



ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) PRACTICES AND ORGANIZATIONAL RESILIENCE IN CREDIT UNIONS

PRÁTICAS ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) E RESILIÊNCIA ORGANIZACIONAL EM COOPERATIVAS DE CRÉDITO

PRÁCTICAS AMBIENTALES, SOCIALES Y DE GOBERNANZA (ESG) Y DE RESILIENCIA ORGANIZACIONAL EN COOPERATIVAS FINANCIERAS

ABSTRACT

Objective: This study aims to investigate the correlation between ESG practices and the organizational resilience of credit unions.

Design and methodology: This study utilizes a qualitative approach to examine, through thematic analysis, the annual sustainability and social responsibility reports published by the Sicredi and Unicred cooperatives between 2015 and 2021.


Results: Both cooperatives in the study aimed to highlight their commitment to ESG issues, either through proactive practices or through compliance with regulations or resolutions. In addition, the analysis revealed the implementation of innovations and improved performance, even in the midst of the COVID-19 pandemic.

Implications: The findings suggest that ESG practices are associated with credit union organizational resilience, in terms of performance and innovation.


Limitations: While there is an indication of a positive influence between ESG practices and credit union organizational resilience, there were no tests to confirm the relationship. This creates opportunities for further research.

Originality/value: In a crisis-ridden scenario, questions arise about the interaction between ESG practices and organizational resilience. At the same time, credit unions are gaining importance in the national financial system, while adhering to the social principle of supporting their respective communities.


Keywords: ESG practices; Organizational Resilience; Credit Unions.

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RESUMO

Objetivo: Este estudo tem como objetivo explorar a relação entre as práticas ESG e a resiliência organizacional em cooperativas de crédito.

Design/metodologia/abordagem: Utilizando uma abordagem qualitativa, esta pesquisa documental





examina os relatórios anuais de sustentabilidade e responsabilidade social publicados pelas cooperativas Sicredi e Unicred entre 2015 e 2021, por meio de uma análise temática.

Resultados: Ambas as cooperativas investigadas buscaram evidenciar o compromisso com os aspectos ESG, seja por meio de práticas proativas ou da conformidade com normativas, ou resoluções. A análise realizada também destacou a introdução de inovações e a melhoria de desempenho, mesmo durante a crise pandêmica de COVID-19.

Implicações: Os resultados indicam que as práticas ESG estão relacionadas à resiliência organizacional de cooperativas de créditos, em termos de desempenho e de inovação.

Limitações: Apesar de uma influência positiva entre práticas ESG e resiliência organizacional das cooperativas ser conjecturada, a relação não foi testada, o que abre caminhos para pesquisas futuras.

Originalidade/valor: Em um cenário marcado por crises, surgem questões sobre a interação entre as práticas ESG e a resiliência das organizações. Ao mesmo tempo, as cooperativas de crédito ganham cada vez mais espaço e relevância no sistema financeiro nacional, aderindo ao princípio social de apoio à comunidade onde operam.

Palavras-chave: Práticas ESG; Resiliência Organizacional; Cooperativas de Crédito.

RESUMEN

Objetivo: Este estudio tiene como objetivo explorar la relación entre las prácticas ESG y la resiliencia organizacional en las cooperativas financieras.

Diseño/metodología/enfoque: Utilizando un enfoque cualitativo, esta investigación documental examina los informes anuales de sostenibilidad y responsabilidad social publicados por las cooperativas Sicredi y Unicred entre 2015 y 2021, a través de un análisis temático.

Resultados: Ambas cooperativas investigadas se esforzaron por demostrar su compromiso con los aspectos ESG, ya sea a través de prácticas proactivas o del cumplimiento de normativas y resoluciones. El análisis realizado también resaltó la introducción de innovaciones y la mejora del desempeño, incluso durante la crisis pandémica de COVID-19.

Implicaciones: Los resultados indican que las prácticas ESG están relacionadas con la resiliencia organizacional de las cooperativas de crédito, en términos de desempeño e innovación.

Limitaciones: A pesar de una influencia positiva entre las prácticas ESG y la resiliencia organizacional de las cooperativas, la relación no se probó, lo que abre

camino para investigaciones futuras.

Originalidad/valor: En un escenario marcado por crisis, surgen interrogantes sobre la interacción entre las prácticas ESG y la resiliencia de las organizaciones. Al mismo tiempo, las cooperativas de crédito están ganando cada vez más espacio y relevancia en el sistema financiero nacional, apegándose al principio social de apoyar a la comunidad donde operan.

Palabras claves: Prácticas ESG; Resiliencia Organizacional; Cooperativas Financieras.

INTRODUCTION

The study of organizational strategy is concerned with explaining the success or failure of firms (Rumelt et al., 1994). Similarly, the study of resilience aims to understand the differential impact of external crises on organizations (Burnard et al., 2018). Organizational resilience refers to the ability to anticipate, avoid, or adapt to shocks (Ortiz-de-Mandojana & Bansal, 2016). Resilience is crucial in crisis management as it aims to address strategic misalignment and enable organizations to adapt to unexpected events (Williams et al., 2017). However, it is important to recognize that the link between predictors and resilience may not be automatic (Viana et al., 2023). Failure to consider the factors that contribute to resilience could lead to viewing it as merely a process of adaptation, which is only one of many possibilities for organizations (Burnard et al., 2018).

Considering different types of shocks (Miranda & Hoffmann, 2021), ranging from those caused by natural forces to economic and, more recently, health shocks, it can be said that being resilient is an additional requirement for organizations, in addition to many others, such as being transparent and sustainable (Desjardine et al., 2019). Some stakeholders (e.g., the local community, consumers, and shareholders) are increasingly demanding compliance with obligations and the adoption of voluntary measures that integrate environmental, social and governance (ESG) practices into business strategies (Desjardine et al., 2019). ESG-driven management implies the achievement of corporate goals such as combating climate change, reducing environmental impacts, improving organizational transparency, and strengthening social relationships and accountability (Bergamini, 2021), both for shareholders and the community.



This makes sustainability an essential topic within organizations and one that is valued and discussed in the corporate environment (Costa & Ferezin, 2021). As a result, Dicuonzo et al. (2022) state that sustainability enables the improvement of future quality of life. Desjardine et al. (2019) state that organizations with ESG practices are more efficient in the face of external pressures and recover quickly from shocks. In other words, companies that adopt social and environmental practices with a long-term vision tend to be more resilient (Ortiz-de-Mandojana & Bansal, 2015).

This topic is frequently examined in relation to publicly traded companies with shareholders. However, it raises the question of whether this extends to other forms of organizations, such as credit unions. To address this, our research focused on cooperatives as they have demonstrated effectiveness in achieving sustainability goals and objectives (Petry & Froehlich, 2022).

