

## Title Risk Management

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Coverage

## Bradesco Asset Management

Shot Description

Definition of rules for Risk Management. It encompasses Market Risk, Credit and Counterparty Risk, Liquidity Risk, Operational Risk and Concentration Risk.

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## Latest Changes

Update of the Standard due to the merger of Bradesco Asset Management S.A. DTVM into Banco Bradesco S.A.

## 1 Objective

To establish the risk management guidelines of the Bradesco Asset Management Department ("Bradesco Asset") for risk management, observing the best market practices by means of governance, methodologies, processes and systems to ensure the efficiency of the controls and support to the business compliance with external and internal norms, always respecting the client's interests and the regulatory aspects.

## 2 Definitions

Risk-related concepts mentioned in this Standard:

**Risk** - any unexpected event that can cause financial loss.

**Stress Scenario** - event with low probability of occurrence, but with high financial severity.

## **3** Principles

The Risk Management Standard is based on the principles of governance, ethics, compliance, transparency, segregation of activities, best practices, accuracy, fairness, timeliness, conduct and integrity.

**Governance** - set of processes and rules that guide the control and management of risk.

**Ethics** - ethical conduct and moral values encompass the set of rules that guide our daily activities to meet the real needs of our clients, in a clear and transparent way, guiding risk management at all levels, adopting procedures to ensure the protection of confidentiality and integrity of information about our clients' operations.

**Compliance** - compliance with regulatory and legal requirements, as well as applicable self-regulatory codes and internal policies and standards, mitigating the possibility of being sanctioned by supervisory and self-regulatory bodies.

**Transparency** - maintaining a clear and direct relationship with the areas involved in asset management and with the regulatory and self-regulatory bodies.

**Segregation of activities** - risk management activities are segregated from business and auditing activities, maintaining independent structures in order to avoid conflicts of interest and safeguard the impartiality of the work performed.

**Best practices** - procedures, methodologies, models and information referenced in the best market practices are used, duly documented, formalized and updated.

**Accuracy** - the process inherent to risk management values the accuracy, consistency and coherence of the results generated by the models in order to support the decisions of the competent authorities.

**Equity** - the process of choice of methodologies, data sources or any risk management decision must ensure equitable treatment to shareholders.

**Timeliness** - risk management is dynamic, and information must be constantly updated and immediately propagated with the objective of an assertive and quick response from the areas involved.

**Conduct/Integrity** - doing what is right for our investors/shareholders, establishing trustworthy relationships between the parties.

# 4 Guidelines

Identify, calculate, monitor, control and manage the risks of investment funds and managed portfolios contemplated in the scope of this Standard:

- To determine risk limits or controls designed to maintain risk exposures at levels considered acceptable in accordance with the investment policy established in the regulations or contract with the client, and the adequacy of the appetite for non-financial risk of the management activity;
- To carry out simulations of extreme market conditions (stress tests), the results of which must be considered when establishing or reviewing policies and limits to follow the fund regulations or the investment policy of the managed portfolio;
- Infrastructure for risk management, established according to the complexity of products, strategies, and financial volume under management:
  - a) Team dedicated to risk management;

b) Systems to identify, evaluate, control and monitor exposures, which should cover all relevant sources of risk and generate timely reports for the institution's board of directors;

c) Annual system evaluation tests

- Elaborate risk reports requested by clients;
- To previously evaluate and diligently monitor the infrastructure and risk indicators of external managers that may compose portfolios;
- To previously evaluate under risk aspects the eligible brokers.

## 5 Risk Management

Risk management is a dynamic process and requires continuous activity, with daily reports and controls.

Governance of risk management begins with defining the areas involved and their responsibilities.

# 5.1 Bradesco Asset's Risk Management and Internal Controls Executive Committee and Risk Committee

# Bradesco Asset's Risk Management and Internal Controls Executive Committee

This is a permanent executive body with deliberative powers, whose purpose is to analyze and evaluate compliance with risk and internal control standards, as well as all the activities of Bradesco Asset, focusing on risks and mitigation procedures.

