goodwill	(43,068)	(47,943)	(24,081)	(167,713)	(216,810)
Tax assets resulting from tax loss of excess depreciation	(41,012)	(45,441)	(50,842)	(56,100)	(62,020)
Shortfall of the value between the provisioned amount and the amount of the adjustments resulting from the evaluation provided by CMN Resolution No. 4,277/2013	(7,682)	(2,828)	(2,818)	(3,117)	(38,923)
Significant investments (amount above 10% threshold) (3)	--	(2,369,660)	(431,711)	(958,912)	(715,692)
Total	**(35,732,354)**	**(29,919,313)**	**(29,582,073)**	**(28,898,427)**	**(28,947,097)**

(1) It was applied the CMN Resolution No. 4,680/2013, which authorized the non-deduction of the tax assets resulting from tax losses, recognized from January 1, 2018 to December 31, 2019, arising from held position in foreign currency for the purpose of providing hedge to foreign participation.
(2) The adjustments of non-controlling interests was calculated according to CMN Resolution No. 4,192/2013, 1st paragraph of the article 9.
(3) Refers to investments of greater than 10% in non-consolidated entities similar to financial institutions, insurance companies, reinsurance companies, capitalization companies and open-ended pension funds.

For further information on the composition of the Reference Equity (PR), see the “Attachment 1 – Composition of the Reference Equity”.

4.2 Minimum Required Reference Equity (MRRE)

The Minimum Required Reference Equity (MRRE) is the equity required of institutions, conglomerates, and other institutions authorized to operate by Bacen, to face the risks to which they are exposed due to the activities they are involved in, and it is definied by CMN Resolution 4,193/13.

The MRRE, corresponds to the application of the factor "F" to the amount of RWA, with 8% of the RWA as of 01.01.2019.

In determining the amount of risk-weighted assets (RWA), we consider the sum of the following portions:

a) RWA_{CPAD} concerning credit risk exposures subject to the calculation of capital requirements under the standardized approach;

b) RWA_{MPAD} concerning market risk exposures subject to the calculation of capital requirements under the standardized approach, and,

c) RWA_{OPAD} on the calculation of the capital requirement for operational risk under the standardized approach.

The scope of consolidation used as a basis for the verification of operational limits considers the Prudential Conglomerate, as defined by the CMN Resolution 4,280/13.

Table 9 - Required Minimun Reference Equity

R$ thousand		4Q19	3Q19	2Q19	1Q19	4Q18
Credit Risk	**RWA_{CPAD}**	**612,629,806**	**613,363,972**	**610,315,136**	**606,099,289**	**624,018,657**
	2%	45,560	50,193	53,419	35,526	26,356
	20%	2,766,510	2,790,186	2,536,957	2,642,702	3,095,298
	35%	15,445,235	15,771,709	15,719,015	15,309,244	15,145,266
	50%	13,159,291	12,845,880	12,944,048	14,616,728	15,961,909
	70%	8,537,790	8,244,858	8,152,478		
	75%	192,183,723	186,947,164	184,535,511	187,273,125	186,816,751
	85%	80,793,184	83,201,925	80,327,267	91,429,709	115,840,402
	100%	267,043,375	268,704,761	274,049,622	264,558,963	258,630,280
	150%	694	169,528	164,325		
	250%	26,733,410	27,241,759	26,316,199	27,668,137	26,688,402
	300%	4,080,150	5,623,666	3,836,824	-	-
	1.250%	663,123	564,175	529,364	565,323	501,403
	Credit Value Adjustment (CVA)	1,177,762	1,208,168	1,150,108	1,463,675	1,096,757
Operational Risk	**RWA_{OPAD}**	**77,379,504**	**77,379,504**	**70,105,346**	**70,105,346**	**61,081,334**
	Asset Management	3,542,378	3,542,378	3,327,180	3,327,180	2,448,856
	Commercial	30,680,568	30,680,568	30,594,635	30,594,635	28,368,191
	Retail Brokerage	53,373	53,373	51,357	51,357	45,696
	Corporate Finance	1,758,539	1,758,539	1,480,317	1,480,317	(294.312)
	Trading and Sales	13,354,165	13,354,165	4,017,861	4,017,861	8,745,833
	Payments and Settlements	9,776,011	9,776,011	12,272,479	12,272,479	4,577,636
	Financial Agent Services	2,195,584	2,195,584	2,164,161	2,164,161	1,835,054
	Retail	16,018,886	16,018,886	16,197,356	16,197,356	15,354,380
Market Risk	**RWA_{MPAD}**	**21,392,665**	**18,792,908**	**20,703,702**	**24,259,848**	**26,390,238**
	Prefixed interest rate, in reais - RWA_{JUR}[1]	1,689,149	1,462,156	1,391,161	1,057,409	1,268,451
	Foreign currency coupons - RWA_{JUR}[2]	1,657,487	3,275,984	2,851,846	3,295,930	2,774,167
	Price index coupons - RWA_{JUR}[3]	204,270	14,691	5,907	662,394	71,288
	Interest rate coupons - RWA_{JUR}[4]	-	-	-	-	-
	Share price fluctuations - RWA_{ACS}	-	-	-	-	-
	Commodity price fluctuations - RWA_{COM}	822,622	282,553	399,092	1,395	4,102
	Exchange rate fluctuations - RWA_{CAM}	17,019,137	13,757,524	16,055,696	19,242,721	22,272,231
Risk Weighted Assets (RWA)(1)		**711,401,975**	**709,536,384**	**701,124,184**	**700,464,483**	**711,490,229**
Minimum Referential Equity Requirement (MRER)(2)		**56,912,158**	**56,762,911**	**56,089,935**	**56,037,159**	**61,366,032**

(1) According to CMN Resolution 4,193/2013, since 01.01.2015 the calculation of RWA applies to institutions of the prudential conglomerate.
(2) According to CMN Resolution 4,193/2013, corresponds to the application of the factor "F" to the amount of RWA, with "F" equals to 11% of RWA, from 10.01.2013 to 12.31.2015; 9.875% from RWA 01.01.2016 to 12.31.2016, 9.25% of RWA from 01.01.2017 to 31.12.2017; 8.625% of RWA from 01.01.2018 to 31.12.2018, and 8% of the RWA from 01.01.2019.

4.3 Capital Adequacy Ratio

The Capital Adequacy Ratio was determined according to the criteria established by CMN Resolutions 4,192/13 and 4,193/13, which refer to the calculation of the Referential Equity (RE) and Minimum Reference Equity Required (MRER) in relation to Risk Weighted Assets (RWA), respectively.

The following table shows the evolution of the ratio (IB), Core Capital Ratio (ICP), Tier 1 Capital Ratio (ICN1), the IRRBB portion and the margin of compatibility of RE and the Core Capital Additional:

Table 10 - Basel Ratio (Total Capital Ratio) and PR margin

	4Q19	3Q19	2Q19	1Q19	4Q18
Referential Equity (RE) (R$ thousand)(1)	**132,150,432**	**134,283,463**	**130,173,191**	**134,936,789**	**134,178,484**
Tier I (R$ thousand)	96,380,201	98,497,837	94,031,977	98,038,655	95,289,701
Core Capital (R$ thousand)	71,289,093	72,644,690	70,176,532	73,781,698	71,169,071
Risk Weighted Assets (RWA) (R$ thousand)(3)	711,401,976	709,536,384	701,124,185	700,464,483	711,490,229
Additional Common Equity Capital (R$ thousand)(4)	**24,899,069**	**24,833,773**	**24,539,346**	**24,516,257**	**16,897,893**
Conservation - Capital Buffer	17,785,049	17,738,410	17,528,105	17,511,612	13,340,442
Countercyclical - Capital Buffer	0	0	0	0	0
Domestic Systemically Important Banks - Capital Buffer	7.114.020	7.095.364	7.011.242	7.004.645	3.557.451
Capital Adequacy Ratio	**18,58%**	**18,93%**	**18,57%**	**19.26%**	**18.86%**
Tier I Ratio	13,55%	13,88%	13,41%	14.00%	13.39%
Core Capital Ratio	10,02%	10,24%	10,01%	10.53%	10.00%
Minimum Referential Equity Requirements (MRER) (R$ thousand)(2)	**56,912,158**	**56,762,911**	**56,089,935**	**56,037,159**	**61,366,032**
Interest rate risk of operations not classified under negotiable portfolio (R_{BAN}) (R$ thousand)	**12,196,412**	**8,485,319**	**9,984,757**	**7,829,347**	**6,492,426**
Compatibility Margin of RE (RE - MRER - RBAN) (R$ thousand)(5)	**(69,108,570)**	**69,035,233**	**64,098,499**	**71,070,283**	**66,320,026**

(1) According to CMN Resolution 4,192/2013.
(2) According to CMN Resolution 4,193/2013, corresponds to the application of the factor "F" to the amount of RWA, with "F" equal to 11% of RWA, from 10.01.2013 to 12.31.2015; 9.875% from RWA 01.01.2016 to 12.31.2016, 9.25% of RWA from 01.01.2017 to 31.12.2017; 8.625% of RWA from 01.01.2018 to 31.12.2018, and 8% of the RWA from 01.01.2019.
(3) According to CMN Resolution 4,193/2013, since 01.01.2015 the calculation of RWA applies to institutions of the prudential conglomerate.
(4) According CMN Resolution 4,193/2013, in 03.31.2016 became effective the Additional Commom Equity Capital.
(5) According Filling Instructions of Operacional Threshold Statement (DLO) - Account 953 - Source: www.bcb.gov.br.

4.4 Assessment of Sufficiency and Adequacy of Reference Equity (PR)

Banco do Brasil annualy prepares and reviews its Capital Plan, approved by the Board of Officers (CD) and Board of Directors (CA), which covers a minimum time horizon of 36 months and which evidences the Bank's capital planning, the assessment of the sufficiency of capital adequacy to the regulatory and prudential limits defined by senior management.

In order to ensure that the capital is sufficient to support the relevant risks and the business growth, and also to guarantee the Bank's solvency ratios, including stress scenarios, the Capital Plan is linked to the business and economic guidelines from Banco do Brasil's Corporate Strategy (ECBB) and to the guidelines and limits from the Statement of Risk Appetite and Tolerance (RAS). And from BB's Corporate Budget.

The Capital Plan covers all entities, located in Brazil and abroad, which integrate Banco do Brasil's Prudential Conglomerate, taking into account the CMN Resolution 4.280/13. In order to subsidize the elaboration of the Capital Plan, the RE and RWA projections are referenced in regulatory aspects, strategic documents, business dynamics and technical information that were discussed at the Capital Forum[4].

Besides that, capital simulations, integrating risk and business stress testing results, referenced in macroeconomic and idiosyncratic scenarios, which is severe and based on plausible assumptions, in order to subsidize the elaboration of the Capital Contingency Plan (PCC).

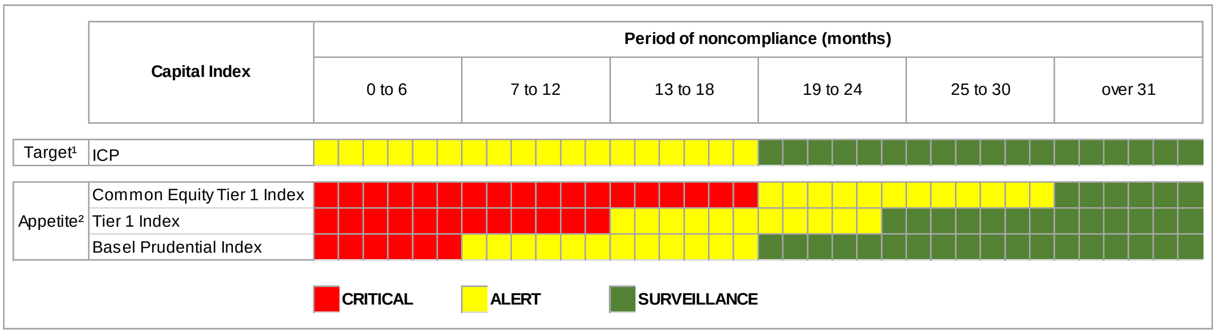
The PCC aims to ensure the alignment of the Bank to regulatory capital and to capital limits defined by the Senior Management (prudential limits) if the sources of capital defined in the Capital Plan are insufficient or not viable, or even in the occurrence of unanticipated events.

The monitoring of the Capital Plan operation is made by the Capital Forum monthly and periodically reported to the Senior Management. In that monitoring, the projections and the necessities of strategy realignment are assessed, considering the values that are realized, stress tests, eventual regulatory changes and the businesses expectations.

In addition, extraordinary projections are made from time to time, considering demands of the Senior Management and the occurrence of facts that may impact the capital of BB. These projections contemplate, among other aspects, strategic discussions that occur within the scope of the Institution and proposals for revisions in banking regulation that are under discussion.

The Bank assesses the projections based on the limits of each indicator and the deadline for any breach, as follows:

Chart 5 - Criteria and parameters for classification of the capital condition



(1) level of capital desired by the institution
(2) maximum level of risk that institution agrees to incur in order to achieve its goals

[4] Forum responsible for advising CEGRC with technical analysis on issues related to the capital management process, Icaap and the Capital Plan.

According to the chart above, the projections indicate that when extrapolating the Core Capital Ratio (ICP) or another capital index, the Company will have enough time to promote strategic changes to avoid their extrapolation, according to the deadlines established for each indicator.

The capital status is monitored and reported at the Capital Forum and, in the event of the Critical Capital State, it must be reported to the CEGRC, strategic risk committee that are linked to the capital management structure, which contains, whenever necessary, suggestions on capital contingency measures to be adopted.

The Bank uses an indicator named Risk Adjusted Return (RAR), which aims to ensure the sustainability of BB`s growth in the long run, as well as to improve the Bank`s capital allocation, prioritizing the growth of businesses that generate profit in a way that is consistent to the capital consumption.

BB prepares and annually revises its Recovery Plan, approved by CD and CA, which aims to restore the Bank's capital adequacy and liquidity levels, in response to stressful situations, contributing to the stability and functioning of the Institution and to maintain the solidity, stability and regular functioning of the Brazilian Banking Industry (SFN).

The Recovery Plan includes a detailed description of the critical functions and essential services for the operation of the Bank, the monitoring program, the stress scenarios, the recovery strategies, the risk barriers, the communication plan and the governance mechanisms of the Institution.

The monitoring and control of the Institution economic and financial situation is carried out based on the indicators proposed for the Recovery Plan and the responsible areas, respecting the minimum periodicity defined. The results are reported monthly to the Capital Forum and quarterly to the Senior Management.

4.5 Leverage Ratio

The Leverage Ratio (RA) established by CMN Resolution 3,748/15, aims to prevent excessive leverage of financial institutions and the consequent increase in systemic risk, with undesirable impacts on the economy. As provided in that Circular, the Common Model of disclosing the information about the Levarage Ratio and the Comparative Summary of the published Financial Statements and the Leverage Ratio.

Table 11 - Commom model of information disclosure on Leverage Ratio

R$ thousand	4Q19
Items accounted in the Balance Sheet	
Equity items other than derivative financial instruments, securities received on loan and resale to settle in repos	1,087,648,549
Adjustments related to equity items deducted from Tier 1 Capital	(37,614,801)
Total exposures accounted in the Balance Sheet	**1,050,033,747**
Transactions with derivative financial instruments	
Gross positive value with derivative financial instruments	815,735
Potential future gains from transactions	614,566
Adjustment related to given guarantees on derivative financial instruments	--
Adjustment related to the provided daily collateral margin	--
Derivatives on behalf of clients where there is no contractual obligation to refund in case of bankrupcy or default of the entities responsible for the settlement system	--
Adjusted notional value in credit derivatives	--
Adjustment under the adjusted notional value in credit derivatives	--
Total exposures related to derivative financial instruments	**1,430,301**
Repurchase Agreements and Lending of Securities	
Transactions with repurchase agreements and securities lending	29,607,492
Adjustment related to repurchases agreements and creditors for securities lending	--
Value related to the counterparty credit risk	5,536,303
Value related to the counterparty credit risk in intermediation transactions	14,459,594
Total exposures related to repurchase agreements and securities lending (sum of lines 12 to 15)	**49,603,389**
Items not accounted in the Balance Sheet	
Reference value of transactions not accounted in the Balance Sheet	130,017,648
Adjustement related to the application of specific CCF to transactions no accounted in the Balance Sheet	(93,581,716)
Total Exposures not accounted in the Balance Sheet	**36,435,932**
Capital and Total Exposure	
Tier 1	**96,380,201**
Total Exposure	**1,137,503,369**
Leverage Ratio	
Basel III Leverage Ratio	**8.47%**

Table 12 - Comparative summary between Disclosed Financial Statements and Leverage Ratio

R$ thousand	4Q19
Total Assets according to Disclosed Financial Statements	1,472,484,492
Adjustment resulting from accounting consolidation differences	--
Adjustment related to accounted assets that were donated, or transferred, with substantial transfer of risks and benefits	(600)
Adjustment related to adjusted notional value and potential future gains on derivatives financial instruments	609,365
Adjustment related to repurchase agreements and securities lending	(341,238,783)
Adjustment related to transactions not accounted in the total assets of the prudential conglomerate	36,435,932
Other Adjustments	(30,787,038)
Total Exposure	**1137,503,369**

5 Shareholdings

Banco do Brasil has a wide and diversified set of businesses, products, services, activities and clients. Because of the organizational nature, strategic option or legal and regulatory requirements, the operationalization of businesses and processes is distributed between the Multiple Bank[5] and its ELBB[6], located in Brazil and abroad, under several organizational and judicial forms.

