

The perception of bank managers from a municipality in the State of Pará on the internal control in the management of socio-environmental risk

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# The perception of banking managers from a municipality in the State of Pará on the internal control in the management of socio-environmental risk

#### Abstract

Objective(s): This study aims to analyze the perception of managers from financial institutions in the municipality of Tomé-Açu, in the State of Pará, regarding the interaction between internal control and social and environmental risk as a variable in the credit grant analysis process via descriptive research, with qualitative and quantitative approach. **Method:** Semi-structured questionnaires were applied to bank branch managers located in the municipality of Tomé-Açu, with close- and open-ended questions to collect data that were then tabulated and analyzed using the software SPSS, Excel, and IRAMUTEQ. Results: We concluded that internal control acts as a tool to help the managers of the institutions with risk analysis process, evidencing the social and environmental risk, influencing cultural changes in the organization and evaluation of the social and environmental responsibility policies. The positive perception of managers on the benefits of adopting good internal control in the management of social and environmental risks, acting as an institutional filter, stands out, so that existing risks can be minimized and controlled with the consistent use of internal control procedures. Contributions: We suggest for future surveys to be conducted with a larger number of respondents, with the possibility of extending to borrowers and all internal employees of the financial institution.

**Keywords:** Internal Control. Social and Environmental Risk. Financial Institutions.

# A percepção de gestores bancários em um município da Amazônia Paraense sobre o controle interno na gestão do risco socioambiental

#### Resumo

**Objetivo(s):** Este estudo objetiva analisar a percepção dos gestores das instituições financeiras no município de Tomé-Açu, no Estado do Pará, sobre a interação existente entre o controle interno e o risco socioambiental como uma variável no processo de análise de concessão de crédito. Método: Trata-se de uma pesquisa descritiva, com abordagem qualitativa e quantitativa. Foram aplicados aos gestores das agências bancárias localizadas no município de Tomé-Açu questionários semiestruturados contendo perguntas fechadas e abertas. Os dados coletados foram tabulados e analisados com a utilização dos softwares SPSS, Excel e IRAMUTEQ. Resultados: Concluiu-se que o controle interno atua como ferramenta de auxílio aos gestores das instituições quanto ao processo de análise de riscos, com destaque para o risco socioambiental, induzindo a mudanças culturais na organização e na avaliação das políticas de responsabilidade socioambiental. Destaca-se a positiva percepção dos gestores sobre os benefícios de um bom controle interno na gestão de riscos socioambientais atuando como filtro institucional, de modo que os riscos existentes podem ser minimizados e controlados com a utilização consistente dos procedimentos de controle interno. Contribuições: Sugere-se que pesquisas futuras sejam realizadas com quantitativo maior de respondentes, com possibilidade de estenderem-se aos tomadores de crédito e a todos os colaboradores internos da instituição financeira.

Palavras-chave: Controle Interno. Risco Socioambiental. Instituições Financeiras.



# La percepción de los gerentes bancarios de un municipio del Estado de Pará sobre el control interno en la gestión del riesgo socioambiental

#### Resumen

Objetivo(s): Este estudio tiene como objetivo analizar la percepción de los gestores de instituciones financieras del municipio de Tomé-Açu, en el Estado de Pará, sobre la interacción entre el control interno y el riesgo socioambiental como variable en el proceso de análisis de concesión de crédito. Método: Se trata de una investigación descriptiva, con enfoque cualitativo y cuantitativo. Se aplicaron cuestionarios semiestructurados que contenían preguntas cerradas y abiertas a gerentes de sucursales bancarias ubicadas en el municipio de Tomé-Açu. Los datos recolectados fueron tabulados y analizados con los programas SPSS, Excel e IRAMUTEQ. Resultados: Se concluyó que el control interno actúa como una herramienta para ayudar a los administradores de la institución en el proceso de análisis de riesgos, con énfasis en el riesgo socioambiental, induciendo cambios culturales en la organización y en la evaluación de políticas de responsabilidad socioambiental. Destacamos la percepción positiva de los gestores sobre los beneficios de un buen control interno en la gestión de riesgos socioambientales, actuando como filtro institucional, de modo que los riesgos existentes puedan ser minimizados y controlados con el uso consistente de procedimientos de control interno. Aportes: Se sugiere que futuras encuestas se realicen con un mayor número de encuestados, con posibilidad de extenderse a prestatarios y todos los empleados internos de la entidad financiera.

Palabras clave: Control Interno. Riesgo Social y Ambiental. Instituciones Financieras.

#### Introduction

Our study analyzes the perception of financial institutions managers in the municipality of Tomé-Açu, in the state of Pará, regarding the interaction between internal control and socioenvironmental risk as a variable in the process of credit grant analysis, with the relationship between financial institutions and internal control as tools for supervising economicadministrative activities and risk analysis during the procedures for granting bank credit. The discussion on socio-environmental risks has been increasingly addressed in congresses, seminars, and other meetings involving society, government, and companies.

