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Research Article FSC Certification in the Sustainability Management Control Systems: A Case Study of Four Wood Trading Companies

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Abstract

There are many management indicators on sustainability, but it is important to better understand the practices and the underlying reasons for including the monitoring of forestry certificates in management control. The purpose of this paper is to examine how and why Forest Stewardship Council (FSC) certification is incorporated into sustainability management control systems (MCSs). FSC certification serves as a credible tool for companies to demonstrate their alignment with the Sustainable Development Goals (SDGs), enhancing stakeholder confidence. The literature review centers on the concepts of FSC certification and sustainability MCSs. A multiple case study methodology was employed, focusing on four companies in the wood and wood-based product sector, particularly those with forestry certifications like FSC. Data were collected from documents published online by the companies studied, followed by a content analysis typical of qualitative research. The results show that the companies studied integrate FSC certification into their MCSs through diverse practices (how?) driven by sustainability motivations (why?). These firms adopt and promote sustainable initiatives, embedding FSC principles into their systems for performance monitoring and assessment. The findings indicate that companies in this sector not only adopt sustainable practices but also prioritize sharing information about these efforts. Practically, it was observed that retail businesses dealing with wood and wood-based products incorporate seven out of the ten FSC principles into their management systems. This reflects a significant level of integration of FSC certification within the MCSs of the analyzed companies.

Keywords: Management control, Sustainability, FSC certification, Wood trading companies

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Introduction

There is a growing interest in sustainability on the part of stakeholders, as sustainable companies demand greater transparency and provide greater benefits for society in general (Segurado, 2022). It is therefore considered that a sustainable economy is built on the trust that companies convey to their stakeholders (Backes and Traverso, 2022). The implementation of strategic management control systems (MCSs) influences the development of products and services related to sustainability, through changes in management control practices (Beusch et al., 2022). The integration of sustainability reports into management control systems also offers benefits to companies that have sustainability objectives and intend to enhance their relationship with their stakeholders.

Both in the production of objects and in construction, wood as a material is present in the daily life of human society, so it is relevant to distinguish between "wood consumption" and "sustainable wood consumption" (Leszczyszyn et al., 2022). The use of wood in construction has been a recommended option. The importance of conserving biodiversity, protecting ecosystems, and promoting safety in forestry work is at the root of Forest Stewardship Council (FSC) forest certification in its economic, social and environmental aspects (FSC, 2022a). This forest certification aims to promote the best ways of responding to climate change, taking into account the resilience of forest areas.

Forests play a vital role for biodiversity, the environment, the community and the economy (FSC, 2022b). Forestry is a response to the demand for biological products (wood, biomass, among others) and the need for nature conservation, following the principles of sustainable development (Aggestam et al., 2020; Kumar et al., 2021). These principles promote the responsible use of forest resources and are based on protocols (criteria and indicators to be followed to achieve goals and objectives) and certifications (compliance with standards, evaluation and recognition of the certifier) (Aggestam et al., 2020; Paluš et al., 2021).

Forest certification emerged in the 1980s with the aim of solving problems of deforestation and forest degradation by ensuring that only products derived from sustainable production are sold (Malek and Rahim, 2022). This certification develops rules to promote sustainable forestry practices at an economic, social, and environmental level and to encourage companies to produce and sell more sustainable products, in line with stakeholder concerns (Hoang et al., 2015). The main objective of forest certification and the respective labeling of forestderived products is to hold anyone accountable and reward them, whether they are a producer, seller or consumer, for being associated with sustainable forestry practices (Kumar et al., 221).

The forest certification processes value the performance of a company's activities, products and services, by verifying that companies are complying with the sustainable standards of the Sustainable Development Goals and the United Nations 2030 Agenda for Sustainable Development (Lemes et al., 2021). In this context, the research question of this study is "how and why should FSC certification be integrated into sustainability MCSs in timber retail companies?". The methodology used is that of multiple cases, with the random selection of four companies in the timber retail sector, through qualitative research, since it is the most appropriate to answer the questions of how and why.