Below is the equity holdings not classified in the trading portfolio, segregated by business segments:

[5] Refers to Banco do Brasil SA (BB).
[6] The ELBB group consists of subsidiaries, wholly-owned subsidiaries, affiliates, investees (simple participations), sponsored, managed and foundations.

Table 13 - Shareholdings - Banking Book

			4Q19			3Q19			2Q19			1Q19			4Q18		
R$ Thousand			**% of Total Shares**	**Book Value of Equity Interests**	**Value of Capital Requirement[1]**	**% of Total Shares**	**Book Value of Equity Interests**	**Value of Capital Requirement[1]**	**% of Total Shares**	**Book Value of Equity Interests**	**Value of Capital Requirement[1]**	**% of Total Shares**	**Book Value of Equity Interests**	**Value of Capital Requirement[1]**	**% of Total Shares**	**Book Value of Equity Interests**	**Value of Capital Requirement[1]**
Banking Segment																	
Banco Votorantim S.A.	(2)		50.00%	4,949,988	460,462	50.00%	5,067,565	450,772	50.00%	4,872,518	439,440	50.00%	4,894,037	466,258	50.00%	4,686,714	477,982
Banco CBSS S.A.	(2)		49.99%	198,466	18,462	49.99%	191,542	17,038	49.99%	193,595	17,460	49.99%	197,973	18,861	49.99%	201,473	20,548
Investment Segment																	
Kepler Weber S.A.	(3)		17.45%	82,123	6,351	17.45%	79,696	6,157	17.45%	77,078	5,948	17.45%	77,692	5,997	17.45%	76,230	6,339
Neoenergia S.A.	(4)			--	--		--	--		--	--	9.35%	1,794,929	143,594	9.35%	1,749,313	150,878
Insurance, Private Pension Fund and Capitalization Segment																	
BB Seguridade Participações S.A.	(5)		66.36%	3,044,982	277,753	66.36%	6,575,345	469,298	66.36%	4,284,836	369,007	66.36%	4,731,243	407,653	66.36%	4,220,210	398,172
Seguradora Brasileira de Crédito à Exportação - SBCE	(6)			--	--		--	-		--	-	12.09%	3,011	259	12.09%	2,492	235
Payment Methods Segment																	
Tecnologia Bancária S.A. - Tecban	(3)	(7)	12.52%	64,531	5,162	12.52%	61,803	4,944	12.52%	57,520	4,602	12.52%	56,240	4,499	12.52%	57,367	4,948
Companhia Brasileira de Soluções e Serviços CBSS - Alelo	(2)		49.99%	281,803	26,214	49.99%	443,087	31,624	49.99%	406,565	35,013	49.99%	454,697	39,178	49.99%	413,660	39,028
Cielo S.A.	(2)		28.69%	3,107,922	289,108	28.69%	3,078,392	219,712	28.68%	3,001,662	258,501	28.68%	2,983,988	257,106	28.68%	3,072,050	289,845
Cateno Gestão de Contas de Pagamento S.A.	(2)		50.08%	1,923,957	178,972	50.08%	1,893,289	135,129	50.08%	1,877,307	161,672	50.08%	1,856,515	159,961	50.07%	1,848,280	174,383
Other Segments																	
Ativos S.A. Gestão de Cobrança e Recuperação de Crédito	(3)		100.00%	6	-	100.00%	2,782	223	100.00%	2,000	160	100.00%	472	38	100.00%	6	1
BB Tur Viagens e Turismo Ltda.	(3)		100.00%	17,086	1,367	100.00%	17,086	1,367	100.00%	17,089	1,367	100.00%	47,676	3,814	100.00%	29,249	2,523
BB Tecnologia e Serviços	(3)		99.99%	298,253	23,860	99.99%	302,068	24,165	99.99%	281,849	22,548	99.99%	273,857	21,909	99.99%	260,379	22,458
Cadam S.A.	(3)		21.64%	14,328	1,146	21.64%	16,270	978	21.64%	17,229	1,055	21.64%	16,590	1,004	21.64%	16,523	1,077
Cia Hidromineral Piratuba	(3)		14.13%	3,149	252	14.13%	2,902	232	14.13%	2,936	235	14.13%	2,943	235	14.13%	2,837	245
Estruturadora Brasileira de Projetos - EBP	(3)		11.11%	3,897	312	11.11%	3,875	310	11.11%	3,845	308	11.11%	1,532	123	11.11%	3,699	130
Elo Holding Financeira S.A.	(2)		49.99%	58	5	49.99%	59	4	49.99%	62	5	49.99%	92	8	49.99%	95	9
Provision for investments	(8)			(4,926)			(8,965)			(8,965)			(8,965)			(8,965)	

(1) Value for the minimum capital requirement for equity interests registered in the fixed assets and included in the calculation of risk-weighted assets regarding exposure to credit risk (RWA_{CPAD}) under Central Bank Circular No. 3,644/2013.
(2) Joint venture, evaluated by the equity method.
(3) Associated companies, evaluated by the equity method.
(4) Interest sold in July, 2019.
(5) Subsidiaries, evaluated by the equity method.
(6) Interest sold in May, 2019.
(7) Company which is not classified as “Payment Institution”.
(8) Unrealized, but acknowledged losses, referring to companies Kepler Weber S.A. and Estruturadora Brasileira de Projetos - EBP, whose value is computed in the calculation of Common Equity.

5.1 Entities Linked to Banco do Brasil (ELBBs) Supervision

The Bank has implemented the Supervision Cycle that aims to oversee the risk management, internal controls and organizational security accomplished by its linked entities, taking into account its activities and business segments.

In this process, the Bank assesses the degree of adherence of the processes conducted by the ELBB in relation to the best references. In addition, improvement guidelines are also issued, in order to promote alignment with the practices adopted by the Institution, with the aim of contribuiting to the achievement of better results. The results of the Supervision Cycle are reported to the Banco do Brasil' Senior Management.

6 Risk Management

6.1 Credit Risk

6.1.1 Specific Credit Policy

Banco do Brasil's credit policy complements the Risk Appetite Statement and contains specific strategic guidelines to direct credit-risk management actions in the prudential conglomerate. It is approved by the Board of Directors and reviewed every year. It applies to all businesses that involve credit risk and is available to consult to all employees.

It is expected that the Subsidiaries, Affiliates and Investment companies define their paths from these guidelines, taking into account the specific needs and legal and regulatory issues to which they are subject.

The specific credit policy guides the continuous, integrated and prospective management of credit risk at Banco do Brasil, comprising all stages of the credit process, the management of the assets subject to this risk, as well as the process of credit collections and recovery, including those incurred at the risk and expense of third parties, except in this case, the adoption of a differentiated rule resulting from a specific analysis.

The credit risk management includes counterparty credit risk (RCC), country risk, sovereign risk, transfer risk, credit concentration risk and the effectiveness of mitigation or risk transfer instruments used exposures that generate the designated risks.

6.1.2 Mitigation Policy

Banco do Brasil is conservative towards credit risk. In conducting any business subject to credit risk, the bank's general rule is to tie it to a mechanism that provides partial or complete hedging of risk incurred. In managing credit risk on the aggregate level, to keep exposure within the risk levels established by the Senior Management, the Bank has the prerogative to transfer or to share credit risk.

Credit rules provide clear, comprehensive guidelines for the operational units. Among other aspects, the rules address ratings, requirements, choices, assessments, formalization, control, and reinforcement of guarantees, ensuring the adequacy and sufficiency of the mitigator throughout the transaction cycle.

6.1.3 Management Strategies and Credit Risk Management Framework

We identify, evaluate, measure, control, report, mitigate and monitor the risks associated with exposures subject to credit risk, promoting continuous improvement in the processes associated with credit risk management.

In line with the objectives of credit risk management, the Board of Directors approves the Specific Credit Policy and Risk Appetite Statement (RAS), through which the BB defines and documents the maximum levels of credit risk appetite accepted by the Bank, based on the consideration of the following elements: macroeconomic and sectoral perspectives, corporate strategy, market conditions, performance of competitors of the same size, controller orientations, expectation of results, scenarios (including stress), the interrelationship between the relevant risks of Banco do Brasil, the volume of problematic assets and the risk-return ratio of portfolios subject to credit risk.

6.1.4 Measurement Systems

We evaluated prospectively the behavior of the portfolio subject to credit risk considered in several scenarios, corporately defined, including stress.

The maximum levels of credit risk appetite are set in the RAS and are expressed in terms of provisions (expected losses) and capital allocation (unexpected losses), relative to components of the reference equity, and are ranked in:

a) managerial or regulatory restrictions;

b) appetite and risk tolerance;

c) Global limits;

d) Specific limits; and

e) Operational limits.

6.1.5 Regulatory Capital Requirement

The Bank measures the regulatory capital requirement for credit risk coverage through Regulatory Standardized Approach, whose procedures for calculating the potion of risk-weighted assets (RWA) regarding exposure to credit risk (RWA_{CPAD}) were disclosured by Bacen through Circular 3,644/13.

Those procedures were implemented in a internal system that determines the capital requirements, allowing timely evaluation of the bank's solvency under the Regulator's rules. The Bank uses Regulatory Capital information to assess the efficiency of capital allocation and planning.

6.1.6 Concentration

The Bank has the credit portfolio concentration risk measurement process and monitoring. Besides the monitoring of the portfolio different segments concentration level indicators, ascertained according to the *Herfindahl-Hirshman* Ratio, the impact of concentration in the capital allocation for credit risk.

6.1.7 Mitigating instruments

When accepting guarantees in loans, preference is given to guarantees which help the operation self-liquidate.

The maximum value considered for purpose of collateral commitment, denominated "maximum down payment", is reached by applying a certain percentage on the value of the goods or right. Below, the percentages used are shown:

Table 14 - Collateral commitment

Asset	Coverage (%)
Credit rights	
- Receipt for bank deposit	100%
- Certificate of bank deposit (1)	100%
- Saving deposits	100%
- Fixed income investment founds	100%
PledgeAgreement – cash collateral(2)	100%
- Standby letter od credit	100%
- Others	80%
Guarantee Funds	
- Guarantee Fund for Generation of Employment and Income (Funproger)	100%
- Guarantee Fund for Micro and Small Business (Fampe)	100%
- Guarantee Fund for Operations (FGO)	100%
- Guarantee Fund for Investments (FGI)	100%
- Others	100%
Guarantee(3)	100%
Credit insurance	100%
PledgeAgreement – securities(4)	77%
Offshore Funds - BB Fund(5)	77%
Livestock(6)	70%
Others (7)	50%

(1)Except the ones possessing swap agreement
(2) In the same currency of the operation.
(3) Provided by a banking institution taht has a credit limit at the bank, with sufficient margin to suport the co-obligation.
(4) Contract of deposit / Transfer of Customer funds
(5) Exclusive or retail.
(6) Excpet in Rural Product Notes Transactions (CPR).
(7) According to certain characteristics, real state, vehicle, machinery and equipment can be received with highest percentage of guarantee.

Considering the credit risk mitigating instruments defined in Bacen Circular 3,809/16, the following table shows the total mitigated value in terms of exposure, weighted by risk factor, and segmented by type and FPR mitigator.

Table 15 - Mitigated value of exposure, weighted by the respective risk factor

R$ thousand		4Q19	3Q19	2Q19	1Q19	4Q18
Total(1)	**Mitigator**	**50,658,326**	**52,499,102**	**50,426,226**	**51,917,585**	**49,472,259**
Guarantee given by the National Treasury or the Banco Central do Brasil	0%	42,758,261	44,042,311	41,972,545	43,590,038	41,114,521
Guarantee given by Guarantee Funds	50%	--	--	--	--	--
Deposits held by the institution itself	0%	,699,511	1,509,713	1,630,991	1,771,680	1,550,509
Guarantee from financial institutions	50%	140,977	120,903	196,717	167,115	171,656
Payroll Discount Transfers(2)	50%	7,059,577	6,826,174	6,625,973	6,388,752	6,635,574

(1) Total value mitigated by the instruments defined by Bacen Circular 3.809/16 for exposures in loans, leasing, commitments after applying the conversion factor, credits to release and guarantees rendereds.
(2) Credit risk mitigation instrument represented by payroll discount transfers was established by Bacen Circular 3,714, which became effective on Aug /14.

6.1.8 Processes for Monitoring the Effectiveness of Mitigators

Monitoring the effectiveness of mitigators is part of the Bank's credit risk management processes. We quote, as an example, monitoring exposures subject to credit risk, the risk ratings of loans, and credit collection and recovery.

The processes of monitoring credit risk exposure and rating loans risks produce important information for verifying the effectiveness of mitigating instruments. The low default ratio in certain segments of the credit portfolio and the lowest level of allowances in certain transactions may mean that the existence of guarantees tied to exposure reducing credit risk and capital requirements for its coverage.

6.1.9 Exposure to Credit Risk

The table below shows the concentration levels of the ten largest customers in relation to total transactions with credit granting feature.

Table 16 - Concentration of the ten and of the hundred largest customers in relation to the total of transactions with credit granting feature

	1st to 10th	1st ao 100th
4Q19	9,47%	19,21%
3Q19	9,77%	20,76%
2Q19	9,61%	21,17%
1Q19	10.26%	22.71%
4Q18	11.28%	23.97%

The following table shows credit risk average exposure of individual portfolios (PF) and businesses (PJ).

It is important to mention that, in Banco do Brasil, the concepts that were used for the Credit Releasing and Loan Portfolio - Broad Concept are:

a) BB's Loan Portfolio – Broad Concept: BB`s Classified Portfolio (BB`s Internal Portfolio + BB`s External Portfolio), BB`s Collaterals and BB`s Bonds and Securities; and

b) Releasing Credits: They stand for portions of credit limits that can not be cancelled unilaterally by BB, such as the limits of special checks and credit cards (balance of credit to be released in limits that can not be cancelled) and the portions on the timetable of releasing that can not be cancelled unilaterally by BB, such as: Finame, BNDES with the timetable of releasing resources (balance of credits to be released in timetable operations).

Table 17 - Credit risk average exposure

R$ million	4Q19		3Q19		2Q19		1Q19		4Q18		3Q18	
Exposure	**Balance ***	**Average Balance**	**Balance ***	**Average Balance**	**Balance ***	**Average Balance**	**Balance ***	**Average Balance**	**Balance ***	**Average Balance**	**Balance ***	**Average Balance**
Individuals												
Agrobusiness	161,219	159,358	156,871	155,688	157,281	155,626	152,903	151,632	150,710	151,749	146,791	145,374
Mortgage	49,295	49,331	49,328	49,419	49,394	49,151	48,836	48,775	48,503	48,704	48,029	47,719
Payroll Loan	81,172	80,206	77,951	76,761	75,089	74,071	72,588	71,875	71,273	71,912	70,106	69,730
Auto Loans	4,186	4,096	4,088	4,119	4,188	4,200	4,245	4,268	4,288	4,267	4,308	4,338
Credit Cards	66,002	66,842	68,718	68,397	67,102	67,317	67,124	67,009	66,990	67,041	65,532	66,674
Others	64,551	65,078	64,530	64,034	63,398	62,693	61,108	60,227	59,396	60,244	57,708	57,066
Total Individuals	**426,425**	**424,912**	**421,487**	**418,417**	**416,452**	**413,059**	**406,805**	**403,786**	**401,160**	**403,917**	**392,474**	**390,901**
Companies												
Agrobusiness	24,259	25,760	28,034	28,483	29,975	32,866	36,480	37,148	38,417	37,349	43,223	43,355
Investments	50,407	51,840	53,888	54,100	53,642	54,234	55,407	53,981	54,795	54,728	58,707	59,494
Import/Export.	12,180	13,205	16,159	15,975	17,658	17,115	17,134	17,224	18,257	17,538	17,611	17,755
Working Capital	146,100	145,235	147,222	147,234	146,959	148,210	148,549	154,098	152,560	151,736	155,311	154,792
Others	131,905	131,643	133,365	130,527	129,792	126,017	125,971	123,959	123,607	124,512	124,708	123,584
Total Companies	364,851	367,684	378,668	376,319	378,025	378,442	383,541	386,410	387,636	385,862	399,561	398,979
Total	**791,276**	**792,596**	**800,154**	**794,736**	**794,477**	**791,501**	**790,346**	**790,196**	**788,795**	**789,779**	**792,035**	**789,880**

* Includes BB internal portfolio and loans to concede

The next table presents the credit risk exposure of the businesses portfolio (PJ), segregated by geographic regions in Brazil:

Table 18 - PJ credit risk exposure by geographic regions

R$ million			4Q19		
Region	**Agribusiness**	**Investments**	**Import/Export.**	**Working Capital**	**Others**
Midwest	1,716	13,165	251	11,448	5,467
Northeast	742	2,464	615	11,630	7,182
North	168	1,848	107	4,230	3,677
Southeast	15,443	25,166	7,943	95,131	80,457
South	6,190	5,630	3,264	19,536	11,504
Foreign	-	2,134	-	4,125	23,617
Total	**24,259**	**50,407**	**12,180**	**146,100**	**131,905**