However, cooperatives exhibit heterogeneity in their approach to ESG practices. With respect to credit unions, Viana et al. (2018) observe a lack of consideration for the socio-environmental impact of this industry, which poses a challenge for fostering ESG engagement. Conversely, Petry and Froehlich (2022) emphasize the correlation between sustainability and cooperativism, grounded in its guiding principles. The principles of cooperativism internationally encompass voluntary membership, democratic control by members, participation in the organization's economic activities, autonomy and independence, education, intercooperation, and concern for the community (International Cooperative Alliance, 2023). These principles are related to the Sustainable Development Goals (SDGs) and were created before them; and cooperatives' actions towards social and environmental responsibility reflect these principles. The inquiry now becomes whether this association results in resilience.

With this in mind, the purpose of this study is to assess the relationship between ESG practices and organizational resilience in credit unions. We utilized a thematic analysis approach to investigate two credit unions' reports published from 2015 to 2021 in order to conduct our documentary research. Our findings contribute to the strategy literature by demonstrating a connection between the implementation of ESG practices and the ability of credit unions to

maintain organizational resilience.

Our study is composed of five major sections, starting with this introduction. Section 2 explores the literature on ESG practices, organizational resilience, and their interrelation. Subsequently, Section 3 elucidates the research procedures, and the findings are detailed and discussed in Section 4. Lastly, Section 5 outlines the conclusions, limitations, and recommendations for future research.

THEORETICAL FRAMEWORK

Environmental, Social and Governance (ESG)

Corporate sustainability has been a topic of interest for some time, as demonstrated in the research by Antolín-López et al. (2016). ESG practices provide one way of measuring this type of sustainability (Buallay, 2019). The term ESG was initially coined in the United Nations conference report titled *Who Cares Wins: Connecting Financial Markets to a Changing World*, in 2004. The United Nations organized this conference to address financial institutions and other relevant groups about corporate policies that integrate and improve ESG aspects in the management of assets and financial markets (Dechow, 2023).

Environmental (E) refers to a company's capacity to preserve natural resources during its operations, reducing the likelihood of environmental damage. Social (S) refers to a company's ability to cultivate trust and guarantee the well-being and respect of its employees. Lastly, Governance (G) pertains to a company's policies and ability to manage the interests of its stakeholders, including shareholders and customers, by enhancing the transparency of organizational information (Dicuonzo et al., 2022). Dechow (2023) points out that ESG practices offer opportunities to improve business performance, and failure to do so can become a risk factor for companies and increase the cost of acquiring resources.

According to Sierdovski et al. (2022), the emergence of ESG concerns is contingent upon concrete practices in organizations. Consequently, it is essential to gauge the efficacy of ESG practices pertaining to corporate sustainability in addition to financial performance. Additionally, corporations with superior sustainability ratings become more attractive to investors, consumers, and society (Antolín-López et al., 2016;



Raghunandan & Rajgopal, 2022) and can gain competitive advantages.

Antolín-López et al. (2016) determined that firms with significant sustainability influence and positive economic, social, and environmental outcomes often develop their own sustainable performance metrics for different stakeholders. In this discussion, Bergamini (2021) adds that the social system of stakeholders must be considered in order to maximize value creation for the greatest number of them and not only for the company's shareholders. Notably, research by Raghunandan and Rajgopal (2022, p. 829) suggests that self-described "ESG funds" do not seem to meet stakeholder demands when composed of companies with negative environmental impacts.

Rosati and Faria (2019) suggest that organizations aligned with the SDGs are mainly located in countries that are particularly vulnerable to climate change. In this sense, implementing ESG practices can contribute to achieving the SDGs. Khaled et al. (2021) mapped the SDGs and their relationship to ESG aspects, as depicted in Figure 1. In the environmental aspect, the authors highlight the integration with the goals of sustainable economic development and adaptation of companies to climate change. The social aspect is centered on addressing social inequalities and hunger, and promoting sustainable economic growth. The governance aspect includes the integration of economic development goals, innovation, and the quest to increase diversity in top management and on the boards of organizations (Khaled et al., 2021). In this way, ESG practices and the contribution of organizations to the achievement of the SDGs can be integrated.

Figure 1. Mapping of SDG targets in relation to ESG

Environmental (E)			Social (S)			Governance (G)		
2. FOMECOR SUSTENTÁVEL	3. SAÚDE BEM-ESTAR	6. ÁGUA POTÁVEL E LIMPEZA	1. ERADICAÇÃO DA POBREZA	2. FOMECOR SUSTENTÁVEL	3. SAÚDE BEM-ESTAR	5. IGUALDADE DE GÊNERO	12. CONSUMO E PRODUTOS RESPONSÁVEIS	17. PARCERIAS PARA DESENVOLVIMENTO
7. ENERGIA LIMPA E ACESIVEL	8. TRIBUTAÇÃO E CRESCIMENTO ECONÔMICO	9. INDÚSTRIA, INOVAÇÃO E INFRAESTRUTURA	4. EDUCAÇÃO DE QUALIDADE	5. IGUALDADE DE GÊNERO	8. TRIBUTAÇÃO E CRESCIMENTO ECONÔMICO			
11. Cidades e Comunidades Sustentáveis	12. Consumo e Produtos Responsáveis	13. Ação Contra a Mudança Global do Clima	10. Redução das Desigualdades	12. Consumo e Produtos Responsáveis	16. Paz, Justiça e Fortes Instituições			
14. Vida na Água	15. Vida Terrestre	17. Parcerias para Desenvolvimento	17. Parcerias para Desenvolvimento					

Source: Adapted from Khaled et al. (2021)

Organizational Resilience

Studies on resilience cover different levels of analysis, such as individual and organizational. At the individual level, resilience refers to a trait that enables individuals to cope with difficulties and uncertainties arising from a worsening scenario (Conz & Magnani, 2020). At the organizational level, resilience management enables performance measurement to identify and enhance the adaptability of the entity (e.g., company, association, club) in responding to external shocks (Desjardine et al., 2019). In order to achieve the proposed objective, this study examines resilience at the organizational level.

Bravo and Hernández (2021) define organizational resilience as the combination of measures that encompasses an organization's characteristics, capabilities, and skills, enabling it to withstand and recover from external shocks that jeopardize its continuity. The authors indicate that organizational resilience can be perceived in three ways: (i) as a characteristic of the organization, (ii) as a result of the organization's activities, and (iii) as a measure of the disturbances that an organization can face. Additionally, the organizational response is assessed by observing the organization's performance before and after the shock (Read, 2005).