The results may be used as a source of information on the role of internal control in the administrative scope of the entities, since the aim is to contribute to the analysis and development of activities promoted in partnership with other sectors, as well as other types of tools – such as internal audit and environmental management system — enabling us to raise the principles and values of sustainability that are adopted by financial institutions.

Internal control procedures assist in the analysis of financial activities and contribute to obtaining relevant and quality information, allowing managers to make better decisions. This study aims to verify the perception of internal control as a supporting tool for financial institutions to analyze socio-environmental risks in the granting of credit for financial and administrative activities that interfere with society and the environment. In this context, the following problem arises: what is the perception of managers from financial institutions in Tomé-Açu about internal control in the management of socio-environmental risk for granting credit?

This work is divided into five main sessions: the introduction problematizes and justifies the proposed construction, followed by the foundation, based on related studies. Subsequently, the methodology explains the methods adopted, the results present the main



findings, and the final considerations present the conclusive reflections.

#### Theoretical framework

#### **Financial Institutions**

In Brazil, the Empire implemented the European banking model. Initially, the basic activities of a commercial bank, or simply a bank, consisted of deposit and loan operations (discounts) since other services practically did not exist. The banks have, ever since, maintained in their commitment the noble characteristic of safeguarding other people's fortunes, among other financial activities (Fortuna, 2017).

In 1945, with the Decree-Law No. 7.293, the Superintendence of Currency and Credit (Superintendência da Moeda e do Crédito – SUMOC) was created to replace the inadequate inspection criteria that began in 1920 with the General Inspector of Banks (Inspetoria Geral dos Bancos). SUMOC's immediate goal was to exercise control over the money market. Numerous banks closed their activities, many others have disappeared, by mergers and incorporations, adjusting and solidifying the National Financial System (Sistema Financeiro *Nacional* – SFN).

The SFN is composed of public and private institutions and its maximum regulatory body is the National Monetary Council (Conselho Monetário Nacional – CMN). The SFN seeks to establish the relationship between agents in need of investment resources and those who can generate savings and, consequently, are able to finance the growth of the economy (Assaf Neto, 2017).

On April 25, 2014, the CMN, with the Resolution No. 4,327/2014, determined guidelines for financial institutions and other institutions authorized to operate by the Central Bank of Brazil (Banco Central do Brasil - BCB) to establish and implement the Socioenvironmental Responsibility Policy (*Política de Responsabilidade Socioambiental* – PRSA). The financial institutions regulated by BCB should observe following principles:

> Art. 1 . . . I - relevance: the degree of exposure to socio-environmental risk of the institution's activities and operations; and

> II - proportionality: the compatibility of the SERP with the nature of the institution and with the complexity of its activities and its financial services and products. (Brasil, 2014; our translation).

In 1995, the Green Protocol was signed, which, according to the Ministry of the Environment (MMA), is a letter of principles for sustainable development signed by official banks - such as Banco do Brasil (BB), Banco do Nordeste do Brasil (BNB), Banco da Amazônia (Basa), Banco Nacional de Desenvolvimento Econômico e Social (BNDES), Caixa Econômica Federal (CEF), and BCB - in which they propose to undertake policies and practices that are in harmony with the objective development that does not compromise the needs of future generations (Brasil, 2009).

The adoption of criteria focused on environmental concern in Brazilian banks allows a significant advance in terms of social and environmental responsibility, and since these banks finance economic activities of the current system, Rabelo and Lima (2009, p. 8) believe that "consequently they become co-responsible for the impacts that these activities may bring to the environment due to unsustainable exploitation of natural resources" (our translation).

In October 2002, the Equator Principles was launched – promoted by the International Finance Corporation (IFC) (the World Bank's financial branch) and the Dutch bank ABN Amro — during a meeting of executives which was being held in the City of London to discuss investments experiences in project involving social and environmental issues in emerging markets, where there are few strict environmental protection legislation (Brasil, 2009).



The principles are a series of guidelines on the socio-environmental responsibility measures financial institutions and borrowers must abide by. The latter should also adopt an Environmental Management System (EMS), fostering improvements in the relationship between society and the environment.

#### **Internal Control**

The Committee on Auditing Procedures of the American Institute of Certified Public Accountants (AICPA) presented a definition for the subject:

> Internal control comprises the organization plan and the coordinated set of methods and measures adopted by the company to protect its assets, verify the accuracy and reliability of its accounting data, promote operational efficiency, and encourage the adherence to the policy outlined by management. (Attie, 2011, p. 188; our translation)

In 1958, AICPA sought to subdivide internal control into administrative controls and accounting controls; while the former seeks to ensure that the shares reach their objectives at the lowest cost and in the best way, the accounting controls aim to give certainty to the numbers recorded and disclosed in the financial statements (Castro, 2015).