R$ million			3Q19		
Region	**Agribusiness**	**Investments**	**Import/Export.**	**Working Capital**	**Others**
Midwest	1,540	13,921	391	11,343	5,380
Northeast	707	2,697	1.114	11,280	6,812
North	149	1,981	101	4,056	3,297
Southeast	19,220	26,790	10,686	96,222	80,537
South	6,418	6,058	3,866	18,640	10,527
Foreign	-	2,442	-	5,683	26,812
Total	**28,034**	**53,888**	**16,159**	**147,222**	**133,365**

R$ million			2Q19		
Region	**Agribusiness**	**Investments**	**Import/Export.**	**Working Capital**	**Others**
Midwest	1,539	13,770	403	11,178	5,119
Northeast	755	2,638	537	10,877	6,428
North	163	2,002	83	3,885	2,768
Southeast	20,344	27,754	12,613	97,466	79,240
South	7,174	6,129	4,022	18,416	--
Foreign	-	2,295	-	5,364	24,988
Total	**29,975**	**54,589**	**17,658**	**147,186**	**118,543**

R$ million			1Q19		
Region	**Agribusiness**	**Investments**	**Import/Export.**	**Working Capital**	**Others**
Midwest	1,776	14,332	519	10,919	5,931
Northeast	825	2,759	484	10,424	6,638
North	176	2,096	78	3,564	2,886
Southeast	26,607	27,410	12,379	100,971	75,321
South	7,096	6,409	3,674	16,893	9,971
Foreign	-	2,401	-	5,777	25,225
Total	**36,480**	**55,407**	**17,134**	**148,549**	**125,971**

R$ million			4Q18		
Region	**Agribusiness**	**Investments**	**Import/Export.**	**Working Capital**	**Others**
Midwest	1,787	13,726	469	10,668	5,801
Northeast	1.002	2,848	482	10,263	6,677
North	174	2,173	87	3,430	2,938
Southeast	28,269	28,419	13,699	110,248	72,549
South	7,962	6,664	4,216	16,067	10,182
Foreign	-	2,598	-	5,102	25,933
Total	**39,195**	**56,427**	**18,953**	**155,779**	**124,079**

The table below presents the credit risk exposure of the individuals portfolio (PF), segregated by geographic regions in Brazil:

Table 19 - PF credit risk exposure by geographic regions

R$ million			4Q19			
Region	**Agribusiness**	**Mortgage**	**Payroll Loans**	**Auto Loans**	**Credit Cards**	**Others**
Midwest	47,915	8,024	9,078	674	10,267	10,049
Northeast	12,523	11,199	20,199	1,186	12,325	12,492
North	11,639	1,894	6,680	482	3,756	4,172
Southeast	45,002	20,090	36,453	1,210	27,636	26,419
South	44,140	8,088	8,762	,633	12,018	10,454
Foreign	-	-	-	-	-	965
Total	**161,219**	**49,295**	**81,172**	**4,186**	**66,002**	**64,551**

R$ million			3Q19			
Region	**Agribusiness**	**Mortgage**	**Payroll Loans**	**Auto Loans**	**Credit Cards**	**Others**
Midwest	46,244	8,025	8,755	654	10,564	10,077
Northeast	12,122	11,148	19,468	1,160	12,762	12,489
North	11,193	1,886	6,345	461	3,821	4,139
Southeast	44,155	20,185	35,066	1,202	28,860	26,498
South	43,158	8,083	8,317	,611	12,711	10,411
Foreign	-	-	-	-	-	916
Total	**156,871**	**49,328**	**77,951**	**4,088**	**68,718**	**64,530**

R$ million			2Q19			
Region	**Agribusiness**	**Mortgage**	**Payroll Loans**	**Auto Loans**	**Credit Cards**	**Others**
Midwest	46,084	8,023	8,369	669	10,272	9,862
Northeast	12,117	11,127	18,707	1,183	12,431	12,283
North	11,115	1,884	5,954	463	3,719	4,066
Southeast	43,898	20,272	33,883	1,238	28,225	26,287
South	44,067	8,088	8,175	,635	12,455	10,179
Foreign	-	-	-	-	-	721
Total	**157,281**	**49,394**	**75,089**	**4,188**	**67,102**	**63,398**

R$ million			1Q19			
Region	**Agribusiness**	**Mortgage**	**Payroll Loans**	**Auto Loans**	**Credit Cards**	**Others**
Midwest	44,324	7,926	7,987	674	10,211	9,494
Northeast	11,563	10,983	18,131	1,185	12,432	11,735
North	10,947	1,831	5,707	455	3,702	3,825
Southeast	42,699	20,126	32,919	1,269	28,294	25,646
South	43,370	7,971	7,844	663	12,484	9,825
Foreign	-	-	-	-	-	583
Total	**152,903**	**48,836**	**72,588**	**4,245**	**67,124**	**61,108**

R$ million			4Q18			
Region	**Agribusiness**	**Mortgage**	**Payroll Loans**	**Auto Loans**	**Credit Cards**	**Others**
Midwest	42,912	7,887	7,691	686	10,170	9,120
Northeast	11,598	10,858	17,752	1,188	12,416	11,130
North	10,768	1,797	5,550	449	3,692	3,579
Southeast	42,971	20,076	32,328	1,304	28,292	24,856
South	43,039	7,922	7,581	,689	12,499	9,451
Foreign	-	-	-	-	-	671
Total	**151,288**	**48,540**	**70,902**	**4,316**	**67,070**	**58,807**

The next tables show the behavior of the total credit risk exposure, segregated by economic sector:

Table 20 - Credit risk exposure of the prudential conglomerate, by economic sector

R$ million	4Q19	3Q19	2Q19	1Q19	4Q18
Government	47,687	49,036	45,999	47,247	47,500
Agribusiness - Animal Origin	13,524	14,125	15,862	16,175	16,308
Agribusiness -Vegetable Origin	34,111	36,284	36,470	35,423	37,591
Construction Specific Activities	9,652	9,730	10,280	10,119	10,695
Automotive	20,021	21,567	21,155	22,807	22,937
Beverages	1,550	1,553	1,733	2,192	2,209
Wholesale Trade and Industries	8,005	7,686	7,401	7,241	7,236
Retail Trade	15,495	14,869	14,185	13,428	13,593
Heavy Construction	4,207	4,478	4,374	4,575	4,525
Leather and Shoes	2,161	2,212	2,238	2,352	2,426
Other Activities	178	206	280	288	27
Electrical and Electronic Goods	10,974	10,889	9,741	9,548	9,301
Eletricity	23,082	29,181	28,543	25,585	26,063
Housing	10,432	11,387	11,711	13,379	14,116
Banks and Financial Services	17,807	18,342	18,241	19,155	17,785
Agricultural Consumables	10,688	11,090	11,136	10,755	10,445
Timber and Furniture	5,247	5,164	5,045	4,913	4,867
Metalw orking and Steel	19,496	23,079	24,307	25,662	27,511
Pulp and Paper	5,252	5,547	5,347	5,552	6,843
Oil and Gas	33,019	28,644	29,132	32,927	40,478
Chemicals	8,539	8,712	8,722	8,307	8,429
Services	26,733	25,605	26,855	26,677	26,816
Telecommunication	6,217	6,349	6,772	6,492	6,458
Textile and Garments	7,909	7,860	8,093	7,909	7,980
Transport	22,867	25,072	24,405	24,832	26,336
Individuals	426,425	421,487	416,452	406,805	401,016
Total(1)	**791,276**	**800,154**	**794,477**	**790,346**	**799,490**

(1)* Includes BB internal portfolio and loans to concede

The table below shows the behavior of the total credit risk exposure of the agribusiness portfolio, segregated by economic sector and businesses portfolio (PJ):

Table 21 - Credit risk exposure of the agribusiness portfolio, segregated by economic sector and businesses portfolio (PJ) - 4Q19

	4Q19				
	Agribusiness	**Investments**	**Import/Export**	**Working Capital**	**Others**
R$ million					
Government	-	6,390	-	30,631	10,665
Agribusiness - Animal Origin	4,564	755	997	4,698	2,510
Agribusiness -Vegetable Origin	10,108	3,326	4,747	8,914	7,016
Construction Specific Activities	30	1,377	510	3,504	4,230
Automotive	34	2,174	376	10,936	6,501
Beverages	458	133	168	472	317
Wholesale Trade and Industries	752	815	429	4,087	1,922
Retail Trade	269	1,197	14	8,382	5,633
Heavy Construction	26	267	196	1,180	2,538
Leather and Shoes	1	116	463	949	631
Other Activities	13	1	22	4	137
Electrical and Electronic Goods	2	607	246	3,488	6,631
Eletricity	193	7,185	102	5,059	10,542
Housing	10	295	--	2,058	8,069
Banks and Financial Services	1	4,501	,0	4,123	9,182
Agricultural Consumables	1,568	688	440	3,689	4,303
Timber and Furniture	661	653	644	2,421	868
Metalworking and Steel	18	1,029	1,443	8,865	8,141
Pulp and Paper	15	1268	129	1,961	1,879
Oil and Gas	4,894	1,313	215	14,626	11,972
Chemicals	36	936	466	5,103	1,998
Services	165	3,401	250	11,745	11,173
Telecommunication	--	98	11	1,280	4,829
Textile and Garments	422	496	286	3,881	2,824
Transport	18	11,386	26	4,045	7,393
Total(1)	**24,259**	**50,407**	**12,180**	**146,100**	**131,905**

(1)* Includes BB internal portfolio and loans to concede

Table 22 - Credit risk exposure of the agribusiness portfolio, segregated by economic sector and businesses portfolio (PJ) - 3Q19

3Q19	Agribusiness	Investments	Import/Export	Working Capital	Others
R$ million					
Government	--	6,521	--	32,420	10,095
Agribusiness - Animal Origin	6,237	742	1,657	3,252	2,236
Agribusiness -Vegetable Origin	11,143	3,538	6,835	8,423	6,346
Construction Specific Activities	28	1,592	544	3,392	4,174
Automotive	54	2,375	526	11,922	6,690
Beverages	460	144	176	477	296
Wholesale Trade and Industries	778	865	400	3,962	1,681
Retail Trade	341	1,264	34	7,290	5,940
Heavy Construction	28	304	166	1,259	2,720
Leather and Shoes	4	114	520	953	620
Other Activities	-	1	-	4	201
Electrical and Electronic Goods	1	644	251	3,432	6,561
Eletricity	369	7,164	109	5,290	16,250
Housing	11	330	--	2,115	8,931
Banks and Financial Services	1	5,489	0	4,257	8,594
Agricultural Consumables	1,679	,890	427	3,677	4,417
Timber and Furniture	701	719	635	2,274	835
Metalworking and Steel	304	1,078	2,375	10,930	8,392
Pulp and Paper	6	1352	140	1,973	2,076
Oil and Gas	5,256	1,428	252	14,810	6,898
Chemicals	34	1,062	490	4,829	2,296
Services	135	3,694	286	11,026	10,465
Telecommunication	--	101	13	1,412	4,823
Textile and Garments	448	544	302	3,762	2,804
Transport	15	11,931	23	4,080	9,023
Total(1)	**28,034**	**53,888**	**16,159**	**147,222**	**133,365**

Table 23 - Credit risk exposure of the agribusiness portfolio, segregated by economic sector and businesses portfolio (PJ) - 2Q19

2Q19	Agribusiness	Investments	Import/Export	Working Capital	Others
R$ million					
Government	-	6,690	-	30,207	9,103
Agribusiness - Animal Origin	7,178	710	2,746	3,111	2,117
Agribusiness -Vegetable Origin	11,850	3,579	7,254	8,221	5,565
Construction Specific Activities	27	1,609	503	3,352	4,788
Automotive	60	2,312	560	11,791	6,432
Beverages	473	154	185	469	452
Wholesale Trade and Industries	799	805	339	3,841	1,617
Retail Trade	374	1,202	33	7,276	5,300
Heavy Construction	33	305	204	1,091	2,742
Leather and Shoes	4	127	519	984	604
Other Activities	-	1	-	6	273
Electrical and Electronic Goods	1	568	194	3,305	5,674
Eletricity	366	7,366	62	6,353	14,395
Housing	13	323	0	2,080	9,296
Banks and Financial Services	1	5,591	0	4,176	8,474
Agricultural Consumables	1,741	931	420	3,764	4,279
Timber and Furniture	703	704	617	2,212	810
Metalworking and Steel	459	1,058	2,650	11,664	8,476
Pulp and Paper	17	1347	125	1,997	1,861
Oil and Gas	5,242	1,429	218	14,778	7,465
Chemicals	33	1,046	419	4,723	2,502
Services	106	3,621	262	12,484	10,382
Telecommunication	--	88	11	1,323	5,349
Textile and Garments	480	546	315	3,784	2,968
Transport	13	11,533	22	3,967	--
Total(1)	**29,975**	**53,642**	**17,658**	**146,959**	**120,922**

(1)* Includes BB internal portfolio and loans to concede

The next tables present the credit risk exposure of individuals (PF) and businesses (PJ) portfolios, segregated by maturity of the transactions:

Table 24 - Credit risk exposure of PF and PJ portfolios by maturity of the transactions - 4Q19

R$ million	4Q19			
Exposure	**up to 6 months**	**6 months to 1 year**	**1 to5 years**	**Above 5 years**
Agribusiness	24,029	35,754	47,346	54,090
Credit Cards	39,855	25439	708	1
Payroll Loan	439	1,044	27,773	51,917
Mortgage	6	7	319	48,964
Auto Loans	122	251	3,810	2
Others	11,800	12,169	24,471	16,111
Total Individuals	**76,250**	**74,664**	**104,427**	**171,084**
Agribusiness	3,643	4,294	6,043	10,279
Working Capital	49,190	9,565	45,943	41,401
Import/Export.	8,455	3,725	-	-
Investments	2,390	1,321	15,487	31,209
Others	33,086	14,965	45,463	38,390
Total Companies	**96,764**	**33,871**	**112,937**	**121,280**
Total	**173,014**	**108,534**	**217,364**	**292,364**

Table 25 - Credit risk exposure of PF and PJ portfolios by maturity of the transactions - 3Q19

R$ million	3Q19			
Exposure	**up to 6 months**	**6 months to 1 year**	**1 to5 years**	**Above 5 years**
Agribusiness	27,393	27,865	49,410	52,202
Credit Cards	45,802	22371	545	1
Payroll Loan	459	1,020	28,133	48,339
Mortgage	5	7	319	48,997
Auto Loans	128	252	3,707	2
Others	14,069	11,744	23,422	15,296
Total Individuals	**87,857**	**63,258**	**105,536**	**164,836**
Agribusiness	5,034	4,650	7,913	10,437
Working Capital	47,842	8,653	45,882	44,846
Import/Export.	11,688	4,471	-	-
Investments	3,314	1,571	17,051	31,953
Others	36,173	12,643	46,536	38,013
Total Companies	**104,050**	**31,987**	**117,382**	**125,249**
Total	**191,906**	**95,246**	**222,917**	**290,085**

Table 26 - Credit risk exposure of PF and PJ portfolios by maturity of the transactions - 2Q19

R$ million	2Q19			
Exposure	**up to 6 months**	**6 months to 1 year**	**1 to5 years**	**Above 5 years**
Agribusiness	33,969	20,690	49,898	52,725
Credit Cards	44,755	21893	454	0
Payroll Loan	502	1,042	28,417	45,127
Mortgage	15	7	321	49,052
Auto Loans	139	264	3,782	3
Others	11,058	14,618	22,987	14,735
Total Individuals	**90,438**	**58,513**	**105,859**	**161,642**
Agribusiness	5,667	5,115	8,551	10,642
Working Capital	46,741	10,673	46,179	43,366
Import/Export.	12,652	5,006	-	-
Investments	3,229	1,462	16,780	32,172
Others	33,816	12,969	46,233	36,773
Total Companies	**102,105**	**35,225**	**117,743**	**122,953**
Total	**192,543**	**93,738**	**223,601**	**284,595**

The table below shows the amount of overdue transactions, gross of allowances and excluded the write-offs, segregated by geographical regions in Brazil:

Table 27 - Amount of overdue transactions by geographical regions

R$ million			4Q19		
Region	**15 to 60 days**	**61 to 90 days**	**91 to 180 days**	**181 to 360 days**	**Above 360 days**
Midwest	1,731	431	957	875	435
Northeast	2,226	602	1119	1,384	598
North	558	159	377	487	244
Southeast	3,854	1,308	2,159	7,465	1,488
South	1,300	461	907	1154	440
Foreign	270	3	107	30	17
TOTAL	**9,939**	**2,964**	**5,626**	**11,395**	**3,220**

R$ million			3Q19		
Region	**15 to 60 days**	**61 to 90 days**	**91 to 180 days**	**181 to 360 days**	**Above 360 days**
Midwest	1,677	379	962	879	552
Northeast	2,161	635	1252	1,279	597
North	581	155	364	501	210
Southeast	3,740	1,171	2,577	7,455	2,062
South	1,394	537	1,097	1099	382
Foreign	6	0	265	-	24
TOTAL	**9,560**	**2,877**	**6,516**	**11,212**	**3,827**