At the organizational level, strategic resilience views the organization as a system capable of withstanding and overcoming external shocks while converting threats into opportunities that create competitive advantage (Woods, 2015). Consequently, enhancing organizational resilience is associated with the organization's capacity to confront and adjust to market uncertainties and external shocks (Bravo & Hernández, 2021).

Hillmann and Guenther (2021) state that companies can only be considered resilient if there is some clarity about the concepts that define resilience. The authors point out that organizations are able to assess, develop and improve their business by improving their performance in the long term (see Hillmann & Guenther, 2021). Maletič et al. (2018) suggest that organizations with comparable capabilities, performance, and activities may adopt varied techniques and management methods for their operations, contingent on their chosen strategy.

Duchek (2020) conceives organizational



resilience as a process consisting of three stages: anticipation, coping, and adaptation, each of which is influenced by the availability of social factors and organizational responsibility. Under this definition, resilience is viewed as a long-term concept (Conz & Magnani, 2020) that requires management over time (Desjardini et al., 2019). Resilience allows companies to overcome crises, handle stress, innovate constantly, and quickly adapt to change (Duchek, 2020). Duchek (2020) also views organizational resilience as a sustainable competitive advantage that requires development.

ESG and Organizational Resilience

Expanding upon the cooperative sector, Cabo and Rebelo (2013) demonstrate that in times of crisis, achieving higher performance and economic and social development in credit unions demands positive stakeholder mobilization. According to the authors, crisis management must include ESG practices (Cabo & Rebelo, 2013). The authors conclude that banking cooperatives exhibit superior performance in social responsibility, thus enhancing sustainability.

Markman and Venzin (2014) examine the measurement of resilience and financial performance during economic crises in banks. They distinguish highly resilient firms from less resilient ones based on financial volatility. The authors conclude that firm performance is crucial as it creates opportunities and provides resources for growth. Resilience has a two-fold impact on a firm. On the one hand, resilience can affect a firm's long-term financial performance (Markman & Venzin, 2014), and on the other hand, it can provide a firm with an exogenous perception of being resilient (Williams et al., 2017).

Some studies examine the relationship between ESG practices and organizational resilience. Maletič et al. (2018) aim to clarify the role of resilience in times of crisis in the relationship between ESG practices and organizational performance. The authors suggest that companies committed to innovating their business models toward sustainability must consider periods of contingency. The outcomes indicate that there is a favorable correlation between sustainability practices and firm performance. In addition, internal (long-term orientation and proactivity)

and external (uncertainty and competitiveness) contingency factors play an important role in the research relationship.

According to Filippi (2018), respecting the principles of cooperativism demonstrates responsibility and contributes as an internal tool for development. Moreover, the author argues that cooperatives aim to strengthen social ties with their members in order to enhance their business model. Desjardini et al. (2019) studied the relationship between resilience and ESG practices during the 2008 global financial crisis. The study results highlight a strong vision of corporate governance, community engagement efforts, supportive relationships, and environmental policies in the companies studied. The authors also propose that older organizations demonstrate greater resilience compared to their younger counterparts due to their long-term focus on economic crises.

Petry and Froehlich (2022) address the issue of social and environmental sustainability in the strategic plan of a credit union unit. These authors report that the social initiatives of the reviewed unit are perceived positively by stakeholders, but indicate that environmental practices are more challenging for this type of organization. Furthermore, the authors conclude that the motivation for investing in socio-environmental sustainability is to achieve cooperative member satisfaction and build a better community, thus contributing to the progress of the organization (Petry & Froehlich, 2022).

In this context, the relevance of this study is based on a few aspects: (i) the interest in the topic is recent and growing in academia. A search on the SPELL indexer (spell.org.br) with the term "ESG" in the title yielded 14 papers, the first of which was published in 2021; (ii) ESG research has focused on the study of companies listed on the stock exchange or in global markets (Costa & Ferezin, 2021). Studying credit unions entails examining a non-traded industry with localized presence; (iii) research on resilience is related to the territory (Hoffmann et al., 2017), but this research focuses on studying a credit union that has a strong presence in the territory in which it is located, but does not take advantage of the common benefits that the territory offers to manufacturing companies (Miranda & Hoffmann, 2021, Hoffmann et al., 2017, Viana et al., 2023); and



(iv) although there is research on ESG practices and organizational resilience, it primarily pertains to companies in developed countries and is focused on the financial crisis of 2008-2010 (e.g., DesJardine et al., 2019; Ortiz-de-Mandojana & Bansal, 2016). This study aims to fill this gap by exploring the relationship between these constructs in Brazilian cooperatives, a developing economy, specifically in light of the shock caused by COVID-19.

RESEARCH METHOD

Research characterization, contextualization and case selection

This study is descriptive and qualitative, based on a comparative analysis of two credit union cases. Chosen cases are significant to comprehend the discussed phenomenon and constitute a multiple case study (refer to Eisenhardt, 1991).

In line with the research objective, this empirical investigation focuses on credit unions, which have gained significance and expanded their influence in the Brazilian financial market in recent years (Bacen, 2023). Although credit unions collectively represent less than 5% of the total assets of the National Financial System, they are responsible for over 26% of the service network, as reported by the Brazilian Confederation of Credit Unions' (Confabras, 2023) second-quarter 2023 data compilation.

As alternative credit institutions and governed by the principles of cooperativism, cooperatives help to promote territorial development through the formation of savings, loans and microcredits for investment in local businesses (see Bacen, 2023). Thus, the fulfillment of obligations in the financial market by cooperatives not only allows the investment of resources and the assumption of risks, but also directly benefits the community in which they operate, contributing to job creation and income distribution (Jacques & Gonçalves, 2016).

The two cooperatives selected for this study are Sistema de Crédito Cooperativo (Sicredi), founded in 1902, and Instituição Financeira Cooperativa (Unicred), established in 1989. They were chosen based on their seniority as the oldest entities of their kind in Brazil.

Sicredi and Unicred were also chosen for their status as leading financial systems in the country (Ailos, 2022), with net surpluses of \$1.16 billion and \$399.2 thousand, respectively. Also, both cooperatives operate throughout all regions of Brazil and have a significant impact on local community development. The data for these two cooperatives can be found in Table 1.

Table 1. Case Summary

Cooperative	Members (Thousand)	Units (Thousand)	Cooperatives	Employees (Thousands)
Sicredi	7.000	2.500	100	+40
Unicred	257	319	30	+3

Source: Prepared by the authors based on the reviewed documents.