## Bradesco Asset Management's Risk Committee

Its purpose is to analyze the risk methodologies adopted, ensure compliance with the internal regulations and legislation in force regarding risk, personal investments, environmental, social, and corporate governance issues. The composition of the Committees of Bradesco Asset is available in the Reference Form disclosed on the Bradesco Asset website.

# 5.2 Participating Teams and Responsibilities

Description of the areas participating in the management process, due to the peculiarities of each risk, are fully affected as areas present in all risk standards: market, credit, liquidity and operational.

## 5.2.1. Risk Superintendence

The Risk Area is independent in relation to the business areas and has access to identify, evaluate, control, and monitor risk exposure. This area is responsible for ensuring that risk levels by rules or mandates are being met by the management

areas. In addition, there is the process of internal and external communication of risk levels to Investors, Regulatory Bodies, Senior Management and Business Lines.

Main attributions:

• Coordinate the Risk Management and Internal Controls Executive Committee of Bradesco Asset Management;

- Create and review, at least annually, the Risk Policy;
- Create and review methodologies for risk management;
- Define the limits for each fund or portfolio;
- Follow-up of the limits;
- Adjust the portfolios;
- Comply with request for reclassification of managers;
- Simulate stress;
- Provide support to the Business areas;
- Report the limits misalignments to the Risk Management and Internal Controls Executive Committee of Bradesco Asset Management;
- Inform risk rule in the constitution of the funds;
- Define risk rule for adequacy;
- Follow up with the regulator and self-regulator;
- Elaborate the Risk Manual, in which must be included the organizational chart of the responsibilities of the people involved in risk management;
- Define the frequency and which areas / people, in addition to the director responsible for the administration of securities portfolios, should receive a report on the risk exposure of each securities portfolio under management.

# 5.2.2. Resource Management

The Management area is responsible for the allocation strategy, execution, and performance monitoring of the portfolio under its management. Each desk has specific expertise and has the authority to manage it following the risk limits and parameters related to each risk, such as average term, authorized products, minimum cash percentage, among others.

# 5.2.3. Compliance

The Compliance, Conduct and Ethics Department (CCED), as the 2nd line of defense, is responsible for supporting the Board of Directors and the Executive

Board in complying with the laws and internal and external regulations, aligned with the Organization's strategy and its social environment, as per Policy nº 4820 - 8 / Compliance, Conduct and Ethics Department.

# 5.2.4. Internal Control System

The Integrated Risk Controls Department (IRCD) promotes and enables risk control and capital allocation, through robust practices and certification of existence, in an independent, consistent, transparent, and integrated manner. For the risks controlled by other departments (Underwriting Risk - Bradesco Seguros Group; Strategy Risk - Planning, Budget, and Control Department; Compliance Risk -Compliance, Conduct and Ethics Department, Pension Funds Risk - Human Resources Department), the IRC('s role is to assist in defining risk management and its governance structure, promoting integration and a consolidated view of risks to Senior Management.

The Internal Controls Area, among its attributions, is responsible for supporting managers (1st line of defense) in the application of the Internal Controls Methodology with the Organizational Risk Library and in the:

- Risk identification, assessment and response;
- Evaluation and adequacy of controls, including those related to Operational Risk losses;
- Certification of the adherence of the controls by means of tests and/or simulation of calculations, recommending, when necessary, an action plan and/or corrective action in order to guarantee acceptable levels of risks in the Organization's processes.

# 5.2.5. Products

The macro of this area is the maintenance and launch of new products, but for this process to be effective and the risk to be mitigated, the integration between the Business areas and the Control and Support areas is necessary. This coordination is the responsibility of the Products area.

# 5.2.6. Fiduciary Administration

Department whose function is the custody and controllership of assets and liabilities.

# 5.2.7. Controllership

Area responsible for accounting and processing Bradesco Asset's portfolios and funds, and consequently for its official quota.

# 5.2.8. Internal Audit

Independent Area from the Business and Risk and Internal Controls areas, considered the third line of defense, is responsible for assessing and reporting on the effectiveness of governance, risk management and internal controls, including how the first and second lines of defense achieve their objectives, and is

responsible for overseeing the processes carried out by the areas participating in the risk environment..