R$ million			2Q19		
Region	**15 to 60 days**	**61 to 90 days**	**91 to 180 days**	**181 to 360 days**	**Above 360 days**
Midwest	1,372	522	783	822	550
Northeast	1,897	556	1065	1,135	607
North	469	156	344	435	224
Southeast	3,164	2,714	7,096	2,724	2,009
South	1,099	706	766	928	775
Foreign	245	1	--	--	25
TOTAL	**8,247**	**4,655**	**10,054**	**6,044**	**4,191**

R$ million			1Q19		
Region	**15 to 60 days**	**61 to 90 days**	**91 to 180 days**	**181 to 360 days**	**Above 360 days**
Midwest	1,315	435	877	806	622
Northeast	1,959	579	1029	1,061	608
North	450	184	368	411	216
Southeast	4,093	1,964	2,639	2,858	1,840
South	1,046	391	822	928	817
Foreign	123	101	11	74	170
TOTAL	**8,986**	**3,654**	**5,746**	**6,139**	**4,274**

R$ million			4Q18		
Region	**15 to 60 days**	**61 to 90 days**	**91 to 180 days**	**181 to 360 days**	**Above 360 days**
Midwest	1,755	435	856	880	681
Northeast	2,002	500	1004	1,249	795
North	474	146	297	441	240
Southeast	6,264	2,632	2,659	3,591	2,405
South	1,660	563	778	1041	952
Foreign	108	-	93	248	55
TOTAL	**12,262**	**4,276**	**5,688**	**7,449**	**5,129**

Below, the amount of overdue transactions, gross of allowances and excluded the write-offs, segregated by economic sector are presented:

Table 28 - Amount of overdue transactions, segregated by economic sector - 4Q19

R$ million			4Q19		
Macro-sector	**15 to 60 days**	**61 to 90 days**	**91 to 180 days**	**181 to 360 days**	**Above 360 days**
Government	0	-	0	0	-
Agribusiness - Animal Origin	33	15	29	28	67
Agribusiness -Vegetable Origin	138	38	178	4,274	50
Construction Specific Activities	98	15	76	66	49
Automotive	95	26	73	53	40
Beverages	2	0	2	3	11
Wholesale Trade and Industries	34	45	39	59	146
Retail Trade	379	41	82	159	74
Heavy Construction	63	2	73	54	71
Leather and Shoes	22	6	29	41	7
Other Activities	1	0	--	0	0
Electrical and Electronic Goods	39	11	42	41	17
Eletricity	3	1	1	11	1
Housing	236	260	198	460	275
Banks and Financial Services	1	1	1	1	15
Agricultural Consumables	48	13	76	295	97
Timber and Furniture	39	13	25	41	27
Metalw orking and Steel	86	60	35	94	66
Pulp and Paper	25	3	12	21	12
Oil and Gas	88	16	49	49	62
Chemicals	34	19	37	38	22
Services	239	61	118	212	86
Telecommunication	9	4	7	98	,2
Textile and Garments	121	27	61	106	26
Transport	187	27	86	774	192
	2,021	**702**	**1,330**	**6,980**	**1,416**

Table 29 - Amount of overdue transactions, segregated by economic sector - 3Q19

R$ million	3Q19				
Macro-sector	**15 to 60 days**	**61 to 90 days**	**91 to 180 days**	**181 to 360 days**	**Above 360 days**
Government	0	0	0	--	--
Agribusiness - Animal Origin	26	13	23	41	137
Agribusiness -Vegetable Origin	68	130	509	3,844	73
Construction Specific Activities	135	77	153	67	55
Automotive	113	30	48	61	40
Beverages	2	2	2	2	19
Wholesale Trade and Industries	37	19	44	86	168
Retail Trade	115	34	332	146	85
Heavy Construction	87	28	105	52	61
Leather and Shoes	25	9	32	32	4
Other Activities	0	0	0	--	0
Electrical and Electronic Goods	43	27	31	68	15
Eletricity	3	0	5	8	1
Housing	265	150	635	453	391
Banks and Financial Services	2	0	1	0	76
Agricultural Consumables	63	38	30	431	73
Timber and Furniture	229	12	37	38	40
Metalw orking and Steel	69	27	107	212	274
Pulp and Paper	14	8	24	14	18
Oil and Gas	50	28	41	69	32
Chemicals	38	16	27	40	21
Services	223	53	144	193	103
Telecommunication	7	3	5	101	4
Textile and Garments	77	22	52	97	41
Transport	--	--	--	--	--
	1,692	**726**	**2,386**	**6,056**	**1,733**

Table 30 - Amount of overdue transactions, segregated by economic sector - 2Q19

R$ million	2Q19				
Macro-sector	**15 to 60 days**	**61 to 90 days**	**91 to 180 days**	**181 to 360 days**	**Above 360 days**
Government	1	0	0	0	--
Agribusiness - Animal Origin	25	9	18	72	213
Agribusiness -Vegetable Origin	242	459	3876	72	277
Construction Specific Activities	145	42	65	99	79
Automotive	47	32	55	81	172
Beverages	3	0	2	4	18
Wholesale Trade and Industries	43	9	79	105	167
Retail Trade	127	41	111	121	91
Heavy Construction	56	51	33	81	21
Leather and Shoes	23	11	27	17	4
Other Activities	0	-	-	0	0
Electrical and Electronic Goods	31	13	58	38	37
Eletricity	1	1	7	2	2
Housing	378	335	362	299	334
Banks and Financial Services	224	0	0	1	76
Agricultural Consumables	38	113	266	149	89
Timber and Furniture	31	16	37	33	78
Metalw orking and Steel	84	20	296	125	230
Pulp and Paper	38	12	14	143	32
Oil and Gas	31	21	37	73	41
Chemicals	20	15	32	45	25
Services	161	55	152	189	85
Telecommunication	5	2	98	8	,5
Textile and Garments	49	132	57	146	49
Transport	93	1264	821	39	339
	1,897	**2,654**	**6,503**	**1,941**	**2,466**

The following table shows the flow of write-off transactions, segmented by economic sector:

Table 31 - Write-off transactions by economic sector

R$ millions	4Q19	3Q19	2Q19	1Q19	4Q18	3Q18
Economic Sector (Write-off)						
Government	0,00	0,02	0,00	0,01	0,00	0,00
Agribusiness - Animal Origin	8,81	99,99	44,18	19,27	43,37	31,38
Agribusiness -Vegetable Origin	83,47	227,87	246,41	89,20	208,19	58,14
Construction Specific Activities	54,09	111,55	93,20	110,06	119,52	105,33
Automotive	45,78	73,37	101,01	162,42	108,22	263,38
Beverages	1,80	1,95	2,84	4,32	3,09	4,54
Wholesale Trade and Industries	93,05	59,95	56,11	108,85	102,40	51,24
Retail Trade	30,82	139,98	94,20	167,94	196,54	148,40
Other Activities	10,91	9,60	7,99	9,20	9,33	13,23
Heavy Constructions	46,28	15,46	54,87	80,63	25,47	208,91
Leather and Shoes	18,68	10,82	13,34	25,37	28,99	21,34
Electrical and Electronic Goods	36,70	51,73	33,01	79,00	73,73	61,60
Eletricity	2,27	0,86	34,83	5,13	2,36	62,00
Housing	517,36	216,45	392,47	417,50	298,32	482,92
Agricultural Consumables	128,42	33,49	32,30	78,68	32,85	23,25
Timber and Furniture	38,14	68,07	37,92	64,85	47,11	49,18
Metalworking and Steel	327,39	206,38	131,71	190,05	189,99	340,55
Pulp and Paper	19,83	52,46	38,39	25,11	26,05	37,93
Oil and Gas	34,13	47,46	42,00	73,68	83,75	166,29
Chemicals	26,41	37,20	32,66	45,16	58,33	53,98
Services	119,36	129,28	148,72	269,37	183,47	194,07
Telecomunication	6,91	5,77	2,85	15,48	6,25	7,23
Textile and Garments	43,60	123,58	70,20	84,64	113,95	89,99
Transport	156,69	49,74	85,94	64,47	71,95	159,14
Total	**1.850,95**	**1.773,03**	**1.797,17**	**2.190,42**	**2.033,23**	**2.634,04**
Others						
Individuals	2.668,53	2.122,31	2.426,37	2224,27	2498,21	2395,18
Total	**4.519,48**	**3.895,33**	**4.223,54**	**4.414,68**	**4.531,44**	**5.029,22**

The table below shows the amount of allowances for loan and lease losses, segmented by economic sector and its quarterly variations:

Table 32 - Total allowances for loan and lease losses in the quarter and variations

R$ million						
Macro-sector	**over 3Q19***	**4Q19**	**3Q19**	**2Q19**	**1Q19**	**4Q18**
Government	18,51	3	3	3	2	1
Agribusiness - Animal Origin	15,55	478	413	451	485	432
Agribusiness -Vegetable Origin	26,66	4,560	3,600	3,644	3,105	2,509
Construction Specific Activities	11,04	715	644	703	743	732
Automotive	1,09	600	594	668	724	806
Beverages	37,61	34	25	24	25	29
Wholesale Trade and Industries	(6,18)	440	469	412	402	418
Retail Trade	25,31	913	728	611	613	694
Heavy Construction	12,12	782	698	571	579	621
Leather and Shoes	17,83	111	94	88	75	84
Other Activities	22,89	1	1	1	1	1
Electrical and Electronic Goods	8,27	288	266	276	278	326
Eletricity	(4,59)	269	281	253	298	295
Housing	(5,35)	3,014	3,184	3,037	3,115	3,249
Banks and Financial Services	(71,64)	24	84	108	220	218
Agricultural Consumables	(12,83)	633	726	539	359	316
Timber and Furniture	12,21	245	219	248	244	273
Metal working and Steel	(21,32)	1,041	1,323	1,452	1,374	1,417
Pulp and Paper	0,69	161	160	162	210	215
Oil and Gas	(38,95)	429	703	690	733	762
Chemicals	17,65	304	259	253	256	281
Services	5,41	1,771	1,680	1,644	1,667	1,823
Telecommunication	13,29	134	119	137	129	139
Textile and Garments	4,22	527	505	549	518	557
Transport	40,14	2,947	2,103	1,957	1,751	1,769
TOTAL	**8,18**	**20,425**	**18,881**	**18,479**	**17,905**	**17,967**

*3Q19 to 4Q19 variation

The behavior of credit risk exposure is presented below, considering settings of Bacen Circular 3,644/13, segmented by Risk-Weighting Factor (FPR), along with the average exposure of the quarters.

Table 33 - Credit risk exposure by FPR

R$ thousand

Exposure by Risk Factor	4Q19	3Q19	2Q19	1Q19	4Q18
0%	6,217	5,834	6,414	8,270	12,161
20%	219,007	1454,255	991,051	1,519,391	153,458
35%	44,129,242	45,062,027	44,911,471	43,740,698	43,272,188
50%	2,858,284	3,290,207	3,573,179	4,542,455	5,145,005
70%	12,208,093	11,790,340	11,657,930	-	-
75%	236,457,919	232,517,634	230,387,174	233,937,800	230,766,129
85%	75,272,720	82,021,619	76,325,912	82,019,372	149,557,380
100%	190,315,300	192,549,635	200,026,048	204,972,105	153,200,834
150%	220	-	-	-	-
Total(1)	**561,467,001**	**568,691,550**	**567,879,180**	**570,740,089**	**582,107,154**
Average Exposure in the Quarter(1)	**564,730,648**	**566,091,063**	**569,374,494**	**571,918,211**	**578,064,907**

(1) Includes loans, leasing, commitments after applying the conversion factor, credits to release and guarantees rendered.

6.1.10 Exposure to counterparty credit risk

Banco do Brasil accepts assuming counterparty credit risk with clients who have been previously analyzed by the risk calculation methodology, with a credit limit applicable to their established profile, subject to the existence of a sufficient operational margin to cover such operations.

Thus, the counterparty credit risk exposures fall in line with other exposures in the customer's loans on the credit limit assigned to it.

These types of operations affect the client's credit risk according to the estimated value of the counterparty credit risk exposure in the event of a default, applicable credit risk mitigators being taken into consideration, the underlying asset issuer risk, the volatility of the asset, the absence of relevant correlation between the collateral and the exposure, deposited collaterals, the percentage subtracted from the assets used as collateral (haircut), and the rules for additional collateral margin calls, according to the characteristics of the operation performed. In operations conducted via Clearing Houses, there is a risk transfer, where the value of the operations are reflected in the credit limit of the Clearing House.

For operations that are subject to the counterparty credit risk, Banco do Brasil follows what is quoted by Circular Bacen 3,068/01, considering the risk as a parameter for the calculation of the market value adjustment of such exposures, affecting the result of the period or in an account apart from the Net Equity, according to the classification of the exposure.

Below are presented the notional values of contracts subject to counterparty credit risk to be liquidated in clearing house liquidation systems, in which clearing houses acts as central counterparties.

Table 34 - Notional value of contracts to be liquidated in clearing houses, in which the clearing house acts as central counterparty

R$ thousand

Stock Market Negotiation	Counterparty	4Q19*	3Q19*	2Q19*	1Q19*	4Q18*
Futures Contracts		**12,958,175**	**9,023,784**	**9,041,087**	**4,911,054**	**5,629,726**
Purchase commitments	B	12,958,175	9,023,784	9,041,087	4,911,054	5,629,726
Options Market		**-**	**-**	**-**	**--**	**263,800**
Short Position	B	-	-	-	--	263,800

Note: Counterparty (B) = Stock Market
*From 1Q16 Banco Votorantim is consolidated by the asset equivalence method

In the next table, the notional value of the contracts subject to the counterparty credit risk, in which there are no clearing houses acting as central counterparties, segmented in uncollateralized agreements and collateralized agreements.

Table 35 - Notional value of contracts subject to counterparty credit risk in which clearing houses do not act as central counterparty

	4Q19	3Q19	2Q19	1Q19	4Q18
Without guarantees					
Derivatives Operations	15,484,565	20,796,219	15,952,342	18,371,639	14,774,333
Currency Operations	728,350	1,244,605	1,264,470	1,142,117	543,468
With guarantees					
Derivatives Operations	5,274,037	10,081,786	3,358,784	12,082,052	8,699,701
Currency Operations	3,829	1,290,073	1,187,724	1,767,109	1,316,450
Repos	803,419,151	881,029,530	995,015,210	967,002,319	800,883,132

The following table shows the positive gross value of contracts subject to counterparty credit risk, including derivatives, outstanding operations, asset loans and repo transactions, disregarding the positive values from compensation agreements, as set forth in CMN Resolution 3,263/05.

Table 36 - Positive gross value of contracts subject to counterparty credit risk

R$ thousand	4Q19	3Q19	2Q19	1Q19	4Q18
Total Gross Positive Value	**21,265,454**	**23,833,841**	**267,988,204**	**237,538,739**	**80,196,332**
Derivative Financial Instruments +Currency Operations	1,269,556	3,412,463	1,135,530	1,004,158	1,035,659
Repos	19.995.898	20.421.378	266,852,674	236,534,581	79,160,673

Obs.: The Total Gross Positive Value calculations for Currency Operations and Repos have been changed to reflect the regulatory requirements of the Operational Limits Demonstrative
The Total Gross Positive Value calculations for Currency Operations and Derivatives was grouped in acordance with regulatory requirements - SACCR

Next, the positive gross collateral received in operations subject to credit risk that cumulatively attends the following requirements, as art.9, section VII, of the Circular Bacen 3,678/13:

a) be kept or held in custody by the institution itself;

b) whose exclusive purpose is to guarantee operations to which they are linked;

c) are subject to movement, exclusively, by order from the depositary institution; and

d) are immediately available to the depositary institution in the event default by the debtor or need for its realization.

Table 37 - The value of collaterals that cumulatively meet the requirements of paragraph VII, Art.9, of Bacen Circular 3,678/13

R$ thousand	4Q19	3Q19	2Q19	1Q19	4Q18
Internalized Resources	407,251,817	443,753,529	498,954,282	482,478,081	406,979,872
Brazilian Governement Securities	309,362,698	351,063,821	384,177,012	370,860,365	308,879,876
Total	**716,614,515**	**794,817,350**	**883,131,294**	**853,338,445**	**715,859,748**

According to the classification of types of collaterals accepted by Bacen, we have identified those that cumulatively meet the conditions established in Circular Bacen 3,678/13, considering the value committed as collateral to the linked operation for the purpose of collaterals calculation.

As follows, the global exposure to the counterparty credit risk is shown, net of compensation agreements effects and the collaterals received.

Table 38 - The value of collaterals that cumulatively meet the requirements of paragraph VII, Art.9, of Bacen Circular 3,678/13

R$ thousand

Counterparty Credit Risk	4Q19	3Q19	2Q19	1Q19	4Q18
Guarantees Rendered Value	783,423,253	860,788,151	728,162,536	870,613,438	721,035,687
Global Exposure(1)	57,237,496	50,618,675	301,698,113	162,168,797	134,364,980

(1) Net of the effects from the guarantees value.