Data collection

The data was collected using documentary research of financial and non-financial reports published by the cooperatives. Sicredi's sustainability reports and financial statements were consulted, totaling 14 reports spanning from 2015 to 2021. Similarly, Unicred's annual reports from 2015 to 2021 and social responsibility reports from 2019 to 2021 were consulted, totaling 10 reports. Following Eisenhardt's (1991) recommendations, we established constructs and adopted categories and subcategories of analysis identified in previous literature (refer to Table 2). Additionally, this study analyzed the practices of cooperatives that contribute to the implementation of the SDGs in addition to the ESG subcategories.

Table 2 . Research categories and subcategories

Category	Subcategory	Source
ESG	1) Environmental 2) Social 3) Governance	Desjardine et al. (2019); Filippi (2018); Maletić et al. (2018); Petry e Froehlich (2022)
Organizational Resilience	1) Innovation 2) Performance	Cabo and Rebelo (2013); Desjardine et al. (2019); Markman e Venzin (2014); Maletić et al. (2018); Williams et al. (2017)

Source: Prepared by the authors.



Data processing

Thematic analysis was conducted to process the data for better understanding of patterns and proposing relationships between categories (Braun & Clarke, 2006). In the exploratory phase, a keyword search was performed on the documents using "ESG", "SDGs", "sustainability", "credit unions", "Unicred", "Sicredi", "performance", "innovation" and "shock". The documents were then read in full and an electronic spreadsheet was used to identify passages related to the research categories, a process that was revised with each new inclusion.

The process enabled a comparison of each organization's sustainability projects, leading to an understanding of the concerns and initiatives related to ESG practices. It also revealed how such actions enhanced the cooperatives' resilience to exogenous shocks and therefore improved their organizational resilience. Finally, selected excerpts were organized into tables to strengthen the analysis undertaken in this study, an approach also adopted in other papers (e.g., Hoffmann et al., 2017; Oliveira et al., 2024).

RESULTS ANALYSIS AND DISCUSSION

Table 3 displays the emphasis placed by Sicredi and Unicred on the environmental aspect in the examined reports. Sicredi has emphasized the significance of their initiatives in indirectly reducing environmental impact. The report highlights actions related to the quest for sustainable products and services, partnerships with other organizations and supplier development. Additionally, the cooperative has prioritized funding environmentally-focused projects to benefit society, especially the communities it serves. While Sicredi has emphasized environmental initiatives over time, Unicred's reports lack sufficient detail on their actions and demonstrate repetition over the years. Furthermore, Unicred's extracts highlight practices related to regulatory compliance.

Table 3 . Texts related to Environmental practices

Year	Sicredi	Unicred
2015	In 2015, Sicredi launched an alternative for the purchase of products and services that have a lower impact on the environment.	Systemic Actions and Sustainable Growth with [Environmental] Responsibility. In June 2015, the Risk Committee of the Unicred System, with the participation of the Central Offices and the Business Units of Unicred do Brasil, developed the Systemic Social and Environmental Responsibility Policy and the Action Plan for the implementation of this policy, which includes short, medium and long-term actions.
2016	The environment is a fundamental part of our indirect impact. In 2016, we introduced new socio-environmental criteria in the evaluation of credit concessions, in addition to the products and services that we already offer our associates that deliver environmental value.	Systemic Actions and Sustainable Growth with [Environmental] Responsibility. In accordance with Resolution 4327/2014 of the CMN [National Monetary Council], it is in the process of implementing a social and environmental risk management structure that is compatible with the nature of its operations, the complexity of the products and services offered and the extent of its exposure to this risk, in accordance with the Social and Environmental Responsibility Policy (PRSA) and the action plans approved by the Confederation's Board of Directors.
2017	To identify socio-environmental risks and opportunities, we enlist the support of a specialized environmental consulting firm to develop projects to assist members with their environmental regulatory and licensing processes.	Systemic Actions and Sustainable Growth with [Environmental] Responsibility. In accordance with the regulations of the Central Bank of Brazil, the Confederation has a social and environmental risk management structure that is compatible with the nature of its operations, the complexity of the products and services offered, and the magnitude of its exposure to risk.
2018	As a result of our management focus on socio-environmental issues, part of the resources we offer in the form of credit are allocated to the so-called Green Economy [...], while significantly reducing environmental risks and ecological scarcity. Its main pillars are low carbon emissions, efficient use of resources [...].	Systemic Actions and Sustainable Growth with [Environmental] Responsibility.



requirements (Raghunandan & Rajgopal, 2022).

2019	In 2019, we expanded our dialogue with environmental agencies through integrated actions aimed at spreading socio-environmental awareness and regularization practices. Among the actions, we highlight workshops in the centers with partners from ICMBio and Fundação Dom Cabral, as well as a joint action with FEBRABAN's partner Environmental Consultant, IBAMA and other federal, state and municipal agencies.	Systemic Actions and Sustainable Growth with [Environmental] Responsibility. In accordance with CMN Resolution 4.327/14, this institution has a social and environmental risk management structure that is compatible with the nature of its activities, the complexity of the products and services offered and the magnitude of its exposure to risk.
2020	Extending our sustainability concerns to the chain of systemic suppliers, encouraging them to adopt best social and environmental practices through support for technical training and the definition of specific criteria for contracting, monitoring and evaluation.	Systemic Actions and Sustainable Growth with [Environmental] Responsibility. The project aims to promote what socio-environmental responsibility is, as well as to integrate socio-environmental risk measures into the routine of the cooperatives that are part of the Unicred system. The updates are also intended to meet the requirements of the Central Bank of Brazil.
2021	[...] a "restriction" message is issued when overlaps with APAs (Environmental Protection Areas) and ARIEs (Areas of Relevant Ecological Interest) are identified, or a "prohibition" message is issued when overlaps with indigenous lands, quilombola lands, embargoed areas, or full-use conservation units are identified, preventing the continuation of funding in these cases.	Systemic Actions and Sustainable Growth with [Environmental] Responsibility. Updating the entire regulatory base for PLD/FT, socio-environmental risks and business continuity management. The growth of the cooperative is promoted in a sustainable and socially and environmentally responsible manner.