FSC certification contributes to nature conservation and trade in sustainable products (Aggestam et al., 2020; Jeronen, 2022). This certification is based on issues related to poverty, equality, natural resources, production and consumption patterns, working conditions, climate change, inclusive and responsible societies and global partnerships (FSC, 2022a, 2022b). The FSC incorporates a set of forest management standards, processes to support certification by accredited bodies, a protection chain to process and track wood from certified forests to the point of sale and, finally, a label that identifies that the wood is FSC certified (Taylor and Lindenmayer, 2021).

The principles and criteria of the FSC certificate define the standards for economically viable,

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socially beneficial and environmentally appropriate forest management, which are applied to all types of forests and all forest areas (FSC, 2022a). In 1994, ten principles were published for the first time, each of which is supported by several criteria. Through the FSC certificate, companies credibly demonstrate that their operational activities are in line with the Sustainable Development Goals (SDGs) and take responsibility for consumer concerns about indiscriminate and illegal logging and its effects on climate change (Kumar et al., 2021). In addition, these companies also secure easier access to global markets and gain a competitive advantage by being FSC certified (Paluš et al., 2021).

Sustainability MCSs are tools that link strategy and operational activity with a specific long-term strategic objective, promoting the use of sustainable practices and procedures to improve company performance (Beusch et al., 2022). These systems integrate strategic sustainability issues into decision-making in order to build information that makes companies proactive and transparent in managing their processes and achieving better results (Corsi and Arru, 2020). The main drivers for companies to implement sustainability MCSs are the opportunities of product and service innovation and the flexibility of supplier prices (Laguir et al., 2022).

Including sustainability information in MCSs can be a complicated process, particularly when it is difficult to measure economic, social, and environmental impacts and objectives due to possible conflicts of interest (Beusch et al., 2022). At the same time, however, the correct implementation of these systems can generate information that can influence the development of products and services, as well as the competitiveness of companies, employee involvement and improved results (Laguir et al., 2022). Successful implementation of MCSs may require renewal and strategic changes involving learning and organizational change. Such renewal can be carried out through new MCSs or by adapting existing systems.

MCSs are crucial in a company because they provide information that helps managers control their activities and reduce uncertainties in order to achieve their objectives (Mouritsen et al., 2022; Pavlatos, 2021). When the information generated is accurate, relevant and timely, with practical, consequential and results-oriented decisions, both at an economic, social and environmental level, it is said that it can contribute to sustainable development (Hadid and Al-Sayed, 2021). Regardless of the robust potential of MCSs, whether or not they integrate sustainability into financial and non-financial information, successful decision-making is always related to the ability of managers to define the best business strategies, always taking risks (Monteiro et al., 2022).

With the integration of information on sustainability and social responsibility into financial information, companies are opting for sustainable development principles (Mustapha and Wahid, 2021). The proper implementation of practices supported by sustainability MCSs can contribute to the company's development and profit maximization through the coordinated of economic, management social. and environmental aspects (Mouloudj and Ikhlef, 2022). The more agile and robust the MCSs are, the easier it will be for stakeholders to make decisions (Aggestam et al., 2020; Gottlieb et al., 2021).

The relationship between managers and those responsible for the different areas is fundamental for meeting the expectations of those involved and for the development of the company (Hadid and Al-Sayed, 2021; Mouritsen et al., 2022). If all areas work together to define the best strategies for a common goal, it will be easier to implement the MCSs and achieve faster and more significant results (Mustapha and Wahid, 2021). Managers or decision-makers need to be able to understand the complexity of the business environment (including sustainability) on the one hand, and the information generated by the most innovative MCSs on the other (Hadid and Al-Sayed, 2021).