6.1.11 Acquisition, Sale or Transfer of Financial Assets

It is BB's policy to assign credits from non-performing loans, recorded in losses and for which the bank has full risk, once the procedures defined in the collections and credit-recovery process have been exhausted, and the selected transactions have reached the savings point, that is, the cost-benefit ratio, Banco do Brasil may choose to assign credits from non-performing.

Credit assignment is also used punctually to dispose of specific credits, when such an operation is considered a viable alternative for its recovery, even if partial.

The assignment of credits described in column 4Q19, shown in the table below:

Table 39 - Loss operations assigned, with substantial transfer of risks and benefits

R$ thousands	4Q19	3Q19	2Q19	1Q19	4Q18
Operation Quantity (in thousands)		0	324	0	395
Securitization (Ativos S.A.) - Value (R$ thousands)		-	5,174,321	--	2,701,447
Securitization (Other) - Value (R$ thousands)	300,000	-	-	9,212	-
Credit Rights Investment Fund (CRIF) - Value (R$ thousands)	39.019,000	34,428	3,200	7,470	48,556
Financial Institution - Value (R$ thousands)	115.942,000	56,667	-	-	-

Note: Operation Quantity 4Q19 - 36 operations.

BB has no exposure in the following categories:

a) exposures assigned with no substantial transfer or retention of risks and benefits;

b) exposures assigned with substantial retention of risks and benefits; and

c) exposures assigned in the last 12 months with substantial retention of risks and benefits, which were written off as losses.

Below, the value of the portfolio granted with a co-obligation, recorded in the off balance sheet, not in the Assets:

Table 40 - Value of the portfolio granted with co-obligation, recorded in the off balance sheet

R$ thousands	4Q19	3Q19	2Q19	1Q19	4Q18
Risk Retention in Loan operations - Operations written off	3,094	3,707	3,717	3,737	3,841

The procedures to acquire financial assets are similar to the standard adopted by the market, which covers the assessment of assigning institution credit risk, the acquired operations and the corresponding debtors. The financial assets acquisitions aim to increase BB`s credit portfolio diversification.

In compliance with the CMN Resolution 3,533 and the related norms, as of January 2012, the accounting registrations started being made by considering the substantial transfer or retention of the acquired financial assets risks and benefits.

All acquired operations are registered in the Financial Assets Register Chamber (C3 Registradora). The Interbank Payment Clearing House (CIP) holds the authorization of the Bacen to operate and administer the C3 Registradora, acting as registration entity in the form of Bacen Circular 3,743/2015 and other applicable rules.

Table 41 - Balance of exposures acquired WITH retention of risks and benefits by the transferor

R$ million	4Q19	3Q19	2Q19	1Q19	4Q18
a) By type of exposure	**4,523**	**5,579**	**5,682**	**6,897**	**6,184**
Physical Person - Payroll Loan	27	95	105	118	136
Physical Person - Vehicles	4,496	5,484	5,577	6,779	6,048
b) By type of transferor	**4,523**	**5,579**	**5,682**	**6,897**	**6,184**
Financial Institutions	4,523	5,579	5,682	6,897	6,184

Table 42 - Balance of exposures acquired WITHOUT retention of risks and benefits by the transferor

R$ million	4Q19	3Q19	2Q19	1Q19	4Q18
a) By type of exposure	**-**	**-**	**-**	**-**	**-**
Physical Person - Payroll Loan	-	-	-	-	-
Physical Person - Vehicles	-	-	-	-	-
b) By type of transferor	**-**	**-**	**-**	**-**	**-**
Financial Institutions	-	-	-	-	-

6.1.12 Securities (TVM) operations derived from securitization processes

The securities acquired by BB are classified in the following categories:

a) category I - securities for trading - securities acquired with the intent of actively and frequently trading must be registered here;

b) category II - securities available for sale - securities that do not fall under categories I or III must be registered here; and

c) category III - securities held to maturity – securities, except non-redeemable shares, which the institution has the intent and financial capacity to keep in its portfolio until maturity must be registered here.

As follows, the exposures due to TVM operations derived from securitization processes are shown:

a) types of securities:

   i) Receivables Investment Funds (FIDC): resource pool that allots most of its net assets to be applied in receivables. These are the rights and securities representing rights arising from operations carried out in the financial, commercial, industrial and real-estate, mortgage, financial leasing, and service-provision sectors, as well as other financial assets and investment modes admitted under the terms of CVM Instructions 356/01 and 444/06; and

   ii) Real Estate Receivables Certificates (CRI): these are fixed-income securities backed by real estate credits - counter installments flows of payments to purchase real estate properties or rent - issued by securitization companies.

b) type of credit backing the issuing:

   i) FIDC: vehicles financing, company cash flow receivables, debentures, promissory notes, bank credit certificates, bank credit bill certificates, real estate credit certificates, real estate letters of credit, export and other credit rights credit bills; and

   ii) CRI: real estate loans.

c) type of security:

   i) FIDC and CRI = senior quota.

Table 43 - Value of the expo sures derived from acquiring FIDC and CRI

	4Q19		3Q19		2Q19		1Q19		4Q18	
	Qtde	Valor	Qtde	Valor	Qtde	Valor	Qtde	Valor	Qtde	Valor
FIDC - category II	3	2,819,750,329	3	2,921,137,824	2	166,516,045	2	177,906,600	2	194,733,392
CRI - category I	-	-	-	-	-	-	-	-	6	414,630,685
CRI - category II	8	277,589,559	6	305,532,965	6	303,379,154	6	369,698,638	3	417,507,867
CRI - category III	1	364,186,625	3	361,865,750	3	356,901,739	3	377,753,019	0	--
TOTAL	**12**	**3,461,526,513**	**12**	**3,588,536,540**	**11**	**826,796,938**	**11**	**925,358,257**	**11**	**1,026,871,944**

Note: Information includes BB branches in Brazil (BB-Multiple Bank).

6.2 Market Risk and Interest Rate Risk in the Banking Book (IRRBB)

6.2.1 Market Risk and IRRBB Policy

BB establishes targeted policies for Market Risk, Use of Derivatives Financial Instruments, IRRBB and Management of Securities and Derivatives Portfolios.These policies determine the Company's operating guidelines in these risks management process.

6.2.2 Management Strategies and Market Risk Framework and IRRBB

The operational systems used are able to ensure the correct management of positions registered in Trading and Banking portfolios.

Banco do Brasil uses statistical and simulation methods to analyze the market risks and IRRBB from its exposures. Among the metrics resulting from the application of these methods, which will be detailed as follows, we highlight:

In the Market Risk management:

a) Sensitivity analysis;

b) Value at Risk (VaR);

c) Stress.

In the IRRBB management:

a) Economic Value of Equity (∆EVE[7]);

b) Net Interest Income (∆NII[8]);

c) Embedded Gains and Loses (EGL[9])

Sensitivity metrics simulate the effects on the value of exposures resulting from variations in the level of market risk factors.

VaR is a metric used to estimate the potential loss under normal market conditions, respectively, dimensioned daily in monetary values, under a confidence interval and time frame.

The risk factors used in VaR metrics to measure the market risk of exposures are classified into the following categories:

a) interest rates;

b) exchange rates;

c) share prices; and

d) commodity prices.

The VaR metrics performance is monthly evaluated by the backtesting process.

[7] *Variação de Valor Economico*
[8] *Variação de Resultado de Intermediação Financeira*
[9] *Perdas e Ganhos Embutidos*

The ∆EVE is defined as the impact of movements in interest rate over the present value of the cash flow of institution the banking book positions. It is calculated over a perspective of the banks liquidation therefore quantifies the value of a bank subjected to shocks in the interest rates. Currently ∆EVE serves for managing IRRBB and it is part of the set of risk drivers used in the assessemento of Capital Sufficiency as outlined in Pillar II

The variation in the Net Interest Income (∆NII) represents the impact of changes in interest rates on the financial intermediation result of the instruments classified in the banking book. It is calculated from the earnings perspective, and show potential losses or gains as a result of interest rate shocks.

The ∆NII can be used to denote the contribution of asset and liability management (ALM) in the financial results.

Both ∆EVE and ∆NII consider the difference between the value in the Base Scenario and in the Scenario considering the shock in the interest rate.

The EGL metric measure the difference between the present value of assets, liabilities and exposures not included in the balance sheet subject to the IRRBB and the respective book value..

6.2.3 Hedge Policies

Regarding hedging policies, there are mechanisms for evaluating and monitoring the effectiveness of the hedge operations, in order to offset the effects of changes in the market value or cash flow of the related asset.

6.2.4 Derivative Financial Instruments

At the BB, the derivative financial instruments are used for hedging own positions, meeting client needs and for intentional positions making, considering limits, competence and procedures that were previously established.

The positions bought and sold are divided in the following way, segmentada entre posições:

a) Derivative financial instrument transactions carried out with a central counterpart, subdivided into those in Brazil and those abroad; and

b) Derivative financial instrument transactions carried out without a central counterpart, subdivided into those in Brazil and those abroad.

Table 44 - Derivative financial instruments in the country and abroad, by market risk factor, with and without a central counterpart - 4Q19

R$ thousand — 4Q19

Risk Factor	Negotiation location	Brazil			Abroad			Consolidated-BB		
		Reference value	Cost value	Market value	Reference value	Cost value	Market value	Reference value	Cost value	Market value
Long position		**28,578,458**	**631,829**	**717,061**	**5,707,352**	**125,181**	**106,052**	**34,285,809**	**757,010**	**823,113**
Interest rates	Stock market	5,004,418	183	12.612	-	-	-	5,004,418	183	12.612
	Counter	3,338,315	36,923	113,931	-	-	-	3,338,315	36,923	113,931
Exchange rates	Stock market	8,508,366	-	-	-	-	-	8,508,366	--	--
	Counter	11,516,950	576,526	510,998	5,707,352	125,181	106,052	17,224,301	701,707	617,050
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	10,391	-	-	-	-	-	10,391	--	--
	Counter	200,018	18,197	79,520	--	--	--	200,018	18,197	79,520
Short position		**31,094,743**	**23,150,393**	**(2,859,238)**	**13,917,701**	**(53,649)**	**(191.435)**	**45,012,444**	**23,096,744**	**(3,050,673)**
Interest rates	Stock market	3,523,785	-	-	-	-	-	3,523,785	--	--
	Counter	12,049,517	(2,398,624)	(2,362,934)	2,521,629	-	-	14,571,146	(2,398,624)	(2,362,934)
Exchange rates	Stock market	,7,957	-	-	-	-	-	7.957	--	--
	Counter	15,025,701	25,556,903	(477,433)	11,396,072	(53,649)	(191,435)	26,421,773	25,503,254	(668,868)
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	457,234	(5,059)	(9,264)	-	-	-	457,234	(5,059)	(9,264)
	Counter	30,549	(2,827)	(9,607)	-	-	-	30,549	(2,827)	(9,607)
Net position		**(2,516,286)**	**(22,518,564)**	**3,576,299**	**(8,210,350)**	**178,830**	**297,487**	**(10,726,635)**	**(22,339,734)**	**3,873,786**

Table 45 - Derivative financial instruments in the country and abroad, by market risk factor, with and without a central counterpart - 3Q19

R$ thousand — 3Q19

Risk Factor	Negotiation location	Brazil			Abroad			Consolidated-BB		
		Reference value	Cost value	Market value	Reference value	Cost value	Market value	Reference value	Cost value	Market value
Long position		**28,703,297**	**1,334,635**	**1,401,928**	**11,203,562**	**318,270**	**284,064**	**39,906,859**	**1,652,905**	**1,685,992**
Interest rates	Stock market	2,993,946	-	-	-	-	-	2,993,946	--	--
	Counter	840,826	214,790	236,626	-	-	-	840,826	214,790	236,626
Exchange rates	Stock market	6,009,012	-	-	-	-	-	6,009,012	--	--
	Counter	18,696,628	1,114,970	1,145,517	11,203,562	318,270	284,064	29,900,190	1,433,240	1,429,581
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	20,829	-	-	-	-	-	20.829	-	-
	Counter	142,056	4,875	19,785	-	-	-	142,056	4,875	19,785
Short position		**12,099,324**	**(824,286)**	**(790,581)**	**11,287,285**	**(105.263)**	**(249.861)**	**23,386,609**	**(929,549)**	**(1,040,442)**
Interest rates	Stock market	426,294	-	-	-	-	-	426,294	-	-
	Counter	1,003,898	(234,483)	(269,000)	4,158,190	-	-	5,162,088	(234,483)	(269,000)
Exchange rates	Stock market	2,853	-	-	-	-	-	2,853	-	-
	Counter	10,488,490	(579,598)	(512,433)	7,129,095	(105,263)	(249,861)	17,617,585	(684,861)	(762,294)
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	135,820	(158)	(6)	-	-	-	135,820	(158)	(6)
	Counter	41,969	(10,047)	(9,142)	-	-	-	41,969	(10,047)	(9,142)
Net position		**16,603,973**	**2,158,921**	**2,192,509**	**(83,723)**	**423,533**	**533,925**	**16,520,250**	**2,582,454**	**2,726,434**

Table 46 - Derivative financial instruments in the country and abroad, by market risk factor, with and without a central counterpart - 2Q19

R$ thousand — 2Q19

Risk Factor	Negotiation location	Brazil			Abroad			Consolidated-BB		
		Reference value	Cost value	Market value	Reference value	Cost value	Market value	Reference value	Cost value	Market value
Long position		**21,213,291**	**986,686**	**1,022,535**	**7,155,677**	**195,968**	**170,076**	**28,368,968**	**1,182,654**	**1,192,611**
Interest rates	Stock market	2,268,707	-	-	-	-	-	2,268,707	--	--
	Counter	3,105,237	612,186	632,910	-	-	-	3,105,237	612,186	632,910
Exchange rates	Stock market	6,758,018	-	-	-	-	-	6758,018	--	--
	Counter	8,907,653	363,860	354,355	7,155,677	195,968	170,076	16,063,330	559,828	524,431
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	14,362	-	-	-	-	-	14.362	-	-
	Counter	159,314	10,640	35,270	-	-	-	159,314	10,640	35,270
Short position		**19,223,809**	**(1,146,231)**	**(996,919)**	**17,517,326**	**(31,427)**	**(123,413)**	**36,741,135**	**(1,177,658)**	**(1,120,332)**
Interest rates	Stock market	2,405,205	-	-	-	-	-	2,405,205	--	--
	Counter	5,403,511	(671,799)	(652,425)	7,265,602	-	-	12,669,113	(671,799)	(652,425)
Exchange rates	Stock market	221,309	-	-	-	-	-	221,309	--	--
	Counter	10,949,501	(463,337)	(331,272)	10,251,724	(31,427)	(123,413)	21,201,225	(494,764)	(454,685)
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	180,070	(341)	(1,762)	-	-	-	180,070	(341)	(1,762)
	Counter	64,213	(10,754)	(11,460)	-	-	-	64,213	(10,754)	(11,460)
Net position		**1,989,482**	**2,132,917**	**2,019,454**	**(10,361,649)**	**227,395**	**293,489**	**(8,372,167)**	**2,360,312**	**2,312,943**

Table 47 - Derivative financial instruments in the country and abroad, by market risk factor, with and without a central counterpart - 1Q19

R$ thousand — 1Q19

Risk Factor	Negotiation location	Brazil			Abroad			Consolidated-BB		
		Reference value	Cost value	Market value	Reference value	Cost value	Market value	Reference value	Cost value	Market value
Long position		**21,049,545**	**1,595,806**	**1,625,030**	**14,410,437**	**311,428**	**242,640**	**35,459,982**	**1,907,234**	**1,867,670**
Interest rates	Stock market	1,651,923	-	-	-	-	-	1,651,923	--	--
	Counter	2,569,645	896,491	919,464	-	-	-	2,569,645	896,491	919,464
Exchange rates	Stock market	3254,258	-	-	-	-	-	3254,258	--	--
	Counter	13,464,417	695,612	697,640	14,410,437	311,428	242,640	27,874,854	1,007,040	940,280
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	4,873	-	-	-	-	-	4,873	-	-
	Counter	104,429	3,703	7,926	-	-	-	104,429	3,703	7,926
Short position		**12,276,682**	**(1,371,922)**	**(1,353,077)**	**13,683,438**	**(121,460)**	**(219,474)**	**25,960,120**	**(1,493,382)**	**(1,572,551)**
Interest rates	Stock market	1,034,823	-	-	-	-	-	1,034,823	--	--
	Counter	1,545,052	(881,748)	(905,656)	10,157,787	-	-	11,702,839	(881,748)	(905,656)
Exchange rates	Stock market	199,712	-	-	-	-	-	199,712	--	--
	Counter	9,239,885	(475,276)	(427,672)	3,525,651	(121,460)	(219,474)	12,765,536	(596,736)	(647,146)
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	152,667	(377)	(86)	-	-	-	152,667	(377)	(86)
	Counter	104,543	(14,521)	(19,663)	-	-	-	104,543	(14,521)	(19,663)
Net position		**8,772,863**	**2,967,728**	**2,978,107**	**726,999**	**432,888**	**462,114**	**9,499,862**	**3,400,616**	**3,440,221**

Table 48 - Derivative financial instruments in the country and abroad, by market risk factor, with and without a central counterpart - 4Q18

R$ thousand 4Q18

Risk Factor	Negotiation location	Brazil			Abroad			Consolidated-BB		
		Reference value	Cost value	Market value	Reference value	Cost value	Market value	Reference value	Cost value	Market value
Long position		**17,906,260**	**464,777**	**521,321**	**11,554,295**	**233,657**	**161,841**	**29,460,555**	**698,434**	**683,162**
Interest rates	Stock market	3,427,997	55	2.425	-	-	-	3,427,997	55	2,425
	Counter	2,265,463	111,964	138,751	-	-	-	2,265,463	111,964	138,751
Exchange rates	Stock market	2,465,529	-	-	-	-	-	2,465,529	-	-
	Counter	9,662,261	349,916	369,721	11,554,295	233,657	161,841	21,216,556	583,573	531,562
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	85,010	2,842	10,424	-	-	-	85,010	2,842	10,424
Short position		**13,040,549**	**(342,153)**	**(556,946)**	**20,783,344**	**(125,106)**	**(252,255)**	**33,823,893**	**(467,259)**	**(809,201)**
Interest rates	Stock market	1,376,442	-	-	-	-	-	1,376,442	-	-
	Counter	2,432,403	180,568	(96,737)	12,985,642	-	-	15,418,045		(96,737)
Exchange rates	Stock market	320,925	-	-	-	-	-	320,925	-	-
	Counter	8,691,613	(502,779)	(448,893)	7,797,702	(125,106)	(252,255)	16,489,315	(627,885)	(701,148)
Share price	Stock market	-	-	-	-	-	-	-	-	-
	Counter	-	-	-	-	-	-	-	-	-
Commodities price	Stock market	136,151	(345)	(292)	-	-	-	136,151	(345)	(292)
	Counter	83,015	(19,597)	(11,024)	-	-	-	83,015	(19,597)	(11,024)
Net position		**4,865,711**	**806,930**	**1,078,267**	**(9,229,049)**	**358,763**	**414,096**	**(4,363,338)**	**1,165,693**	**1,492,363**

6.2.5 Trading Portfolios

The Trading Portfolio is divided into subgroups called groups, always observing the internal rules, which establish the objectives, the composition and market risk limits for each group.