Table 4. Excerpts related to the Social factor

Year	Sicredi	Unicred
2015	To be recognized by society as a cooperative financial institution committed to the economic and social development of members and communities, with sustainable growth of cooperatives integrated into a solid and efficient system.	Nowadays, investing in social actions has become synonymous with the development of an organization, as such initiatives, in addition to fostering social development, value and engage employees, promoting a break from routine, the exercise of citizenship and a sense of belonging, increasing their self-esteem by helping others.
2016	Our goal is to create more income, development, social and financial inclusion for our members and the regions in which we operate by promoting the culture of cooperativism. We also promote cooperativism through the activities of 'Dia C', the Day of Cooperating, an international day of celebration. In 2016, we carried out 176 volunteer activities related to the [SDGs] in 11 states where we operate - including financial education talks, collecting donations and providing services [...].	With a focus on promoting social development, in 2016 Unicred do Brasil mobilized its employees with three solidarity actions, encouraging everyone to exercise citizenship and feel a sense of "belonging to the cause", increasing their self-esteem by helping others.
2017	The Sicredi Foundation supports the actions carried out by the centrals and units by providing specialized technical advice for each social program and initiative: 'Crescer' (Growing Up) Program, 'Pertencer' (Belonging) Program, 'A União Faz a Vida' (The Union Makes Life) Program, Fundraising, Library, Financial Education and Sustainability.	Systemic Actions and Sustainable Growth with [Social] Responsibility.
2018	[As a result of our management focused on socio-environmental issues, we are] improving the well-being of humanity and social equality. [Among its main pillars is] social inclusion.	Systemic Actions and Sustainable Growth with [Social] Responsibility.

Source: Prepared by the authors based on the reviewed documents.

Table 4 demonstrates that the examined cooperatives prioritize implementing social inclusion systems, promoting projects and initiatives that facilitate social and economic growth through socio-environmental actions. One objective emphasized in the sustainability statements of Sicredi and Unicred is the pursuit of social recognition through investments and dedication to social development, resulting in a positive impact via ESG related actions. In 2019, Sicredi initiated the process of joining the Global Compact with the objective of promoting sustainable development. This move signifies the organization's commitment to action and assures its stakeholders that it meets the necessary



2019	In a year in which our credit portfolio grew above the market average, reaching R\$72.2 billion, we also provided financial education to 4.4 million people, trained more than 87,000 people in cooperative education through the 'Crescer' program, and taught the values of citizenship and cooperation to more than 109,000 children and adolescents through the 'A União Faz a Vida' program, our main social responsibility program.	In order to provide a more sustainable lifestyle, financial education is a proposal consistent with the UN [SDG] 4: Quality Education. In line with the Public Guidelines, the values of cooperativism and its expertise, Unicred SC/PR has adopted financial education as an effective strategy to reduce financial illiteracy.
2020	Every year in July, we celebrate Dia C (Day of Cooperating), a national initiative organized by the OCB system to demonstrate the power of cooperativism for social change. [...] the participating organizations carry out actions of social responsibility in the communities, in accordance with the principles of cooperativism, through volunteer actions.	[In 2020], we joined forces to support each other and achieved great results in the economic and social fields.
2021	In 2021, we launched Sicredi FIC 'Ações Sustentáveis' (Sustainable Actions) ESG, our first ESG-focused equity fund [...], which focuses on companies that align with our sustainability strategy and generate a positive impact on society, in addition to profitability for members. In 2021, R\$30.7 million was invested in 3,287 social projects of collective interest in the areas of education, culture, sports, health, safety, [...] and social inclusion. In this way, we contribute to the development of the regions in which we operate.	Just as all branches of cooperativism seek to empower the communities in which they operate through the strength of people's unity, Unicred's attention to members and teams has always been a strong point, and now, with increasingly solid growth, we are strengthening our mission to create more and more positive social impact in our surroundings.

Source: Prepared by the authors based on the reviewed documents.

Since 2020, credit unions have had to adapt to the challenges presented by the COVID-19 pandemic. Despite the unfavorable effects, the period has also created opportunities for cooperatives in the market. Thus, our data reveals that Sicredi and Unicred did not suffer negative consequences from these changes. Consequently, in 2021, the cooperatives invested in innovative programs and strengthened programs related to the development of ESG practices in companies, financed and supported by the cooperatives.

Between 2015 and 2021, an evolution can be observed in the corporate governance aspects of Sicredi and Unicred (Table 5). The reports highlight that the economic scenario is changing, which requires organizations to invest in the innovation of their practices. We highlight the significance of aligning governance practices with actions focused on social and environmental responsibility, as noted by Sierdovski et al. (2022). To this end, both cooperatives incorporate factors pertaining to governance and socio-environmental responsibility. With a focus on economic growth, in 2016 Sicredi and Unicred aligned themselves with the perspective related to governance management, aiming to improve internal controls and risk management by holding events, presentations and trainings focused on upgrading the management practices of the cooperatives. It is important to note that as of 2021, governance is one of Sicredi's main pillars of strategy. The data indicate that this decision is primarily motivated by the desire to provide clarity to the shareholders.

Table 5. Excerpts related to the Governance factor

Year	Sicredi	Unicred
2015	The new phase of governance has renewed the motivation of the team, making it clear that the cooperatives of the Sicredi system have strong internal values rooted in Sicredi's organizational culture.	On November 13 and 14, the plenary session was the center of important debates on strategies and alternatives inherent to the organization and related to the theme of the event. As examples [...] we highlight the composition of the membership, the strengthening and investment in the brand, business strategies, systemic growth, international models, good governance practices, among other relevant contents for the growth and development plan, for orientations and projections for the future of the Unicred system.
2016	We have made progress on key internal control and governance issues, with greater integration of the risks assessed, more simplified monitoring, and a focus on information and process improvements aimed at maintaining the quality and sustainability of the System.	In 2016, the structuring of the IT [Information Technology] Governance and Corporate Architecture teams ensured excellence, standardization and best practices in [IT] and aligned [IT] delivery with business needs.



2017	Presentations were held on our management and economic scenario, as well as on the analysis of the impact of current economic issues on our management and governance. Members are also encouraged to attend [...], events that address issues related to the activities of SicrediPar's directors.	Unicred's team is trained to handle complaints according to best corporate governance practices, i.e. with transparency and confidentiality, while maintaining the anonymity of the complainant.
2018	One of the issues that mobilized our leadership was diversity. We know that in order to have a broad, national presence, we need a diverse team. [Some units have set up women's and youth committees to promote the participation of these groups in our management structures and in their communities.	Management with transparency, ethics, professionalism and compliance with the principles and good practices of governance.
2019	Globally, we are recognized by the World Council of Credit Unions as a model of governance and also for our commitment to strengthening credit cooperativism [in the country]. An example of this is the creation of the FDC/SICREDI Center for Studies on Governance in Cooperatives, in partnership with the Fundação Dom Cabral, which aims to contribute to improving the management and governance of credit unions in Brazil.	The Institution was created with the purpose of managing the financial resources of the cooperative members and, to this end, it has a governance system that adopts the best management practices.
2020	The Governance Portal is a communication channel between cooperatives and their core coordinators and board members. Through this channel, it is possible to share information management materials with leaders and other members.	The Positions, Careers and Performance project, with the creation of competency maps, job descriptions and training. On this basis, we will be able to prepare and develop people to support the business, including structures that meet the strategic needs and governance [...] of the people management model.
2021	Our sustainability strategy is based on expanding our positive impact in a balanced way across three pillars: Economic, Social and Environmental. In 2021, we added another pillar to our strategy: Governance.	As a Premium cooperative financial institution, our core values are the Seven Cooperative Principles, particularly regarding participatory and transparent management with our members and our concern for the environment and society. We are committed to best governance and ESG practices.