A company's level of competitiveness is increasingly important to stakeholders, as it is one of the ways to generate income and facilitate entry into global markets (Aggestam et al., 2020). Stakeholders outside the company are increasingly interested in the non-financial information that can be generated by MCSs, particularly that related to sustainability issues

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(Monteiro et al., 2022). Understanding stakeholder interests is a participatory and constructive process that helps define strategic goals and objectives, and even increases the quality of environmental and social decisionmaking (Pavlatos, 2021). Both MCSs and stakeholder expectations are key factors in the success of companies (Corsi and Arru, 2020; Gottlieb et al., 2021). A sustainable economy is built on the trust that companies convey to stakeholders (Backes and Traverso, 2022).

Methodology

The aim of this study is to understand how and why timber trading companies integrate FSC certification into sustainability MCSs. A theoretical framework on FSC certification and sustainability MCSs is considered verv appropriate. The research method selected was a multiple case study, as it is considered appropriate for answering the how and why questions typical of qualitative research (Yin, 2017). The data will be collected from the companies' websites and documents, and will be analyzed, processed, and interpreted qualitatively.

The case study method aims to understand phenomena in a real context, be it an event, individuals, companies or even a political context (Elstub and Pomatto, 2022). For a good case study, the context and purposes of the study need to be well defined. This method consists of different branches of research (Maiorescu-Murphy, 2020), and can be carried out in the absence of theory, where more than one case is used and the data collected are compared. Another branch seeks to identify gaps, anomalies or contradictions in the theory, through one or more cases, answering questions of how and why in relation to a specific contemporary phenomenon in order to obtain the respective answers. This method can be used in qualitative and quantitative research, with qualitative research being the most relevant for this research method, as it answers questions of the how and why type (Yin, 2017).

This study looks at four cases, selecting companies from the wood and wood-based products retail sector that have various certifications, including FSC certification. The data needed to study the integration of FSC certification into MCSs were collected through websites, documents, and reports published by the companies. The data evidence was processed by analyzing the information collected, as this is a qualitative methodology. From the companies' websites, it was possible to learn about their concern for sustainability, mentioning a section on the certifications they hold. Three of these companies produce annual reports on their management models, operational results and sustainability. For this study, the reports for 2021 were analyzed, since the 2022 reports were not yet available, as well as information from their websites, taken from February and March 2023, in order to complement the information in the reports.

Results

For this case study, four companies were randomly selected that operated simultaneously in Portugal, belonged to the wood retail sector and were FSC-certified. These four companies are: (1) Balbino-Faustino, (2) Corticeira Amorim, (3) Finsa and (4) Movecho.

Balbino-Faustino produces veneer, panels with and without fleece, sandwich, cork, edging, melamine and thermo-laminates, decorative products, substrates, structural products, flooring, accessories, solid wood, phenolic compacts, adhesives, acoustic products, doors, solid panels, laminated beams and post-formed worktops (Balbino-Faustino, 2021, 2022). The company's values are based on sustainability, solid relations with all stakeholders, employee safety and investment in improving processes and equipment.

The Corticeira Amorim is based on four pillars of sustainability: transparency and responsibility; the environmental characteristics of the product and the cork oak forest; the development, safety and well-being of people; investment in research and development and increased economic performance. This company aims to be sustainable, combining technology and innovation with a centuries-old natural material, promoting a sustainable balance and generating value for all stakeholders and the planet (Corticeira Amorim, 2021).

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Finsa is dedicated to the industrial transformation of wood, designing, manufacturing and processing wood-based products: panels, decorative surfaces, furniture components, flooring, laminates and solid wood (Finsa, 2022). Environmental performance is based on the company's commitment to environmental management and compliance with environmental legal requirements, promoting circularity as an environmental value.

Finally, Movecho, which manufactures and sells furniture for different areas, specializes in custom projects for various sectors, such as luxury retail, hotels, restaurants and institutional spaces (Movecho, 2022). This company offers integrated solutions in the development, production and installation of custom-made furniture and interiors, consistently investing in Research and Development over the years. According to the company's vision, production activity should not and cannot be incompatible with environmental balance, so it can remain competitive and offer innovative, high-quality solutions to customers.