The definition of internal control in an organization can be characterized, according to Almeida (2017, p. 53; our translation), as "the set of procedures, methods, or routines with the objectives of protecting assets, producing reliable accounting data and assisting management in the orderly conduct of the company's business."

Attie (2011, p. 188; our translation) notes that in "countries with education focused on capitalist environments and effective investments, the sense of control is more flourishing and alive," thus highlighting an environment related to accounting and finance.

## **Risk Management of Financial Institutions**

The risk analysis for credit granting enables the monitoring of economic activities and their effects on society. For Rabelo and Lima (2009, p. 8; our translation), "the use of credit as a tool to enable the sustainability of resources is one of these necessary and minimal adjustments to live with environmental risks."

For Lima (2016, p. 3; our translation) risk analysis "is the process by which the various exposures, in the most different types of risks, are diagnosed, calculated and analyzed, generating controls for financial decisions in the conditions of exposed risks," and this process has undergone both technological advances and in the theory of finance, seeking improvements in risk analysis techniques.

On February 23, 2017, with Resolution No. 4,557/2017, the CMN determined guidelines for risk and capital management structures, which must be implemented by financial institutions and other institutions authorized to operate by BCB (Brasil, 2017). The head provision of Art. 2, § 1, of the resolution states that the managing structures must be:

- I compatible with the business model, the nature of the operations and the complexity of the institution's products, services, activities, and processes;
- II proportional to the size and relevance of exposure to risks, according to criteria defined by the institution;
- III adequate to the risk profile and systemic importance of the institution; and
- IV able to assess the risks arising from macroeconomic and markets conditions in which the institution operates (Brasil, 2017; our translation).

An efficient risk management is essential for the competitiveness of banks and the establishment of their strategies; while also fulfilling the objectives, mission, and values of the company (Assaf Neto, 2017). Risk management is important to: identify the company's



exposure to risk and its most fragile aspects; minimize financial losses; and protect the company's capital. Some risks are constantly verified by financial institutions (Assaf Neto, 2017; Lima, 2016; Rogante, 2009), such as: risk of change in interest rates; credit risk; market risk; operational risk; exchange risk; sovereign risk; liquidity risk; legal risk; compliance risk; and socio-environmental risk.

According to the Brazilian Association of Banks (Associação Brasileira de Bancos – ABBC), socio-environmental risks can be defined according to the possibility of losses to financial institutions due to socio-environmental damage, which are classified as: pollution, damage to human health, safety, impacts on communities, and threats to biodiversity (Associação Brasileira de Bancos, 2019).

Dzioubanov (2015) presents a reflection on social responsibility and environmental management of organizations, noting that the socio-environmental issue is a present concern and concluding that the granting of credit is dependent on socio-environmental risk.

Nogueira, Conceição, and Imbroisi (2015) study the importance of the lender in influencing the environmental behavior of the borrower, the authors conclude that there is evidence of the slow but growing incorporation of the environmental behavior of the bank loan borrowers in the analysis of the lending agent.

Thus, it is perceived that several factors influence the risk analysis by financial institutions, in particular the analysis of socio-environmental risk, which has undergone improvement in its regulations in the banking sector. Thus, Castro (2015) highlights the importance of financial institutions to adopt an internal control with a preventive focus.

# Methodology

The methodology of a study defines, in summary, how the research will be carried out, evidencing the fundamental pieces for the construction of knowledge that can respond to the problem of the research. Therefore, it is essential to discuss objectives, approach, procedures, and which methods were use, as described below.

This study was developed to describe the results obtained; according to Silva and Menezes (2000, p. 21: our translation): "descriptive research aims to describe the characteristics of a given population or phenomenon or the establishment of relationships between variables." We seek, therefore, to list the characteristics and contributions that arise from internal control procedures in relation to risk management – specifically, socioenvironmental risk – setting as object of study the perception of financial institutions managers located in the municipality of Tomé-Açu.

The research was consolidated between April and October 2019, focused on the application of a semi-structured questionnaires using the Likert Scale in a survey styled descriptive study with self-administered questionnaire, composed of open- and closed-ended questions. The questions were oriented according to the theoretical references previously raised and based on research focused on the same theme, involving the discussion about socioenvironmental risks, since it is with this information that we intended to achieve the expected results. Andrade (2010, p. 137; our translation) notes that "Data collection is a very important stage of field research, but it should not be confused with the research itself."

Data collection was conducted in six banking institutions operating in the municipality of Tomé-Açu (State of Pará), specifically with branch managers, thus not being contemplated business or administrative/financial managers. The first response was received on May 5, 2019, and the last on October 14, 2019.

A total of six branch managers answered the questionnaire, one for each institution interviewed; they were personally approached with a presentation form that explained the objectives of the research.