## 5.3 Risk Limits

Risk management begins before the constitution of a fund or managed portfolio, because the proposed risk budget must be consistent with the investment policy and its audience.

The metrics vary according to each type of risk and are described in the regulation or in the limit's appendix of this standard, however, a criterion that is always present in any portfolio under management is the portfolio's stress execution. Another essential point is that, besides the limits defined in the mandates, the regulatory limits are respected.

## 5.3.1. Limit Extrapolation

In the case of non-compliance occurring in managed funds or portfolios, the manager will prepare an action plan with the objective of reestablishing the permitted risk levels. The action plan must be accompanied by the risk area. In exceptional market circumstances, caused by exogenous socioeconomic factors, which result in extreme cases of non-adherence, the Risk area will call an extraordinary meeting of the Bradesco Asset's Risk Management and Internal Controls Executive Committee.

## 6 Market Risk

## 6.1 Definitions

Concepts related to market risk:

**Market Risk** - is the risk associated with changes in the prices of financial products (assets and liabilities). These products can be referenced to interest rates (local/external), shares, currencies, commodities, inflation, energy, among others.

**Risk Factor** - is a component of risk belonging to an asset. An asset can have more than one risk factor.

**Mark to Market** - is the value of the operation on a certain date having as reference market information for that day.

**Value at Risk (VaR)** - measure that estimates the maximum expected loss of an asset or portfolio given a confidence interval or percentile, for a time horizon determined in business days, under normal market conditions.

**Parametric VaR** - VaR calculation model that uses as assumption the normal distribution of the returns of the assets.

**Benchmark VaR (BVaR)** - value at risk relative to a market benchmark.

**Tracking Error** - measures the standard deviation of the difference between portfolio returns and benchmark returns.

**Stress Scenario** - scenarios with low probability of occurrence and that can cause high financial loss.

**Monte Carlo Simulation** - methodology that relies on the generation of numbers based on statistical distributions.

**DV01** - is the variation in the price of a fixed income asset if there is a change of one base point in its rate.

**Backtesting** - process used to verify the adherence of the modeling used in risk management.

# 6.2 Market Risk Management

Market risk management process with the participating areas and their governance.

# 6.2.1. Participating Teams and Responsibilities

## Risk Superintendence

In the scope of market risk management, the area is responsible for:

- Dimension the market risk profile of the funds and portfolios managed by means of risk limits;
- Provide reports and market risk analyses requested by clients;
- Analyze and monitor the mark-to-market methodologies;
- Perform periodic reassessments of the methodologies;
- Estimate, manage, analyze, monitor and control the market risk of the managed funds and portfolios: fund type and their specific characteristics.

## Asset Management

Responsible for buying and selling assets in the funds and in the managed market portfolios according to the respective investment policy.

# 6.3 Methodology

The methodologies for calculating and estimating market risk for the funds and portfolios under management consider:

- The type of fund;
- Investment policy;
- the specific characteristics of the funds;
- A broad set of risk indicators, sensitivity measures, and risk/return indicators considering: type of fund; investment policy;
- Analysis of market risk factors;

Exclusive funds will also be evaluated by the methodology requested by the client.

# 6.4 Market Risk Limits

Market risk limits follow the rules:

- a) The elaboration of the limits must consider:
  - The type of fund;
  - Investment policy;
  - The preponderant strategies;
  - The target audience; the liquidity risk of the fund.
- b) The limits must be approved by the Bradesco Asset's Risk Committee Management;
- c) They must be reported to the for Bradesco Asset's Risk and Control Management Executive Committee
- d) The review of the limits will be annual;
- e) In cases where a fund or managed portfolio undergoes a change in its investment policy, the risk limit will be reviewed.

Due to the peculiarities of Bradesco Asset's products and customers, different risk indicators are used as a limit.

In the portfolios under management a traditional metric of value at risk is used, together with the portfolio's stress measure, with the objective of observing the portfolio's behavior in adverse and extreme scenarios. The constitution of the scenarios may be by means of historical data, prospective data, or relevant scenarios disclosed in the market used as a basis for the definition of margin of guarantee or as a suggestion to the investment fund managers.

Main methodologies or metrics for Market Risk management used at Bradesco Asset:

- Var;
- BVaR;
- Stress Test;
- DV01;
- Tracking Error;
- NDE.