Furthermore, in 2020, Sicredi improved its governance portal with the aim of strengthening communication between its members and other cooperatives, providing information and support materials for its management. Simultaneously, Unicred instituted an employment and career policy for its employees. The efforts of both companies concentrated on boosting corporate social responsibility and were instrumental in advancing ESG practices, consistent with Desjardine et al.'s (2019) recommendations.

The analysis revealed that cooperatives aimed to showcase their alignment with the objectives of the Global Compact, which implements measures to attain the targets of the 2030 Agenda, pertaining to the UN SDGs. The alignment of ESG practices with the SDGs is highlighted in the study by Khaled et al. (2021), who mapped the integration of each ESG axis with the SDGs. While this type of action is more prevalent in developed countries (Rosati & Faria, 2019), credit unions aim to foster sustainable development of the organizations through their social and environmental projects and governance, alongside employees, members, communities and society. It is worth noting that, since 2016, Sicredi has been promoting volunteering activities for communities related to the SDGs. This mobilizes the stakeholders of the company, who, according to Bergamini (2021), must be involved in the promotion of ESG.

In 2018, Sicredi also made progress in terms of transparency of its impact on ESG issues, by using standardized indicators from the Global Reporting Initiative (GRI). Thus, the cooperative initiated the disclosure of SDG-related actions in its sustainability report. Furthermore, although Unicred refrained from disclosing its objectives for achieving sustainable development between 2015 and 2017, this changed in 2018 with the adoption of measures aligned to the SDGs. As such, there is an effort to propose solutions to its stakeholders in terms of reducing environmental degradation, as recommended in the literature (e.g., Costa et al., 2022).

Technological evolution is also addressed by the governance of the cooperatives studied, as shown in Table 6. The internal environment has acquired new software while providing updated member products and services to enhance the impact of sustainable development efforts.

Source: Prepared by the authors based on the reviewed documents.



Moreover, there has been a development in the performance of credit unions with respect to achieving the SDGs during the study period. This progress is attained through social programs in which cooperatives excel, exhibiting robust governance and dedication to steering their missions by confronting challenges in pursuit of socio-environmental objectives. Cooperatives deviate from the funds examined by Raghunandan and Rajgopal (2022) in this regard, as they present concrete actions on the matter.

Table 6. Excerpts related to the Performance and Innovation factors

Year	Sicredi	Unicred
2015	The institution is a benchmark for the market in terms of innovation and the use of cutting-edge solutions. It develops more than 1 million hours of information systems per year in partnership with leading technology companies, with whom it creates an ecosystem of collaboration and creation.	In 2015, the Unicred System's collaborative environment was migrated to Office 365 with the intention of bringing Unicred System employees closer together through technology, expanding communication and collaboration opportunities between Unicreds, Central Cooperatives and Unicred do Brasil, adapting the licensing model for the Office productivity suite, technologically updating the Unicred System's communication platform, and expanding security initiatives in communication and collaboration.
2016	The communication channels of Sicredi and the top management of each cooperative are open to economic, social and environmental issues, although specific requests on these topics have not been received. We encourage our audiences to use these channels and open this communication to discuss other issues that are important to the system, employees and members.	In 2016, the Processes area launched a new version of the portal, making its visual identity more of an agile and transparent model that allows for innovation and engagement, while ensuring the necessary controls for secure and effective management of the technology environment.
2017	The accomplishments of 2017 reinforced our vision to be recognized as a cooperative financial institution committed to the economic and social development of its members and communities, with the sustainable growth of cooperatives integrated into a solid and effective system.	Contrary to what it may seem, innovation is not always about reinventing the wheel or blazing new trails. Above all, you have to change the way you go, and I can tell you that we have!

2018	In 2018, the Brazilian economy continued to recover. However, the recovery was slow and affected by the uncertainties caused by the political crisis. Despite this, we continued to improve our performance and once again achieved the best results in our history.	Unicred, along with other companies, was invited by the prestigious Unisinos University to be part of the Blockchain CoLab group, whose purpose was to form a hub that would connect people in the study and dissemination of knowledge about Blockchain, the backbone of the Bitcoin cryptocurrency, an intelligence that promises to bring a wave of impact comparable to the advent and popularization of the use of the Internet in the 1990s in Brazil, reinforcing the Unicred System's commitment to the constant search for innovation and best practices.
2019	We placed 73rd in the ranking, which selects the 300 best companies in Brazil based on six dimensions: financial performance, corporate governance, innovation, people, sustainability and vision for the future. The guide, organized by Época magazine in partnership with Fundação Dom Cabral, also ranked us 9th in the "Best in the South" category. In the banking sector, we were ranked 1st in financial performance, 4th in people, 5th in corporate governance, 8th in vision of the future, 9th in innovation and 12th in sustainability.	In an increasingly competitive economic climate, credit pricing was the most appropriate solution we found to improve business management and maintain the sustainable growth of the cooperative. The idea is also to grant discounts based on the member's relationship with the cooperative.
2020	The Program for the Encouragement of Technological Innovation in Agricultural Production (Inovagro) finances the incorporation of technological innovation in rural properties, including the implementation of systems for the generation and distribution of alternative energy for self-consumption, such as wind, solar and biomass energy. At the end of the year, the line had a balance of R\$ 53.1 million.	This innovation has given us access to information about our members' behavior, greater control and autonomy over our operations, and the ability to negotiate with the various suppliers in the value chain - making our business model even more efficient.
2021	This is the first operation by a Brazilian cooperative financial institution to be certified by the Climate Bonds Initiative (CBI), an international organization that promotes investment in the low-carbon economy and establishes best practices for the market in terms of the environmental integrity of green economy products.	By aligning our sustainable growth with our expansion, constant innovation in our products and services, and innovative solutions, we have been able to guarantee great achievements and even a historic milestone: in 2021, we achieved the highest Unicred System result ever.

Source: Prepared by the authors based on the reviewed documents.



Sicredi listed its achievements in the market since 2015, highlighting a technological vision in relation to social, environmental and economic issues, pointing to a contribution to the country's economy, with good results in 2018 and 2021. Unicred also highlighted its contribution to the economic scenario, through investments in innovation and the implementation of new information systems. Even in 2021, in a difficult period in the face of a global pandemic, the cooperative achieved positive results, influenced by innovation, expansion and sustainable development.