Microsoft Excel and Statistical Package for the Social Sciences (SPSS) Software was used to analyze, as accurately as possible, the data collected according to the answers provided by each participant, thus allowing for the comparison of the information. We sought to perform descriptive analysis of the relative percentage frequencies, which were then graphically arranged, verifying and validating the statements of the questionnaire applied.

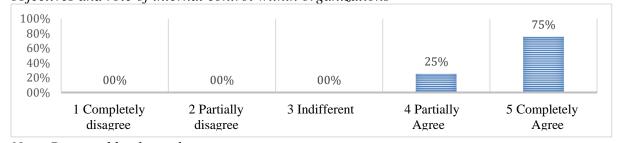
Regarding the qualitative approach, we opted for the use of IRAMUTEO, free and open-source software, developed by Pierre Ratinaud and Pascal Marchand, which allows analyzing the word cloud – a graphic representation of text segments that are frequently quoted by respondents and that interconnect – of the textual corpus (Silva, 2018).

### **Discussion of results**

## **Descriptive Statistics of the Proposed Statements**

Figures 1 to 14 show statistically the level of agreement between the managers regarding each proposed statement, presenting information regarding the perception of managers in relation to the purposes of internal control in the institution, such as the perception of socio-environmental risk and socio-environmental responsibility policies, seeking to meet the objectives of this research.

Result of the application of the questionnaire, statement 1.I - Is knowledgeable on the objectives and role of internal control within organizations



*Note. Prepared by the authors.* 

Figure 1 show that all respondents understand the importance of internal control as a way of adhering to the internal policies of their financial institutions by means of operational routines, administrative processes, or accounting controls.

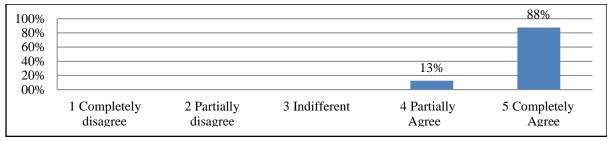
Oliveira and Soares (2018, p. 12; our translation) demonstrated that the interviewees in their research "were unanimous in informing that the principles of internal control were observed in the implementation of internal control in the financial institution," in addition to highlighting the investment in procedures that meet national and international standards, assisting in the assessment and management of risks.

Figure 2

Figure 1

*Result of the application of the questionnaire, statement 1.II – Internal control procedures* facilitate the identification of socio-environmental risks



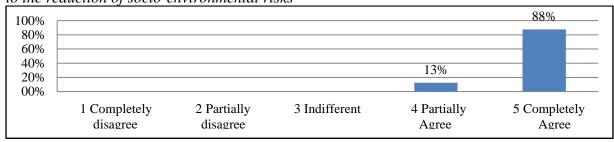


Note. Prepared by the authors.

The data show that 87.5% of the interviewees completely agree that internal control facilitates the identification of socio-environmental risks. Regarding the internal control procedures, Oliveira and Soares (2018, p. 13: our translation) found that "they are developed together with the various management areas of services, products, and processes of the Organization, whose adherence tests are applied with the required periodicity."

Figure 3

Result of the application of the questionnaire, statement 1.III – Internal control contributed to the reduction of socio-environmental risks



Note. Prepared by the authors.

Notably, 87.5% of the respondents completely agree that internal control contributed to the reduction of social and environmental risks, but 12.5% draw attention by partially agreeing with this statement.

The research by Oliveira and Soares (2018, p. 19; our translation) identified that "The main risks presented are based on control procedures that reduce them to acceptable levels," thus, we can infer, according to the managers' perception, that internal control contributes significantly to risk management, especially in relation to socio-environmental risks, enabling banking institutions to achieve their objectives and goals outlined in the organization's strategy.

Figure 4

Result of the application of the questionnaire, statement 1.IV-The internal control system facilitates the analysis of information between sectors of the organization

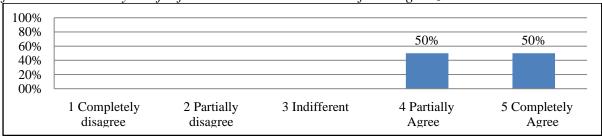


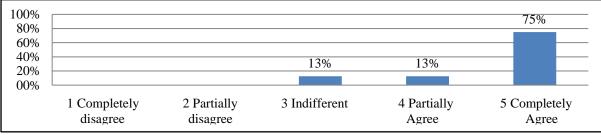


Figure 4 shows that 50% of the interviewees completely agree with the statement, while 50% partially agree that the internal control system facilitates the analysis of information between the sectors of the organization. We understand this as a positive scenario for organizations to use the internal control system, enabling the exchange of information between sectors so that decisions are made with agility. After conducting his research, Silva (2017, p. 114; our translation) shows that "to have compliance, a perfect harmony is necessary, between the internal controls, aiming toward compliance in the processes allied to a perfect internal monitoring by internal audit in order to mitigate the risks."