# 6.4.1. Limit Extrapolation

In the case of non-compliance occurring in managed funds or portfolios, the manager will prepare an action plan with the objective of reestablishing the permitted risk levels. The action plan must be accompanied by the Risk area.

In exceptional market circumstances, caused by exogenous socioeconomic factors that result in extreme cases of non-adherence, the Risk area will call an extraordinary meeting of the Bradesco Asset's Risk Management and Internal Controls Executive Committee.

## 6.5 Reports

Management reports, market risk monitoring and control, and follow-up of profile adjustments will be sent daily to the directors and all areas linked to Bradesco Asset's asset management. This process aims to ensure the transparency of risk information and the continuous acculturation of risk management.

# 7 Credit and Counterparty Risk

# 7.1 Definitions

Concepts related to credit risk mentioned in this Policy:

**Credit Risk** - the possibility of occurrence of losses associated with the noncompliance by the borrower of its respective financial obligations in the agreedupon terms, the devaluation of a credit agreement resulting from the deterioration in the borrower's risk classification, the reduction in gains or remunerations, the advantages granted in the renegotiation and the recovery costs.

**Counterparty Credit Risk** - the possibility of non-compliance with obligations related to the settlement of transactions involving the negotiation of financial assets, including those related to the settlement of derivative financial instruments.

**Covenants** - contractual clauses of debt securities, which protect the interest of the creditor by establishing conditions that should not be breached.

**Rating** - Credit risk classification attributed to issuers or issues.

**Structured Products** - FIDCs and Real Estate Funds.

# 7.2 Principles

- Prevalence of customer interests;
- Adherence to the Conflict of Interest Standard;
- Fairness, equality between processes, criteria, methodologies and monitoring, which are previously defined and applied indifferently to all issuers and credit assets;
- Independence in the processes of asset analysis, decision-making and risk monitoring of credit assets.

# 7.3 Credit Risk Management

Description of the Credit Risk management process with the participating areas and their governance.

# 7.4 Participating Areas and Responsibilities

## **Credit Analysis Management**

Area responsible for the entire analysis, preliminary assessment, and review process.

Macro activities of the area:

- Analyze and evaluate credit assets issues;
- Analyze and evaluate structured products;
- Responsible for the preparation of the Credit Guidelines;
- Determination of Bradesco Asset's score or rating assigned to the issuances;

- Coordination of Bradesco Assset's Credit Assets Committee;
- Monitoring of the issuance and issuers;
- Safekeeping of documentation related to the analyses;
- Periodic review of the rating of the assets present in the portfolios.

## Credit Management Management

Area participating in the credit management process and part of the Asset Management team, responsible for purchasing private securities for funds and managed portfolios. Additionally, within this process, the area has the following attributions:

- Participate in the Bradesco Asset Management's Credit Commission;
- Manage the credit assets that comprise the funds' portfolio;
- Monitor the credit market (issuers, products and trends);
- Determine the spread of operations;
- Consolidate the total demand for credit at Bradesco Asset and distribution of operations among the funds in line with the demand defined by the other managers.

## Asset Managers

The Resource Management area determines the allocation in credit assets and indicates the demands to the Credit Management area.

# Risk Superintendence

Activities of the Risk Superintendence:

- Monitor credit risk;
- Monitor the exposure limit (individual and global);
- Assess counterparty risk exposure;
- Analyze and evaluate the mark-to-market rates of the credit spread;
- Monitor the framework of all funds;
- Control the volume approved by Bradesco Asset's Fund and Portfolio Management Executive Committee vis-à-vis the verification of the total effectively purchased;
- Verify effective compliance with credit guidelines.

# Legal

The support area for credit operations has the following main attributions:

- Analyze the legal formulation of the guarantees and documentation for the acquisition;
- Reassess, upon request of the competent area, the fulfillment of the conditions for eventual execution of the guarantees;
- Preparation, execution and monitoring of the credit recovery plan.