The issue of sustainability has become increasingly important, given the impact it has on business performance, whether through regulation or by directly impacting the health and well-being of stakeholders (Corticeira Amorim, 2021, 2022). Forests that are managed sustainably represent carbon dioxide sinks, improving their efficiency and encouraging their growth and renewal (Finsa, 2022). There must be a commitment to sustainable forest management, combined with customer satisfaction and environmental conservation (Balbino-Faustino, 2021, 2022). In order to become sustainable, these companies have implemented certification according to FSC requirements. Therefore, the analysis in this study sought to identify the objectives disclosed by the companies, in line with the FSC principles and strategies.

With regard to the FSC principles of economic sustainability, principle 1 – Compliance with legislation – mentions that all national laws and international agreements must be respected. Only two of the four companies studied have adopted this principle: Corticeira Amorim and Finsa. Corticeira Amorim (2021, 2022) has implemented this principle in order to act in

accordance with legislation and comply with legal requirements regarding environmental aspects, implementing practices that follow ethical standards in management and environmental and social responsibility. Finsa (2021) has also implemented this principle with identical objectives, acting in accordance with the legislation in force and complying with standards of ethics and conduct in the legal timber trade. Principle 7 - Forest management planning mentions that planning and management plans must be properly written, implemented and updated. The companies that follow this principle are Balbino-Faustino, Corticeira Amorim and Movecho. Balbino-Faustino (2021) uses the Balanced Scorecard model to define its strategic objectives and improve performance. Corticeira Amorim (2021, 2022) follows this principle in order to integrate sustainability into its decisionmaking process and to avoid negative environmental impacts by managing the risks and opportunities of its operational activity. Movecho (2022) intends to ensure supervision of all phases of the activity in order to guarantee the highest possible quality, seeking innovative, sustainable and optimized solutions. Finally, Principle 10 – Implementation of management activities - mentions that the principles and criteria of sustainable forest management should be followed. Only Finsa (2021) follows principle 10 with the aim of promoting the use of materials from sustainably managed farms.

With regard to the FSC principles of social sustainability, principle 2 – Protection of workers and working conditions - mentions that the rights to use land and forest resources should be defined, documented and legally established. The only company in the study that follows this principle is Corticeira Amorim (2021), focusing on concepts of confidentiality, respect and dignity. Principle 4 – Relations with communities - states that the social and economic well-being of the community and the rights of workers should be safeguarded. The four companies studied showed evidence of following this principle. Balbino-Faustino (2021) considers that the feedback provided by stakeholders is fundamental to improving operational activity and encourages local entrepreneurial partners towards sustainability. In the same vein, Corticeira Amorim (2021) and Movecho (2022) also consider stakeholder feedback to be fundamental for the sustainable management of

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their activities and for improving their performance, focusing on an environment of equality and fairness, with the same opportunities for training and development and the creation of a fair and inclusive workplace. The Finsa company (2021) intends to establish channels of communication with all stakeholders involved in the management of activities, in order to promote the socio-economic development of local communities and inform all employees about the importance of forest management.

In terms of the FSC principles of environmental sustainability, principle 6 – Environmental values and impacts - deals with the duty to conserve biological biodiversity. The companies that respect this principle are Balbino-Faustino, Corticeira Amorim and Finsa. Balbino-Faustino (2021) felt the need to readapt and take advantage of opportunities, promoting sustainable forestry practices and environmental protection, through product development and sustainable management, with the improvement of processes and the aid of MCSs. Corticeira Amorim (2021) believes that the most profitable and biodiverse ecosystems can be stimulated through more sustainable production systems, by encouraging the services provided, combating biodiversity loss and contributing to carbon neutrality. Finsa (2021) mentions objectives for implementing sustainable forestry practices, namely maintaining and improving forests, preventing forest fires, conserving and protecting protected species and promoting diversity. Principle 9 – Protecting high conservation values - states that forest management activities should maintain and improve the attributes that define it. The evidence gathered shows that, with the exception of Balbino-Faustino, the other three companies in the case study adopt practices related to this principle. Corticeira Amorim (2021) has targets for 2021/2024: zero carbon footprint, 100% electricity from renewable sources; zero impact on packaging; 100% waste recovery rate; 100% workers receiving training; and zero discrimination. Finsa (2021) is committed to sustainable growth and the obligation to respect and protect materials, adopting а procedure for verifying environmental parameters. Movecho (2022) is also concerned with zero waste - energy recovery from waste, circularity - 100% waste recovery, and reducing the carbon footprint.