Figure 5

Result of the application of the questionnaire, statement 1.V- The adoption of internal control procedures caused financial institution investing in socio-environmental

responsibility policies



Note. Prepared by the authors.

The results showed that 75% of the respondents completely agree, while 12.5% partially agree that the adoption of internal control procedures has led to investments in socio-environmental responsibility policies by the financial institution, demonstrating that the adoption of such procedures has encouraged financial institutions to invest in their socio-environmental responsibility policies since internal control has contributed to risk management and verification of the adopted policies.

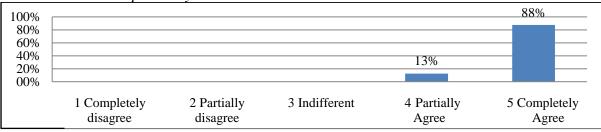
On the other hand, 12.5% declared themselves indifferent to this statement, which allows us to infer that the adoption of internal control procedures may or may not influence financial institutions to invest in SERP.

Carlos and Morais (2017, p. 9; our translation) found that, in the banking sector entities regarding the environmental aspects, "there are effective control actions regarding the use of renewable resources, the aspects of pollution, energy, water, paper consumption, in addition to the emission of waste and concern with climate change."

# Figure 6

Result of the application of the questionnaire, statement 1.VI-corporate governance, risk management, and compliance in the internal control system allows information to be safely

transmitted to the supervisory bodies



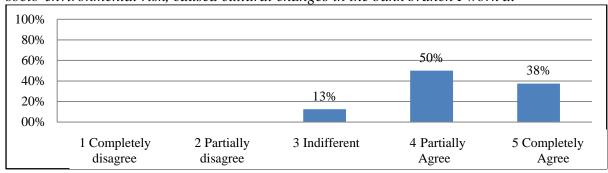


Among respondents, 87.5% completely agree, while 12.5% partially agree that corporate governance, risk management and compliance in the internal control system ensure that the transmission of information to supervisory bodies occurs efficiently.

Oliveira and Soares (2018) identified that, when there are improvements in internal control – regarding the adoption of rules and procedures for risk structures – along with improvements in the interaction of corporate governance and the performance of the risk committee, the management of events is also improved on, enabling the institution to create mechanisms to mitigate risks.

Figure 7

Result of the application of the questionnaire, statement 1.VII – Internal control, regarding socio-environmental risk, caused cultural changes in the bank branch I work at



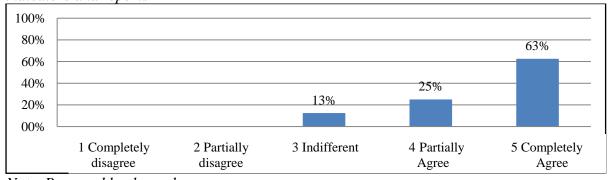
Note. Prepared by the authors.

When asked about the ability of internal control to change the organizational culture of the institution in which they work, regarding socio-environmental risk, 37.5% of the interviewees completely agree and 50% partially agree, while 12.5% declare themselves indifferent.

Silveira (2018, p. 52; our translation) identified that "all macro themes present in the institution's sustainability report are also present in the daily life and values of employees when thinking about sustainability," and based on these data it is inferable that the sustainable practices adopted in internal control procedures influence organizational culture, directly or indirectly.

Figure 8

Result of the application of the questionnaire, statement 1.VIII – The use of internal control system influences improvements in the quality of information generated in performance indicators and reports



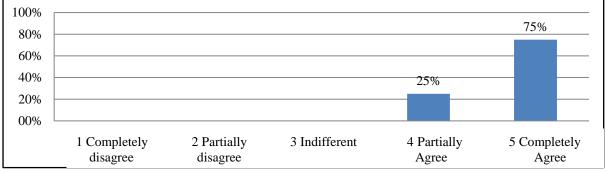


Regarding the perception of managers on the positive influence the adoption of internal control may have on the quality of information provided in performance indicators and reports, 62.5% completely agree, 25% partially agree and 12.5% declare themselves indifferent.

In her research on social and environmental responsibility described in sustainability reports, Franklin (2014, p. 55; our translation) states that such reports are the "Main tool for promoting the social and environmental responsibility actions of the institution," which allows internal and external users to access the economic, social, and environmental performance generated by the institution when they adopt a good internal control system. Performance information management becomes increasingly efficient, improving the quality of the information that are generated in reports and performance indicators and assisting in the decision making of its users, in a timely manner.

Figure 9

Result of the application of the questionnaire, statement 1.IX – Knowledgeable on the Institution's Social and Environmental Responsibility Policy



Note. Prepared by the authors.