# 7.5 Credit Risk Profiles

Bradesco Asset has a Private Credit Policy that defines risk profiles and allocation parameters. The parameters consider the internal rating assigned to the assets and the guideline observes the following principles:

- Approval by Bradesco Asset's Credit Assets Committee;
- Periodic review, or when requested by Bradesco Asset's Fund and Portfolio Management Executive Committee, due to relevant changes in the market environment or structure.

# 7.6 Pre-Acquisition Analysis, Evaluation and Review

The credit assets and the financial instruments subject to counterparty risk, before being approved and acquired, go through a process of analysis and careful evaluation observing, at least:

- Fundamental and qualitative aspects;
- Characteristics of both the issuer and the guarantor of the operation;
- The characteristics of controllers and economic group, when applied;
- Internal rating according to internal criteria;
- Internal rating criteria approved by Bradesco Asset's Fund and Portfolio Management Executive Committee;
- The non-preponderance of the rating prepared by a specialized agency;
- The preview of the documents deemed necessary;
- Analysis of the structure, characteristics of the underlying assets, indicators and other relevant characteristics in the case of a structured product;
- Review of the assets with a frequency inversely proportional to the attributed risk, not exceeding one year;
- Preparation of periodic reports.

# 7.7 Approval

The Bradesco Asset's Management of Funds and Portfolios Managed Executive Committee is responsible for approving the purchase and the volume of the credit assets to be purchased.

# 7.8 Credit Risk Monitoring

The monitoring of credit assets, as well as financial instruments subject to counterparty risk, must be carried out considering:

- The assumptions and financial indicators prepared by the asset analysis and valuation area;
- Available market rates and indicators that correlate with assets;
- Buy and sell fees;
- Credit exposures according to the fund's risk profile;
- Credit spreads;
- The documentation received;
- The main indicators of FIDCs;
- The main indicators of real estate funds.

Periodic reports must be performed.

## 7.9 Credit Recovery Process

In exceptional cases of losses for the funds, corrective action plans are prepared and monitored by Bradesco Asset's Credit Assets Committee.

# 8 Liquidity Risk

## 8.1 Definitions

**Liquidity Risk** - the possibility of the investment fund or managed portfolio not being able to easily and timely liquidate the necessary volume of funds to honor its redemptions or obligations, under any market circumstances.

**Illiquid Assets** - assets that, due to the depth or ruptures of the market, their characteristics or links with specific strategies have a low liquidity estimate.

Liquidity Ratio - the ratio of estimated liquid assets to estimated cash outflows.

**Liquidity Index in Stress Scenarios** - ratio between the estimated liquid assets and the estimated cash outflows considering market stress scenarios as hypothesis.

**Cash Outflow in Stress Scenarios** - amount of resources that the investment fund would need to support oscillations in its net fund raising in extreme situations, considering the interval of days for the payment of redemptions.

# 8.2 Liquidity Risk Management

## Active

The liquidity of the assets present in the investment fund or managed portfolio will be estimated by observing:

- The typification of financial assets;
- The metrics of trading occurring in markets;
- The analysis of the depth of the markets.

## Liabilities and Fund Characteristics

For the valuation of liabilities, the following aspects will be observed:

- The expected redemption values under ordinary conditions, calculated with consistent and verifiable statistical criteria;
- The degree of dispersion of the ownership of the quotas;
- The deadlines provided for in the regulation for payment of redemption requests;
- The fund's obligations, including expected margin deposits and other collateral.

## 8.3 Liquidity Indicators

For liquidity risk management, the fund's liquidity indicators are estimated:

- Normal market conditions;
- Market stress situations ;
- Fund concentration levels.

## 8.4 Participating Areas and Responsibilities

The Liquidity Risk management process has the participation of the areas described below, with their respective attributions and responsibilities, as defined:

## Risk Superintendence

- Establish, together with the administrator, the methodologies for Liquidity Risk;
- Evaluate the assumptions for stress scenarios;
- Analyze the behavior of the liability;
- Coordinate the Bradesco Asset's Risk Management and Internal Controls Executive Committee;
- Coordinate the Bradesco Asset's Risk Committee;
- Coordinate periodic meetings with the Directors;

- Coordinate liquidity action plan;
- Calculate the liquidity ratio;
- Prepare studies, reports and tools that contribute to the constant improvement of liquidity management;
- Monitor the guarantee margin.