In addition to the analysis carried out in terms of principles, an analysis was also carried out taking into account the three strategies that FSC certification includes. Strategy 1 – Co-creating and implementing forestry solutions - refers to involving all stakeholders, simplifying policies and standards and broadening the scope and relevance of climate change. Only Balbino-Faustino (2021) did not disclose evidence of adopting this strategy. As for the other 3 companies in this study, Corticeira Amorim's strategy is to create technological solutions, at product level, in partnership with all stakeholders (Corticeira Amorim, 2021). Finsa's strategy is to encourage the participation of all stakeholders, proactively and transparently, in the planning and monitoring of operational activities for socio-economic development (Finsa, 2021). Movecho (2022) aims to identify and analyze the most innovative materials, production and assembly methods, and create solutions tailored to all stakeholder requirements.

Strategy 2 – Transforming markets – is related to advancing sustainable standards in the value chain, accelerating their acceptance, disclosing reports and increasing stakeholder benefits. All the companies in the study have adopted this strategy. Balbino-Faustino (2021, 2022) felt the need to change in order to readapt to new markets and offer more innovative alternatives. Corticeira Amorim (2021) implemented a framework of respect for the fundamental values of Human Rights and Labor. Finsa (2021) has implemented objectives to contribute to improving social and economic well-being and population retention, encouraging public participation in sustainable forestry practices. Movecho (2022) focuses its evolution on its employees, offering the same training and development opportunities to all areas, making the company a place of equality, inclusion and mutual help.

Strategy 3 – Catalyzing change – is related to fulfilling the company's mission, encouraging investment in sustainable practices, accelerating awareness of the value of forests and increasing relevance to governments. Of the evidence collected from the four companies, only Corticeira Amorim (2021) identified economic, social, and environmental progress as one of the measures for evaluating its suppliers based on

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performance criteria, criticality of products/services and environmental and social aspects.

As part of the forestry certification that the companies have, namely Corticeira Amorim (2021) and Finsa (2021), they have defined sustainability policies with specific objectives to comply with sustainable forestry practices, in accordance with the FSC principles and criteria, and have also created action plans for environmental and social improvement. According to FSC standards, companies only receive a forestry certificate if they meet all the pre-established requirements. In this sense, Corticeira Amorim (2021), when assessing the principles and criteria of the certification, identifies compliance and non-compliance, and, in the case of non-compliance, the company has an action plan in which follow-up audits are carried out to verify the measures taken to mitigate these non-compliances. Finsa (2021) has defined action procedures for resolving possible conflicts, complaints or claims related to the impacts of forestry practices.

Table 1 below summarizes the results presented in the previous paragraphs.

	Cases			
Description	Balbino- Faustino	Corticeira Amorim	Finsa	Movecho
FSC principle 1		\checkmark	\checkmark	
FSC principle 2		\checkmark		
FSC principle 4	\checkmark	\checkmark	\checkmark	\checkmark
FSC principle 6	\checkmark	\checkmark	\checkmark	
FSC principle 7	\checkmark	\checkmark		\checkmark
FSC principle 9		\checkmark	\checkmark	\checkmark
FSC principle 10			\checkmark	
FSC strategy 1		\checkmark	\checkmark	\checkmark
FSC strategy 2	\checkmark	\checkmark	\checkmark	\checkmark
FSC strategy 3		\checkmark		

Table 1: FSC principles and strategies in the 4 cases studied

Source: Authors' own elaboration

As part of the forestry certification that the companies studied have, namely Corticeira Amorim and Finsa, these companies have defined sustainability policies with specific objectives to comply with sustainable forestry practices, in accordance with the FSC principles and criteria. However, the level of compliance, as perceived by the information disclosed by the companies, varies between just 4 and 9 criteria.