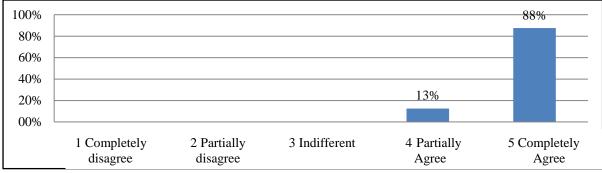
All managers stated that they were aware, even if partially, of the institution's internal policy of social and environmental responsibility. The results, however, may be limited considering the importance of this knowledge for the development of the activities of an agency manager.

In the study by Siemionko (2010, p. 40; our translation), when questioning the interviewees if they knew the bank's sustainability policy, "only 62% said they knew, 36.5% said they did not know, and 1.6% are indifferent to the issue." Since various branches of activity are directly or indirectly related to some type of socio-environmental risk, it is essential for employees to be aware of the SERP adopted by the institution.

# Figure 10

Result of the application of the questionnaire, statement 1.X-It is important for the bank to create actions and programs focused on the socio-environmental issue





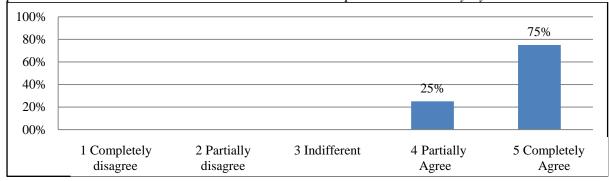
Note. Prepared by the authors.

All the interviewed managers agreed that it is important to adopt measures and programs related to the socio-environmental issue. By adopting such measures, the institutions improve the discussion on the socio-environmental issues in organizations, regardless of their size or the field of activity.

In the research by Siemionko (2010), 98% of respondents declared as important the creation of campaigns and programs focused on the socio-environmental issue. Thus, it can be inferred that, regardless of the financial institution, managers highlight the importance of creating actions aimed at social and environmental responsibility.

Figure 11

Result of the application of the questionnaire, statement 1.XI - It is relevant that the internal public knows the socio-environmental balance sheet published annually by the bank



*Note. Prepared by the authors.* 

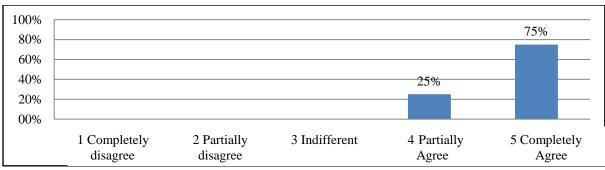
Of the managers who answered, 75% completely agree, while 25% partially agree. Thus, we can affirm that managers agree with the statement; when the team follows the actions developed by the organization, it facilitates the understanding of the functions performed regarding the analysis of socio-environmental risk.

Franklin (2014, p. 55; our translation) points out that, regarding the financial institutions, the Sustainability Report is drawn "closer to their related audience, allowing many employees to become aware of a variety of information that they would not have access to if they did not have the opportunity to explore the document."

Figure 12

Result of the application of the questionnaire, statement 1.XII – In order for credit to be granted for financing (investment projects), do you agree that the client must be accountable for their socio-environmental responsibility and sustainability practices





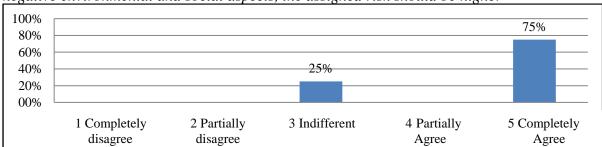
Note. Prepared by the authors.

Faced with the statement that questions whether clients should be accountable for their practices of socio-environmental responsibility and sustainability in case of the analysis and release of credit for financing, 75% of the respondents completely agree and 25% partially agree.

In her research, Siemionko (2010, p. 47; our translation) identified that 87.5% of respondents "say that it is important and necessary to account for the practices of social and environmental responsibility and sustainability by borrowers." The data shows the importance of the client accounting for their actions to the financial institution at the time of the credit request, facilitating the analysis of risks.

Figure 13

Result of the application of the questionnaire, statement 1.XIII – If the bank began to analyze the socio-environmental criteria for credit analysis for loans and the client presented negative environmental and social aspects, the assigned risk should be higher



Note. Prepared by the authors.

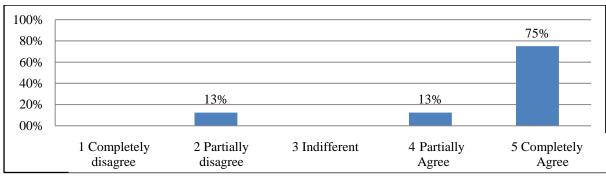
As a result, 75% of the respondents completely agree, while 25% are indifferent to the Bank assigning higher risk, using mechanisms for categorizing the field of activity, in case the client presenting negative socio-environmental aspects.

In Silveira's (2018) survey, respondents reported that, when applying a questionnaire to the borrowers and identifying that the company has risky activities – such as companies that use the supply of raw material from logging – they warn the borrowers about this type of activity.