## Asset Management

Buys and sells financial assets, observing the alignment between the portfolio's liquidity indicators and the estimated behavior of the fund's liabilities.

# Administrator

- Define, together with Bradesco Asset, the methodology for Liquidity Risk;
- Send the data for the daily calculation of the Liquidity ratio.

## Custody

Carry out the reporting of assets given as collateral.

## 8.5 Liquidity Risk Limits

The limits are established by Bradesco Asset's Risk Committee and reported to the Bradesco Asset's Risk Management and Internal Controls Executive Committee. The parameters will be reviewed annually, or if there is a change in the fund's investment policy.

## 8.6 Limit Extrapolation

In the case of non-compliance in funds or managed portfolios, the manager will prepare an action plan with the objective of reestablishing the minimum liquidity levels defined. The action plan must be monitored by the Risk area.

In exceptional market circumstances, caused by exogenous socioeconomic factors, which result in extreme cases of non-adherence, the Risk area will call an extraordinary meeting Bradesco Asset's Risk Management and Internal Controls Executive Committee.

# 8.7 Reports

The management, monitoring, and market risk control reports, as well as those aimed at monitoring profile adjustments, will be sent daily to the directors and all areas linked to Bradesco Asset's asset management. This process aims to ensure the transparency of risk information and the continuous acculturation of risk management.

## 9 Operational Risk

## 9.1 Definitions

**Operational Risk (OR)** - the possibility of losses resulting from internal processes, people, inadequate or flawed systems, and external events.

**Operational Risk Event** - incident that results in losses or impacts resulting from error, failure, deficiency or inadequacy of processes related to this type of risk.

**OR Cause** - reason or reasons for the occurrence of the event.

Effects of an OR event - consequences of an event related to that risk.

Types of Losses:

- Undocking (cash outflow from the company);
- Opportunity Cost (the company fails to do business due to the OR event);
- Near Miss (occurrence of an OR event that did not materialize into financial loss due to chance).

**Operational Risk Matrix** - relates the probability of the event to the financial impact and its respective gradation.

**Raw Operational Risk** - risk present without the implementation of control activities aimed at reducing its probability and/or impact.

**Residual Operational Risk** - risk remaining after the implementation of control activities that aim to reduce its probability and/or impact.

**Risk Control Self Assessment (RCSA)** - OR self-assessment tool performed by the area responsible for the process.

**Business Impact Analysis (BIA)** - a methodology that makes it possible to identify and classify the impact of critical business processes, in terms of financial loss, damage to reputation, non-compliance with laws, regulations, contracts and corporate policies.

**Monitoring of Abusive Practices** - methodology for analyzing and monitoring possible signs of suspicious operations and abusive market practices, such as spoofing, layering and insider trading.

# 9.2 Operational Risk Management

The coordination of Bradesco Asset's Operational Risk management is carried out by the Risk Superintendence. Allied to this point, it is the responsibility of each area that owns the processes to identify, evaluate, report, and be responsible for mitigating or preventing RO, as well as the preparation of their respective action plans.

It is the responsibility of the areas that own the processes to self-assess the risks of their processes via CSR, and to communicate to the Risk Superintendence about changes in their respective risk matrix.

The events that are classified above the average risk level, in addition to the action plans for this risk classification, will be made known to the Bradesco Asset's Risk Management and Internal Controls Executive Committee.

At the end of the calendar year, a summary of the OR management work carried out in the period is made available to Bradesco Asset's management body, containing the residual risk of the processes and the action plans in effect, and finalized.

For Operational Risk Management to be effective, the following procedures are followed:

**Identification of Operational Risk** - consists of identifying, (i) the operational risks of Bradesco Asset's processes and the controls associated with them; (ii) the quantitative indicators that reveal the frequency and probability of operational failures, associating them, if possible, with a value of potential financial loss and; (iii) the losses and operational risk events.

**Operational Risk Assessment** - consists of assessing the level of exposure to operational risk existing in the processes by means of a risk matrix and measurement of operational losses associated with operational risk events.