Discussions

The companies in the wood and wood-based products retail sector studied implement various practices (how?) in which FSC certification is integrated into the MCSs, promoting the pursuit of various sustainability objectives (why). This result corroborates how the MCSs are essential in the process of planning, coordinating and evaluating operational activities, making it possible to clarify and measure objectives (Mouloudj and Ikhlef, 2022; Qiu et al., 2022). In other words, achieving favorable organizational objectives (financial and non-financial) is associated not only with the efficiency of innovative technological solutions, but also with sustainable processes (Laguir et al., 2022). The periodic release of reports, which include economic, social and environmental indicators, clarifies and denotes concern for sustainability (Carmo and Miguéis, 2022; Segurado, 2022).

The companies in the wood and wood-based products retail sector studied integrate a large part of the FSC principles into their management, supported by MCSs that include sustainability indicators. This is, in fact, a certification program that aims to promote responsible forest management and create solutions for sustainable forest management (Lemes et al., 2021; Hoang et

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al., 2015). This FSC certificate is validated by independent accredited organizations (FSC, 2022a; Jeronen, 2022). These companies studied implement FSC certification in their MCSs through the integration of FSC principles and strategies, both in decision-making and in relations with stakeholders. This result confirms how companies, in order to contribute to sustainable forest management, give preference to raw materials from sustainably managed protection forests, adopt environmental procedures and focus on the search for zero waste, always following the principles of sustainable development (Aggestam et al., 2020; Kumar et al., 2021).

With regard to sustainability, the companies studied show concern for meeting stakeholder expectations by encouraging their participation, in a proactive and transparent manner, in the processes of planning and monitoring the management of activities (Corsi and Arru, 2020; Gottlieb et al., 2021; Monteiro et al., 2022). It is thus argued that the SDGs are pillars of sustainability involved in the process of communicating with stakeholders (Kumar et al., 2021).

Conclusions

The objective of this study was to understand how and why to integrate FSC certification into the MCS for sustainability of timber trading companies, with the research question being "how and why to integrate FSC certification into the MCS for sustainability of timber trading companies?". The theoretical framework was established in the context of FSC certification and MCSs for sustainability. Four companies in the wood and wood-based products retail sector with forestry certifications, namely FSC certification, were selected and their reports for 2021 were analyzed, as well as the information on their websites.

The main results of this study confirm that there are various practices (how?) in which FSC certification is integrated into the MCSs to promote various sustainability objectives (why?). The results show that the companies studied seek to implement sustainable practices and disseminate information on the subject. One of the main results was that the companies in this sector integrate seven of the ten FSC principles into their management, which shows that FSC certification is highly integrated into the MCSs. These companies implement FSC certification in their MCSs by integrating the SDGs and the FSC principles and strategies into their management, whether through their implementation in activities, decision-making or relations with stakeholders.

This research has some methodological limitations. Firstly, the fact that the evidence was collected only from published documents. As only a few cases were studied in a single, very specific sector of activity, this is also a limitation. Furthermore, the study was limited to the period covered by the documents released by the companies. With regard to suggestions for future research, and in line with the limitations mentioned above, we propose triangulating data from complementary sources. This could be achieved by interviewing the preparers and users of the MCSs that include information on sustainability planning and control. Extending the study to other cases, other sectors of activity and longer periods of time, possibly covering the first historical integration of sustainability into the MCSs, are also suggestions for further research in the future. Complementary studies using other methodologies are also suggested, particularly quantitative research to test hypotheses about the relationship between variables involving MCSs and sustainability objectives.

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