## Figure 14

Result of the application of the questionnaire, statement 1.XIV – When lending money, the bank is also sympathetic to the way it is used, assuming responsibility for the social and environmental impacts of financial services, for current and future generations





*Note. Prepared by the authors.* 

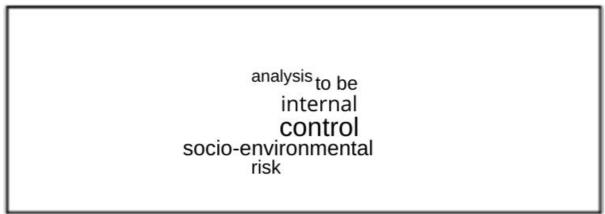
The results show that 75% completely agree and 12.5% partially agree that, when lending money, the bank is also sympathetic to the way it is used, that is, it takes responsibility for the socio-environmental impacts financial services may have for the current and future generations. Thus, the bank becomes sympathetic to the actions of the borrowers since it acts as an intermediary of financial transactions when granting credit. In Siemionko's research (2010, p. 50), 80% of managers answered that they "perceive a concern of the institution when being responsible for the way the borrowed money is used."

# Presentation and Analysis of the Qualitative Research Results

The IRAMUTEQ software was used to analyze the subjective responses collected from the respondents in the application of question 2.I – "Comment on the relationship between internal control and socio-environmental risks," highlighting the graphical representation of the frequency in which the main words are quoted from a word cloud (Figure 15).

Figure 15

Word cloud of managers' perception of the relationship between internal control and social and environmental risks



*Note. Prepared by the authors.* 

In the word cloud, the emphasized terms used by respondents are plotted according to how often they are mentioned. As shown in Figure 15, the main words highlighted in the textual corpus are "control," "internal," "risk," "socio-environmental," "to be/being," and "analysis."

By observing these data, we can infer that the functions performed by internal control and the analysis of socio-environmental risk have direct and indirect relationships in the process of granting credit in financial institutions, as demonstrated by the GR01 respondent:



"They're directly connected. Internal control is fundamental in mitigating social and environmental risks."

Table 1

Sample of respondents' answers to auestion 2.I

2.I - Comment on the existing relationship between internal control and socio-environmental risks		
Respondent	Submitted response	
GR01	They're directly connected. Internal control is fundamental in mitigating social and environmental risks.	
GR04	Internal control functions as an institutional filter, in which it can be identified whether socio- environmental policies are in accordance with the analyses of the identified risks	
GR05	I believe that there is a direct relationship between internal controls and socio-environmental risks in the post-contract stage of granting credit, because the first contact with the client (committed or not to social and environmental issues) occurs at the time of customer service.	
GR08	The bank is increasingly concerned about the environment, conducting advertisements monthly on the subject	

*Note. Prepared by the authors.* 

For respondent GR05, "there is a direct relationship between internal controls and socio-environmental risks in the post-contract stage of granting credit, because the first contact with the client (committed or not to social and environmental issues) occurs at the time of customer service." Silveira (2018, p. 59) verified in her study that "Everyone mentioned that when they encountered the risk that may be subject to regularization, the request for this analysis is forwarded to the responsible area located in a sector of the Bank located in the Administrative Center."

Thus, understanding the perception of managers regarding social and environmental risks and internal control, internal control performs functions directly linked to risk after the customer service process, and measures should be carried out to monitor and oversee the client's activities as part of the credit granting process.

After surveying and tabulating the answers regarding question 2.II – "Comment on how the credit granting process occurs in this institution," the word cloud was elaborated (Figure 16).

Figure 16

Word cloud of managers' perception of the credit granting process

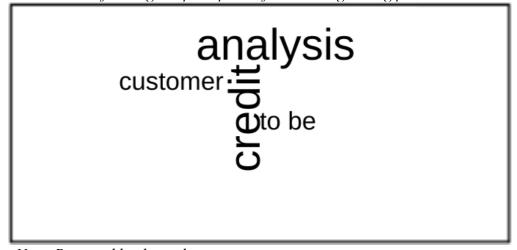




Figure 16 shows that the words emphasized by the respondents were "analysis," "credit," "to be/being," and "customer." It is evident that managers perceive the importance of performing customer credit analysis to verify related risks.

Table 2

Sample of respondents' answers to question 2.I

2.II - Comment on how the credit granting process occurs in this institution		
Respondent	Submitted response	
GR01	Analyses of key points are carried out: customer credit limit; ability to pay; socio-environmental risk.	
GR04	The process takes place upon receiving a proposal, in which the credit object and its destination are evaluated, if it is for purposes involving the environment, projects by agronomists technicians are required for measuring the necessary fundamental resources and the impact that will be generated to the exploited environment	
GR05	Mostly through the analysis of client credit, potential indebtedness. In the granting of microcredit, social, fiscal, and environmental issues are also analyzed for the release of credit to the client.	
GR06	Risk, ability to pay, offered warranty, registration updated, restrictive and finally approval of credit.	