The main types of limits used for the market risk management are: Value at Risk (VaR), Stressed VaR and Capital Requirments (RWA)

In the case of the Trading Book VaR limits, aiming to evidence the level of the market risk that is generated by the exposures and the corresponding impact on the capital requirement for its coverage, the VaR metric are considered.

For measuring the Total VaR of the Trading Portfolio, Banco do Brasil adopts the Historical Simulation technique, and the following parameters:

a) Total VaR: (VaR + Stressed VaR) x Multiplier, where:

i) VaR: the potential expected loss considering a series of 252 daily shocks (business days), a confidence level of 99% and a holding period of 10 business days (Bacen Circular 3,568/11);

ii) Stressed VaR: the potential expected loss considering series of daily shocks under stress scenarios within 12 month periods starting at January 2nd, 2004, a confidence level of 99% and a holding period of 10 business days (Bacen Circular 3,568/11); and

iii) Multiplier: M=3, as defined by Bacen Circular 3,568/11.

The following table shows the total value of the Trading Portfolio by relevant market risk factor, divided into positions purchased and positions sold:

Table 49 - Negotiable Portfolio by relevant market risk factor, divided into positions purchased and positions sold.

R$ thousand

Risk Factor	4T19	3T19	2T19	1Q19	4Q18
Prefixed					
purchased	1,161,109	1,571,576	1,743,622	2,227,172	1,801,782
sold	563,534	1,140,946	1,474,867	1,583,337	1,921,927
CDI/TMS/FACP					
purchased	413,489	302,833	298,215	308,728	336,583
sold	-	-	-	-	-
Price index					
purchased	41,518	81,827	43,256	201,536	26,773
sold	-	-	-	-	-
Foreign currency /gold					
purchased	3,693,684	3,504,430	4,932,184	4,250,292	3,596,108
sold	144,481	34,964	142,649	37,016	77,792
Shares					
purchased	-	-	-	-	-
sold	-	-	-	-	-

Note: Patagonia Bank included.

6.2.6 Banking Portfolios

The Financial Conglomerate positions not classified under the Trading Portfolio are considered components of the Baking Portfolio

The Banking Portfolio is divided into groups for the Treasury risk source and Risk Factors for the Commercial Bank risk source, observing the internal rules which establish the objectives, the composition, the financial limits and the market risk limits for each group or risk factor.

Banco do Brasil uses the △EVE (variation in the Economic Value of Equity) metric, in order to calculate the interest rate risk in the banking book.

Among other aspects, it is important to mention that the △EVE metric:

a) includes all the operations that are sensitive to the variation of interest rates and uses risk measuring techniques and financial concepts that are widely accepted;

b) considers data relevant to rates, deadlines, prices, optionalities and other information that was adequately specified;

c) requires the definition of adequate premises to turn positions into cash flows;

d) measures the sensitivity to changes in the temporal structure of interest rates, between different rate structures and premises;

e) is part of the daily practices of risk management;

f) allows the simulation of market extreme conditions (stress tests); and

g) makes it possible to estimate the need of capital for risk coverage.

In order to deal with the products that do not have a defined maturity, Banco do Brasil adopts statistical and econometric methods, according with the literature, to analyze temporal series, more specifically the methods called ARIMA (Autoregressive, Integrated and Moving Averages).

The table chart below describes IRRBB risk management objectives and policies according to Circular 3.876, from January 31st, 2018.

Chart 6 - IRRBB risk management objectives and policies

Qualitative data		
A	Description of how the financial institution defines the IRRBB for its risk control and measurement.	Banco do Brasil (BB) has limits approved in their Risk Appetite Statement (RAS), which assures the amount of Referential Equity (RE) compatible with Interest Rate Risk in the Banking Book (IRRBB) exposures. The evaluation of the Referential Equity (RE) adequacy for IRRBB exposures considered two approaches: Economic Value of Equity (EVE), Net Interest Income (NII) and Ebedded Gains and Losses (EGL). For the assessment of the capital adequacy the reference is Tier I Capital (CN1).
B	Description of the policies and strategies for the management and mitigation of IRRBB. For example: monitoring EVE and NII in relation with the defined limits, hedge practices, performs stress test, results analysis, independent audit role and practices, the assets and liabilities unit role and practice in order to ensure proper validation of models and timely actions in response to changes in market conditions.	BB manages its IRRBB by setting limits and assuring approval hierarchy. For its control, the BB uses systems that consider all significant and reliable data sources of risk in the market. The IRRBB is subjected to strategic committees that concerns Finance and Controlling Directorships in order to dicuss impact on ALM and in the budget. BB manages their exposures to IRRBB by considering the mismatching between assets and liabilities, regarding tenors, rates, index and currencies. In addition, BB identifies, measures and controls this risk with both economic value and financial intermediations results approaches. That seeks to keep the risk exposures according to the risk appetite approved by the Board of Directors. We perform stress tests in the Banking Book to evaluate the sensibility considering the estabilished limits. The models are developed by expert team and validated by an independent area, with evaluation by Technical Forum and later evaluation by the Executive Committee for approval. Inside the Internal Controls Directorship (Dicoi), there is also another department named “Risks and Capital Compliance Department”, which aims to validate modelling and assess the monitoring of prioritized models according to their criticality level, regulatory determination, exposure to risks or their relevance.
C	The calculus periodicity of the IRRBB measures for the institution and description of the specific metrics that BB uses for quantifying the sensitivity of IRRBB.	We perform the following methods for this matter: △NII, that estimates the fluctuation in the outcome of the financial intermediation, the △EVE, that estimates the fluctuation in the economic value of equity and EGL for the validation process. Calculations are done daily (for internal management) and monthly (regulatory report and Executive Committees).

D	Description of stress shock scenarios in the interest rate that are used by the institution to estimate fluctuations in the economic value of equity and into the outcome of the financial intermediation.	BB uses internal model to set the limits that are establish in the Risk Appetite Statement (RAS), as was defined in art. 31 from Circular 3.876. For the calculation of the IRRBB, shocks are applied in the term interest rate structure (ETTJ), to simulate possible scenarios, predefined and respecting the guidelines established in the study that determines the parameterization of the shock scenarios or in minimum requirements defined by the regulation of the IRRBB. The ETTJ employed in the scenarios materialize the risk factors contained in the portfolios under management. Such scenarios are built for use in the management of any portfolio and contain all risk factors and their respective shocks. To calculate the IRRBB by the internal methodology, we have scenario of curves that are divided in relation to the risk factors for internal and external products, containing positive and negative parallel shocks in the referred ETTJ. From the management perspective, these scenarios are arranged in: Scen 1: normality - up, Cen 2: stress - up, Cen 3: normality - down and Cen 4: stress - down.
E	Description and implications of the relevant premises used in the system to measure the IRRBB of the bank. If mandatory modelling premises required for disseminating metrics matters differ from the relevant ones considered, the institution must explain the foundation under the choice of the premises, as, for example, historical data, academic research, judging and Board of Directors analyses.	We did not identify different premises.
F	Description, in general terms, of how the institution hedges its exposures to IRRBB, as well as the accounting treatment of such operations.	There is still no defined hedge strategy for the banking portfolio. Currently, BB does not present hedge accounting to IRRBB in its portfolio.
G	Description, in general terms, of the most relevant assumptions for modeling and parameterization in the calculation of △EVE and △NII disclosed in Table 51, including: • to △EVE, if the commercial margins and other spread components were included in the repricing flows or considered in the discount rates used; • how the average repricing deadline in line 1 has been determined, including any peculiar characteristics of products that affect the evaluation of the repricing behavior; • the methodology used to estimate the prepayment rates of credit operations, the rates of early redemption of time deposits and other assumptions considered relevant; • any other assumptions that have a material impact on the □EVE and □NII values reported in Table B, including explanations of why such assumptions are relevant; • any risk factor aggregation methods and any correlations of different risk factor interest rates.	Commercial margins are included in the calculation of △EVE and △NII. Specifically for the calculation of renewals in △NII, we use a proxy for the commercial margins that represents our business opportunity. The transactions are re-scheduled daily, according to the corporate curves used in the calculation. When a re-contracting is simulated, in addition to the price, we also include the shock compatible with the scenario. To create an estimator for the early redemption rate for the products subject to this risk were analyzed all the intermediate redemptions that occurred during its validity. The estimator assumes that the volume and number of rescues will occur on a scale similar to those observed in the historical series.

H	(Optional) Any other information that the institution wishes to disclose with respect to its interpretation of the relevance and sensitivity of the disclosed IRRBB measures, as well as explanatory notes on any significant variations in the IRRBB level reported in relation to previous base dates.	
Quantitative Data		
1	Medium-term repricing assumption attributed to deposits with no contractual maturity defined.	1 day.
2	Maximum repricing term assumption attributed to deposits with no contractual maturity defined.	1 day.

Note: Mandatory as determined in Annex II, Table A, da Circular 3.876/18.

The following table shows us the IRRBB measures in the standardized scenarios, as it was defined by Bacen in the Circular 3.876, 31st of January 2018.

Table 50 - IRBB measures disclosures

R$ thousand		△ EVE	□	△ NII
Reference-date	**4Q19***	**4Q18**	**4Q19**	**4Q18**
High Parallel Scenario (up)	17,198,383	12,311,998	145,259	(3,766,458)
Low parallel scenario (down)	14,929	(11,802,882)	4,416,841	3,710,958
Scenario for raising short-term interest rates	6,737,292	5,257,785		
Scenario for reducing short-term interest rates	2,245,944	(2,725,729)		
Steepener Scenario	5,389,641	3,237,965		
Flattener Scenario	32,869	(1,638,129)		
Maximum Variation	17,198,383	12,311,998	-	3,710,958
Reference-date	**4Q19**	**4Q18**	**4Q19**	**4Q18**
Tier I Capital	96,380,201	95,289,701	96,380,201	95,289,701

Mandatory as determined in Annex II, Table B, da Circular 3.876/18. Frequency: Annual

6.2.7 Risk measuring systems for Market Risk and IRRBB

The market risk and IRRBB measuring process uses corporate systems, Riskwatch, which primarily aim to:

a) consolidate managerial information for market risk management and IRRBB;

b) simulate market scenarios; and

c) calculate market risk measures and IRRBB.

Riskwatch functions that deserve special emphasis are:

a) the calculation of market risk and IRRBB indicators, such as Value-at-Risk, duration, △EVE e △NII;

b) the elaboration of cash flow reports, either consolidated or by product, marked to market or nominal;

c) the determination of the portfolio sensitivity to the fluctuations in national and international interest rates;

d) the calculation of the theoretical result of portfolios after the application of historical and stress scenarios; and

e) the elaboration of the reports on the mismatching of maturities, rates, indexes and currencies.

Regarding IRRBB and Market Risk exposure limits, there daily calculation and reporting to managers with the portfolio exposure and the consumption of limits. A report with the exposure to the limits estabilished in the Risk Appetite Statement (RAS) is forwarded monthly to the Strategic Committees through the Risk Panel.

6.3 Liquidity Risk

6.3.1 Liquidity Risk Policy

Banco do Brasil has a liquidity risk policy which comprises the guidelines of the Company in its liquidity risk management process.

The liquidity risk policy presents the liquidity risk of operations recorded on assets, liabilities and offset accounts that are carried out in the financial and capital market, as well as possible contingent or unexpected exposures, taking into account different time horizons and estimating losses associated with different scenarios, internal and external, including stress scenarios. It also considers funding strategies that provide adequate diversification of funding sources, maturity and currency terms and liquidity contingency plan.

6.3.2 Liquidity Risk Processes and Strategies

BB maintains appropriate levels of liquidity for its commitments in Brazil and abroad, resulting from its broad and diversified depositor base and the quality of its assets, a well-diversified branches network and its ability to access the international capital market. Strict control over liquidity risk is in accordance with the Liquidity Risk Policy established by the Board of Directors, complying with the requirements of Brazilian banking supervision and that of the other countries where BB operates.

The liquidity risk management process involves continuous flow of information. BB's liquidity risk management segregates liquidity in Brazilian Reais from liquidity in foreign currencies. The instruments used in the management are:

a) Intraday liquidity;
b) Observed liquidity;
c) Projected liquidity;
d) Liquidity Risk Scenarios;
e) Liquidity Risk Limits;
f) Prospective Monitoring of Liquidity Risk (MPRL);
g) Liquidity Risk Forum;
h) Liquidity Contingency Plan (PCL);
i) Liquidity Stress Test;
j) MCL Effectiveness Test; and
k) Backtest (Adherence Test) of the liquidity risk models.

The liquidity risk management instruments are monitored periodically and reported in BB's strategic committees.

The Projected Liquidity ensure a forward-looking assessment of the effect of mismatching between funding and investments, in order to identify situations that could compromise the liquidity of the Institution, taking into account both budgetary planning and market conditions.

Projected Liquidity is assessed periodically under alternative and stress scenarios. If the result of any of these liquidity projection scenarios remains below the adopted liquidity level limit, then the breach is treated in accordance with established governance, comprising both the Liquidity Forum and BB risk committees.

Furthermore, Banco do Brasil uses the following metrics for Liquidity Risk limits:

a) Liquidity Reserve (RL);
b) Liquidity Cushion; and
c) Availability of Free Resources Indicator (DRL);
d) Funding Concentration Index (IC);

e) Liquidity Coverage Ratio (LCR); and
f) Net Stable Funding Ratio (NSFR).

Liquidity Reserve is the metric used in short-term liquidity risk management. It is the minimum level of high liquidity assets the Bank must maintain, compatible with the risk exposure arising from the nature of its operations and market conditions.

The Liquidity Cushion limit aims to monitor the daily observed liquidity in addition to the daily monitoring of liquidity projections in various scenarios: base and stress, using the Liquidity Reserve limit.

The Availability of Free Resources indicator (DRL), used in planning and in the execution of its annual budget, is intended to ensure a balance between funding and the investment of resources in the commercial portfolio and ensure liquidity financing with stable resources.

The Funding Concentration Index (IC) determines the level of concentration of funding obtained from Banco do Brasil S.A, identifying risk exposure and subsidizing the preventive liquidity assessment process. Its calculation is monthly and its value is used in the management of liquidity risk

The LCR and NSFR indicators, regulatory measures also comprise the monitoring and liquidity management process. Their calculations are made on a monthly and monthly basis, respectively. Their details are presented in the subsequent sections.

The Liquidity Contingency Plan, on its turn, establishes the strategy, procedures and responsibilities to be adopted in liquidity stress situations. In that case, one or more contingency measures may be adopted so that the institution can assure its payment capacity. The potential of liquidity contingency measures is verified monthly.

The Liquidity Reserve and the LCR are used as a parameters to identify a liquidity contingency and to activate the Liquidity Contingency Plan, being monitored daily.

6.3.3 Liquidity Coverage Ratio (LCR) Calculation

The Liquidity Coverage Ratio (LCR) is required for financial institutions that are classified in the S1 segment, in accordance with CMN Resolution 4,401/15.

The LCR calculation follows the standardized stress scenario model established by Bacen through Circular 3,749/15. This model complies with international guidelines and aims to guarantee the existence of sufficient high quality liquid assets to support a financial stress scenario with a 30 - day term.