Based on the findings, credit unions have established ESG practices. This is supported by research from Cabo and Rebelo (2013), Desjardine et al. (2019), Filippi (2018), Maletič et al. (2018), and Petry and Froehlich (2022), who confirm that social responsibility is connected with enhanced sustainability performance. The studies of Williams et al. (2017) and Maletič et al. (2018) present governance, performance, and innovation aspects and find that companies with higher resilience have better implementation and performance rates of ESG practices. This study shows a positive correlation between resilience and ESG practices implementation and performance rates for cooperatives.

Our results show that ESG practices that impact the development of local communities also promote organizational resilience. This is consistent with studies by Markman and Venzin (2014), Williams et al. (2017), and Desjardine et al. (2019). These authors emphasize the importance of organizational resilience, and that the length of time a firm has been in operation contributes to its ability to cope with exogenous shocks. As observed in the findings of this research, even in the face of the challenges posed by the COVID-19 pandemic, organizations have shown improvements in performance. This aligns with the notion that not only does resilience have a part in managing crises, but it also promotes the ongoing development of organizations (Hillmann & Guenther, 2021).

CONCLUSION

This study investigated the relationship between ESG practices and the organizational resilience of credit unions. The results of the thematic analysis show that Sicredi and Unicred have reported on the ESG practices developed, as well as the introduction of innovations and the performance achieved. Additionally, both cooperatives have emphasized their commitment to the 17 sustainable development goals (SDGs).

Based on these findings, this study demonstrates the correlation between ESG practices, which are related to environmental, social, and governance aspects, and actions taken towards the SDGs, as well as organizational resilience, operationalized through the categories of "innovation" and "performance". The results suggest that ESG initiatives extend beyond sound corporate practices or market trends, and are associated with the adaptive capacity of cooperatives. Therefore, these findings highlight the need for sustained resilience management over time, encompassing diverse shock types and even periods without such adverse events.

Due to the impact of credit unions on the local community, our findings underscore the role of socio-environmental practices in the relationship between ESG practices and organizational resilience. Along with indicating the resilience of cooperatives themselves, the adoption of socio-environmental practices also aided local communities in managing the crisis stemming from the Covid-19 pandemic. Therefore, ESG practices and the resilience of cooperatives help to overcome and improve the development of local communities in scenarios of exposure to shocks.

In line with the SDGs, credit unions are contributing to sustainable development by integrating ESG practices into their strategies. Notably, one of the principles of a cooperative is to serve its members in order to contribute to the sustainable development of communities. In this way, ESG practices of credit unions, such as the creation of a credit line linked to sustainable actions, contribute to the fight against social inequalities, to the integration with their stakeholders and to the adaptation to climate change. Thus, we can conclude that there is an integration between ESG practices and the SDGs, consistent with the mapping presented by Khaled



et al. (2021).

In addition, the fact that we have studied two cooperatives is a contribution, since previous studies have focused on companies listed on stock exchanges and global markets, as seen in Costa and Ferezin (2021). Credit unions are not listed and have a strong local investment appeal, which makes them an object of interest. The results show that ESG practices are related to organizational resilience even in this type of organization, providing a theoretical contribution.

Furthermore, Credit unions operate locally but also communicate with the overall market. This reduces the impact of location on the cooperative, but does not diminish its effect on all locations where it operates. This leads to a different perception of the territorial effect, which has been studied before (Hoffmann et al., 2017). However, this study takes it one step further and looks at the impact of COVID-19 and cooperatives in a developing economy, connecting resilience and ESG. This is different from previous studies that examined the same constructs, focusing on the 2008-2010 crisis and developed economies (DesJardine et al., 2019; Ortiz-de-Mandojana & Bansal, 2016). The results suggest that the effects may be the same regardless of the type of crisis, which is another theoretical contribution of this study.

In terms of limitations of the study, although the data suggest a relationship between ESG practices and organizational resilience in the cooperatives we studied, the relationship was not statistically tested. For future studies, we recommend examining cases from various sectors, exploring diverse shocks within the same study, and utilizing multivariate statistical techniques to verify the instances where ESG practices lead to increased resilience in cooperatives. A second research suggestion is to conduct a case study to observe how ESG practices are implemented by cooperatives to achieve SDG goals, according to the mapping developed by Khaled et al. (2021).

REFERENCES

Ailos – Sistema de Cooperativas de Crédito (2022). *Blog do Sistema de Cooperativas de Crédito*. <https://blog.ailos.coop.br/cooperativismo/cooperativas-de-credito-no-brasil/>

Antolín-López, R., Delgado-Ceballos, J., & Montiel,

I. (2016). Deconstructing corporate sustainability: a comparison of different stakeholder metrics. *Journal of Cleaner Production*, 136, 5-17. <https://doi.org/10.1016/j.jclepro.2016.01.111>

Bacen – Banco Central do Brasil (2023). *Cooperativas de Crédito*. <https://www.bcb.gov.br/estabilidadefinanceira/cooperativacredito>

Bergamini Jr., S. (2021). ESG, Impactos ambientais e Contabilidade. *Pensar Contábil*, 23(80), 46-54.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

Buallay, A. (2019), Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector, *Management of Environmental Quality*, 30(1), 98-115. <https://doi.org/10.1108/MEQ-12-2017-0149>

Bravo, O., & Hernández, D. (2021). Measuring organizational resilience: Tracing disruptive events facing unconventional oil and gas enterprise performance in the Americas. *Energy Research & Social Science*, 80, 102187. <https://doi.org/10.1016/j.erss.2021.102187>

Burnard, K., Bhamra, R., & Tsinoopoulos, C. (2018). Building organizational resilience: Four configurations. *IEEE transactions on engineering management*, 65(3), 351-362. <https://doi.org/10.1109/TEM.2018.2796181>

Cabo, P., & Rebelo, J. (2013). *O papel das instituições de crédito em tempos de crise: as cooperativas de crédito agrícola e caixas económicas como agentes impulsionadores do desenvolvimento económico e social*. VII Coloquio Ibérico Internacional de Cooperativismo y Economía Social.