Note. Prepared by the authors.

When identifying the risks involving the client and the financial institution, the GR04 respondent reports that, when identifying a socio-environmental risk, "projects by agronomists technicians are required for measuring the necessary fundamental resources and the impact that will be generated to the exploited environment," that is, it highlights the importance of a qualified professional to verify the possibility of the occurrence of the risks, making it possible to verify what measures can be taken to mitigate the risk in evidence.

The research by Siemionko (2010, pp. 44-45: our translation) showed that "41.2% of respondents cannot perceive the consideration of environmental dimensions in the credit analysis process," creating an alert compared to economic and financial risks. Nonetheless, the current data show that there has been progress regarding the perception of bank employees about the importance of the socio-environmental dimension in credit analysis.

Respondent GR05 adds that "in the granting of microcredit, social, fiscal, and environmental issues are also analyzed for the release of credit to the client," that is, in order to approve the credit to the client, first several factors must be analyzed, characterizing the client who is seeking financial resources, factor that helps the financial institution make the best decisions.

After conducting a survey and tabulating the answers related to question 2.III – "Name which business fields are frequently analyzed by the institution," the word cloud in Figure 17 was elaborated.

Figure 17

Word cloud on which fields of activities are analyzed by the institution

trade service



As shown in Figure 17, in relation to the field of business activity that are frequently analyzed by the institution, according to the perception of managers, "commerce" and "service" stood out.

Table 3

1 Sample of respondents' answers to question 2.1

2.III - Cite the field of business frequently analyzed by the institution	
Respondent	Submitted response
GR01	Forestry, Internet Provider, Retail Trade, and Non-Commercial Association.
GR03	Credit in the scope of family farming, rural individuals, and legal entities.
GR04	Those involving the environment, commercial, agro-industrial, service providers are analyzed.
GR05	Various retailers: foodstuffs, clothing, furniture; gas stations; companies specializing in agricultural production: palm oil, black pepper, regional fruits.

*Note. Prepared by the authors.* 

In addition to trade and service provision, the respondent GR01 highlights the "forestry" field and the GR03 respondent highlights credit in the agricultural sector, both for individuals and for legal entities. In a given financial institution, Silveira (2018, p. 58; our translation) identified that questionnaires are applied "according to the classification of the segment: agribusiness, construction, manufacturing, transportation. For companies not included in the segments mentioned, simplified or generic models apply."

Since credit risks related to socio-environmental risk are constant in sectors involving rural activity, Silveira (2018, p. 54; our translation) stated that "financing in embargoed areas and environmental preservation becomes a major risk." Notably, there is a concern to verify the risks that are linked to the credit granting process, which involves both the institutions and the borrowers, regardless of where the institution is inserted, since it is a responsibility that involves several risk factors.

#### Final considerations

This study was limited to analyzing the perception of managers from financial institutions in the city of Tomé-Açu, in the State of Pará, regarding the interaction between internal control and socio-environmental risk as a variable in the process of credit grant analysis, via the application of a questionnaires during field research. Tabulation and data analysis software, such as Microsoft Excel and SPSS, were used for the graphical expression of quantitative data on the agreement of managers regarding the statements of the applied questionnaire, making it possible to infer about the perception of managers and correlate the results with previous studies.

We were able to observe that social and environmental responsibility is tied to all sectors, regardless of the size or field of the company, involving its internal and external agents. We noticed that managers perceive a close relationship between internal control and the socioenvironmental risk variable in the financial institutions of Tomé-Açu.

The managers presented an understanding that the adoption of internal control has been an important procedure in assisting the management of social and environmental risks in the institution, especially in activities that occur after customer service. We showed, with the IRAMUTEQ software, that the main business activities that seek the financial institution to obtain credit are related to trade and service provider. The respondents also highlighted other activities, such as: gas stations, companies specialized in agricultural production of palm oil, black pepper, and regional fruits.



Managers play a fundamental role in relation to the guidelines of internal control and socio-environmental risk in financial institutions, and the answers obtained by the study show that the respondents agree on the importance of their action in the monitoring of socioenvironmental policies.

This study contributes to the academic society and organizational sectors by showing that internal control has been fundamental in the analysis and mitigation of socioenvironmental risks, especially in activities involving trade and service providers, acting as an institutional filter, based on the premise that existing risks can be minimized and controlled with the consistent use of internal control procedures.

We highlight the positive perception of managers regarding the benefits of adopting efficient internal control in the management of social and environmental risks. We suggest for future research to be conducted with a higher number of respondents, with the possibility of extending the sample to borrowers and all internal employees of the financial institution.

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