The regulatory stress scenario used to calculate the LCR considers idiosyncratic and market shocks that results in:

a) partial funding loss from retail operations and wholesale operations without collaterals.

b) reduction in the institution`s ability to raise short - term funds;

c) additional outflow of funds under agreement due to three levels credit risk downgrade, including additional collateral requirement;

d) increase in the volatility of prices, rates or indexes that impact the quality of a collateral or the potential future exposure of derivative positions, resulting in the application of greater discounts to a collateral or additional collateral call, or other demands for liquidity;

e) withdrawals higher than expected in lines of credit and liquidity granted; and

f) the potential need to repurchase bonds issued or honor non-contractual obligations aiming to mitigate reputational risk.

Thus, LCR is the ratio between high quality liquid assets (HQLA) and the expected total net cash outflow for the next 30 days, as the following formula shows:

$$LCR = \frac{High\ Quality\ Liquid\ Assets\ (HQLA)}{Net\ Cash\ Outflows}$$

Where: Net Cash Outflows = Cash Outflows (-) Cash Inflows
Cash Inflows is limited to 75% of cash outflows

The HQLA are assets that remain liquid in markets during periods of stress, which are easily and immediately converted into cash with low or without losses, it has no impediments, with a low risk and whose pricing is easy and right, i.e. that meet the minimum requirements set by the regulator (Circular 3,749, from March 5th 2015).

Net cash outflows are the cash outflows minus the cash inflows. Cash outflows are estimated by multiplying the balances of the various categories of obligations and commitments, recorded to liabilities or off balance sheet, by weighting factors. Cash inflows are estimated by the multiplication by weighting factors, the balances of the various categories of receivables without default, for which there is no expectation of counterparty failure in the next 30 days.

The following table shows LCR figures calculated using the average values of 64 daily observations sent to Bacen from October to December 2019:

Table 51 - Information on the Liquidity Coverage Ratio (LCR)

	R$ thousand	4Q19		3Q19	
		Average Amount¹	Weighted Average Amount²	Average Amount¹	Weighted Average Amount²
	High Quality Liquid Assets (HQLA)				
1	**Total High Quality Liquid Assets (HQLA)**		**187,929,703**		**160,894,843**
	Cash Outlows				
2	**Retail funding:**	**316,885,652**	**26,539,075**	**320,827,408**	**27,630,273**
3	Stable funding	214,154,386	10,707,719	211,338,928	10,566,946
4	Less stable funding	102,731,266	15,831,356	109,488,479	17,063,327
5	**Non-collateralized wholesale funding:**	**64,951,701**	**30,255,387**	**61,535,854**	**29,519,255**
6	Operating deposits (all counterparties) and affiliated cooperative deposits	6,441,112	704,557	5,953,447	627,026
7	Non-operating deposits (all counterparties) and affiliated cooperative deposits	48,632,701	19,672,942	45,232,270	18,542,092
8	Other non-collateralized wholesale funding	9,877,888	9,877,888	10,350,137	10,350,137
9	**Collateralized wholesale funding**		**11,014,833**		**9,081,346**
10	**Additional requirements:**	**109,265,619**	**23,201,843**	**106,113,928**	**20,356,287**
11	Related to exposure to derivatives and other collateral requirements	15,777,237	13,200,493	13,092,074	10,245,471
12	Related to funding losses through the issue of debt instruments	3,076,933	3,076,933	3,238,899	3,238,899
13	Related to lines of credit and liquidity	90,411,449	6,924,417	89,782,955	6,871,917
14	**Other contractual obligations**	**31,212,908**	**31,212,908**	**27,699,145**	**27,699,145**
15	**Other contingent obligations**	**244,159,128**	**4,311,040**	**245,068,716**	**4,425,356**
16	**Total cash ouftlows**		**126,535,087**		**118,711,661**
	Cash Inflows				
17	**Collateralized loans**	**29,256,271**	**0**	**26,449,107**	**0**
18	**Outstanding loans whose payments are fully up-to-date**	**23,717,278**	**10,908,791**	**25,011,325**	**13,116,729**
19	**Other cash inflows**	**67,595,235**	**59,884,821**	**64,422,321**	**57,192,519**
20	**Total cash inflows**	**120,568,783**	**70,793,612**	**115,882,752**	**70,309,248**
			Valor Total Ajustado3 (R$ mil)		**Total Adjusted Amount³**
21	**Total HQLA**		**187,929,703**		**160,894,843**
22	**Total net cash outflow**		**55,741,475**		**48,402,414**
23	**LCR (%)**		**337,1%**		**332,4%**

1 - Total balance of cash inflow/outlow item
2 - Total balance of cash inflow/outlow item after application of weighting factors.
3 - Total balance of cash inflow/outlow item after application of weighting factors and limits.

The average Banco do Brasil LCR for 4Q19 recorded to 337,1%, compared to 332,4% recorded in the previous quarter. The quarter-on-quarter increase was mainly due to the increase in the average balance of the federal government securities portfolio in the period.

High Quality Liquid Assets are represented mainly by Brazilian Government securities in addition to the amounts considered as a return from compulsory reserve collected to Bacen and cash. The average HQLA volume for the quarter was R$ 187.9 billion.

Cash Outflows, considering the regulatory stress scenario, recorded to an average amount of R$ 126.5 billion in 4Q19 of which 69,6% refer to:

a) retail and non-collateralized wholesale funding, as presented on items 2 and 5 of the above table;
b) credit card payments to merchants, as presented on item 14 of the above table.

Cash Inflows amounted to an average value of R$ 70.8 billion in 4Q19. Of this total, the amount of R $ 10.9 billion refers to the inflow of credit operations, which represent 15.4% of total Cash Inflows (item 18).

Accordingly, it is possible to conclude that Banco do Brasil has sufficient liquid assets to support the standardzided stress scenario proposed by the regulator.

6.3.4 Net Stable Funding Ratio (NSFR) Calculation

The Net Stable Funding Ratio (NSFR) is a requirement for financial institutions classified in S1 segment, in accordance with CMN Resolution 4,616/17.

The calculation of NSFR follows a methodology established by Bacen, through Circular 3,869/17, which is aligned with Basel international guidelines and aims to ensure that financial institutions finance their activities with stable funding in a long-term view.

The NSFR is defined by the following calculation formula:

$$NSFR = \frac{Available\ Stable\ Funding\ (ASF)}{Required\ Stable\ Funding\ (RSF)}$$

Available Stable Funding – ASF

The available Stable Funding (ASF) refers to liabilities and equity weighted by a discount factor, as provided in Bacen Circular 3,869/17. The ASF is comprised mainly by capital and retail and wholesale funding.

Required Stable Funding – RSF

Required Stable Funding (RSF) refers to assets and off-balance exposures weighted by a discount factor, as provided for in Bacen Circular 3,869/17. The RSF is comprised mainly by loans, compulsory deposits, private and sovereign bonds, interbank applications, permanent assets and tax credit.

Each element of assets, liabilities, equity and off-balance exposures must comprise the amount of ASF and RSF, and are stated by maturities up six months, from six months to one year and greater than one year.

Depending on the level of liquidity (assets), level of stability (liabilities and equity), as well as according to maturity, the operations receive specific weights, resulting in the calculation of NSFR.

The following table presents Banco do Brasil Prudential Conglomerate NSFR of ending of 4Q19:

Table 52 - Net Stable Funding Ratio – NSFR

		4Q19				
		Value per residual effective maturity term (R$ thousand)				
		No Maturity	Lower than six months	Greater than or equal to six months, and lower than 1 year	Greater than or equal to 1 year	Total without Weighting
Available Stable Funding (ASF)						
1	**Capital Stock**	**-**	**-**	**-**	**175,352,288**	**175,352,288**
2	Reference Equity, gross of regulatory deductions	-	-	-	130,980,879	130,980,879
3	Other instruments authorized to be included in PR and eligible to NSFR	-	-	-	44,371,409	44,371,409
4	**Retail Funding**	**176,215,586**	**156,327,349**	**21,902**	**1,495**	**310,543,200**
5	Stable Funding	171,323,132	48,451,415	-	-	208,785,819
6	Less Stable Funding	4,892,455	107,875,934	21,902	1,495	101,757,380
7	**Wholesale Funding**	**25,779,263**	**504,872,226**	**26,645,634**	**112,534,724**	**147,285,487**
8	Operating deposits and deposits of member cooperatives	5,449,461	-	-	-	2,724,731
9	Other Wholesale Funding	20,329,802	504,872,226	26,645,634	112,534,724	144,560,756
10	**Operations in which the institution acts exclusively as intermediary, not undertaking any rights or obligations, even if contingent**	**-**	**34,205,424**	**-**	**117,780**	**117,780**
11	**Other liabilities, in which:**	**-**	**110,240,443**	**2,122**	**149,325,508**	**149,326,569**
12	Derivatives whose replacement values are lower than zero	-	118.866	-	-	-
13	Other liability or shareholders' equity elements for which a specific FAZ has not beenestablished	-	110,121,578	2,122	149,325,508	149,326,569
14	**Total Available Stable Funding (ASF)**	**201,994,850**	**805,645,443**	**26,669,657**	**437,331,796**	**782,625,323**
Required Stable Funding (RSF)						
15	**Total NSFR high-quality liquid assets (HQLA)**	**16,833,050**	**77,763,090**	**12,415,354**	**127,301,499**	**45,518,259**
16	**Deposits held at other financial institutions for operational purposes**	**-**	**-**	**-**	**-**	**-**
17	**Performing loans and securities (financial institutions, corporates and central banks)**	**-**	**511,553,504**	**81,798,866**	**398,194,071**	**466,557,701**
18	Performing loans to financial institutions secured by Level 1 HQLA	-	386,488,697	-	-	38,648,870
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	-	-	-	-	-
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks, of which:	-	90,520,471	78,302,170	309,644,969	350,131,725
21	With a risk weight of less than or equal to 35%, approach for credit risk, according to Circular 3,644.	-	-	-	4,008	2,605
22	Performing residential mortages, of which:	-	-	-	-	-
23	Which are in accordance to Circular 3,644, 2013, art. 22	-	801,111	832,436	40,704,787	27,274,885
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	-	33,743,225	2,664,260	47,840,307	50,499,617
25	**Assets with matching interdependent liabilities**	**-**	**15,103,639**	**15,513,703**	**451,727**	**-**
26	**Other assets, in which:**	**-**	**93,639,530**	**18,347,429**	**102,774,331**	**156,012,611**
27	Transactions with commodities, including those with expected physical settlement and gold	-	-	-	-	-
28	Assets pledged due to the deposit of initial collateral margin in transactions with derivatives and interest in mutual guarantee funds of clearinghouses or providers of clearing and settlement services	-	-	-	2,431,268	2,066,578
29	Derivatives whose replacement values are higher than or equal to zero	-	-	-	-	-
30	Derivatives whose replacement values are less than zero, gross of the deduction of any collateral provided as a result of deposit of variation margin	-	-	-	48,081	48,081
31	Other assets for which there is no specific treatment	-	93,639,530	18,347,429	100,294,982	153,897,952
32	**Off-balance sheet transactions**	**126,356,816**	**-**	**-**	**-**	**5,140,381**
33	**Total Required Stable Funding (RSF)**	**143,189,866**	**698,059,763**	**128,075,352**	**628,721,627**	**673,228,952**
34	**NSFR (%)**					**116.25%**

Banco do Brasil's Available Stable Funding (ASF) weighted amounted to R$ 782.6 billion in the end of 4Q19, compared to R$ 781.1 billion in 3Q19, composed mainly by capital, retail and wholesale funding and judicial deposits.

Required Stable Funding (RSF), amounted to R$ 673.2 billion in the same period, compared to R$ 666.0 billion in 3Q19, composed mainly by loans and financing awarded to wholesale and retail customers, central governments and transactions with central banks.

BB recorded NSFR above the 100% regulatory limit in 4Q19, which demonstrates that has sufficient stable resources available to support the stable resources required over the long term.

At the close of 4Q19, the NSFR for the Prudential BB Conglomerate was 116.2%, against 117.2% in 3Q19, above the required regulatory level of 100%. An observed variation basically due to the evolution of capital sources, which went from R $ 171.4

billion in 3Q19, to R $ 175.3 billion in 4Q19, and a concomitant increase in total high liquidity assets (HQLA) and of transactions with collateralized financial institutions, by 17.6% and 9.9%, respectively.

6.3.5 Liquidity Risk measuring systems

Liquidity risk measuring process makes use of corporate systems, the Riskwatch application and the Statistical Analysis System - SAS. The main objectives of these applications are:

a) consolidate management information of the Bank, ascertaining and providing information for liquidity risk management;

b) provide liquidity risk measurements (products/cash flows by currency and index).

The measurement terms of management tools adopted in the liquidity risk management process, presented in the previous chapter, is performed in accordance with the models and methodologies approved.

Diris verifies, daily, with liquidity managers (Brazil and abroad), the consumption of defined regulatory and managerial limits. In the event of extrapolations, these are treated according to the established governance.

The reporting of liquidity risk management occurs, periodically, in ordinary meetings of the Committees and Board that make up the Bank's Management.

6.4 Operational Risk

Banco do Brasil manages operational risk by segregating risk and business management functions and by adopting the best practices on risk management, in accordance with rules and regulations of supervision and banking regulation.

There is an operational risk management structure and policies approved by the Board of Directors compatible with its business model and the complexity of its processes, products and services.

In line with the strategy to reduce operational losses and to maintain the level of exposure to operational risk, observing the established appetite and tolerance, a Global Limit is defined annually, which is segmented into Specific Limits, distributed by the operational risk categories and the responsible managers of those risks.

The Governance of operational risk involves the Board of Directors, and one of its advisory committes, the Internal Committee for Risk Management, Internal Controls, Assets, Liabilities, Liquidity and Capital (CEGRC).

6.4.1 Specific Policy for Operacional Risk

BB adopts a Specific Operational Risk Policy that contains guidelines to the various areas to ensure the effectiveness of the operational risk management model. The subsidiaries, affiliates and holdings are expected to define their directions based on these guidelines, considering the specific needs and also legal and regulatory aspects to which they are subject. BB also has other policies that make up the list of policies associated to the management of the operational risk:

a) Prevention and Combat against Money Laundering, Terrorism Financing and Corruption;

b) Business Continuity Management;

c) BB's Relationship with Suppliers;

d) Legal Risk Management; and

e) Information and Cyber Security.

6.4.2 Operational Risk Management Process

The roles and responsibilities for operational risk management are defined in accordance with the Lines of Defense Model that involves the entire Organization at its various levels.

The 1st Line is composed of the organization's production chain, responsible for identifying the risks of its processes, products and services, establishing the controls to mitigate them and monitor their effectiveness and performance.

The 2nd Line of Defense is organized to: advise 1st Line managers in the identification and mitigation of risks; evaluate the identified risks by quantifying the exposure to operational risk in order to consider the impact on BB's business; measure and control BB's exposure; monitor the adequacy and effectiveness of operational risk management; and report their results.

The 3rd Line of Defense is the Internal Audit, responsible for the independent evaluation of governance, risk management and internal controls.

Risk identification relies on the corporate dictionary of operational risk that has the risks mapped and classified into four levels, in order to facilitate and standardize the process. From the identified risks, certification and evaluation are carried out, where the calculations of the risk criticity and its potential impact are executed and mitigation actions must be implemented. To make operational risk management more effective, priority is given to the most relevant losses and the risks of greater criticity, which are also accompanied by the highest levels of governance.

The Operational Risk Panel is the instrument used to manage operational losses and to follow the framework of the Global Limit and Specific Limits established, being reported monthly to CEGRC and quarterly brought to the CA's attention. The panel presents monthly and annual position, with the respective detail of the limits, monitoring the history of operational losses and main occurrences by category.

In the 4Q19, there was a reduction in the participation of the Business Failures loss event category.

Table 53 - Operational losses monitoring by loss events category

	4Q19	3Q19	2Q19	1Q19	4Q18
Business Failures	59,90%	76,77%	64,99%	76,74%	70,94%
Labor Issues	32,08%	18,19%	27,82%	17,97%	18,98%
Processes Failures	3,83%	0,55%	6,37%	0,73%	0,95%
External Fraud and Theft	3,37%	4,17%	0,54%	3,94%	8,64%
Internal Fraud	0,51%	0,26%	0,17%	0,40%	0,30%
Damage to Physical Assets	0,16%	0,07%	0,07%	0,20%	0,19%
Systems Failures	0,15%	0,00%	0,04%	0,00%	0,00%
Disruption of Activities	0,00%	0,00%	0,00%	0,00%	0,00%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

6.5 Environmental Risk

6.5.1 Environmental Responsibility Policy

In compliance with requirements of CMN Resolution 4,327, as of 04.25.2014, CMN Resolution 4,557, as of 02.23.2017 and the Febraban SARB Regulation 14, as of

08.28.2014, Banco do Brasil established Specific Socio-Environmental Responsibility Policy (PRSA).

The PRSA guides the behavior of the Bank, which, in turn, guided by the principles of relevance, proportionality and efficiency, commits itself to collaborate with subsidiaries, affiliates and simple participations in order to define their guidelines, taking into account the specific needs and legal and regulatory aspects to which they are subject.