**Monitoring and Control of Operational Risk** - is carried out by following up the risk matrices, the evolution of operational losses, the behavior of the operational risk indicators, and following up the action plans.

**Operational Risk Mitigation** - is carried out from the preparation of action plans to reduce the level of exposure to operational risk in the processes by means of the implementation of improvements in their controls.

#### 9.3 Business Continuity

Business Continuity Management aims to avoid interruptions in Bradesco Asset's activities, avoid non-compliance with obligations to its clients and limit severe losses arising from operational risk. This objective is achieved by means of a Business Continuity Plan that contains the strategies to be adopted in the event of crises and recovery until normalcy returns.

The Business Impact Analysis (BIA) methodology is applied to support the elaboration of the business continuity plan and the prioritization of projects to meet new needs and/or the adequacy of existing plans.

In parallel, periodic tests are carried out to evaluate the Business Continuity plans and according to the results obtained, improvement actions are defined.

# 9.4 Participating Areas and Responsibilities

# Risk Superintendence

- Coordinate operational risk management among Bradesco Asset's areas ;
- Elaborate the methodologies to be used in the management ;
- Present the theme at the Bradesco Asset's Risk Committee and at the Risk Management and Internal Controls Executive Committee;
- Map Operational Risk in management processes;
- Identification and monitoring of Relevant Third Parties;
- Prepare the Annual Operational Risk Report;
- Perform Business Continuity management;
- Promote OR acculturation.

# Asset Management

• Allocate portfolios and send orders to the Trading area.

# Trading

• Execute orders received from managers.

# **Distribution Area - Client Service**

• Distribution of segment-specific investment funds.

## Products

• Adapt and maintain the products' infrastructure and processes aiming at reducing Operational Risk.

# Information Technology

- Assist in Business Continuity Management, as provided for in the Continuity Plan;
- Maintain the technology and infrastructure in proper working order.

# 10 Concentration Risk

# 10.1 Definitions

The Concentration Risk occurs when certain strategies, assets or financial instruments present a relevant percentage of participation in the fund or in the portfolio, representing a new source of potential loss. This risk can be related to risks of another nature such as:

- Credit Concentration Risk;
- Market Concentration Risk;
- Liquidity Concentration Risk;
- Operational Concentration Risk;
- Exposures: regulatory limits for issuers that must be observed by investment funds and managed portfolios.

# 10.1.1. Market Concentration Risk

Represents the concentration risk sub-segment present when one or more assets or financial instruments are directly or indirectly exposed to the same risk factor or to a set of factors that are correlated.

# 10.1.2. Liquidity Concentration Risk

The liquidity concentration risk in investment funds and managed portfolios can be observed under two aspects:

- The set of assets that form a portfolio, these assets can be grouped according to their liquidity over time;
- The liabilities, formed by the investors. The distribution of shareholder participation and its dynamics can reveal potential risks to the fund's liquidity.

# 10.1.3. Concentration Risk in Operational Risk

Concentration in Operational Risk is understood as an exposure or a group of exposures to operational risk with the potential to produce losses to portfolios under management.

## 10.2 Participating Areas and Their Responsibilities

## Risk Superintendence

- Elaborate the methodology;
- Define alert levels;
- Manage, analyze, and monitor control.

## Bradesco Asset Management's Risk Committee

Responsible for analyzing and evaluating funds that exceed concentration risk.

## 10.3 Methodology

Concentration Risk Management is not to be confused with the observation of concentration limits required by regulatory agencies. Concentration risk is treated in this rule as a complementary analysis that addresses other aspects of concentration which can become potential sources of loss for investors.

The approach will be specific for each fund and will depend on its investment policy and will comprise the following aspects: evaluation of sectorial concentration and evaluation of concentration by risk factor within a given market.

# 10.3.1. Concentration Risk Indicators

- Concentration index;
- Exhibitions and alerts.

## 10.4 Alerts

The costs are borne by Bradesco Asset's Risk Management and Internal Controls Executive Committee, which will decide, if necessary, on the protection measures.

**Department** 9993 / Bradesco Asset Management **Representative** Bruno Funchal

*We declare this is a free English translation of the Bradesco Asset's Risk Management Policy, classified as a public document by the Bradesco Organization.*