Confedbras - Confederação Brasileira das Cooperativas de Crédito. (2023). *No BureauCoop – Painel de Dados do Cooperativismo Financeiro*. <https://www.bureau.coop.br/index.php/public-panel/>

Conz, E., & Magnani, G. (2020). A dynamic perspective on the resilience of firms: A systematic literature review and a framework for future research. *European Management Journal*, 38(3), 400-412. <https://doi.org/10.1016/j.emj.2019.12.004>

Costa, E., & Ferezin, N. B. (2021). ESG (Environmental, Social and Corporate Governance) e a comunicação: o tripé da sustentabilidade aplicado às organizações globalizadas. *Revista*



Alterjor, 24(2), 79-95. <https://doi.org/10.11606/issn.2176-1507.v24i2p79-95>

Costa, R., Costa, T. P., Conceição, M. M., & Conceição, J. T. P. (2022). ESG—Os pilares para os desafios da sustentabilidade. *Recima21-Revista Científica Multidisciplinar*, 3(9), e391920-e391920. <https://doi.org/10.47820/recima21.v3i9.1920>

Dechow, P. M. (2023). Understanding the Sustainability Reporting Landscape and Research Opportunities in Accounting. *The Accounting Review*, 98(5), 481-493. <https://doi.org/10.2308/TAR-2023-0145>

DesJardine, M., Bansal, P., & Yang, Y. (2019). Bouncing back: Building resilience through social and environmental practices in the context of the 2008 global financial crisis. *Journal of Management*, 45(4), 1434-1460. <https://doi.org/10.1177/0149206317708854>

Dicuonzo, G., Donofrio, F., Rinaldo, S., & Dell'Atti, V. (2022). The effect of innovation on environmental, social and governance (ESG) practices. *Meditari Accountancy Research*, 30(4), 1191-1209. <https://doi.org/10.1108/MEDAR-12-2020-1120>

Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13(1), 215-246. <https://doi.org/10.1007/s40685-019-0085-7>

Eisenhardt, K. M. (1991). Better stories and better constructs: The case for rigor and comparative logic. *Academy of Management review*, 16(3), 620-627.

Filippi, M. (2018). *Reinforcing sustainable supply chains: Lessons from French agricultural cooperatives*. 166th Seminar, August 30-31, 2018, Galway, West of Ireland, European Association of Agricultural Economists.

Hillmann, J., & Guenther, E. (2021). Organizational resilience: a valuable construct for management research?. *International Journal of Management Reviews*, 23(1), 7-44. <https://doi.org/10.1111/ijmr.12239>

Hoffmann, V. E., Belussi, F., Martínez-Fernández, M. T., & Reyes, E. (2017). United we stand, divided we fall? Clustered firms' relationships after the 2008 crisis. *Entrepreneurship & Regional Development*, 29(7-8), 735-758. <https://doi.org/10.1080/08985626.2017.1343869>

International Cooperative Alliance (2023). *Cooperative identity, values & principles*. <https://www.ica.coop/en/whats-co-op/co-operative-identity-values-principles>.

[www.ica.coop/en/whats-co-op/co-operative-identity-values-principles](https://doi.org/10.14210/alcance.v30n2(maio/ago).p13-27).

Jacques, E. R., & Gonçalves, F. D. O. (2016). Cooperativas de crédito no Brasil: evolução e impacto sobre a renda dos municípios brasileiros. *Economia e Sociedade*, 25, 489-509. <https://doi.org/10.1590/1982-3533.2016v25n2art8>

Khaled, R., Ali, H., & Mohamed, E. K. (2021). The Sustainable Development Goals and corporate sustainability performance: Mapping, extent and determinants. *Journal of Cleaner Production*, 311, 127599. <https://doi.org/10.1016/j.jclepro.2021.127599>

Maletič, M., Maletič, D., & Gomišček, B. (2018). The role of contingency factors on the relationship between sustainability practices and organizational performance. *Journal of Cleaner Production*, 171, 423-433. <https://doi.org/10.1016/j.jclepro.2017.09.172>

Markman, G. M., & Venzin, M. (2014). Resilience: Lessons from banks that have braved the economic crisis—And from those that have not. *International Business Review*, 23(6), 1096-1107. <https://doi.org/10.1016/j.ibusrev.2014.06.013>

Miranda Jr., N. da S., & Hoffmann, V. E. (2021). Resiliência regional: um estudo bibliométrico a partir da Web of Science. *Gestão & Regionalidade*, 37(111). <https://doi.org/10.13037/gr.vol37n111.6093>

Oliveira, R. S. De, Viana, L. F. C., Ferreira, L. B. G. R., & Hoffmann, V. E. (2024). Intercooperação, (eco) inovação e desempenho: Um estudo de caso na Rede de Comercialização Solidária do Tapajós, estado do Pará, Brasil. *Innovar*, 34(92), Pré-Impressão. <https://doi.org/10.15446/innovar.v34n92.10047>

Ortiz-de-Mandojana, N., & Bansal, P. (2016). The long-term benefits of organizational resilience through sustainable business practices. *Strategic Management Journal*, 37(8), 1615-1631. <https://doi.org/10.1002/smj.2410>

Petry, J., & Froehlich, C. (2022). Sustentabilidade socioambiental em uma cooperativa de crédito. *Gestão & Regionalidade*, 38(115), 5-23. <https://doi.org/10.13037/gr.vol38n115.7341>

Read, D. (2005). Some observations on resilience and robustness in human systems. *Cybernetics and Systems: An International Journal*, 36(8), 773-802. <https://doi.org/10.1080/01969720500306253>



Raghunandan, A., & Rajgopal, S. (2022). Do ESG funds make stakeholder-friendly investments? *Review of Accounting Studies*, 27(3), 822-863. <https://doi.org/10.1007/s11142-022-09693-1>

Rosati, F., & Faria, L. G. (2019). Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of cleaner production*, 215, 1312-1326. <https://doi.org/10.1016/j.jclepro.2018.12.107>

Rumelt, R.P., Schendel, D.E., Teece, D.J. (1994). *Fundamental Issues in strategy: A research agenda*. Harvard College.

Sierdovski, M., Pilatti, L. A., & Rubbo, P. (2022). Organizational competencies in the development of Environmental, Social, and Governance (ESG) criteria in the industrial sector. *Sustainability*, 14(20), 13463. <https://doi.org/10.3390/su142013463>

Viana, C. L., Roehe Vaccaro, G. L., & Senna Venzke, C. (2018). Sustentabilidade e os diferenciais cooperativos: Um estudo em um Sistema Cooperativo de Crédito. *Revista de Gestão e Organizações Cooperativas*, 5(9), 163-180. <https://doi.org/10.5902/2359043230627>

Viana, L. F. C., Hoffmann, V. E., & Miranda Jr., N. da S. (2023). Regional resilience and innovation: Paper profiles and research agenda. *Innovation & Management Review*, 20(2), 119-131. <https://doi.org/10.1108/INMR-11-2021-0225>

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D.A., & Zhao, E.Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, 11(2), 733-769. <https://doi.org/10.5465/annals.2015.0134>

Woods, D. D. (2015). Four concepts for resilience and the implications for the future of resilience engineering. *Reliability Engineering & System Safety*, 141, 5-9. <https://doi.org/10.1016/j.res.2015.03.018>