BB's Specific Credit and Relationship with Suppliers Policies also have socio-environmental orientations[10].

6.5.2 Environmental Risk Management Strategies

Banco do Brasil's performance is based on policies and processes approved by the Senior Management and the management structure segregates the risk management process from other corporate processes.

BB adopts socio-environmental risk governance structure compatible to its size, business type, complexity of the products and services, and relations established with their relationship public.

The socio-environmental risk management structure aims to identify, measure, evaluate, monitor, report, control and mitigate socio-environmental risk.

BB has a base for recording losses related to its administrative activities and credit and financing operations, with occurrences generated and identified by socio-environmental factors. It also adopts exclusion criteria when conducting business, contracting services, investments or corporate partnerships with third parties that subject workers to degrading forms of work or conditions similar to slave labor, the practice of sexual exploitation of minors and / or hand- child labor and liability for intentional damage to the environment.

The area responsible for socio-environmental risk has a routine that aims to solve doubts and questions of the branch network and business support, arising from legislation and internal rules on this risk.

Banco do Brasil assesses the socio-environmental risk in the creation and revitalization of products and services.

In order to adapt socio-environmental risk management to legal, regulatory and market changes, BB carries out a procedure that identifies, monitors and compares environmental legislation. This routine includes advice on the legal area and changes in internal regulations.

In order to assess socio-environmental risk in activities with the greatest potential for harm, BB applies the criteria of the Equator Principles, a voluntary pact of which it has been a signatory since 2005.

For the acceptance of urban properties as loans collateral, payment in kind, auctioning or adjudication, BB applies the Contamination Evidence Survey (LIC) form, as determined by SARB Regulation 14.

Banco do Brasil also has processes that contribute with the implementation of social and environmental responsibility actions based on the Dow Jones Sustainability Index (DJSI), Corporate Sustainability Index (ISE) of the companies listed in B3 (Brazil, Stock Exchange and Counter), Agenda 30 and Sustainability Forum.

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10 More informations avaiable in https://ri.bb.com.br/en/corporate-governance-and-sustainability/sustainability/

6.6 Climate Risk

The Bank defines climate risk as the possibility of losses arising from the business transition to a low carbon economy, from the onset of extreme weather events or that will have long-term consequences that could affect the value generation by companies.

Risk management is carried out within the framework of the social and environmental risk management framework, however, the Bank develops actions for the implementation of its own climate risk management structure, expected to be completed by 2020.

To mitigate the impacts of climate on business, the Bank uses tools such as the Climate Risk Agricultural Zoning (Zarc), published by the Ministry of Agriculture, Livestock and Supply, and the Internally Developed Agricultural Technical Reference System (RTA).

The Zarc tool indicates the municipalities with climatic and soil suitability for certain crops and the most adapted cultivars. In turn, the RTA maintains information on production costs, price history and productivity by culture and producing municipality. The yield history of the system is fed with each crop and is directly affected by the incidence of climatic phenomena. The historical yield series is sensitive to harmful events, which affect the attractiveness of a crop in a given municipality, and is fundamental for analyzes of crop costing financing.

Climate Risk Monitoring is carried out throughout the country, based on Climate Event Alerts issued by the Bank's agribusiness advisers network, which are registered in the Harvest Monitoring Panel system and allow the observation of recurrence of extreme events and changes in the climate. local weather pattern. In the short term, in a harvest period, the alerts also make it possible to adopt preventive measures to mitigate financial losses at the credit operation level, such as the activation of production insurance.

6.7 Strategy Risk

BB establishes policies, strategies and manuals for strategy risk management, which determines the Company’s guidelines for the management of this risk.

6.7.1 Processes and Strategy Risk Management

BB performs the continuous, integrated and prospective management of strategy risk, including the identification, measurement, evaluation, monitoring, reporting, control, and mitigation of the risk associated with relevant processes and participants linked to the achievement of the objectives and results sought by Banco do Brasil, with its continuous improvement.

Strategy risk management is organized in dimensions and categories that enables its management in a comprehensive manner, passing through strategic, tactical and operational levels, including companies that are part of the Prudential Conglomerate.

The expectations and strategic drivers defined by the Board of Officers and the Board of Directors are considered as basis in the strategic risk management process, as well as the Risk Appetite Statement (RAS) and scenarios, parameters and indicators designed in relation to internal and external environments.

As a way of disseminating the risk culture, BB maintains discussions about the subject in the Institution with the áreas involved in the lines of defense, develops training and communication programs for the qualification of the professionals involved in the process, as well as continuous improvement of practices related to strategic risk management, using up-to-date tools tailored to the needs of this risk management.

6.8 Reputational Risk

The reputational risk management structure segregates the risk management structure from the brand management corporate processes, evidencing the responsibility of the areas that are involved and aims to ensure a sustainable feedback to shareholders.

BB periodically monitors indicators that reflect the reputational risk level incurred by the Institution. Besides that, the bank works on reputational risk stress tests to assess the impact of adverse or severe scenarios.

6.9 Complementary Pension Fund Entities and Private Health Insurance Plan Operators for Employees Risk (EFPPS Risk)

6.9.1 Definitions and Management Process

The EFPPS risk, in Banco do Brasil (BB), is defined as the possibility of negative impact arising from the mismatch between actuarial liabilities and assets of closed private pension entities and private health insurance operators to employees, of which Banco do Brasil (BB) is a sponsor[11].

Considering that Banco do Brasil is exposed to EFPPS Risk, specifically in the following ways:

Asset risk: which is the possibility of losses resulting from fluctuations in the fair value of plan assets; and

Actuarial liability risk: which is the possibility of losses arising from fluctuations in the present value of actuarial obligations of Defined Benefit (BD) plans.

For both private pension plans and health plans, actuarial risk is associated with plans classified as Defined Benefits (BD).

Thus, for the purpose of managing EFPPS risk, plans that meet this characteristic are monitored, whose potential impact on BB's Core Capital is considered relevant.

It should be noted that the EFPPS risk management structure at BB segregates the risk management process, which is under the responsibility of the risk management area, from the other processes related to the calculation of the actuarial result (deficit /surplus) and governance with the Sponsored Entities, which are under the responsibility of the other intervening areas, according to their institutional attributions.

6.9.2 Risk Exposure

Among the Benefit Plans of which BB is a sponsor, the main exposure is found in Benefit Plan 1 (PB1), linked to the Banco do Brasil Employees' Pension Fund (Previ), whose total asset value is approximately R $ 195.0 billion[12], distributed mainly in fixed income and variable income investments. From the point of view of the present value of actuarial liabilities (actuarial liabilities), the amount determined on the base date Dec/19 is R $ 211.2 billion.

Also in the context of actuarial liabilities, Cassi's Associates Plan also stands out, whose present value of the bonds reached the amount of R $ 13.2 billion.

[11] As shown in the explanatory note to balance sheet note no. 26.

[12] Amount calculated for accounting purposes at BB at the time of the half-yearly balance sheets, on the base date Dec / 19, based on the fair value methodology of the plan assets. According with Regulation 695 of Brazilian Securities and Exchange Commission (CVM).

6.9.3 Sensitivity Analysis

In relation to the risk of volatility in the fair value of the assets, a sensitivity analysis exercise was carried out to assess the impact on BB's Core Capital Index (ICP), due to variations in the share price of Companhia Vale SA, which PREVI's PB1 holds equity interest. For this purpose, the Vale3 share price recognized in the BB balance sheet on the base date of 12.31.2019 was taken as the basis (quotation observed in the last trading day of the year on 12.31.2019 - R $ 53.30).

On the observed price of the stock, negative and positive variations were applied every 5% in 5% (from -50% to 50%). The values of the plan is other assets and actuarial liabilities were kept constant. The results are shown in the following table:

Table 54 - Previ PB 1 – Sensitivity Analysis Vale3 – Impact in the Core Capital Index (ICP) (p.p)

Vale3

Variation in the price of the stock (%)	-50%	-45%	-35%	-30%	-25%	-20%	-15%	-10%	-5%	**0%**	5%	10%	15%	20%	25%	30%	35%	45%	50%
Impact in the ICP (p.p.)	-1.88	-1.70	-1.32	-1.13	-0.94	-0.75	-0.57	-0.38	-0.19	**0.00**	0.19	0.38	0.57	0.75	0.94	1.13	1.32	1.37	1.37

6.9.4 Interest Rate - Actuarial Liabilities and Fixed Income Previ PB1

The interest rate used to measure the present value of the actuarial obligations (actuarial liabilities) of the benefit plans, constitutes one of the most important variables in estimating the impacts of the actuarial risk on the Bank's capital.

Therefore, to assess the impact of this variable on the plan's actuarial liabilities and, consequently, on BB's Core Capital Index (ICP), we performed a sensitivity analysis exercise that consists of applying negative and positive shocks to the rate, varying from -1.5 to 1.5 percentage points (pp), in relation to the rate observed on the base date of 12.31.2019 (3.48% pa).

Like the actuarial liability, the fixed income investment portfolio, which represents approximately 45% of the plan's total assets, is also impacted by changes in interest rates.

Previ's PB1 fixed income portfolio is mainly comprised of Federal Public Securities (TPF). Thus, to estimate the impacts on the portfolio, the interest rates associated with these papers were used as a reference, on the base date 12.31.2019, and negative and positive shocks of the same magnitude were applied to those applied to the discount rate of the actuarial liability (of -1.5 to 1.5 pp).

It should be noted that, in this simulation, the values of other investments (variable income portfolio, fixed assets, among others) were kept constant. The consolidated results, resulting from the simultaneous shocks in assets and liabilities, are presented in the following table:

Table 55 - Previ PB 1 - Sensitivity Analysis Previ PB 1 – Impact in the Core Capital Index (ICP) (p.p)

Fixed income and actuarial liabilities

Variation in the interest rate (em p.p)	-1.50	-1.00	-0.80	-0.60	-0.40	-0.20	**0.00**	0.20	0.40	0.60	0.80	1.00	1.50
Impact in the ICP (em p.p.)	-2.37	-1.49	-1.17	-0.86	-0.56	-0.27	**0.00**	0.26	0.51	0.76	0.99	1.21	1.37

It is noteworthy that the impacts on the Core Capital Index (ICP), as shown in the simulations above, take into account the prudential adjustments deducted from the Core Capital (CP[13]).

6.10 Legal Risk

As regulated by the CMN Resolution 4,557, from 02.23.2017, legal risk is part of the operational risk definition. For this reason its management structure and modelling are detailed in item 6.4 of this report within the scope of operational risk.

6.11 Model Risk

6.11.1 Specific Risk Policy Model

This Policy guides BB's model risk management (MRM), which deals with the possibility of losses arising from the inadequate development or use of models, due to the inaccuracy or insufficiency of data or the incorrect formulation in its construction, which may adversely affect the sustainability of business. In addition, it contributes to the dissemination of the risk management culture.

6.11.2 Strategies for Model Risk Management

MRM structure aims to identify, measure, evaluate, monitor, report, control and mitigate model risk, considering the nature of operations, the complexity of products and processes and the dimension of BB's model risk exposure, with continue reports to Senior Management.

Model risk management covers the entire life cycle of models, assessing inventoried models through its phases of development, validation, approval, implementation and use.

The model risk management activity is performed separately from the development activities, independent validation (backtesting) and internal audit, so that the model risk management follows the Referential Lines of Defense Model (MRLD).

Model risk management ranks and prioritizes BB's models based on criteria compatible with their associated risk. Instruments and methodologies to measure and mitigate model risk are developed based on market standards and best practices. Models are assessed for their criticality and severity as so model's risk exposure can be rated.

6.12 Contagion Risk (Step-in Risk)

6.12.1 Contagion Risk Specific Policy

The Contagion Risk Specific Policy establishes the guidelines to handle the possibility of a negative impact on the Prudential Conglomerate capital, liquidity or reputation, derived from adverse events in the relevant ELBB that are not part of the Prudential Conglomerate, guiding the behavior of BB in the management of the risk.

That policy works together with the Shareholdings Specific Policy which aims to guide BB's actions, through guidelines, in relation to the businesses that involve direct and

[13] Actuarial assets related to defined benefit pension funds, net of deferred tax liabilities associated with them, in accordance with CMN Resolution 4,192 / 2013.

indirect equity investments, in Brazil and abroad, by observing governance, corporate strategy and business aspects.

6.12.2 Contagion Risk Management Strategies

The Contagion Risk management model aims to identify and monitor the risks that are associated to the ELBB, as well as assess the materiality of exposure to other sources, arising from other relationships (contractual or not) of the entities that compose the Prudential Conglomerate, with non consolidated entities, such as investment funds, partnerships, sponsored entities in the cultural or sports fields, among others.

Among the instruments used in management, is the Supervision Cycle of the risk management, internal controls and organizational security processes conducted by the linked entities, as described in item 5.1 Entities Linked to Banco do Brasil (ELBBs) Supervision.

In addition, on an ongoing basis, analyzes of documents related to the ELBB risk management processes are carried out, in order to promote alignment with Banco do Brasil guidelines. Technical opinions are also made, from the point of view of Contagion Risk, in the studies and deliberations carried out by BB, in relation to capital contributions and corporate movements.

6.13 Compliance Risk

6.13.1 Specific Policy of Internal Controls and Compliance

The principles and guidelines for managing compliance risk were materialized in the Specific Policy of Internal Controls and Compliance of Banco do Brasil, which was approved by the Board of Directors and is reviewed annually.

6.13.2 Compliance Risk Management Model

The methodologies for scope definition as well as risk and controls identification and assessment were revised and improved for 2019 exercise. The scope of action is based on the most relevant causes that affect Banco do Brasil´s strategic objectives achievement.

Regarding to compliance risk management, the scope is related to compliance and corporate processes adherence with legal and infralegal standards and corporate governance principles. Risk management was improved through actions to review the risk management strategy, the concept of compliance risk, the taxonomy of risk events and management indicators.

Respecting the limits between the other relevant risks, the quantitative model has been enhanced to measure the financial impact by monitoring operational losses or sanctions from Banking Supervisors and other regulators / regulators - regulatory compliance.

According to the Referential Lines of Defense Model (MRLD) implemented at the Bank, regulatory monitoring begins with the 1st Line role, aiming at the adherence of the processes, products and services of its activity area to legal and infralegal standards. Internal Controls Area (Dicoi), as 2nd line of defence, through its work scope, assesses the identified compliance risks advising managers on mitigating these risks.

6.13.3 Compliance Program

The Compliance Program of Banco do Brasil, approved by the Board of Directors (CA), in Dec/2017, aims at compliance risk management, focused on achieving compliance, sustainability and security in business, processes, products and services, improvement in the prevention of illicit acts, deviations of conduct and damages to the reputation, contributing to the reduction of financial losses. It is based on the pillars Prevention, Detection and Correction with the following guidelines:

a) top Management Support - tone from the top;
b) risk assessment;
c) code of Ethics, Standards of Conduct and Compliance Policy;
d) training and communication;
e) regulatory monitoring;
f) due diligence;
g) internal controls;
h) reporting channel; and
i) internal investigations and consequence management.

In the context of compliance, the Bank has an Integrity Program that provides a set of mechanisms, internal procedures and incentives to irregularities report, with a focus on anti-corruption measures and prevention of illegal acts.

6.13.4 Customer and User Relationship Policy for Products and Services

The principles and guidelines regarding Banco do Brasil's behavior in the relationship with customers and users of products and services and in conducting its activities in compliance with the principles of ethics, responsibility, transparency and diligence, fostering the convergence of interests and consolidation of the institutional image of credibility, safety and competence were established in the Customer and User Relationship Policy for Products and Services, which was approved by the Board of Directors (CA) with a three-year review. The management model evolved within the approval and implementation of maturity level assessment considering Customer and User Relationship Policy and indicators were defined for its monitoring.

7 Stress Test Program

The Basel Committee for Banking Supervision (CBSB)[14] defines Stress Test as an assessment of the Bank`s financial position under adverse or severe conditions, but plausible, to support the decision process.

The CMN Resolution 4,557/ 2017 establishes that the Stress Tests Program comprises a coordinated set of processes and routines, endowed with its own methodologies, documentation and governance, with the main objective of identifying potential vulnerabilities of the institution.

In this context, the stress test model adopted by Banco do Brasil aims to test the resilience in the face of possibility of adverse or extreme events, and maybe idiosyncratic or systemic.

So, BB works on stress test exercises considering:

a) Stress Tests per Category of Risk: stress tests used in the management of each risk, by considering their specificities;

b) Integrated Stress Tests (TEI): stress test based on a single scenario of adverse or severe macroeconomic conditions or in idiosyncratic scenarios, as appropriate, applicable in an integrated way to risk variables, business variables and their impacts on the result and capital of the Institution.

For the exercise to accomplish its objective, BB uses assumptions that produce extreme situations, although plausible, capable of generating results in which solvency requirements are extrapolated.

It is important to mention that, for the accomplishment of TEI, the Bank uses corporate stress scenarios, which are approved by Board of Directors.

The usage of the stress test as a management tool aims to provide the risks foward-looking assessment, subsidize the development of contingency plans and support capital and liquidity planning processes.

[14] *Principles for sound Stress Testing practices and supervision (*mai/09).